


# Attributes of Critical Thinking

Does your discipline (or your course) require any of the following processes when student apply and demonstrate learning?

- Conceptualizing (reviewing) a Situation
- Explanation of Issues Surrounding and Influencing Context
- Investigation of Evidence (ideas, artifacts, events)
- Systematic and Methodological Analysis (observation, experience)
- Evaluating Evidence (making decisions based on evidence)
- Synthesizing an Hypothesis
- Drawing Conclusions (making decisions, applying to context)
- Reflecting on Implications

**Identify a task through which students demonstrate these qualities in your discipline/class. (*describe below*)**

	<b>Capstone</b> 4	<b>Milestones</b> 3	<b>Milestones</b> 2	<b>Benchmark</b> 1
<b>Explanation of issues</b>	Issue/problem to be considered critically is stated clearly and described comprehensively, delivering all relevant information necessary for full understanding.	Issue/problem to be considered critically is stated, described, and clarified so that understanding is not seriously impeded by omissions.	Issue/problem to be considered critically is stated but description leaves some terms undefined, ambiguities unexplored, boundaries undetermined, and/or backgrounds unknown.	Issue/problem to be considered critically is stated without clarification or description.
<b>Evidence</b> <i>Selecting and using information to investigate a point of view or conclusion</i>	Information is taken from source(s) with enough interpretation/evaluation to develop a comprehensive analysis or synthesis. Viewpoints of experts are questioned thoroughly.	Information is taken from source(s) with enough interpretation/evaluation to develop a coherent analysis or synthesis. Viewpoints of experts are subject to questioning.	Information is taken from source(s) with some interpretation/evaluation, but not enough to develop a coherent analysis or synthesis. Viewpoints of experts are taken as mostly fact, with little questioning.	Information is taken from source(s) without any interpretation/evaluation. Viewpoints of experts are taken as fact, without question.
<b>Influence of context and assumptions</b>	Thoroughly (systematically and methodically) analyzes own and others' assumptions and carefully evaluates the relevance of contexts when presenting a position.	Identifies own and others' assumptions and several relevant contexts when presenting a position.	Questions some assumptions. Identifies several relevant contexts when presenting a position. May be more aware of others' assumptions than one's own (or vice versa).	Shows an emerging awareness of present assumptions (sometimes labels assertions as assumptions). Begins to identify some contexts when presenting a position.
<b>Student's position (perspective, thesis/hypothesis)</b>	Specific position (perspective, thesis/hypothesis) is imaginative, taking into account the complexities of an issue. Limits of position (perspective, thesis/hypothesis) are acknowledged. Others' points of view are synthesized within position (perspective, thesis/hypothesis).	Specific position (perspective, thesis/hypothesis) takes into account the complexities of an issue. Others' points of view are acknowledged within position (perspective, thesis/hypothesis).	Specific position (perspective, thesis/hypothesis) acknowledges different sides of an issue.	Specific position (perspective, thesis/hypothesis) is stated, but is simplistic and obvious.
<b>Conclusions and related outcomes (implications and consequences)</b>	Conclusions and related outcomes (consequences and implications) are logical and reflect student's informed evaluation and ability to place evidence and perspectives discussed in priority order.	Conclusion is logically tied to a range of information, including opposing viewpoints; related outcomes (consequences and implications) are identified clearly.	Conclusion is logically tied to information (because information is chosen to fit the desired conclusion); some related outcomes (consequences and implications) are identified clearly.	Conclusion is inconsistently tied to some of the information discussed; related outcomes (consequences and implications) are oversimplified.

