

Assessment of Student Learning Handbook

MINNESOTA STATE COMMUNITY & TECHNICAL COLLEGE



Fresh Ideas

2016-2017 Edition

Mission: Provide dynamic learning for living, working and serving. **Vision:** A success story for every stakeholder.



Assessment of Student Learning Handbook

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Executive Summary of Assessment of Student Learning



Plan → Assess → Improve

M State is dedicated to creating a culture of continuous improvement regarding the assessment of student learning.

Why do we do assessment?

- Improve student learning and engagement
- Align course activities and materials with course competencies, program outcomes and core abilities
- Provide evidence for programmatic and institutional accreditation
- Ensure we are meeting the needs of our stakeholders
- Uphold high standards of academic integrity and excellence
- Promote faculty professional development

Assessment of Student Learning Cycle

	Annual	Every 3 rd Year
Comprehensive Program Review*		✓
Annual Assessment • Action Plan for Course or Program/Department	✓	
Core Ability Assessment	✓	
Program Outcome Survey**	✓	

*Visit the Employee Portal > Files and Forms > Assessment of Student Learning for more information on your program's comprehensive review cycle.

**Program outcome surveys may not apply to some general education faculty.

Comprehensive Program Review

This is a 3 year comprehensive review process. During the year of the comprehensive program review, the review process uses a committee of peers and administrators to examine the academic program's successes and challenges. Specific action items are generated that will include work for the next 2-3 years. That work will be reviewed and updated annually. Using the annual assessment action plan process as a tool to advance action items from program review is encouraged, as noted below.

Annual Assessment Action Plan

This supports the comprehensive program review process and/or departmental or course assessment action plans. Faculty meet with their dean yearly to discuss assessment action plans and other program factors. During the annual assessment, action items from the last comprehensive review, or from other course or departmental assessment efforts are discussed and may be updated.

Every year, faculty develop action plans that (1) support student learning at the course or departmental level, **AND/OR** (2) support action items from the previous comprehensive program review process. Annual assessment may build upon the previous years' assessments.

Core Ability Assessment

This annual process assesses student learning of M State's core abilities. Each program requiring 30 or more credits will conduct core ability assessment.

Program Outcome Survey

Graduates of the AAS, AS, Diploma and Certificate programs complete a program outcome survey upon graduation each academic year. These surveys are indirect assessments designed to help programs reflect upon student perceptions of meeting their program outcomes.

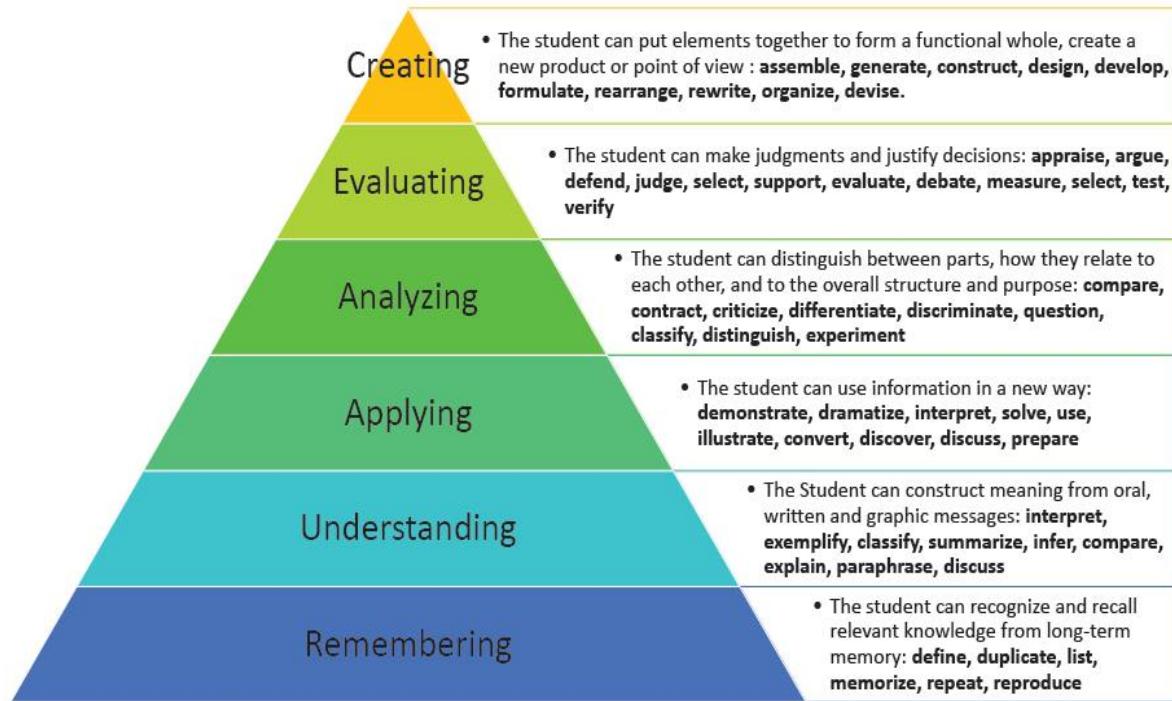
Employee Portal Assessment Resources

- Assessment of Student Learning Course/Department/Program Action Plan Forms
- Assessment Glossary
- Assessment of Student Learning Work Group Members
- M State Core Abilities
- AACU Value Rubrics to Use for Core Ability Assessment
- Program Review Schedule, Forms and Checklists

Assessment Glossary

Alignment: “Critical course elements working together to ensure that students achieve the desired outcomes.” Alignment needs to be present at every level of curriculum - elements of a course to a course → course to program → program to institutional → and carried through to → industry, licensure, and/or transfer standards.¹

Bloom’s Taxonomy²



http://p2cdn4static.sharschool.com/UserFiles/Servers/Server_87286/Image/Vridder/Staff/BloomRevisedTaxonomy.jpg

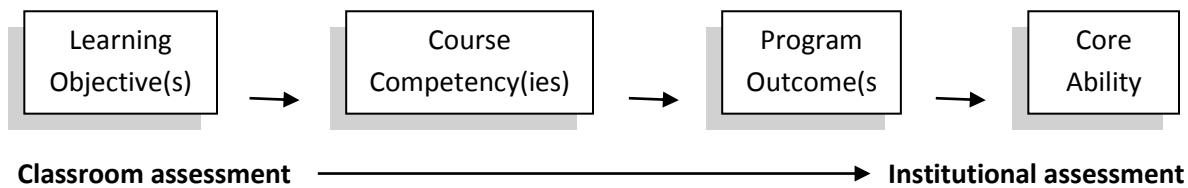
Core Abilities: Broad-based learning goals that serve as the foundation of the educational experience at M State. The core abilities are linked to our mission and vision statements and are the focus of institutional assessment.

Course Competency (often referred to as course outcome): Broad statement of knowledge, skills, or behaviors that a student should demonstrate upon course completion.³

- Competencies should begin with an action verb.
- Competencies are assessed at a Bloom’s level appropriate for the course.
- Each course should be mapped to at least one core ability.
- All competencies should be mapped to one or more of the program outcomes and all program outcomes need to be mapped to at least one competency.

Criteria: The qualitative or quantitative guidelines, rules, principles, or statements by which learner responses, work products, or mastery are evaluated.¹

Learning Objective: Narrow, specific knowledge, skill, or ability demonstrated by the student - the “how” of student learning.



NOTE: A single tool may be used for all levels of assessment (see course-embedded assessment).

This is also the model for **instructional alignment** which includes learning objective, course competency, program outcome, and core ability assessment.

Program Outcome: A robust statement that encompasses the knowledge, skills, and behaviors developed over the duration of the program through a wide range of courses and educational experiences. The program outcomes describe the competencies demonstrated by the ideal program graduate.³

- Outcomes should begin with an action verb and are assessed at the higher levels of Bloom’s taxonomy (see below).
- All outcomes should be mapped to one or more core abilities.
- All core abilities should be mapped to at least one program outcome.
- Core ability assessment should align with industry or transfer standards.

Quantitative Measures: Include numerical evidence of student learning such as an exam score or percentage of students passing a licensure exam.⁸

Qualitative Measures: Include narratives such as responses to open-ended survey questions or information gathered from focus groups.⁸

Rubrics: Provide specific, objective, and consistent performance criteria to evaluate student work. They outline the knowledge, skills, and behaviors indicative of various levels of learning. Rubrics may be shared with students before an assignment to provide expectations and allow opportunities for student self-assessment.⁸

Scaffolding: A process whereby instructors and learners interact with each other and with the subject matter in a way that provides students with guided support and practice as they learn a particular concept or skill. In a comprehensive community college it helps to remember that, “Because scaffolding is such a dynamic intervention finely tuned to the learner’s ongoing progress, the support given by the teacher during scaffolding strongly depends upon the characteristics of the situation like the type of task (e.g., well-structured versus ill-structured) and the responses of the student. Therefore, scaffolding does never look the same in different situations and it is not a technique that can be applied in every situation in the same way.”⁴

Assessment Types

Authentic Assessment: Assessments that are “more authentically related to later uses of learning than are conventional tests. Simulations, hands-on field or laboratory exercises, research projects, and juried presentations” are examples of authentic assessments. Authentic assessments will vary by subject and are designed to assess students’ abilities to perform or problem solve as they will need to in their chosen career or discipline.⁵

Course-embedded Assessment: Involves multi-layer assessment. Student work is evaluated for a grade, as well as to determine whether course competencies have been met. The work may also be used to assess program outcomes and/or core abilities.⁷

Course-embedded assessments may include exams, research papers, projects, lab reports, etc.

Course-embedded assessments may also include formative techniques used throughout the course to improve teaching and learning.⁷

Direct Assessment: Includes student products that demonstrate that specific learning has taken place. Examples of direct assessment include comprehensive exams, research papers, portfolios, field experiences, licensure exams, industry certifications, etc.⁸

Formative Assessment: Monitors student learning to provide ongoing feedback that can be used by instructors to improve their teaching and by students to improve their learning. Formative assessments are low stakes with little or no point value.⁶

Formative assessments may include concept maps, clicker questions, short summaries to identify main topics, etc.

