1. Please describe your program’s learning-outcomes trajectory since 2006-07: Has there been a transformation of organizational culture regarding the establishment of learning outcomes and the capacity to assess progress toward their achievement? If so, during which academic year would you say the transformation became noticeable? What lies ahead; what is the next likely step in developing a learning-outcomes organizational culture within the program?

In a 2011 summer retreat, the Department of Communication Studies met to discuss the need to revise our assessment plan. It was decided that the assessment plan in place was outdated, labor intensive, and no longer fully reflected our expectations for what we wanted students to know upon graduating from our program.

As a result of our retreat, we shifted a majority of the day-to-day information covered in faculty meetings to our listproc. As a result of this shift, we were able to spend our entire scheduled fall 2011 faculty meeting times devoted to assessment. Starting from the ground up, we revamped most of our learning outcomes and completely changed the methods used to collect data. Shifting from using portfolios to using AAC&U’s rubrics to assess oral communication, written communication, and inquiry and analysis enabled us to use validated rubrics to assess student oral presentations and written work. To make the process sustainable over time, we generated assessments to measure student discipline content knowledge and quantitative reasoning skills. Taken as a whole, our efforts enabled us to produce outcomes that are assessable, align with the Baccalaureate Learning Goals (BLGs), and use validated rubrics. The revised data collection process is sustainable, less labor intensive and relies on the efforts of a broad cross-section of faculty, rather than a small committee. All of our learning outcomes were created with assistance from the University Assessment Coordinator (Amy Liu).

As a result of our efforts, there has been a noticeable and positive shift in embracing assessment efforts at the department level. Pilot data was collected in the fall 2011 to reflect changes in our assessment plan. Additional data will be collected in the spring 2012 semester to complete the cycle.

2. Please list in prioritized order (or indicate no prioritization regarding) up to four desired learning outcomes (“takeaways” concerning such elements of curriculum as perspectives, specific content knowledge, skill sets, confidence levels) for students completing the program. For each stated outcome, please provide the reason that it was designated as desired by the faculty associated
with the program.

*Note: The learning outcomes listed below do not indicate prioritization.

a) **Students will have knowledge of communication discipline principles and facts**
   
   *Demonstrate a mastery of general discipline knowledge:* Identify how context affects the communication situation, distinguish differences between hearing and listening, understand value of feedback in the communication process, and apply ethical principles as a communicator.

b) **Students will communicate effectively in a variety of contexts.**
   
   *Demonstrate proficiency in oral communication:* determine presentation needs in different situations, correctly use visual aids, make appropriate language choices, use proper structure, and effectively deliver presentations.

   *Demonstrate proficiency in written communication:* implement a variety of style sheets, use thesis statements, use appropriate organizational strategies, apply transitions, include appropriate evidentiary support material, and employ grammar conventions.

c) **Students will think critically when constructing and consuming messages.**
   
   *Demonstrate proficiency in critical analysis research:* identify key critical perspectives of thought, be able to frame a question, appropriately select an artifact, and select appropriate methods to answer a question.

   *Demonstrate proficiency in quantitative research:* identify principles of research design, understand operational and conceptual definitions, select the correct statistical approach to answer hypotheses, and knowledge of internal validity threats.

3. **For undergraduate programs only, in what ways are the set of desired learning outcomes described above aligned with the University’s Baccalaureate Learning Goals? Please be as specific as possible.**

   The Department’s learning outcomes for this program aligns nicely with the BLGs. The BLGs include five areas and the outcomes adopted for this program overlap with four of them, including: Competence in Discipline, Intellectual and Practical Skills, Personal and Social Responsibility, and Integrative Learning.

   Particular emphasis is placed on Intellectual and Practical Skills. You will note that the Department’s learning outcomes are geared specifically to engage students with respect to inquiry and analysis (see for example, learning outcome “c” in question three), critical thinking (see for example, learning outcome “c” in question three), and written and oral communication (see for example, learning outcome “b” in question three).
4. For each desired outcome indicated in item 2 above, please:

   a) Describe the method(s) by which its ongoing pursuit is monitored and measured.

1. Students will have knowledge of communication discipline principles and facts
Demonstrate a mastery of general discipline knowledge: Identify how context affects the communication situation, distinguish differences between hearing and listening, understand value of feedback in the communication process, and apply ethical principles as a communicator.

   For this learning outcome, students complete an examination that was constructed, vetted, and approved by the faculty. The examination is an 8-item discipline competency measure (see Appendix A).

2. Students will communicate effectively in a variety of contexts.
Demonstrate proficiency in oral communication: determine presentation needs in different situations, correctly use visual aids, make appropriate language choices, use proper structure, and effectively deliver presentations.