# Critical Thinking Scoring Rubric

Adapted from Center for Teaching, Learning, & Technology, Washington State University ©2006

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Rating Criteria	Rating Scale			Developing	Mastering
	Emerging	2	3		
Summarized problem, question, or issue	Does not attempt to or fails to identify and summarize accurately.	Approach to the issue is in egocentric and socio-centric terms. Does not relate to other contexts. Analysis is grounded in absolutes, with little acknowledgement of own biases. Does not recognize context and underlying ethical implications.	Summarizes issue, though some aspects are incorrect or confused. Nuances and key details are missing or glossed over.	Clearly identifies the challenge and subsidiary, embedded, or implicit aspects of the issue. Identifies integral relationships essential to analyzing the issue.	
Considers context and assumptions	Position is clearly adopted with little consideration. Addresses a single view of the argument, failing to clarify the position relative to one's own. Fails to justify own opinion or hypothesis is unclear or simplistic.	Presents and explores relevant contexts and assumptions, although in a limited way. Analysis includes some outside verification, but primarily relies on authorities. Provides some consideration of assumptions and their implications.		Analyzes the issue with a clear sense of scope and context, including an assessment of audience. Identifies influence of context. Questions assumptions, addressing ethical dimensions underlying the issue.	
Communicates own perspective, hypothesis, or position	No evidence of selection or source evaluation skills. Repeats information without question or dismisses evidence without justification. Does not distinguish between fact and opinion. Evidence is simplistic, inappropriate or not related to topic.	Presents own position, which includes some original thinking, though inconsistently. Justifies own position without addressing other views or does so superficially. Position is generally clear, although gaps may exist.		Position demonstrates ownership. Appropriately identifies own position, drawing support from experience and information not from assigned sources. Justifies own view while integrating contrary interpretations. Hypothesis demonstrates sophisticated thought.	
Analyzes supporting data and evidence	Deals with a single perspective and fails to discuss others' perspective. Adopts a single idea with little question. Alternatives are not integrated. Ideas are obvious. Avoids discomfiting ideas. Treats other positions superficially. No evidence of self-assessment.	Demonstrates adequate skill in selecting and evaluating sources to meet information need. Use of evidence is selective, discerns fact from opinion and may recognize bias. Appropriate evidence is provided although exploration is routine.		Evidence of source evaluation skills. Examines evidence and questions accuracy and relevance. Recognizes bias. Sequence of presentation reflects clear organization of ideas, subordinating for importance and impact.	
Uses other perspectives and positions	Fails to identify conclusions, implications, and consequences, or conclusion is a simplistic summary. Conclusions are absolute, and may attribute conclusion to external authority.	Begins to relate alternative views. Rough integration of multiple viewpoints. Ideas are investigated in a limited way. May overstate conflict or dismiss alternative views hastily. Analysis of other views mostly accurate. Some evidence of self-assessment.		Addresses diverse perspectives from a variety of sources to qualify analysis. Any analogies are used effectively. Clearly justifies own view while respecting views of others. Analysis of other positions is accurate and respectful. Evidence of reflection and self-assessment.	
Assesses conclusions, implications, and consequences		Conclusions consider evidence of consequences extending beyond a single issue. Presents implications that may impact other people or issues. Presents conclusions as only loosely related to consequences. Implications may include vague reference to conclusions.		Identifies and discusses conclusions, implications, and consequences. Considers context, assumptions, and evidence. Qualifies own assertions. Consequences are considered and integrated. Implications are developed and consider ambiguities.	