Indirect Assessment: Implies that learning has taken place, but does not demonstrate that learning or skill. Examples of indirect assessment include student surveys and interviews; course evaluations; retention, graduation and job-placement rates, etc.⁸

Summative Assessment: Evaluates student learning at the end of a course or program. It is used to determine if, and at what level, the competencies have been met. Summative assessments are high stakes with high point value.⁶

Summative assessments may include a midterm exam, a paper, a recital, a skills test, etc.

¹ Quality Matters Glossary

² Anderson, L. W. and Krathwohl, D. R., et al. 2001. *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. Allyn & Bacon. Boston, MA.

³ Lewis, Marianne, Steve Kroger, and Mike Zender. *Defining Program-Based Student Learning Outcomes (SLOs) and Translating Them into a Curricular Structure*. Center for the Enhancement of Teaching and Learning, University of Cincinnati, 2009. Web. 27 May 2015. <http://www.uc.edu/content/dam/uc/cetl/docs/ProgramBased_SLOmodules1.pdf>.

⁴ Van de Pol, J., Volman, M. & Beishuizen, J. *Educ Psychol Rev* (2010) 22: 271. doi:10.1007/s10648-010-9127-6

⁵ Svinivki, M. & McKeachie, W. 2011. *McKeachie's Teaching Tips: Strategies, Research, and Theory for College and University Teachers*. 13th edition.

⁶ *Whys and Hows of Assessment*. Eberly Center for Teaching Excellence, Carnegie Mellon University, n.d. Web 1 June 2015. <<https://www.cmu.edu/teaching/assessment/basics/formative-summative.html>>.

⁷ *Assessment*. Missouri State University – West Plains, 2012. Web 28 May 2015. <<http://wp.missouristate.edu/assessment/3123.htm>>.

⁸ *Assessment Terms and Definitions*. West Chester University of Pennsylvania, 2009. Web. 27 May 2015. <<https://www.wcupa.edu/tlac/documents/More%20on%20Measures--Definitions.pdf>>.

MINNESOTA STATE COMMUNITY AND TECHNICAL COLLEGE

College-wide Core Abilities and AAC&U Value Rubrics

The M State core abilities are broad-based learning goals that serve as the foundation of the educational experience at M State. The core abilities are linked to our mission and vision statements and are the focus of institutional assessment.

If your assessment does not fit with the AAC&U rubrics listed, email assessment@minnesota.edu for guidance.

A

Core Ability: Demonstrate Effective Communication

Indicators:

1. Learner writes clearly, concisely and accurately in appropriate context and format.
2. Learner speaks clearly, concisely and accurately in a variety of contexts and formats.
3. Learner comprehends written and verbal communication.

AAC&U Value Rubrics

- Written Communication (p.8)
- Oral Communication (p.10)
- Reading Value (p.12)

B

Core Ability: Demonstrate Critical Thinking

Indicators:

1. Learner draws conclusions based on evidence.
2. Learner distinguishes between facts, fallacies, inferences and judgments.
3. Learner considers multiple perspectives in problem solving.

AAC&U Value Rubrics

- Critical Thinking (p.14)
- Inquiry and Analysis (p.16)
- Problem Solving (p.18)

C Core Ability: Demonstrate Quantitative and Logical Reasoning

Indicators

1. Learner performs computations using appropriate methods.
2. Learner demonstrates numerical and logical reasoning.

AAC&U Value Rubrics

- Problem Solving (p.18)
- Quantitative Literacy (p.20)

D Core Ability: Demonstrate Personal and Social Responsibility

Indicators

1. Learner demonstrates personal integrity and professional ethical practices.
2. Learner demonstrates respect for the rights, views and work of others.
3. Learner demonstrates personal accountability.
4. Learner demonstrates multicultural and global awareness.
5. Learner demonstrates the ability to work in a team.

AAC&U Value Rubrics

- Civic Engagement (p.22)
- Ethical Reasoning (p.24)
- Global Learning (p.26)
- Intercultural Knowledge and Competence (p.28)
- Teamwork (p.30)

E Core Ability: Demonstrate Effective Use of Information Technology

Indicators

1. Learner applies technology to create solutions.
2. Learner uses technology to communicate.

AAC&U Value Rubrics

- Information Literacy (p.32)
- Inquiry and Analysis (p.16)
- Problem Solving (p.18)



WRITTEN COMMUNICATION VALUE RUBRIC

for more information, please contact value@uacn.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
Written communication is the development and expression of ideas in writing. Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies, and mixing texts, data, and images. Written communication abilities develop through iterative experiences across the curriculum.

Framing Language

This writing rubric is designed for use in a wide variety of educational institutions. The most clear finding to emerge from decades of research on writing assessment is that the best writing assessments are locally determined and sensitive to local context and mission. Users of this rubric should, in the end, consider making adaptations and additions that clearly link the language of the rubric to individual campus contexts.

This rubric focuses assessment on how specific written work samples or collections of work respond to specific contexts. The central question guiding the rubric is "How well does writing respond to the needs of audience(s) for the work?" In focusing on this question the rubric does not attend to other aspects of writing that are equally important: issues of writing process, writing strategies, writers' fluency with different modes of textual production or publication, or writer's growing engagement with writing and disciplinarity through the process of writing.

Evaluators using this rubric must have information about the assignments or purposes for writing guiding writers' work. Also recommended is including reflective work samples of collections of work that address such questions as: What decisions did the writer make about audience, purpose, and genre as s/he compiled the work in the portfolio? How are those choices evident in the writing – in the content, organization and structure, reasoning, evidence, mechanical and surface conventions, and citational systems used in the writing? This will enable evaluators to have a clear sense of how writers understand the assignments and take it into consideration as they evaluate.

The first section of this rubric addresses the context and purpose for writing. A work sample or collections of work can convey the context and purpose for the writing tasks it showcases by including the writing assignments associated with work samples. But writers may also convey the context and purpose for their writing within the texts. It is important for faculty and institutions to include directions for students about how they should represent their writing contexts and purposes.

Faculty interested in the research on writing assessment that has guided our work here can consult the National Council of Teachers of English/Council of Writing Program Administrators' White Paper on Writing Assessment (2008; www.ncte.org/cccc/resources/positions/123784.htm) and the Conference on College Composition and Communication's Writing Assessment: A Position Statement (2008; www.ncte.org/cccc/resources/positions/123784.htm)

Glossary

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

- Content Development: The ways in which the text explores and represents its topic in relation to its audience and purpose.
- Context of and purpose for writing: The context of writing is the situation surrounding a text: who is reading it? who is writing it? Under what circumstances will the text be shared or circulated? What social or political factors might affect how the text is composed or interpreted? The purpose for writing is the writer's intended effect on an audience. Writers might want to persuade or inform; they might want to report or summarize information; they might want to work through complexity or confusion; they might want to argue with other writers, or connect with other writers; they might want to convey urgency or amuse; they might write for themselves or for an assignment or to remember.
- Disciplinary conventions: Formal and informal rules that constitute what is seen generally as appropriate within different academic fields, e.g. introductory strategies, use of passive voice or first person point of view, expectations for thesis or hypothesis, expectations for kinds of evidence and support that are appropriate to the task at hand, use of primary and secondary sources to provide evidence and support arguments and to document critical perspectives on the topic. Writers will incorporate sources according to disciplinary and genre conventions, according to the writer's purpose for the text. Through increasingly sophisticated use of sources, writers develop an ability to differentiate between their own ideas and the ideas of others, credit and build upon work already accomplished in the field or issue they are addressing, and provide meaningful examples to readers.
- Evidence: Source material that is used to extend, in purposeful ways, writers' ideas in a text.
- Genre conventions: Formal and informal rules for particular kinds of texts and/or media that guide formatting, organization, and stylistic choices, e.g. lab reports, academic papers, poetry, webpages, or personal essays.
- Sources: Texts (written, oral, behavioral, visual, or other) that writers draw on as they work for a variety of purposes – to extend, argue with, develop, define, or shape their ideas, for example.

WRITTEN COMMUNICATION VALUE RUBRIC

Definition

Written communication is the development and expression of ideas in writing. Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies, and mixing texts, data, and images. Written communication abilities develop through iterative experiences across the curriculum.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	Milestones 3	Benchmark 1
Context of and Purpose for Writing <i>Includes considerations of audience, purpose, and the circumstances surrounding the writing task(s).</i>	Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.	Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context).	Demonstrates awareness of context, audience, purpose, and to the assigned tasks(s) (e.g., begins to show awareness of audience's perceptions and assumptions).
Content Development	Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work.	Uses appropriate, relevant, and compelling content to explore ideas within the context of the discipline and shape the whole work.	Uses appropriate and relevant content to develop and explore ideas through most of the work.
Genre and Disciplinary Conventions <i>Formal and informal rules inherent in the expectations for writing in particular forms and/or academic fields (please see glossary).</i>	Demonstrates detailed attention to and successful execution of a wide range of conventions particular to a specific discipline and/or writing task (s) including organization, content, presentation, formatting, and stylistic choices	Demonstrates consistent use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices	Follows expectations appropriate to a specific discipline and/or writing task(s) for basic organization, content, and presentation
Sources and Evidence	Demonstrates skillful use of high-quality, credible, relevant sources to develop ideas that are appropriate for the discipline and genre of the writing	Demonstrates consistent use of credible, relevant sources to support ideas that are situated within the discipline and genre of the writing.	Attempts to use a consistent system for basic organization and presentation.
Control of Syntax and Mechanics	Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free.	Uses straightforward language that generally conveys meaning to readers. The language in the portfolio has few errors.	Uses language that sometimes impedes meaning to readers with clarity, although writing may include some errors.

