

### CRITICAL THINKING VALUE RUBRIC

A A Association of American Colleges and Universities

Based upon the AAC&U Creative Thinking and Inquiry & Analysis VALUE rubrics: <a href="http://www.aacu.org/value/rubrics/creative-thinking">http://www.aacu.org/value/rubrics/creative-thinking</a>, and <a href="http://www.aacu.org/value/rubrics/creative-thinking">http://www.aacu.org/value/rubrics/creative-thinking</a>, and <a href="http://www.aacu.org/value/rubrics/creative-thinking">http://www.aacu.org/value/rubrics/creative-thinking</a>, and <a href="http://www.aacu.org/value/rubrics/creative-thinking">http://www.aacu.org/value/rubrics/creative-thinking</a>, and <a href="http://www.aacu.org/value/rubrics/creative-thinking">http://www.aacu.org/value/rubrics/inquiry-analysis</a></a>

Foundation Component Areas Where Critical Thinking is Taught: All courses in the Core

#### About the VALUE Rubrics

The AAC&U VALUE rubrics were developed by teams of faculty experts representing colleges and universities across the United States through a process that examined many existing campus rubrics and related documents for each learning outcome and incorporated additional feedback from faculty. The rubrics articulate fundamental criteria for each learning outcome, with performance descriptors demonstrating progressively more sophisticated levels of attainment. The rubrics are intended for institutional-level use in evaluating and discussing student learning, not for grading. The utility of the VALUE rubrics is to position learning at all undergraduate levels within a basic framework of expectations such that evidence of learning can be shared nationally through a common dialog and understanding of student success.

In developing an assessment plan for the CORE, the THECB strongly encouraged institutions to use "externally informed benchmarks" in the assessment of the Core. As such, UHD has committed to using the VALUE rubrics as part of its assessment plan for the core.

### **THECB Definition of Critical Thinking**

The THECB defines critical thinking as creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information. The THECB definition spans aspects of both the Creative Thinking VALUE rubric and the Inquiry & Analysis VALUE rubric so both are presented here.

### **Creative Thinking Framing Language**

### Definition

Creative thinking is both the capacity to combine or synthesize existing ideas, images, or expertise in original ways and the experience of thinking, reacting, and working in an imaginative way characterized by a high degree of innovation, divergent thinking, and risk taking.

### Framing Language

Creative thinking, as it is fostered within higher education, must be distinguished from less focused types of creativity such as, for example, the creativity exhibited by a small child's drawing, which stems not from an understanding of connections, but from an ignorance of boundaries. Creative thinking in higher education can only be expressed productively within a particular domain. The student must have a strong foundation in the strategies and skills of the domain in order to make connections and synthesize. While demonstrating solid knowledge of the domain's parameters, the creative thinker, at the highest levels of performance, pushes beyond those boundaries in new, unique, or atypical recombinations, uncovering or critically perceiving new syntheses and using or recognizing creative risk-taking to achieve a solution.

The Creative Thinking VALUE Rubric is intended to help faculty assess creative thinking in a broad range of transdisciplinary or interdisciplinary work samples or collections of work. The rubric is made up of a set of attributes that are common to creative thinking across disciplines. Examples of work samples or collections of work that could be assessed for creative thinking may include research papers, lab reports, musical compositions, a mathematical equation that solves a problem, a prototype design, a reflective piece about the final product of an assignment, or other academic works. The work samples or collections of work may be completed by an individual student or a group of students.

### Glossary

### The definitions that follow were developed to clarify terms and concepts used in this rubric only.

- Exemplar: A model or pattern to be copied or imitated (quoted from www.dictionary.reference.com/browse/exemplar).
- Domain: Field of study or activity and a sphere of knowledge and influence.

<sup>&</sup>lt;sup>1</sup> THECB Assessment of the Core Guidelines: <a href="http://www.thecb.state.tx.us/index.cfm?objectid=417252EA-B240-62F7-9F6A1A125C83BE08">http://www.thecb.state.tx.us/index.cfm?objectid=417252EA-B240-62F7-9F6A1A125C83BE08</a> (Retrieved 10/6/2014).

