### INQUIRY & ANALYSIS

**Inquiry & Analysis (Definition from VALUE Rubric):** 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.

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<th>Exceeds 3</th>
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<th>Does not meet 1</th>
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<tbody>
<tr>
<td>1. Use appropriate research methodologies</td>
<td>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 sub-disciplines.¹</td>
<td>Critical elements of the methodology or theoretical framework are appropriately developed, however, more subtle elements are missing, incorrectly developed, or unfocused.</td>
<td>Research methodology demonstrates a misunderstanding of the methodology or theoretical framework, is nonexistent, or incomplete.</td>
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<tr>
<td>2. Collect, record, and organize data²</td>
<td>Professionally collects, records, and organizes data.</td>
<td>Adequately collects, records, and organizes data.</td>
<td>Attempts to collect, record, and organize data, but is incomplete or unorganized.</td>
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<tr>
<td>3. Identify patterns and relationships²</td>
<td>Organizes and synthesizes evidence to reveal insightful patterns, differences, or similarities related to focus.</td>
<td>Organizes evidence to reveal important patterns, differences, or similarities related to focus.</td>
<td>Lists evidence, but it is incomplete, unorganized, and/or unrelated to focus.</td>
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<tr>
<td>4. Draw conclusions from the data²</td>
<td>States a conclusion that is a logical extrapolation from the inquiry findings.</td>
<td>States a conclusion focused solely on the inquiry findings. The conclusion arises specifically from and responds specifically to the inquiry findings.</td>
<td>Does not state or include a conclusion, or states an ambiguous, illogical, or unsupportable conclusion from inquiry findings.</td>
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<tr>
<td>5. Design and execute discipline-specific research projects or studies using scientific reasoning</td>
<td>Synthesizes in-depth information from relevant sources representing various points of view/approaches.</td>
<td>Presents in-depth information from relevant sources representing various points of view/approaches.</td>
<td>Presents information from sources representing limited points of view/approaches, or does not present discipline-specific research or reasoning.</td>
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</table>

¹ “Appropriate methodology” to be defined here by department

² Discussion point: Some departments may choose to collect additional student work for differentiating Outcomes #2 and #3
INQUIRY AND ANALYSIS VALUE Rubric

for more information, please contact value@aacu.org

The 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 core expectations articulated in all 15 of the VALUE rubrics can and should be translated into the language of individual campuses, disciplines, and even courses. 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.

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: (Definition from VALUE Rubric: 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.)

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<tr>
<td><strong>1. Formulate a hypothesis/thesis</strong></td>
<td>Specific position (perspective, thesis/hypothesis) is creative, taking into account complexities of an issue.</td>
<td>Specific position (perspective, thesis/hypothesis) acknowledges and/or accounts for different sides of an issue.</td>
<td>Position (perspective, thesis/hypothesis) is simplistic, unclear, or incomplete.</td>
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<tr>
<td><strong>2. Establish criteria for evaluation and select or construct a method for testing the hypothesis</strong></td>
<td>Establishes thorough and detailed criteria for evaluation, and excellently accounts for complexities, exceptions, counter-arguments, and/or possible errors.</td>
<td>Establishes appropriate criteria for evaluation, and adequately accounts for complexities, exceptions, and/or possible errors.</td>
<td>Does not establish appropriate criteria for evaluation, and/or fails to account for possible errors.</td>
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<tr>
<td><strong>3. Reason from sound premises to a valid conclusion</strong></td>
<td>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.</td>
<td>Conclusion is logically tied to a range of Information; some related outcomes (consequences and implications) are identified clearly.</td>
<td>Conclusion is nonexistent, incomplete, or inconsistently tied to some of the information discussed; related outcomes (consequences and implications) are oversimplified.</td>
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<tr>
<td><strong>4. Apply knowledge to new situations</strong></td>
<td>Proficiently uses course learning or prior knowledge to perform discipline-specific tasks.</td>
<td>Competently uses course learning or prior knowledge to perform discipline-specific tasks.</td>
<td>Does not use course learning or prior knowledge to perform discipline-specific tasks.</td>
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<td><strong>5. Synthesize knowledge</strong></td>
<td>Others' points of view or sources of information are exceptionally synthesized within position (perspective, thesis/hypothesis).</td>
<td>Others' points of view or sources of information are acknowledged within position (perspective, thesis/hypothesis).</td>
<td>Others' points of view or sources of information are minimally or not at all acknowledged.</td>
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CRITICAL THINKING VALUE Rubric

for more information, please contact values@aauu.org

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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.

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 walks of life.

This rubric is designed for use with many different types of assignments and the suggestions here are not an exhaustive list of possibilities. Critical thinking can be demonstrated in assignments that require students to complete analyses of text, data, or issues. 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.

Glossary

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

- Ambiguity: Information that may be interpreted in more than one way.
- Assumptions: Ideas, conditions, or beliefs (often implicit or unstated) that are "taken for granted or accepted as true without proof." (quoted from www.dictionaryreference.com/browse/assumptions)
- Context: The historical, ethical, political, cultural, environmental, or contextual settings or conditions that influence and complicate the consideration of any issues, ideas, artifacts, and events.
- Literal meaning: Interpretation of information exactly as stated. For example, "she was green with envy" would be interpreted to mean that her skin was green.
- Metaphor: Information that is (intended to be) interpreted in a non-literal way. For example, "she was green with envy" is intended to convey an intensity of emotion, not a skin color.