ORAL COMMUNICATION 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.

The type of oral communication most likely to be included in a collection of student work is an oral presentation and therefore is the focus for the application of this rubric.

Definition

Oral communication is a prepared, purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors.

Framing Language

Oral communication takes many forms. This rubric is specifically designed to evaluate oral presentations of a single speaker at a time and is best applied to live or video-recorded presentations. For panel presentations or group presentations, it is recommended that each speaker be evaluated separately. This rubric best applies to presentations of sufficient length such that a central message is conveyed, supported by one or more forms of supporting materials and includes a purposeful organization. An oral answer to a single question not designed to be structured into a presentation does not readily apply to this rubric.

Glossary

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

- Central message: The main point/thesis/"bottom line"/"take-away" of a presentation. A clear central message is easy to identify; a compelling central message is also vivid and memorable.
- Delivery techniques: Posture, gestures, eye contact, and use of the voice. Delivery techniques enhance the effectiveness of the presentation when the speaker stands and moves with authority, looks more often at the audience than at his/her speaking materials/notes, uses the voice expressively, and uses few vocal filters ("um," "uh," "like," "you know," etc.).
- Language: Vocabulary, terminology, and sentence structure. Language that supports the effectiveness of a presentation is appropriate to the topic and audience, grammatical, clear, and free from bias. Language that enhances the effectiveness of a presentation is also vivid, imaginative, and expressive.
- Organization: The grouping and sequencing of ideas and supporting material in a presentation. An organizational pattern that enhances the effectiveness of the presentation reflects a purposeful choice among possible alternatives, such as a chronological pattern, a problem-solution pattern, an analysis-of-parts pattern, etc., that makes the content of the presentation easier to follow and more likely to accomplish its purpose.
- Supporting material: Explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities, and other kinds of information or analysis that supports the principal ideas of the presentation. Supporting material is generally credible when it is relevant and derived from reliable and appropriate sources. Supporting material is highly credible when it is also vivid and varied across the types listed above (e.g., a mix of examples, statistics, and references to authorities). Supporting material may also serve the purpose of establishing the speakers credibility. For example, in presenting a creative work such as a dramatic reading of Shakespeare, supporting evidence may not advance the ideas of Shakespeare, but rather serve to establish the speaker as a credible Shakespearean actor.



for more information, please contact value@aacu.org



ORAL COMMUNICATION VALUE RUBRIC

A

Oral communication is a prepared, purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone	Milestones	Benchmark
Organization	4 Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable and is skillful and makes the content of the presentation cohesive.	3 Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable within the presentation.	2 Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is intermittently observable within the presentation.
Language	Language choices are imaginative, memorable, and compelling, and enhance the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are thoughtful and generally support the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are mundane and commonplace and partially support the effectiveness of the presentation. Language in presentation is appropriate to audience.
Delivery	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation compelling, and speaker appears polished and confident.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation interesting, and speaker appears comfortable.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation understandable, and speaker appears tentative.
Supporting Material	A variety of types of supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that significantly supports the presentation or establishes the presenter's credibility/ authority on the topic.	Supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that generally supports the presentation or establishes the presenter's credibility/ authority on the topic.	Supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that partially supports the presentation or establishes the presenter's credibility/ authority on the topic.
Central Message	Central message is compelling (precisely stated, appropriately repeated, memorable, and strongly supported.)	Central message is clear and consistent with the supporting material.	Central message is basically understandable but is not often repeated and is not memorable.

READING VALUE RUBRIC

for more information, please contact value@uav.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.

Reading is "the process of simultaneously extracting and constructing meaning through interaction and involvement with written language" (Snow et al., 2002). (From www.rand.org/pubs/research_briefs/RB8024/index1.html)

Definition

Framing Language

To paraphrase Phaedrus, texts do not explain, nor answer questions about, themselves. They must be located, approached, decoded, comprehended, analyzed, interpreted, and discussed, especially complex academic texts used in college and university classrooms for purposes of learning. Historically, college professors have not considered the teaching of reading necessary other than as a "basic skill" in which students may require "remediation." They have assumed that students come with the ability to read and have placed responsibility for its absence on teachers in elementary and secondary schools.

This absence of reading instruction in higher education must, can, and will change, and this rubric marks a direction for this change. Why the change? Even the strongest, most experienced readers making the transition from high school to college have not learned what they need to know and do to make sense of texts in the context of professional and academic scholarship—to say nothing about readers who are either not as strong or as experienced. Also, readers mature and develop their repertoire of reading performances naturally during the undergraduate years and beyond as a consequence of meeting textual challenges. This rubric provides some initial steps toward finding ways to measure undergraduate students' progress along the continuum. Our intention in creating this rubric is to support and promote the teaching of undergraduates as readers to take on increasingly higher levels of concerns with texts and to read as one of "those who comprehend."

Readers, as they move beyond their undergraduate experiences, should be motivated to approach texts and respond to them with a reflective level of curiosity and the ability to apply aspects of the texts they approach to a variety of aspects in their lives. This rubric provides the framework for evaluating both students' developing relationship to texts and their relative success with the range of texts their coursework introduces them to. It is likely that users of this rubric will detect that the cell boundaries are permeable, and the criteria of the rubric are, to a degree, interrelated.

Glossary

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

- Analysis: The process of recognizing and using features of a text to build a more advanced understanding of the meaning of a text. (Might include evaluation of genre, language, tone, stated purpose, explicit or implicit logic (including flaws of reasoning), and historical context as they contribute to the meaning of a text.)
- Comprehension: The extent to which a reader "gets" the text, both literally and figuratively. Accomplished and sophisticated readers will have moved from being able to "get" the meaning that the language of the text provides to being able to "get" the implications of the text, the questions it raises, and the counterarguments one might suggest in response to it. A helpful and accessible discussion of 'comprehension' is found in Chapter 2 of the RAND report, *Reading for Understanding*: www.rand.org/pubs/monograph_reports/MR1465/MR1465.ch2.pdf.
- Epistemological lens: The knowledge framework a reader develops in a specific discipline as s/he moves through an academic major (e.g., essays, textbook chapters, literary works, journal articles, lab reports, grant proposals, lectures, blogs, webpages, or literature reviews, for example). The depth and breadth of this knowledge provides the foundation for independent and self-regulated responses to the range of texts in any discipline or field that students will encounter.
- Genre: A particular kind of "text" defined by a set of disciplinary conventions or agreements learned through participation in academic discourse. Genre governs what texts can be about, how they are structured, what to expect from them, what can be done with them, how to use them
- Interpretation: Determining or construing the meaning of a text or part of a text in a particular way based on textual and contextual information.
- Interpretive Strategies: Purposeful approaches from different perspectives, which include, for example, asking clarifying questions, building knowledge of the context in which a text was written, visualizing and considering counterfactuals (asking questions that challenge the assumptions or claims of the text, e.g., What might our country be like if the Civil War had not happened? How would Hamlet be different if Hamlet had simply killed the King?).
- Multiple Perspectives: Consideration of how text-based meanings might differ depending on point of view.
- Parts: Titles, headings, meaning of vocabulary from context, structure of the text, important ideas and relationships among those ideas.
- Relationship to text: The set of expectations and intentions a reader brings to a particular text or set of texts.
- Searches intentionally for relationships: An active and highly-aware quality of thinking closely related to inquiry and research.
- Takes texts apart: Discerns the level of importance or abstraction of textual elements and sees big and small pieces as parts of the whole meaning (compare to Analysis above).
- Metacognition: This is not a word that appears explicitly anywhere in the rubric, but it is implicit in a number of the descriptors, and is certainly a term that we find frequently in discussions of successful and rich learning. Metacognition, (a term typically attributed to the cognitive psychologist J.H. Flavell) applied to reading refers to the awareness, deliberateness, and reflexivity defining the activities and strategies that readers must control in order to work their ways effectively through different sorts of texts, from lab reports to sonnets, from math texts to historical narratives, or from grant applications to graphic novels, for example. Metacognition refers here as well to an accomplished reader's ability to consider the ethos reflected in any such text; to know that one is present and should be considered in any use of, or response to a text.

READING VALUE RUBRIC

for more information, please contact value@aau.org



Reading is "the process of simultaneously extracting and constructing meaning through interaction and involvement with written language" (Snow et al., 2002). (From www.rand.org/pubs/research_briefs/RB8024/index1.html)

Definition

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Comprehension <i>Genres</i>	Recognizes possible implications of the text for contexts, perspectives, or issues beyond the assigned task within the classroom or beyond the author's explicit message (e.g., might recognize broader issues at play, or might pose challenges to the author's message and presentation).	Uses the text, general background knowledge, and/or specific knowledge of the author's context to draw more complex inferences about the author's message and attitude.	Evaluates how textual features (e.g., sentence and paragraph structure or tone) contribute to the author's message; draws basic inferences about context and purpose of text.	Apprehends vocabulary appropriately to paraphrase or summarize the information the text communicates.
Relationship to Text <i>Making meanings with texts in their contexts</i>	Uses ability to identify texts within and across genres, monitoring and adjusting reading strategies and expectations based on generic nuances of particular texts.	Articulates distinctions among genres and their characteristic conventions.	Reflects on reading experiences across a variety of genres, reading both with and against the grain experimentally and intentionally.	Applies tacit genre knowledge to a variety of classroom reading assignments in productive, if unreflective, ways.
Analysis <i>Interacting with texts in parts and as wholes</i>	Evaluates texts for scholarly significance and relevance within and across the various disciplines, evaluating them according to their contributions and consequences.	Uses texts in the context of scholarship to develop a foundation of disciplinary knowledge and to raise and explore important questions.	Engages texts with the intention and expectation of building topical and world knowledge.	Approaches texts in the context of assignments with the intention and expectation of finding right answers and learning facts and concepts to display for credit.
Interpretation <i>Making sense with texts as blueprints for meaning</i>	Evaluates strategies for relating ideas, text structure, or other textual features in order to build knowledge or insight within and across texts and disciplines.	Identifies relations among ideas, text structure, or other textual features, to evaluate how they support an advanced understanding of the text as a whole.	Recognizes relations among parts or aspects of a text, such as effective or ineffective arguments or literary features, in considering how these contribute to a basic understanding of the text as a whole.	Identifies aspects of a text (e.g., content, structure, or relations among ideas) as needed to respond to questions posed in assigned tasks.
Reader's Voice <i>Participating in academic discourse about texts</i>	Provides evidence not only that s/he can read by using an appropriate epistemological lens but that s/he can also engage in reading as part of a continuing dialogue within and beyond a discipline or a community of readers.	Articulates an understanding of the multiple ways of reading and the range of interpretive strategies particular to one's discipline(s) or in a given community of readers.	Demonstrates that s/he can read purposefully, choosing among interpretive strategies depending on the purpose of the reading.	Can identify purpose(s) for reading, relying on an external authority such as an instructor for clarification of the task.
	Discusses texts with an independent intellectual and ethical disposition so as to further or maintain disciplinary conversations.	Elaborates on the text(s) (through interpretation or questioning) so as to deepen or enhance an ongoing discussion.	Discusses texts in structured conversations (such as in a classroom) in ways that contribute to a basic, shared understanding of the text.	Comments about texts in ways that preserve the author's meanings and link them to the assignment.