## **Inquiry & Analysis Framing Language**

#### Definition

Inquiry is a systematic process of exploring issues, objects or works through the collection and analysis of evidence that results in informed conclusions or judgments. Analysis is the process of breaking complex topics or issues into parts to gain a better understanding of them.

### Framing Language

This rubric is designed for use in a wide variety of disciplines. Since the terminology and process of inquiry are discipline-specific, an effort has been made to use broad language which reflects multiple approaches and assignments while addressing the fundamental elements of sound inquiry and analysis (including topic selection, existing, knowledge, design, analysis, etc.). The rubric language assumes that the inquiry and analysis process carried out by the student is appropriate for the discipline required. For example, if analysis using statistical methods is appropriate for the discipline then a student would be expected to use an appropriate statistical methodology for that analysis. If a student does not use a discipline-appropriate process for any criterion, that work should receive a performance rating of "1" or "0" for that criterion.

In addition, this rubric addresses the **products** of analysis and inquiry, not the **processes** themselves. The complexity of inquiry and analysis tasks is determined in part by how much information or guidance is provided to a student and how much the student constructs. The more the student constructs, the more complex the inquiry process. For this reason, while the rubric can be used if the assignments or purposes for work are unknown, it will work most effectively when those are known. Finally, faculty are encouraged to adapt the essence and language of each rubric criterion to the disciplinary or interdisciplinary context to which it is applied.

### Glossary

The definitions that follow were developed to clarify terms and concepts used in this rubric only.

- Conclusions: A synthesis of key findings drawn from research/evidence.
- Limitations: Critique of the process or evidence.
- Implications: How inquiry results apply to a larger context or the real world.



# CRITICAL THINKING PART 1: CREATIVE THINKING VALUE RUBRIC



Based upon the AAC&U Creative Thinking and Inquiry & Analysis VALUE rubrics: <a href="http://www.aacu.org/value/rubrics/creative-thinking">http://www.aacu.org/value/rubrics/creative-thinking</a>, and <

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Foundation Component Areas Where Critical Thinking is Taught: All courses in the core

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	Mastery (Senior Level) Point-value: 4	Proficient (Junior Level) Point-value: 3	Developing (Sophomore Level) Point-value: 2	Basic (Freshman Level) Point-value: 1	Skill is evident but performance falls below Freshman Level <sup>2</sup> Point-value: 0  No Evidence: Assignment may not elicit skill or student failed to articulate.
Acquiring Competencies This step refers to acquiring strategies and skills within a particular domain.	Reflect: Evaluates creative process and product using domain-appropriate criteria.	Create: Creates an entirely new object, solution or idea that is appropriate to the domain.	Adapt: Successfully adapts an appropriate exemplar to his/her own specifications.	Model: Successfully reproduces an appropriate exemplar.	Unable to successfully reproduce an appropriate exemplar.
Taking Risks May include personal risk (fear of embarrassment or rejection) or risk of failure in successfully completing assignment, i.e. going beyond original parameters of assignment, introducing new materials and forms, tackling controversial topics, advocating unpopular ideas or solutions.	Actively seeks out and follows through on untested and potentially risky directions or approaches to the assignment in the final product.	Incorporates new directions or approaches to the assignment in the final product.	Considers new directions or approaches without going beyond the guidelines of the assignment.	Stays strictly within the guidelines of the assignment.	Fails to follow the intent of the assignment, critical pieces are missing.
Solving Problems	Not only develops a logical, consistent plan to solve problem, but recognizes consequences of solution and can articulate reason for choosing solution.	Having selected from among alternatives, develops a logical, consistent plan to solve the problem.	Considers and rejects less acceptable approaches to solving problem.	Only a single approach is considered and is used to solve the problem.	Is unable to articulate a single, cohesive approach to solving a problem.
Embracing Contradictions	Integrates alternate, divergent, or contradictory perspectives or ideas fully.	Incorporates alternate, divergent, or contradictory perspectives or ideas in a exploratory way.	Includes (recognizes the value of) alternate, divergent, or contradictory perspectives or ideas in a small way.	1 0,	Fails to mention alternative, divergent or contradictory perspectives or ideas
Innovative Thinking Novelty or uniqueness (of idea, claim, question, form, etc.).	Extends a novel or unique idea, question, format, or product to create new knowledge or knowledge that crosses boundaries.	Creates a novel or unique idea, question, format, or product.	Experiments with creating a novel or unique idea, question, format, or product.		Parrots a collection of available ideas in the format originally presented either from lectures or other sources.
Connecting, Synthesizing, Transforming	Transforms ideas or solutions into entirely new forms.	Synthesizes ideas/solutions into a coherent whole.	Connects ideas or solutions in novel ways.		Articulates incorrect or illogical connections among ideas or solutions.