   For this learning outcome, upper-division presentations from senior level classes are randomly sampled. Faculty members use the AAC&U’s VALUES Oral Communication rubric (see Appendix B) to score these selected presentations. The rubric is comprised of five dimensions that include: Organization, language, delivery, supporting material, and central message. Each dimension is scored on a five-point scale that ranges from a value of “0” indicating that it does not meet the benchmark to “4” indicating Capstone or complete proficiency.

   Demonstrate proficiency in written communication: implement a variety of style sheets, use thesis statements, use appropriate organizational strategies, apply transitions, include appropriate evidentiary support material, and employ grammar conventions.

   For this learning outcome, upper-division senior seminar classes are randomly sampled. Faculty members use the AAC&U’s VALUES Written Communication rubric (see Appendix C) to score these selected final papers. The rubric is comprised of five dimensions that include: Context and purpose for writing, content development, genre and disciplinary conventions, sources and evidence and control of syntax and mechanics. Each dimension is scored on a five-point scale that ranges from a value of “0” indicating that it does not meet the benchmark to “4” indicating Capstone or complete proficiency.

3. Students will think critically when constructing and consuming messages.
Demonstrate proficiency in critical analysis research: identify key critical perspectives of thought, be able to frame a question, appropriately select an artifact, and select appropriate methods to answer a question.
For this learning outcome, papers from upper-division students in our advanced writing class (ComS 100B) are randomly sampled. Faculty members use the AAC&U’s VALUES Inquiry and Analysis rubric (see Appendix D) to score these selected papers. The rubric is comprised of six dimensions that include: Topic selection, existing knowledge, research, and/or views, design process, analysis, conclusions, and limitations and implications. Each dimension is scored on a five-point scale that ranges from a value of “0” indicating that it does not meet the benchmark to “4” indicating Capstone or complete proficiency.

**Demonstrate proficiency in quantitative research:** identify principles of research design, understand operational and conceptual definitions, select the correct statistical approach to answer hypotheses, and knowledge of internal validity threats.

For this learning outcome, students complete two examinations that were constructed, vetted, and approved by the faculty. The examination is a quantitative competency measure (see Appendix E for part A and Appendix F for part B).

b) **Include a description of the sample of students (e.g., random sample of transfer students declaring the major; graduating seniors) from whom data were/will be collected and the frequency and schedule with which the data in question were/will be collected.**

All data is a random sampling of program majors. Data collected is spread across the entire academic year. All learning outcomes are included in the annual data collection.

c) **Describe and append a sample (or samples) of the “instrument” (e.g., survey or test), “artifact” (e.g., writing sample and evaluative protocol, performance review sheet), or other device used to assess the status of the learning outcomes desired by the program.**

Two examinations and three rubrics are used for assessment purposes. Each of these tools is attached to this document. Attachments are labeled appropriately.

d) **Explain how the program faculty analyzed and evaluated (will analyze and evaluate) the data to reach conclusions about each desired student learning outcome.**

The Department began its pilot study of the current assessment plan in Fall 2011. Data has been collected and will be reviewed by the entire faculty in the spring 2012 semester. Additional data is will be completed in spring 2012, which will cover all learning outcomes presented here.

5. **Regarding each outcome and method discussed in items 2 and 4 above, please provide examples of how findings from the learning outcomes process have been utilized to address decisions to revise or maintain elements of the curriculum (including decisions to alter the program’s desired outcomes). If such decision-making has not yet occurred, please describe the plan by which it will occur.**
As indicated throughout this document, the Department is in the process of collecting data to reflect the refined learning outcomes that have been approved in Fall 2011. In the Spring 2012 semester, the entire faculty will meet to review collected data on all of the learning outcomes. Patterns will be reviewed and discussions regarding perceived deficiencies in the department will be undertaken. It is anticipated that any changes to curriculum deficiencies will be implemented in Fall 2012.

6. Has the program systematically sought data from alumni to measure the longer-term effects of accomplishment of the program’s learning outcomes? If so, please describe the approach to this information-gathering and the ways in which the information will be applied to the program’s curriculum. If such activity has not yet occurred, please describe the plan by which it will occur.

   The department has not previously gathered data from alumni. One difficulty for collecting such data is the ability to reach a sufficient sample of former students. In the fall 2011 semester, the Department sponsored an event at the Alumni Center to revive the Communication Studies Chapter for the university. From those attending the fall event, several indicated a desire to be part of the leadership team to revive the chapter and a meeting is scheduled on February 1 in the Alumni Center. While this group might eventually form a base to assist in engaging in assessment through alumni, such a possibility is in the distant future.

7. Does the program pursue learning outcomes identified by an accrediting or other professional discipline-related organization as important? Does the set of outcomes pursued by your program exceed those identified as important by your accrediting or other professional discipline-related organization?