CRITICAL THINKING VALUE RUBRIC

for more information, please contact value@aacu.org



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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 circumstantial 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.

CRITICAL THINKING 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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Definition

	Capstone	Milestones	Benchmark
	4	3	2
Explanation of issues <i>Selecting and using information to investigate a point of view or conclusion</i>	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.
Evidence <i>Viewpoints of experts are questioned thoroughly.</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.
Influence of context and assumptions	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).
Student's 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).	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.
Conclusions and related outcomes (implications and consequences)	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.



B, E

INQUIRY AND ANALYSIS VALUE RUBRIC

for more information, please contact value@aacn.org



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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.

Definition

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.



for more information, please contact value@act.org



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INQUIRY AND ANALYSIS VALUE RUBRIC

B, E

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

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

Definition

	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
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.
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.
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.
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 unsupported conclusion from inquiry findings.
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.



PROBLEM SOLVING VALUE RUBRIC

for more information, please contact value@aacu.org



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Problem solving is the process of designing, evaluating and implementing a strategy to answer an open-ended question or achieve a desired goal.

Framing Language

Problem-solving covers a wide range of activities that may vary significantly across disciplines. Activities that encompass problem-solving by students may involve problems that range from well-defined to ambiguous in a simulated or laboratory context, or in real-world settings. This rubric distills the common elements of most problem-solving contexts and is designed to function across all disciplines. It is broad-based enough to allow for individual differences among learners, yet is concise and descriptive in its scope to determine how well students have maximized their respective abilities to practice thinking through problems in order to reach solutions.

This rubric is designed to measure the quality of a **process**, rather than the quality of an **end-product**. As a result, work samples or collections of work will need to include some evidence of the individual's thinking about a problem-solving task (e.g., reflections on the process from problem to proposed solution; steps in a problem-based learning assignment; record of think-aloud protocol while solving a problem). The final product of an assignment that required problem resolution is insufficient without insight into the student's problem-solving process. Because the focus is on institutional level assessment, scoring team projects, such as those developed in capstone courses, may be appropriate as well.

Glossary

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

- Contextual Factors: Constraints (such as limits on cost), resources, attitudes (such as biases) and desired additional knowledge which affect how the problem can be best solved in the real world or simulated setting.
- Critique: Involves analysis and synthesis of a full range of perspectives.
- Feasible: Workable, in consideration of time-frame, functionality, available resources, necessary buy-in, and limits of the assignment or task.
- “Off the shelf” solution: A simplistic option that is familiar from everyday experience but not tailored to the problem at hand (e.g. holding a bake sale to “save” an underfunded public library).
- Solution: An appropriate response to a challenge or a problem.
- Strategy: A plan of action or an approach designed to arrive at a solution. (If the problem is a river that needs to be crossed, there could be a construction-oriented, cooperative (build a bridge with your community) approach and a personally oriented, physical (swim across alone) approach. An approach that partially applies would be a personal, physical approach for someone who doesn't know how to swim.
- Support: Specific rationale, evidence, etc. for solution or selection of solution.

PROBLEM SOLVING VALUE RUBRIC

for more information, please contact value@aacn.org



Problem solving is the process of designing, evaluating, and implementing a strategy to answer an open-ended question or achieve a desired goal.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

Definition

	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Define Problem	Demonstrates the ability to construct a clear and insightful problem statement with evidence of all relevant contextual factors.	Demonstrates the ability to construct a problem statement with evidence of most relevant contextual factors, and problem statement is adequately detailed.	Begins to demonstrate the ability to construct a problem statement with evidence of most relevant contextual factors, but problem statement is superficial.	Demonstrates a limited ability in identifying a problem statement or related contextual factors.
Identify Strategies	Identifies multiple approaches for solving the problem that apply within a specific context.	Identifies multiple approaches for solving the problem, only some of which apply within a specific context.	Identifies only a single approach for solving the problem that does apply within a specific context.	Identifies one or more approaches for solving the problem that do not apply within a specific context.
Propose Solutions/Hypotheses	Proposes one or more solutions/hypotheses that indicates a deep comprehension of the problem. Solution/hypotheses are sensitive to contextual factors as well as all of the following ethical, logical, and cultural dimensions of the problem.	Proposes one or more solutions/hypotheses that indicates comprehension of the problem. Solutions/hypotheses are sensitive to contextual factors as well as the one of the following: ethical, logical, or cultural dimensions of the problem.	Proposes one solution/hypothesis that is “off the shelf” rather than individually designed to address the specific contextual factors of the problem.	Proposes a solution/hypothesis that is difficult to evaluate because it is vague or only indirectly addresses the problem statement.
Evaluate Potential Solutions	Evaluation of solutions is deep and elegant (for example, contains thorough and insightful explanation) and includes, deeply and thoroughly, all of the following: considers history of problem, reviews logic/reasoning, examines feasibility of solution, and weighs impacts of solution, and weighs impacts of solution.	Evaluation of solutions is adequate (for example, contains thorough explanation) and includes the following: considers history of problem, reviews logic/reasoning, examines feasibility of solution, and weighs impacts of solution.	Evaluation of solutions is brief (for example, explanation lacks depth) and includes the following: considers history of problem, reviews logic/reasoning, examines feasibility of solution, and weighs impacts of solution.	Evaluation of solutions is superficial (for example, contains cursory, surface level explanation) and includes the following: considers history of problem, reviews logic/reasoning, examines feasibility of solution, and weighs impacts of solution.
Implement Solution	Implements the solution in a manner that addresses thoroughly and deeply multiple contextual factors of the problem.	Implements the solution in a manner that addresses multiple contextual factors of the problem in a surface manner.	Implements the solution in a manner that addresses the problem statement but ignores relevant contextual factors.	Implements the solution in a manner that does not directly address the problem statement.
Evaluate Outcomes	Reviews results relative to the problem defined with thorough, specific considerations of need for further work.	Reviews results in terms of the problem defined with little, if any, consideration of need for further work.	Reviews results superficially in terms of the problem defined with no consideration of need for further work.	Reviews results superficially in terms of the problem defined with no consideration of need for further work.

QUANTITATIVE LITERACY VALUE RUBRIC

for more information, please contact value@aacu.org



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Quantitative Literacy (QL) – also known as Numeracy or Quantitative Reasoning (QR) – is a "habit of mind," competency, and comfort in working with numerical data. Individuals with strong QL skills possess the ability to reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations. They understand and can create sophisticated arguments supported by quantitative evidence and they can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate).

Quantitative Literacy Across the Disciplines

Current trends in general education reform demonstrate that faculty are recognizing the steadily growing importance of Quantitative Literacy (QL) in an increasingly quantitative and data-dense world. AAC&U's recent survey showed that concerns about QL skills are shared by employers, who recognize that many of today's students will need a wide range of high level quantitative skills to complete their work responsibilities. Virtually all of today's students, regardless of career choice, will need basic QL skills such as the ability to draw information from charts, graphs, and geometric figures, and the ability to accurately complete straightforward estimations and calculations.

Preliminary efforts to find student work products which demonstrate QL skills proved a challenge in this rubric creation process. It's possible to find pages of mathematical problems, but what those problem sets don't demonstrate is whether the student was able to think about and understand the meaning of her work. It's possible to find research papers that include quantitative information, but those papers often don't provide evidence that allows the evaluator to see how much of the thinking was done by the original source (often carefully cited in the paper) and how much was done by the student herself, or whether conclusions drawn from analysis of the source material are even accurate.

Given widespread agreement about the importance of QL, it becomes incumbent on faculty to develop new kinds of assignments which give students substantive, contextualized experience in using such skills as analyzing quantitative information, representing quantitative information in appropriate forms, completing calculations to answer meaningful questions, making judgments based on quantitative data and communicating the results of that work for various purposes and audiences. As students gain experience with those skills, faculty must develop assignments that require students to create work products which reveal their thought processes and demonstrate the range of their QL skills.

This rubric provides for faculty a definition for QL and a rubric describing four levels of QL achievement which might be observed in work products within work samples or collections of work. Members of AAC&U's rubric development team for QL hope that these materials will aid in the assessment of QL – but, equally important, we hope that they will help institutions and individuals in the effort to more thoroughly embed QL across the curriculum of colleges and universities.

