
Recommendation:

1. Use the following Rubric as a standard for courses at PSU.
2. Provide for training and support to faculty on best practices for utilizing this process in classes.

The Holistic Critical Thinking Scoring Rubric

A Tool for Developing and Evaluating Critical Thinking

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Strong 4. Consistently does all or almost all of the following:

- Accurately interprets evidence, statements, graphics, questions, etc.
- Identifies the most important 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.

Acceptable 3. Does most or many of the following:

- 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.

Unacceptable 2. Does most or many of the following:

- 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.

Weak 1. 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 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.

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How To Use *The Holistic Critical Thinking Scoring Rubric*

1. Understand what the Rubric is intended to Address.

Critical thinking is the process of making purposeful, reflective and fair-minded judgments about what to believe or what to do. Individuals and groups use critical thinking in problem solving and decision making. This four level rubric treats this process as a set of cognitive skills supported by certain habits of mind. To reach a judicious, purposeful judgment a good critical thinker engages in analysis, interpretation, evaluation, inference, explanation, and reflection to monitor and, if needed, correct his or her thinking. The disposition to pursue open-mindedly and with intellectual integrity the reasons and evidence wherever they lead is crucial to reaching sound, objective decisions and resolutions to complex, high-stakes, ill-structured problems. So are the other critical thinking habits of mind, such as being inquisitive, systematic, confident in reasoning, anticipatory of possible consequences, prudent in making judgments.

2. Differentiate and Focus.

Holistic scoring requires focus. Whatever one is evaluating, be it an essay, a presentation, a group decision making activity, or the thinking a person displays in a professional practice setting, many elements must come together for overall success: critical thinking, content knowledge, and technical skill (craftsmanship). Deficits or strengths in any of these can draw the attention of the rater. However, in scoring for any one of the three, one must attempt to focus the evaluation on that element to the exclusion of the other two. To use this rubric correctly, one must apply it with focus only on the critical thinking, which is the reasoning process used.

3. Practice, Coordinate and Reconcile.

Ideally, in a training session with other raters one will examine samples (documents, videotaped examples, etc.) which are paradigmatic representations of each of the four levels. Without prior knowledge of their level, novice raters will be asked to evaluate and assign ratings to these samples. After comparing these preliminary ratings, collaborative analysis with the other raters and the experienced trainer is used to achieve *consistency of expectations* among those who will be involved in rating the actual cases. Training, practice, and inter-rater reliability are the keys to a high quality assessment. This gives operational agreement, which is very important.

Usually, two raters will evaluate each essay, assignment, project, or performance. If they disagree there are three possible ways that resolution can be achieved: (a) by a conversation between the two raters regarding their evaluations, (b) by using an independent third rater, or (c) by taking the average of the two initial ratings. But, the averaging strategy is strongly discouraged. Discrepancies of more than one level between raters indicates that the raters must review together the evidence considered salient by each rater.

This rubric is a **four** level scale, forced choice scale. Half point and “middle of the two” scoring is not possible. The only variation which would be consistent with this tool is to combine #1 and #2 so that this became a three level scale: Strong, Acceptable, Weak.

When working alone, or without paradigm samples, one can achieve a greater level of internal consistency by not assigning final ratings until a number of essays, projects, assignments, or performances have been given preliminary ratings. Frequently natural clusters or groupings of similar quality soon come to be discernible. At that point one can be more confident in assigning a firmer critical thinking score using this four level rubric. After assigning preliminary ratings, a review of the entire set assures greater internal consistency and fairness in the final ratings.

Appendix

Performance Task
Interpret, analyze, and evaluate quality of information
Identify information relevant to problem
Highlight connected and conflicting information
Detect flaws in logic and questionable assumptions
Explain why information is credible, unreliable, or limited

Analytic Reasoning and Evaluation	Demonstrate accurate understanding of large body of information	Identify most facts/ideas that support/refute all major arguments (or salient features of all objects to be classified)	Identify most facts/ideas that support/refute all major arguments (or salient features of all objects to be classified)	Identify most facts/ideas that support/refute all major arguments (or salient features of all objects to be classified)	Provide analysis beyond obvious Makes several accurate claims about quality of information	Provide analysis beyond obvious Makes several accurate claims about quality of information
	Accurately interpret evidence, statements, graphics, questions, etc.	Identify salient arguments (reasons and claims) pro and con	Thoughtfully analyze and evaluate major alternative points of view	Draw warranted, judicious, non-fallacious conclusions	Support key results and procedures, explains assumptions and reasons	Fair-mindedly follows where evidence and reasons lead

Performance Task
Consider and weight information from discrete source to make decisions (draw conclusion and/or propose course of action) that logically follow from valid arguments, evidence, and examples
Consider implications of decisions and suggest additional research when appropriate

Problem Solving	Provide solid rationale based on credible evidence from variety of sources	Provide solid rationale based on credible evidence from variety of sources	Weigh other options	Provide decision and solid rationale based on credible evidence from variety of sources	Present decision as best given available evidence When applicable, propose course of action that follows logically from conclusion, consider implications	Present decision as best given available evidence When applicable, propose course of action that follows logically from conclusion, consider implications When applicable, recognize need for additional research, recommend specific research to address unanswered questions
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	Accurately interpret evidence, statements, graphics, questions, etc.	Identify salient arguments (reasons and claims) pro and con	Thoughtfully analyze and evaluate major alternative points of view	Draw warranted, judicious, non-fallacious conclusions	Support key results and procedures, explains assumptions and reasons	Fair-mindedly follows where evidence and reasons lead
<p><u>Make-an-Argument</u> <i>Start a position</i> <i>Provide valid reasons to support position</i> <i>Demonstrate understanding of complexity of issue by considering and possibly refuting alternative viewpoints</i></p>						
Analytic Reasoning and Evaluation	Provide analysis that reflects thorough consideration of complexity of issue	Provide analysis that reflects thorough consideration of complexity of issue	Possibly refute major counterarguments or consider contexts integral to issue (e.g., cultural, ethical, social, political)	Assert insightful position and provide multiple sound reasons to justify it	Assert insightful position and provide multiple sound reasons to justify it	Assert insightful position and provide multiple sound reasons to justify it
<p><u>Critique-an-Argument</u> <i>Interpret, analyze, and evaluate quality of information</i> <i>Highlight conflicting information</i> <i>Detect flaws in logic and questionable assumptions</i> <i>Explain why information is credible, unreliable, or limited</i> <i>This score is also used as a measure of Recognition of Logical Fallacies in Arguments."</i></p>						
Analytic Reasoning and Evaluation	Demonstrate accurate understanding of complete argument	Identify multiple deficiencies in argument	Identify multiple deficiencies in argument	Identify multiple deficiencies in argument	Provide analysis beyond obvious	Provide analysis beyond obvious