Emerging	Free-Scoring Rubric for Critical Thinking	Mastering
<p>1) Identifies and summarizes the <b>problem/question</b> at issue (and/or the source's position).</p> <p>Does not identify and summarize the problem, is confused or identifies a different and inappropriate problem. Does not identify or is confused by the issue, or represents the issue inaccurately.</p>		<p>Identifies the main problem and subsidiary, embedded, or implicit aspects of the problem, and identifies them clearly, addressing their relationships to each other. Identifies not only the basics of the issue, but recognizes nuances of the issue.</p>
<p>2) Identifies and presents the <b>STUDENT'S OWN hypothesis, perspective and position</b> as is important to the analysis of the issue.</p> <p>Addresses a single source or view of the argument and fails to clarify the established or presented position relative to one's own. Fails to establish other critical distinctions.</p>		<p>Identifies, appropriately, one's own position on the issue, drawing support from experience, and information not available from assigned sources.</p>
<p>3) Identifies and considers <b>OTHER salient perspectives and positions</b> that are important to the analysis.</p> <p>Deals only with a single perspective and fails to discuss other possible perspectives, especially those salient to the issue.</p>		<p>Addresses perspectives noted previously, and additional diverse perspectives drawn from outside information.</p>
<p>4) Identifies and assesses the <b>key assumptions</b>.</p> <p>Does not surface the assumptions and ethical issues that underlie the issue, or does so superficially.</p>		<p>Identifies and questions the validity of the assumptions and addresses the ethical dimensions that underlie the issue.</p>
<p>5) Identifies and assesses the <b>quality of supporting data/evidence</b> and provides <b>additional data/evidence</b> related to the issue.</p> <p>Merely repeats information provided, taking it as truth, or denies evidence without adequate justification. Confuses associations and correlations with cause and effect. Does not distinguish between fact, opinion, and value judgments.</p>		<p>Examines the evidence and source of evidence; questions its accuracy, precision, relevance, completeness. Observes cause and effect and addresses existing or potential consequences. Clearly distinguishes between fact, opinion, &amp; acknowledges value judgments.</p>
<p>6) Identifies and considers the <b>influence of the context*</b> on the issue.</p> <p>Discusses the problem only in egocentric or sociocentric terms. Does not present the problem as having connections to other contexts--cultural, political, etc.</p>		<p>Analyzes the issue with a clear sense of scope and context, including an assessment of the audience of the analysis. Considers other pertinent contexts.</p>
<p>7) Identifies and assesses <b>conclusions, implications and consequences</b>.</p> <p>Fails to identify conclusions, implications, and consequences of the issue or the key relationships between the other elements of the problem, such as context, implications, assumptions, or data and evidence.</p>		<p>Identifies and discusses conclusions, implications, and consequences considering context, assumptions, data, and evidence. Objectively reflects upon their own assertions.</p>

Single Point Rubric for Critical Thinking

<p><b>Concerns</b> <i>Areas that need work</i></p>	<p><b>Criteria</b> <i>Standards for this task</i></p>	<p><b>Advanced</b> <i>Evidence of exceeding standards</i></p>
	<p><u>Explanation of issues</u> Issue/problem to be considered critically is stated clearly and described comprehensively, delivering all relevant information necessary for full understanding.</p>	
	<p><u>Use of Evidence</u> Information is taken from source(s) with enough interpretation/evaluation to develop a comprehensive analysis or synthesis. Viewpoints of experts are questioned thoroughly.</p>	
	<p><u>Influence of context and assumptions</u> Thoroughly (systematically and methodically) analyzes own and others' assumptions and carefully evaluates the relevance of contexts when presenting a position.</p>	
	<p><u>Student's position (perspective, thesis/hypothesis)</u> Specific position (perspective, thesis/hypothesis) is imaginative, taking into account the complexities of an issue. Limits of position (perspective, thesis/hypothesis) are acknowledged. Others' points of view are synthesized within position (perspective, thesis/hypothesis).</p>	
	<p><u>Conclusions and related outcomes (implications and consequences)</u> Conclusions and related outcomes (consequences and implications) are logical and reflect student's informed evaluation and ability to place evidence and perspectives discussed in priority order.</p>	



## Stronger Reasoning & Decision Making: Training Tools & Techniques

### The Holistic Critical Thinking Scoring Rubric - HCTSR A Tool for Developing and Evaluating Critical Thinking

The Holistic Critical Thinking Scoring Rubric (HCTSR) is an internationally known rating tool used to assess the quality of thinking displayed in verbal presentations or written reports. The HCTSR can be used in any training program or assessment process. Its greatest value is obtained when used by trainees to assess the quality of their own or another's reasoning. The exercise of applying this holistic evaluation leads trainees to internalize descriptions of strong (and weak) thinking.

#### **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.

#### **Significantly 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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