Framing Language

This rubric has been designed for the evaluation of work that addresses quantitative literacy (QL) in a substantive way. QL is not just computation, not just the citing of someone else's data. QL is a habit of mind, a way of thinking about the world that relies on data and on the mathematical analysis of data to make connections and draw conclusions. Teaching QL requires us to design assignments that address authentic, data-based problems. Such assignments may call for the traditional written paper, but we can imagine other alternatives: a video of a PowerPoint presentation, perhaps, or a well designed series of web pages. In any case, a successful demonstration of QL will place the mathematical work in the context of a full and robust discussion of the underlying issues addressed by the assignment.

Finally, QL skills can be applied to a wide array of problems of varying difficulty, confounding the use of this rubric. For example, the same student might demonstrate high levels of QL achievement when working on a simplistic problem and low levels of QL achievement when working on a very complex problem. Thus, to accurately assess a student's QL achievement it may be necessary to measure QL achievement within the context of problem complexity, much as is done in diving competitions where two scores are given, one for the difficulty of the dive, and the other for the skill in accomplishing the dive. In this context, that would mean giving one score for the complexity of the problem and another score for the QL achievement in solving the problem.

QUANTITATIVE LITERACY VALUE RUBRIC


Definition

Quantitative Literacy (QL) – also known as Numeracy or Quantitative Reasoning (QR) – is a "habit of mind," competency, and comfort in working with numerical data. Individuals with strong QL skills possess the ability to reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations. They understand and can create sophisticated arguments supported by quantitative evidence and they can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate).

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone	Milestones	Benchmark
	4	3	2
Interpretation <i>Ability to explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words)</i>	Provides accurate explanations of information presented in mathematical forms. Makes appropriate inferences based on that information. <i>For example, accurately explains the trend data shown in a graph, and makes reasonable predictions regarding what the data suggest about future events.</i>	Provides somewhat accurate explanations of information presented in mathematical forms. <i>For instance, accurately explains the trend data shown in a graph.</i>	Attempts to explain information presented in mathematical forms, but draws incorrect conclusions about what the information means. <i>For example, attempts to explain the trend data shown in a graph, but may explain trend data shown in a graph, but may misattribute the slope of the trend line.</i>
Representation <i>Ability to convert relevant information into various mathematical forms (e.g., equations, graphs, diagrams, tables, words)</i>	Skillfully converts relevant information into an insightful mathematical portrayal in a way that contributes to a further or deeper understanding.	Competently converts relevant information into an appropriate and desired mathematical portrayal.	Competently converts relevant information into an appropriate and desired mathematical portrayal is only partially successful or inaccurate.
Calculation	Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem. Calculations are also presented elegantly (clearly, concisely, etc.)	Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem.	Calculations attempted are either unsuccessful or represent only a portion of the calculations required to comprehensively solve the problem.
Application / Analysis <i>Ability to make judgments and draw appropriate conclusions based on the quantitative analysis of data, while recognizing the limits of this analysis</i>	Uses the quantitative analysis of data as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions from this work.	Uses the quantitative analysis of data as the basis for competent judgments, drawing reasonable and appropriately qualified conclusions from this work.	Uses the quantitative analysis of data as the basis for workmanlike (without inspiration or nuance, ordinary) judgments, drawing plausible conclusions from this work.
Assumptions <i>Ability to make and evaluate important assumptions in estimation, modeling, and data analysis</i>	Explicitly describes assumptions and provides compelling rationale for why each assumption is appropriate. Shows awareness that confidence in final conclusions is limited by the accuracy of the assumptions.	Explicitly describes assumptions and provides compelling rationale for why assumptions are appropriate.	Explicitly describes assumptions.
Communication <i>Expressing quantitative evidence in support of the argument or purpose of the work in terms of what evidence is used and how it is formatted, presented, and contextualized</i>	Uses quantitative information in connection with the argument or purpose of the work, presents it in an effective format, and explicates it with consistently high quality.	Uses quantitative information in connection with the argument or purpose of the work, though data may be presented in a less than completely effective format or some parts of the explication may be uneven.	Uses quantitative information, but does not effectively connect it to the argument or purpose of the work.
			Presents an argument for which quantitative evidence is pertinent, but does not provide adequate explicit numerical support. (May use quasi-quantitative words such as "many," "few," "increasing," "small," and the like in place of actual quantities.)

CIVIC ENGAGEMENT VALUE RUBRIC

for more information, please contact value@aacu.org



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Definition

Civic engagement is "working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values and motivation to make that difference. It means promoting the quality of life in a community; through both political and non-political processes." (Excerpted from *Civic Responsibility and Higher Education*, edited by Thomas Ehrlich, published by Oryx Press, 2000, Preface, page vi.) In addition, civic engagement encompasses actions wherein individuals participate in activities of personal and public concern that are both individually life enriching and socially beneficial to the community.

Framing Language

Preparing graduates for their public lives as citizens, members of communities, and professionals in society has historically been a responsibility of higher education. Yet the outcome of a civic-minded graduate is a complex concept. Civic learning outcomes are framed by personal identity and commitments, disciplinary frameworks and traditions, pre-professional norms and practice, and the mission and values of colleges and universities. This rubric is designed to make the civic learning outcomes more explicit. Civic engagement can take many forms, from individual volunteerism to organizational involvement to electoral participation. For students this could include community-based learning through service-learning classes, community-based research, or service within the community. Multiple types of work samples or collections of work may be utilized to assess this, such as:

- ⑩ The student creates and manages a service program that engages others (such as youth or members of a neighborhood) in learning about and taking action on an issue they care about. In the process, the student also teaches and models processes that engage others in deliberative democracy, in having a voice, participating in democratic processes, and taking specific actions to affect an issue.
 - ⑩ The student researches, organizes, and carries out a deliberative democracy forum on a particular issue, one that includes multiple perspectives on that issue and how best to make positive change through various courses of public action. As a result, other students, faculty, and community members are engaged to take action on an issue.
 - ⑩ The student works on and takes a leadership role in a complex campaign to bring about tangible changes in the public's awareness or education on a particular issue, or even a change in public policy. Through this process, the student demonstrates multiple types of civic action and skills.
 - ⑩ The student integrates their academic work with community engagement, producing a tangible product (piece of legislation or policy, a business, building or civic infrastructure, water quality or scientific assessment, needs survey, research paper, service program, or organization) that has engaged community constituents and responded to community needs and assets through the process.
- In addition, the nature of this work lends itself to opening up the review process to include community constituents that may be a part of the work, such as teammates, colleagues, community/agency members, and those served or collaborating in the process.

Glossary

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

- Civic identity: When one sees her or himself as an active participant in society with a strong commitment and responsibility to work with others towards public purposes.
- Service-learning class: A course-based educational experience in which students participate in an organized service activity and reflect on the experience in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of personal values and civic responsibility.
- Communication skills: Listening, deliberation, negotiation, consensus building, and productive use of conflict.
- Civic life: The public life of the citizen concerned with the affairs of the community and nation as contrasted with private or personal life, which is devoted to the pursuit of private and personal interests.
- Politics: A process by which a group of people, whose opinions or interests might be divergent, reach collective decisions that are generally regarded as binding on the group and enforced as common policy. Political life enables people to accomplish goals they could not realize as individuals. Politics necessarily arises whenever groups of people live together, since they must always reach collective decisions of one kind or another.
- Government: "The formal institutions of a society with the authority to make and implement binding decisions about such matters as the distribution of resources, allocation of benefits and burdens, and the management of conflicts." (Retrieved from the Center for Civic Engagement Web site, May 5, 2009.)
- Civic/ community contexts: Organizations, movements, campaigns, a place or locus where people and/or living creatures inhabit, which may be defined by a locality (school, national park, non-profit organization, town, state, nation) or defined by shared identity (i.e., African-Americans, North Carolinians, Americans, the Republican or Democratic Party, refugees, etc.). In addition, contexts for civic engagement may be defined by a variety of approaches intended to benefit a person, group, or community, including community service or volunteer work, academic work.

CIVIC ENGAGEMENT VALUE RUBRIC

for more information, please contact nalve@aacm.org



D

Civic engagement is "working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values, and motivation to make that difference. It means promoting the quality of life in a community, through both political and non-political processes." (Excerpted from *Civic Responsibility and Higher Education*, edited by Thomas Elrich, published by Oryx Press, 2000, Preface, page vi.) In addition, civic engagement encompasses actions wherein individuals participate in activities of personal and public concern that are both individually life enriching and socially beneficial to the community.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone	Milestones	Benchmark	
	4	3	2	
Diversity of Communities and Cultures	Demonstrates evidence of adjustment in own attitudes and beliefs because of working within and learning from diversity of communities and cultures. Promotes others' engagement with diversity.	Reflects on how own attitudes and beliefs are different from those of other cultures and communities. Exhibits curiosity about what can be learned from diversity of communities and cultures.	Has awareness that own attitudes and beliefs are different from those of other cultures and communities. Exhibits little curiosity about what can be learned from diversity of communities and cultures.	Expresses attitudes and beliefs as an individual, from a one-sided view. Is indifferent or resistant to what can be learned from diversity of communities and cultures.
Analysis of Knowledge	Connects and extends knowledge (facts, theories, etc.) from one's own academic study/field/discipline to civic engagement and to one's own participation in civic life, politics, and government.	Analyzes knowledge (facts, theories, etc.) from one's own academic study/field/discipline making relevant connections to civic engagement and to one's own participation in civic life, politics, and government.	Begins to connect knowledge (facts, theories, etc.) from one's own academic study/field/discipline to civic engagement and to one's own participation in civic life, politics, and government.	Begins to identify knowledge (facts, theories, etc.) from one's own academic study/field/discipline that is relevant to civic engagement and to one's own participation in civic life, politics, and government.
Civic Identity and Commitment	Provides evidence of experience in civic-engagement activities and describes what she/he has learned about her or himself as it relates to a reinforced and clarified sense of civic identity and continued commitment to public action.	Provides evidence of experience in civic-engagement activities and describes what she/he has learned about her or himself as it relates to a growing sense of civic identity and commitment.	Evidence suggests involvement in civic-engagement activities is generated from expectations or course requirements rather than from a sense of civic identity.	Provides little evidence of her/his experience in civic-engagement activities and does not connect experiences to civic identity.
Civic Communication	Tailors communication strategies to effectively express, listen, and adapt to others to establish relationships to further civic action	Effectively communicates in civic context, showing ability to do all of the following: express, listen, and adapt ideas and messages based on others' perspectives.	Communicates in civic context, showing ability to do more than one of the following: express, listen, and adapt ideas and messages based on others' perspectives.	Communicates in civic context, showing ability to do one of the following: express, listen, and adapt ideas and messages based on others' perspectives.
Civic Action and Reflection	Demonstrates independent experience and <i>shows initiative in team leadership</i> of complex or multiple civic engagement activities, accompanied by reflective insights or analysis about the aims and accomplishments of one's actions.	Demonstrates independent experience and <i>team leadership</i> of civic action, with reflective insights or analysis about the aims and accomplishments of one's actions.	Has clearly <i>participated</i> in civically focused actions and begins to reflect or describe how these actions may benefit individual(s) or communities.	Has <i>experimented</i> with some civic activities but shows little internalized understanding of their aims or effects and little commitment to future action.
Civic Contexts/Structures	Demonstrates ability and commitment to <i>collaboratively work across and within</i> community contexts and structures to achieve a civic aim.	Demonstrates experience identifying intentional ways to <i>participate in</i> civic contexts and structures.	Experiments with civic contexts and structures, <i>tries out a few to see what fits</i> .	