   The General Communication studies BA degree is not related to a professional organization. Our discipline’s national governing body, the National Communication Association provides guidelines for recommended outcomes for graduates. The Department’s adopted learning outcomes exceed the expectations of our parent organization.

8. Finally, what additional information would you like to share with the Senate Committee on Instructional Program Priorities regarding the program’s desired learning outcomes and assessment of their accomplishment?

   The Department of Communication Studies has made great progress in adapting our Learning Outcomes to the BLGs. Working with the University Assessment Coordinator during all iterations was helpful in refining our expectations. It is a priority for the University to maintain this support and it was invaluable to our Department.

   The Department is also somewhat frustrated with how programs have been defined for this process. During our assessment revision process, we consulted multiple agents to determine
what was meant by the term, “program” for assessment purposes. Using hegis codes as designated by the Chancellor’s office seems to be recent standard. While we understand the logic, we did not design our revised assessment efforts around such a division. Although our approach is nimble, it does take additional work to refine some of our program areas to meet this designation.
Appendix A: Communication Studies Department Assessment Survey

As part of its assessment efforts the Department of Communication Studies periodically requests that students complete a brief assessment survey. Below you will find a nine-item assessment survey.

You are to mark your responses on the survey. (You may select more than one.)

Item 1: What is your concentration?

____ Criticism and Public Communication  ______ Organizational Communication
____ Digital Video  ______ Public Relations
____ Interpersonal and Small Group  ______ Telecommunication and New Media
____ Intercultural & International  ______ Other: ______________________

For the items below circle your response

Item 2: Listening is a(n) ____________________________ process, whereas hearing in a(n) ____________________________ process.

a) voluntary, automatic  c) passive, active
b) typical, atypical  d) automatic, voluntary

Item 3: Which of the following scenarios best demonstrates how different contexts can affect communication?

a) After a meeting, Jonah’s supervisor asks her, “How about lunch?” in front of everyone. Jonah hesitates about how respond, even though when her friend asks her the same thing she immediately replies with “sure.”

b) Maya made lunch for all her classmates and brought it to class. She then asked if anyone is willing to switch speech dates with her the following week.

c) Juan finds out that he has to drop out of school and move out of state. He does not tell his friends about this when he sees them.

d) None of these have to do with context
Item 4: One basic underlying principle of all forms of communication is ethics. Which of the following statements best explains what ethics in communication means?

a) whether or not you agree with a statement someone makes

b) a code of conduct about which information to share, how, when and with whom

c) your views about politics, religion and society

d) how you vote in elections

Item 5: In communication, the response to a message is known as:

a) babble

b) answer

c) truth

d) feedback

Item 6: The process of listening differs from hearing because listening:

a) requires very little effort

b) requires some kind of response from the listener

c) makes the speaker feel agitated

d) knowing what you should say before the speaker starts talking

Item 7: Joanne usually speaks less, in a lower tone, and uses less direct eye contact when interacting at family gatherings. When she is around her friends and co-workers, she speaks more, holds direct eye-contact, and speaks louder. This demonstrates how _________________ can impact communication.

a) self-concept

b) context

c) listening skills

d) language

Item 8: Selecting how much to self-disclose when meeting someone for the first time, a journalist omitting information from an article, or giving information about one friend to another friend, are all examples of which of the following?

a) effective communication strategies

b) demonstrating tolerance

c) ethical decisions in communicating

d) ways to create romantic relationships

Item 9: Feedback in communication:

a) can demonstrate that you are listening actively

b) can be verbal or nonverbal, intentional or unintentional

c) impacts further communication

d) all of the above describe feedback
APPENDIX B: ORAL COMMUNICATION VALUE RUBRIC

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.

For more information, please contact value@aacu.org

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 fillers ("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 supports the effectiveness of a presentation typically includes an introduction, one or more identifiable sections in the body of the speech, and a conclusion. 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.
**ORAL COMMUNICATION VALUE Rubric**

for more information, please contact value@aacu.org

**Definition**
Oral communication is a prepared, purposeful presentation designed to increase knowledge, 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.

