DEVELOPMENT OF CRITICAL THINKING RUBRIC

Overview

This rubric was adapted from the AAC&U VALUE rubric for critical thinking by an interdisciplinary team of faculty participating in a Critical Thinking Across the Curriculum [CTAC] faculty learning community. The rubric articulates fundamental criteria for the development of critical thinking, with performance descriptors demonstrating progressively more sophisticated levels of attainment. It provides a vision for the kinds of graduates we want to send into the world; that is, where we want students to be when they leave Mason.

The rubric's uses are twofold. First, it is intended as a framework for faculty to use as they reflect on strategies and assignments they implement to develop students as critical thinkers in their classrooms. Faculty might reflect on the opportunities to set students on this developmental trajectory and to show improvement in the development of critical thinking at course, program, or institutional levels. It provides a macro-level view of how students grow, progress, and/or evolve in the development of their critical thinking during their academic careers. Secondly, the rubric is intended for institutional-level use in evaluating and discussing student learning. It may also afford the opportunity to examine the development of critical thinking competencies within and/or across units.

Scholars in this outcome point to the key importance of dispositions, or habits of mind, in the development of students as critical thinkers. Thus, the rubric begins with the criterion, intellectual autonomy, *as a precondition* for the development of specific critical thinking competencies as articulated in the remainder of the rubric. The target, for those who teach critical thinking, is to talk with students about the dispositions or habits of mind of the critical thinker as the development of the cognitive skills proceeds and to encourage them to be reflective about themselves as critical thinkers.

Framing Language

This rubric is designed to be transdisciplinary, reflecting the recognition that success in all disciplines requires habits of inquiry and analysis that share common attributes. Further, research suggests that successful critical thinkers from all disciplines increasingly need to be able to apply those habits in various and changing situations encountered in all matters of personal and professional contexts, specifically, but not exclusively, the vocations, the professions, industry, and commerce.

Assessment of Work Samples

This rubric is designed for use with many different types of assignments and the suggestions here are not an exhaustive list of possibilities. The development of critical thinking can be demonstrated in assignments that require students to complete analyses of text, data, or issues. Research papers, lab reports, musical compositions, a mathematical equation that solves a problem, or a prototype design are all examples of work samples that could be assessed. Assignments that cut across presentation mode might be especially useful in some fields. If insight into the process components of critical thinking (e.g., how information sources were evaluated regardless of whether they were included in the product) is important, assignments focused on student reflection might be especially illuminating.

Definition: Critical thinking is a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion. The capacity to combine or synthesize existing ideas, images, or expertise in original ways; thinking innovatively; and intellectual risk taking – all components of creative thinking – is part of the development of critical thinking.

NOTE: *Not all outcomes will be applicable to all teaching situations.*

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Developing the Critical Thinker

This criterion is best thought of as a precondition for the development of specific critical thinking competencies as articulated in the remainder of this rubric.

	Novice	Milestone: Emerging	Milestone: Showing Strength	Expert/ Advanced
Intellectual Autonomy	Typically, a dualistic view of the world (black/white, right/ wrong) and is dependent on authority. There is reluctance to examine counter-argument. Student has unrealistic view of self as well as unfocused concern with work organization, study skills, and intellectual habits of mind.	Students begin to recognize multiple perspectives and demonstrate courage as they begin to take risks with ideas. There is a developing determination to succeed and perseverance. Developing self-knowledge, e.g., the acceptance one might be wrong, seeking out knowledge, learning skepticism. Early awareness of study skills and organization weaknesses.	There is developing confidence in reasoning and argument where the student approaches knowledge questions analytically. Qualities include fair-mindedness and an opening up to others' viewpoints and arguments. Shows empathy with the situations of others (fellow-students, writers, artists). Developing definition of self as student through self-discipline (e.g.; punctual, taking pride in one's work, no procrastination).	Intellectual integrity is evidenced (e.g., search for counter-arguments, search for evidence); student grasps the contextual character of knowledge and that knowledge is constructed. Student demonstrates intellectual humility through realizing the evolving and temporary character of knowledge. There is realistic self-appraisal of one's strengths and limitations.

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	Novice	Milestone: Emerging	Milestone: Showing Strength	Expert/ Advanced
1. Explanation of issues	Issue/problem to be considered critically is stated without clarification or description.	Issue/problem to be considered critically is stated but description leaves some terms undefined, ambiguities unexplored, boundaries undetermined, and/or backgrounds unstated.	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 clearly and described comprehensively, delivering all relevant information necessary for full understanding.
2. Evidence *Selecting and using information to investigate a point of view or conclusion*	Information is taken from source(s) without any interpretation/ evaluation. Viewpoints of experts are taken as fact, without question.	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 exploration.	Information is taken from source(s) with enough interpretation/ evaluation to develop a coherent analysis or synthesis. Viewpoints of experts are explored.	Information is taken from source(s) with enough interpretation/ evaluation to develop a comprehensive analysis or synthesis. Viewpoints of experts are explored in depth.
3. Influence of context and assumptions	Shows an emerging awareness of present assumptions (sometimes labels assertions as assumptions). Begins to identify some contexts when presenting a position.	Identifies several relevant contexts when presenting a position. May be more aware of others' assumptions than one's own (or vice versa).	Identifies and examines own and others' assumptions and several relevant contexts when presenting a position.	Systematically and methodically analyzes own and others' assumptions and carefully evaluates the relevance of contexts when presenting a position.
4. Student's position (perspective, thesis/ hypothesis)	Specific position (perspective, thesis/ hypothesis) is stated, but is simplistic and obvious.	Specific position (perspective, thesis/ hypothesis) acknowledges different sides of an issue.	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) 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).
5. Conclusions and related outcomes (implications and consequences)	Conclusion is inconsistently tied to some of the information discussed; related outcomes (consequences and implications) are oversimplified.	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 logically tied to a range of information, including opposing viewpoints; related outcomes (consequences and implications) are identified clearly.	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.