ETHICAL REASONING 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

Ethical Reasoning is reasoning about right and wrong human conduct. It requires students to be able to assess their own ethical values and the social context of problems, recognize ethical issues in a variety of settings, think about how different ethical perspectives might be applied to ethical dilemmas and consider the ramifications of alternative actions. Students' ethical self identity evolves as they practice ethical decision-making skills and learn how to describe and analyze positions on ethical issues.

Framing Language

This rubric is intended to help faculty evaluate work samples and collections of work that demonstrate student learning about ethics. Although the goal of a liberal education should be to help students turn what they've learned in the classroom into action, pragmatically it would be difficult, if not impossible, to judge whether or not students would act ethically when faced with real ethical situations. What can be evaluated using a rubric is whether students have the intellectual tools to make ethical choices.

The rubric focuses on five elements: Ethical Self Awareness, Ethical Issue Recognition, Understanding Different Ethical Perspectives/Concepts, Application of Ethical Principles, and Evaluation of Different Ethical Perspectives/Concepts. Students' Ethical Self Identity evolves as they practice ethical decision-making skills and learn how to describe and analyze positions on ethical issues. Presumably, they will choose ethical actions when faced with ethical issues.

Glossary

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

- Core Beliefs: Those fundamental principles that consciously or unconsciously influence one's ethical conduct and ethical thinking. Even when unacknowledged, core beliefs shape one's responses. Core beliefs can reflect one's environment, religion, culture or training. A person may or may not choose to act on their core beliefs.
- Ethical Perspectives/concepts: The different theoretical means through which ethical issues are analyzed, such as ethical theories (e.g., utilitarian, natural law, virtue) or ethical concepts (e.g., rights, justice, duty).
- Complex, multi-layered (gray) context: The sub-parts or situational conditions of a scenario that bring two or more ethical dilemmas (issues) into the mix/ problem/ context/ for student's identification.
- Cross-relationships among the issues: Obvious or subtle connections between/ among the sub-parts or situational conditions of the issues present in a scenario (e.g., relationship of production of corn as part of climate change issue).



M STATE
CORE ABILITY

D

ETHICAL REASONING VALUE RUBRIC
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Definition

Ethical Reasoning is reasoning about right and wrong human conduct. It requires students to be able to assess their own ethical values and the social context of problems, recognize ethical issues in a variety of settings, think about how different ethical perspectives might be applied to ethical dilemmas, and consider the ramifications of alternative actions. Students' ethical self-identity evolves as they practice ethical decision-making skills and learn how to describe and analyze positions on ethical issues.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone	Milestones	Benchmark
	4	3	2
Ethical Self-Awareness	Student discusses in detail/ analyzes both core beliefs and the origins of the core beliefs and discussion has greater depth and clarity.	Student discusses in detail/ analyzes both core beliefs and the origins of the core beliefs.	Student states both core beliefs and the origins of the core beliefs.
Understanding Different Ethical Perspectives/Concepts	Student names the theory or theories, can present the gist of said theory or theories, and accurately explains the details of the theory or theories used.	Student can name the major theory or theories she/he uses, can present the gist of said theory or theories, and attempts to explain the details of the theory or theories used, but has some inaccuracies.	Student can name the major theory she/he uses, and is only able to present the gist of the named theory.
Ethical Issue Recognition	Student can recognize ethical issues when presented in a complex, multilayered (gray) context AND can recognize cross-relationships among the issues.	Student can recognize ethical issues when issues are presented in a complex, multilayered (gray) context OR can grasp cross-relationships among the issues.	Student can recognize basic and obvious ethical issues and grasp (incompletely) the complexities or interrelationships among the issues.
Application of Ethical Perspectives/Concepts	Student can independently apply ethical perspectives/ concepts to an ethical question, accurately, and is able to consider full implications of the application.	Student can independently (to a new example) apply ethical perspectives/ concepts to an ethical question, accurately, but does not consider the specific implications of the application.	Student can apply ethical perspectives/ concepts to an ethical question, independently (to a new example) and the application is inaccurate.
Evaluation of Different Ethical Perspectives/Concepts	Student states a position and can state the objections to, assumptions and implications of, and can reasonably defend against the objections to, assumptions and implications of different ethical perspectives/ concepts, and the student's defense is adequate and effective.	Student states a position and can state the objections to, assumptions and implications of, and respond to the objections to, assumptions and implications of different ethical perspectives/ concepts, but the student's response is inadequate.	Student states a position and can state the objections to, assumptions and implications of different ethical perspectives/ concepts but does not respond to them (and ultimately objections, assumptions, and implications are compartmentalized by student and do not affect student's position.)



GLOBAL LEARNING VALUE RUBRIC

for more information, please contact value@aaccu.org



Global learning is a critical analysis of and an engagement with complex, interdependent global systems and legacies (such as natural, physical, social, cultural, economic, and political) and their implications for people's lives and the earth's sustainability. Through global learning, students should 1) become informed, open-minded, and responsible people who are attentive to diversity across the spectrum of differences, 2) seek to understand how their actions affect both local and global communities, and 3) address the world's most pressing and enduring issues collaboratively and equitably.

Framing Language
Effective and transformative global learning offers students meaningful opportunities to analyze and explore complex global challenges, collaborate respectfully with diverse others, apply learning to take responsible action in contemporary global contexts, and evaluate the goals, methods, and consequences of that action. Global learning should enhance students' sense of identity, community, ethics, and perspective-taking. Global learning is based on the principle that the world is a collection of interdependent yet inequitable systems and that higher education has a vital role in expanding knowledge of human and natural systems, privilege and stratification, and sustainability and development to foster individuals' ability to advance equity and justice at home and abroad. Global learning cannot be achieved in a single course or a single experience but is acquired cumulatively across students' entire college career through an institution's curricular and co-curricular programming. As this rubric is designed to assess global learning on a programmatic level across time, the benchmarks (levels 1-4) may not be directly applicable to a singular experience, course, or assignment. Depending on the context, there may be development within one level rather than growth from level to level.

We encourage users of the Global Learning Rubric to also consult three other closely related VALUE Rubrics: Civic Engagement, Intercultural Knowledge and Competence, and Ethical Reasoning.

Glossary

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

Global Self-Awareness: in the context of global learning, the continuum through which students develop a mature, integrated identity with a systemic understanding of the interrelationships among the self, local and global communities, and the natural and physical world.

Perspective Taking: the ability to engage and learn from perspectives and experiences different from one's own and to understand how one's place in the world both informs and limits one's knowledge. The goal is to develop the capacity to understand the interrelationships between multiple perspectives, such as personal, social, cultural, disciplinary, environmental, local, and global.

Cultural Diversity: the ability to recognize the origins and influences of one's own cultural heritage along with its limitations in providing all that one needs to know in the world. This includes the curiosity to learn respectfully about the cultural diversity of other people and on an individual level to traverse cultural boundaries to bridge differences and collaboratively reach common goals. On a systems level, the important skill of comparatively analyzing how cultures can be marked and assigned a place within power structures that determine hierarchies, inequalities, and opportunities and which can vary over time and place. This can include, but is not limited to, understanding race, ethnicity, gender, nationhood, religion, and class.

Personal and Social Responsibility: the ability to recognize one's responsibilities to society--locally, nationally, and globally--and to develop a perspective on ethical and power relations both across the globe and within individual societies. This requires developing competence in ethical and moral reasoning and action.

Global Systems: the complex and overlapping worldwide systems, including natural systems (those systems associated with the natural world including biological, chemical, and physical sciences) and human systems (those systems developed by humans such as cultural, economic, political, and built), which operate in observable patterns and often are affected by or are the result of human design or disruption. These systems influence how life is lived and what options are open to whom. Students need to understand how these systems 1) are influenced and/or constructed, 2) operate with differential consequences, 3) affect the human and natural world, and 4) can be altered.

Knowledge Application: in the context of global learning, the application of an integrated and systemic understanding of the interrelationships between contemporary and past challenges facing cultures, societies, and the natural world (i.e., contexts) on the local and global levels. An ability to apply knowledge and skills gained through higher learning to real-life problem-solving both alone and with others.