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<sup>&</sup>lt;sup>2</sup> Evaluators are encouraged to assign a zero to any work sample that does not meet Basic (Freshman Level) performance. Evaluators are encouraged to check the "No Evidence" if the rubric dimension is not evident in the work. For example, a student who uses supporting materials that confuse the message or are offensive or unrelated, would receive a zero on Supporting Material. By contrast, there are no supporting materials, the "No Evidence" category would be selected. There is simply no evidence of whether or not the student knows how to use supporting materials.



## CRITICAL THINKING PART 2: INQUIRY & ANALYSIS VALUE RUBRIC



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Definition: The THECB defines critical thinking as: creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.

Foundation Component Areas Where Critical Thinking is Taught: All courses in the core

	Mastery (Senior Level) Point-value: 4	Proficient (Junior Level) Point-value: 3	Developing (Sophomore Level) Point-value: 2	Basic (Freshman Level) Point-value: 1	Skill is evident but performance falls below Freshman Level <sup>e</sup> Point-value: 0	No Evidence: Assignment may not elicit skill or student failed to articulate.
Topic selection	Identifies a creative, focused, and manageable topic that addresses potentially significant yet previously less-explored aspects of the topic.	Identifies a focused and manageable/doable topic that appropriately addresses relevant aspects of the topic.	Identifies a topic that while manageable/doable, is too narrowly focused and leaves out relevant aspects of the topic.	Identifies a topic that is far too general and wide-ranging as to be manageable and doable.	Unclear what the topic actually is. Topic may appear to shift over the course of the student's work.	
Existing Knowledge, Research, and/or Views	Synthesizes in-depth information from relevant sources representing various points of view/approaches.	Presents in-depth information from relevant sources representing various points of view/approaches.	Presents information from relevant sources representing limited points of view/approaches.	Presents information from irrelevant sources representing limited points of view/approaches.	Appears to be including a set number of sources because the assignment stipulated a minimum. Sources do not advance the understanding of the topic.	
Design Process	All elements of the methodology or theoretical framework are skillfully developed. Appropriate methodology or theoretical frameworks may be synthesized from across disciplines or from relevant subdisciplines.	Critical elements of the methodology or theoretical framework are appropriately developed, however, more subtle elements are ignored or unaccounted for.	Critical elements of the methodology or theoretical framework are missing, incorrectly developed, or unfocused.	Inquiry design demonstrates a misunderstanding of the methodology or theoretical framework.	Unable to determine if the student understands the methodology or theoretical framework.	
Analysis	Organizes and synthesizes evidence to reveal insightful patterns, differences, or similarities related to focus.	Organizes evidence to reveal important patterns, differences, or similarities related to focus.	Organizes evidence, but the organization is not effective in revealing important patterns, differences, or similarities.	Lists evidence, but it is not organized and/or is unrelated to focus.		
Conclusions	States a conclusion that is a logical extrapolation from the inquiry findings.	States a conclusion focused solely on the inquiry findings. The conclusion arises specifically from and responds specifically to the inquiry findings.	States a general conclusion that, because it is so general, also applies beyond the scope of the inquiry findings.	States an ambiguous, illogical, or unsupportable conclusion from inquiry findings.	Student does not articulate a conclusion.	
Limitations and Implications	Insightfully discusses in detail relevant and supported limitations and implications.	Discusses relevant and supported limitations and implications.	Presents relevant and supported limitations and implications.	Presents limitations and implications, but they are possibly irrelevant and unsupported.		

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