GLOBAL LEARNING VALUE RUBRIC

for more information, please contact value@aacu.org

Definition

Global learning is a critical analysis of and an engagement with complex, interdependent global systems and legacies (such as natural, physical, social, cultural, economic, and political) and their implications for people's lives and the earth's sustainability. Through global learning, students should 1) become informed, open-minded, and responsible people who are attentive to diversity across the spectrum of differences, 2) seek to understand how their actions affect both local and global communities, and 3) address the world's most pressing and enduring issues collaboratively and equitably.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone	3 4	Milestones	Benchmark
Global Self-Awareness	Effectively addresses significant issues in the natural and human world based on articulating one's identity in a global context.	Evaluates the global impact of one's own and others' specific local actions on the natural and human world.	Analyzes ways that human actions influence the natural and human world.	Identifies some connections between an individual's personal decision-making and certain local and global issues.
Perspective Taking	Evaluates and applies diverse perspectives to complex subjects within natural and human systems in the face of multiple and even conflicting positions (i.e. cultural, disciplinary, and ethical.)	Synthesizes other perspectives (such as cultural, disciplinary, and ethical) when investigating subjects within natural and human systems.	Identifies and explains multiple perspectives (such as cultural, disciplinary, and ethical) when exploring subjects within natural and human systems.	Identifies multiple perspectives while maintaining a value preference for own positioning (such as cultural, disciplinary, and ethical).
Cultural Diversity	Adapts and applies a deep understanding of multiple worldviews, experiences, and power structures while initiating meaningful interaction with other cultures to address significant global problems.	Analyzes substantial connections between the worldviews, power structures, and experiences of multiple cultures historically or in contemporary contexts, incorporating respectful interactions with other cultures.	Explains and connects two or more cultures historically or in contemporary contexts with some acknowledgement of power structures, demonstrating respectful interaction with varied cultures and worldviews.	Describes the experiences of others historically or in contemporary contexts primarily through one cultural perspective, demonstrating some openness to varied cultures and worldviews.
Personal and Social Responsibility	Takes informed and responsible action to address ethical, social, and environmental challenges in global systems and evaluates the local and broader consequences of individual and collective interventions.	Analyzes the ethical, social, and environmental consequences of global systems and identifies a range of actions informed by one's sense of personal and civic responsibility.	Explains the ethical, social, and environmental consequences of local and national decisions on global systems.	Identifies basic ethical dimensions of some local or national decisions that have global impact.
Understanding Global Systems	Uses deep knowledge of the historic and contemporary role and differential effects of human organizations and actions on global systems to develop and advocate for informed, appropriate action to solve complex problems in the human and natural worlds.	Analyzes major elements of global systems, including their historic and contemporary interconnections and the differential effects of human organizations and actions, to pose elementary solutions to complex problems in the human and natural worlds.	Examines the historical and contemporary roles, interconnections, and differential effects of human organizations and actions on global systems within the human and the natural worlds.	Identifies the basic role of some global and local institutions, ideas, and processes in the human and natural worlds.
Applying Knowledge to Contemporary Global Contexts	Applies knowledge and skills to implement sophisticated, appropriate, and workable solutions to address complex global problems using interdisciplinary perspectives independently or with others.	Plans and evaluates more complex solutions to global challenges that are appropriate to their contexts using multiple disciplinary perspectives (such as cultural, historical, and scientific).	Formulates practical yet elementary solutions to global challenges that use at least two disciplinary perspectives (such as cultural, historical, and scientific).	Defines global challenges in basic ways, including a limited number of perspectives and solutions.



INTERCULTURAL KNOWLEDGE AND COMPETENCE VALUE RUBRIC

for more information, please contact ralue@aauz.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

Intercultural Knowledge and Competence is "a set of cognitive, affective, and behavioral skills and characteristics that support effective and appropriate interaction in a variety of cultural contexts." (Bennett, J.M. 2008. Transformative training: Designing programs for culture learning. In *Contemporary leadership and intercultural competence: Understanding and utilizing cultural diversity to build successful organizations*, ed. M. A. Moodian, 95-110. Thousand Oaks, CA: Sage.)

Framing Language

The call to integrate intercultural knowledge and competence into the heart of education is an imperative born of seeing ourselves as members of a world community, knowing that we share the future with others. Beyond mere exposure to culturally different others, the campus community requires the capacity to: meaningfully engage those others, place social justice in historical and political context, and put culture at the core of transformative learning. The intercultural knowledge and competence rubric suggests a systematic way to measure our capacity to identify our own cultural patterns, compare and contrast them with others, and adapt empathically and flexibly to unfamiliar ways of being.

The levels of this rubric are informed in part by M. Bennett's Developmental Model of Intercultural Sensitivity (Bennett, M.J. 1993. Towards ethnocentrism: A developmental model of intercultural sensitivity. In *Education for the intercultural experience*, ed. R. M. Paige, 22-71. Yarmouth, ME: Intercultural Press). In addition, the criteria in this rubric are informed in part by D.K. Deardorff's intercultural framework which is the first research-based consensus model of intercultural competence (Deardorff, D.K. 2006. The identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in International Education* 10(3): 241-266). It is also important to understand that intercultural knowledge and competence is more complex than what is reflected in this rubric. This rubric identifies six of the key components of intercultural knowledge and competence, but there are other components as identified in the Deardorff model and in other research.

Glossary

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

- Culture: All knowledge and values shared by a group.
- Cultural rules and biases: Boundaries within which an individual operates in order to feel a sense of belonging to a society or group, based on the values shared by that society or group.
- Empathy: "Empathy is the imaginary participation in another person's experience, including emotional and intellectual dimensions, by imagining his or her perspective (not by assuming the person's position)". Bennett, J. 1998. Transition shock: Putting culture shock in perspective. In *Basic concepts of intercultural communication*, ed. M. Bennett, 215-224. Yarmouth, ME: Intercultural Press.
- Intercultural experience: The experience of an interaction with an individual or groups of people whose culture is different from your own.
- Intercultural/ cultural differences: The differences in rules, behaviors, communication and biases, based on cultural values that are different from one's own culture.
- Suspends judgment in valuing their interactions with culturally different others: Postpones assessment or evaluation (positive or negative) of interactions with people culturally different from one self. Disconnecting from the process of automatic judgment and taking time to reflect on possibly multiple meanings.
- Worldview: Worldview is the cognitive and affective lens through which people construe their experiences and make sense of the world around them.

INTERCULTURAL KNOWLEDGE AND COMPETENCE VALUE RUBRIC

for more information, please contact nalve@aau.org

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Association
of American
Colleges and
Universities

Intercultural Knowledge and Competence is "a set of cognitive, affective, and behavioral skills and characteristics that support effective and appropriate interaction in a variety of cultural contexts." (Bennett, J. M. 2008. Transformative training: Designing programs for culture learning. In *Contemporary leadership and intercultural competence: Understanding and utilizing cultural diversity to build successful organizations*, ed. M. A. Moodian, 95-110. Thousand Oaks, CA: Sage.)

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	Milestones 3	Benchmark 1
Knowledge <i>Cultural self-awareness</i>	Articulates insights into own cultural rules and biases (e.g. seeking complexity; aware of how her/his experiences have shaped these rules and how to recognize and respond to cultural biases, resulting in a shift in self-description.)	Recognizes new perspectives about own cultural rules and biases (e.g. not looking for sameness; comfortable with the complexities that new perspectives offer.)	Identifies own cultural rules and biases (e.g. with a strong preference for those rules shared with own cultural group and seeks the same in others.)
Knowledge <i>Knowledge of cultural worldview/frameworks</i>	Demonstrates sophisticated understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.	Demonstrates adequate understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.	Demonstrates partial understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.
Skills <i>Empathy</i>	Interprets intercultural experience from the perspectives of own and more than one worldview and demonstrates ability to act in a supportive manner that recognizes the feelings of another cultural group.	Recognizes intellectual and emotional dimensions of more than one worldview and sometimes uses more than one worldview in interactions.	Identifies components of other cultural perspectives but responds in all situations with own worldview.
Skills <i>Verbal and nonverbal communication</i>	Articulates a complex understanding of cultural differences in verbal and nonverbal communication (e.g., demonstrates understanding of the degree to which people use physical contact while communicating in different cultures or use direct/indirect and explicit/implicit meanings) and is able to skillfully negotiate a shared understanding based on those differences.	Recognizes and participates in cultural differences in verbal and nonverbal communication and begins to negotiate a shared understanding based on those differences.	Identifies some cultural differences in verbal and nonverbal communication and is aware that misunderstandings can occur based on those differences but is still unable to negotiate a shared understanding.
Attitudes <i>Curiosity</i>	Asks complex questions about other cultures, seeks out and articulates answers to these questions that reflect multiple cultural perspectives.	Asks deeper questions about other cultures and seeks out answers to these questions.	Asks simple or surface questions about other cultures.
Attitudes <i>Openness</i>	Initiates and develops interactions with culturally different others. Suspends judgment in valuing her/his interactions with culturally different others.	Begins to initiate and develop interactions with culturally different others. Begins to suspend judgment in valuing her/his interactions with culturally different others.	Expresses openness to most, if not all, interactions with culturally different others. Has difficulty suspending any judgment in her/his interactions with culturally different others, and is aware of own judgment and expresses a willingness to change.

TEAMWORK 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 by shared nationally through a common dialog and understanding of student success.

Definition

Teamwork is behaviors under the control of individual team members (effort they put into team tasks, their manner of interacting with others on team, and the quantity and quality of contributions they make to team discussions.)

Framing Language

Students participate on many different teams, in many different settings. For example, a given student may work on separate teams to complete a lab assignment, give an oral presentation, or complete a community service project. Furthermore, the people the student works with are likely to be different in each of these different teams. As a result, it is assumed that a work sample or collection of work that demonstrates a student's teamwork skills could include a diverse range of inputs. This rubric is designed to function across all of these different settings.

Two characteristics define the ways in which this rubric is to be used. First, the rubric is meant to assess the teamwork of an individual student, not the team as a whole. Therefore, it is possible for a student to receive high ratings, even if the team as a whole is rather flawed. Similarly, a student could receive low ratings, even if the team as a whole works fairly well. Second, this rubric is designed to measure the quality of a **process**, rather than the quality of an **end product**. As a result, work samples or collections of work will need to include some evidence of the individual's interactions within the team. The final product of the team's work (e.g., a written lab report) is insufficient, as it does not provide insight into the functioning of the team.

It is recommended that work samples or collections of work for this outcome come from one (or more) of the following three sources: (1) student's own reflections about their contribution to a team's functioning; (2) evaluation or feedback from fellow team members about students' contribution to the team's functioning; or (3) the evaluation of an outside observer regarding students' contributions to a team's functioning. These three sources differ considerably in the resource demands they place on an institution. It is recommended that institutions using this rubric consider carefully the resources they are able to allocate to the assessment of teamwork and choose a means of compiling work samples or collections of work that best suits their priorities, needs, and abilities.

TEAMWORK VALUE RUBRIC

for more information, please contact value@uacu.org



Teamwork is behaviors under the control of individual team members (effort they put into team tasks, their manner of interacting with others on team, and the quantity and quality of contributions they make to team discussions.)

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

Definition

	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Contributes to Team Meetings	Helps the team move forward by articulating the merits of alternative ideas or proposals.	Offers alternative solutions or courses of action that build on the ideas of others.	Offers new suggestions to advance the work of the group.	Shares ideas but does not advance the work of the group.
Facilitates the Contributions of Team Members	Engages team members in ways that facilitate their contributions to meetings by both constructively building upon or synthesizing the contributions of others as well as noticing when someone is not participating and inviting them to engage.	Engages team members in ways that facilitate their contributions to meetings by constructively building upon or synthesizing the contributions of others.	Engages team members by taking turns and listening to others without interrupting.	
Individual Contributions Outside of Team Meetings	Completes all assigned tasks by deadline; work accomplished is thorough, comprehensive, and advances the project. Proactively helps other team members complete their assigned tasks to a similar level of excellence.	Completes all assigned tasks by deadline; work accomplished is thorough, comprehensive, and advances the project.	Completes all assigned tasks by deadline; work accomplished advances the project.	Completes all assigned tasks by deadline.
Fosters Constructive Team Climate	Supports a constructive team climate by doing all of the following: <ul style="list-style-type: none"> Treats team members respectfully by being polite and constructive in communication. Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work. Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. Provides assistance and/or encouragement to team members. 	Supports a constructive team climate by doing any three of the following: <ul style="list-style-type: none"> Treats team members respectfully by being polite and constructive in communication. Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work. Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. Provides assistance and/or encouragement to team members. 	Supports a constructive team climate by doing any two of the following: <ul style="list-style-type: none"> Treats team members respectfully by being polite and constructive in communication. Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work. Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. Provides assistance and/or encouragement to team members. 	Supports a constructive team climate by doing any one of the following: <ul style="list-style-type: none"> Treats team members respectfully by being polite and constructive in communication. Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work. Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. Provides assistance and/or encouragement to team members.
Responds to Conflict	Addresses destructive conflict directly and constructively, helping to manage/resolve it in a way that strengthens overall team cohesiveness and future effectiveness.	Identifies and acknowledges conflict and stays engaged with it.	Redirecting focus toward common ground, toward task at hand (away from conflict).	Passively accepts alternate viewpoints/ideas/opinions.



M STATE
CORE ABILITY

E



INFORMATION LITERACY 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. In July 2013, there was a correction to Dimension 3: Evaluate Information and its Sources Critically.

Definition

The ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively and responsibly use and share that information for the problem at hand. -

Adopted from the National Forum on Information Literacy

Framing Language

This rubric is recommended for use evaluating a collection of work, rather than a single work sample in order to fully gauge students' information skills. Ideally, a collection of work would contain a wide variety of different types of work and might include: research papers, editorials, speeches, grant proposals, marketing or business plans, PowerPoint presentations, Posters, literature reviews, position papers, and argument critiques to name a few. In addition, a description of the assignments with the instructions that initiated the student work would be vital in providing the complete context for the work. Although a student's final work must stand on its own, evidence of a student's research and information gathering processes, such as a research journal/diary, could provide further demonstration of a student's information proficiency and for some criteria on this rubric would be required.

INFORMATION LITERACY VALUE RUBRIC

The ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively and responsibly use and share that information for the problem at hand. - The National Forum on Information Literacy
Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

Definition

	Capstone 4	Milestones 3	Benchmark 1
Determine the Extent of Information Needed	Effectively defines the scope of the research question or thesis. Effectively determines key concepts. Types of information (sources) selected directly relate to concepts or answer research question.	Defines the scope of the research question or thesis completely: Can determine key concepts. Types of information (sources) selected relate to concepts or answer research question.	Defines the scope of the research question or thesis incompletely (parts are missing, remains too broad or too narrow, etc.). Can determine key concepts. Types of information (sources) selected partially relate to concepts or answer research question.
Access the Needed Information	Accesses information using effective, well-designed search strategies and most appropriate information sources.	Accesses information using variety of search strategies and some relevant information sources. Demonstrates ability to refine search.	Accesses information using simple search strategies, retrieves information from limited and similar sources.
Evaluate Information and its Sources Critically*	Chooses a variety of information sources appropriate to the scope and discipline of the research question. Selects sources after considering the importance (to the researched topic) of the multiple criteria used (such as relevance to the research question, currency, authority, audience, and bias or point of view).	Chooses a variety of information sources appropriate to the scope and discipline of the research question. Selects sources using multiple criteria (such as relevance to the research question, currency, and authority).	Chooses a variety of information sources. Selects sources using basic criteria (such as relevance to the research question and currency).
Use Information Effectively to Accomplish a Specific Purpose	Communicates, organizes and synthesizes information from sources to fully achieve a specific purpose, with clarity and depth	Communicates, organizes and synthesizes information from sources. Intended purpose is achieved.	Communicates and organizes information from sources. The information is not yet synthesized, so the intended purpose is not fully achieved.
Access and Use Information Ethically and Legally	Students use correctly all of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrate a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students use correctly three of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students use correctly two of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.

*Corrected Dimension 3: Evaluate Information and its Sources Critically in July 2013

The link to the Assessment Action Plan online form can be found in the Employee Portal > Files & Forms > Assessment of Student Learning. Faculty should use the online form to submit their action plan.



Assessment Action Plan

2016-17 Academic Year

PLAN ► ASSESS ► IMPROVE STUDENT LEARNING

M State is dedicated to creating a culture of continuous improvement regarding the assessment of student learning.

Your Information:

First Name:

Last Name:

Email:

Assessment Action Plan

Plans Due Dec. 19, 2016 or May 8, 2017

Step 1. General Action Plan Information

A. This action plan is for a (choose one): Course Program/Department

B. Name of the course or program/department:

*Include the course number and name if applicable (e.g. ENGL 1101 College Writing I)

C. If this is a collaborative action plan, enter all the name(s) of the faculty involved in this project:

Step 2. What area of student learning would you like to improve?

(This may include a course competency, program outcome, or departmental goal for enhancing learning.)

Step 3. What baseline data/information will you use to measure improvement?

(Optional - upload files with supporting data/information)

Step 4. What is your strategy to improve student learning?

INSTRUCTIONS (Please Read!): If you do not have your results yet, skip steps 5-7 and click on the "submit/save" button at the bottom of this page. You will receive a confirmation email with a link to update your action plan at a later date when you have your results.

Assessment Action Plan Results

Complete this section after you have implemented your strategy and reviewed your results.

*If your action plan results will not be available prior to the deadline, indicate this in step 6 and submit your plan.

Step 5. Analyze the Effectiveness of Your Strategy

How did your strategy impact student learning? Provide supporting data/information.

(Optional - Upload files with supporting data/information)

Step 6. Next Steps

Identify any next steps you plan to take with this action plan.

Step 7. Peer Consultation

Did you discuss your plan and/or results with peers? If so, what did you take away from these discussions?

Submit/Save



The link to the Core Ability Score Sheet Request Form can be found in the Employee Portal > Files & Forms > Assessment of Student Learning. Use the online form to submit your requests.

Core Ability Assessment

Core Ability Score Sheet Request Form

Information submitted on this form will be used to generate a Core Ability Score Sheet, which you will receive from M State's institutional research department.

Your Information

First Name:

Last Name:

Email:

Enter information below for the course you would like to assess

1. Term:
2. Course prefix and number (e.g. ENGL 1101):
3. Full name of the course (e.g. College Writing I):
4. Enter the six digit course ID for the section(s) you want to assess:
(The course ID can be found on the web schedule)
5. Select a rubric:

What's Next?

Click on the "submit" button below and Institutional Research will email you a populated Core Ability Score Sheet for the requested course. You will receive your score sheet in approximately 5-10 business days, unless a preferred date is indicated below.

Date preference to receive Score Sheet (optional):

Core Ability Assessment Score Sheet Example

Faculty Name:	Sandy Shore			NOTES: You must score 3 or more categories of the AAC&U rubric. If you are not using a category, please leave it blank. Only integers 1, 2, 3, and 4 can be used for scoring (see score in rubric column headings).									
AAC&U Rubric:	Problem Solving												
Core Ability:	Critical Thinking												
Course:	CHEM 1101 Principles of Chemistry, ID 000968												
Term:	Spring 2016												
Student ID	Name	Define Problem	Identify Strategies	Propose Solutions / Hypotheses	Evaluate Potential Solutions	Implement Solution	Evaluate Outcomes	Row Status					
111111	Doe, Jane	3		4	3		2	Ok					
222222	Doe, John	4		4	4		4	Ok					
333333	Student, Sample	1		2	2		1	Ok					
								Incomplete					
								Incomplete					
								Incomplete					
								Incomplete					

The Core Ability Score Sheet Assessment Request Form link can be found in the Employee Portal > Files and Forms > Assessment of Student Learning under Core Ability Assessment. Complete the online request form (see example online request form on page 36) to receive a score sheet for the requested course from the institutional research department.