<table>
<thead>
<tr>
<th></th>
<th>Capstone</th>
<th>4</th>
<th>3</th>
<th>Milestones</th>
<th>2</th>
<th>Benchmark</th>
<th>1</th>
</tr>
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<tbody>
<tr>
<td><strong>Organization</strong></td>
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<tr>
<td>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.</td>
<td>Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable within the presentation.</td>
<td>Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is intermittently observable within the presentation.</td>
<td>Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is not observable within the presentation.</td>
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<tr>
<td><strong>Language</strong></td>
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<tr>
<td>Language choices are imaginative, memorable, and compelling, and enhance the effectiveness of the presentation. Language in presentation is appropriate to audience.</td>
<td>Language choices are thoughtful and generally support the effectiveness of the presentation. Language in presentation is appropriate to audience.</td>
<td>Language choices are mundane and commonplace and partially support the effectiveness of the presentation. Language in presentation is appropriate to audience.</td>
<td>Language choices are unclear and minimally support the effectiveness of the presentation. Language in presentation is not appropriate to audience.</td>
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<tr>
<td><strong>Delivery</strong></td>
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<tr>
<td>Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation compelling, and speaker appears polished and confident.</td>
<td>Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation interesting, and speaker appears comfortable.</td>
<td>Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation understandable, and speaker appears tentative.</td>
<td>Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) detract from the understandability of the presentation, and speaker appears uncomfortable.</td>
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<tr>
<td><strong>Supporting Material</strong></td>
<td>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.</td>
<td>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.</td>
<td>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.</td>
<td>Insufficient supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make reference to information or analysis that minimally supports the presentation or establishes the presenter's credibility/authority on the topic.</td>
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<td><strong>Central Message</strong></td>
<td>Central message is compelling (precisely stated, appropriately repeated, memorable, and strongly supported.)</td>
<td>Central message is clear and consistent with the supporting material.</td>
<td>Central message is basically understandable but is not often repeated and is not memorable.</td>
<td>Central message can be deduced, but is not explicitly stated in the presentation.</td>
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APPENDIX C: WRITTEN COMMUNICATION VALUE RUBRIC

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 disciplinary 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 shows 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/ccce/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 writing it? who is reading 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 amusement; 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.
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.

<table>
<thead>
<tr>
<th>Context of and Purpose for Writing</th>
<th>Capstone 4</th>
<th>Milestones 3</th>
<th>Milestones 2</th>
<th>Benchmark 1</th>
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</thead>
<tbody>
<tr>
<td>Includes considerations of audience, purpose, and the circumstances surrounding the writing task(s).</td>
<td>Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.</td>
<td>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).</td>
<td>Demonstrates awareness of context, audience, purpose, and to the assigned tasks(s) (e.g., begins to show awareness of audience's perceptions and assumptions).</td>
<td>Demonstrates minimal attention to context, audience, purpose, and to the assigned tasks(s) (e.g., expectation of instructor or self as audience).</td>
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<thead>
<tr>
<th>Content Development</th>
<th>Capstone 4</th>
<th>Milestones 3</th>
<th>Milestones 2</th>
<th>Benchmark 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work.</td>
<td>Uses appropriate, relevant, and compelling content to explore ideas within the context of the discipline and shape the whole work.</td>
<td>Uses appropriate and relevant content to develop and explore ideas through most of the work.</td>
<td>Uses appropriate and relevant content to develop simple ideas in some parts of the work.</td>
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<tr>
<th>Genre and Disciplinary Conventions</th>
<th>Capstone 4</th>
<th>Milestones 3</th>
<th>Milestones 2</th>
<th>Benchmark 1</th>
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<tbody>
<tr>
<td>Formal and informal rules inherent in the expectations for writing in particular forms and/or academic fields (please see glossary).</td>
<td>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</td>
<td>Demonstrates consistent use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices</td>
<td>Follows expectations appropriate to a specific discipline and/or writing task(s) for basic organization, content, and presentation</td>
<td>Attempts to use a consistent system for basic organization and presentation.</td>
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<tr>
<th>Sources and Evidence</th>
<th>Capstone 4</th>
<th>Milestones 3</th>
<th>Milestones 2</th>
<th>Benchmark 1</th>
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<tr>
<td>Demonstrates skillful use of high-quality, credible, relevant sources to develop ideas that are appropriate for the discipline and genre of the writing.</td>
<td>Demonstrates consistent use of credible, relevant sources to support ideas that are situated within the discipline and genre of the writing.</td>
<td>Demonstrates an attempt to use credible and/or relevant sources to support ideas that are appropriate for the discipline and genre of the writing.</td>
<td>Demonstrates an attempt to use sources to support ideas in the writing.</td>
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<tr>
<th>Control of Syntax and Mechanics</th>
<th>Capstone 4</th>
<th>Milestones 3</th>
<th>Milestones 2</th>
<th>Benchmark 1</th>
</tr>
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<tbody>
<tr>
<td>Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free.</td>
<td>Uses straightforward language that generally conveys meaning to readers. The language in the portfolio has few errors.</td>
<td>Uses language that generally conveys meaning to readers with clarity, although writing may include some errors.</td>
<td>Uses language that sometimes impedes meaning because of errors in usage.</td>
<td></td>
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</tbody>
</table>
APPENDIX D: INQUIRY AND ANALYSIS VALUE RUBRIC

for more information, please contact value@aacu.org

The VALUE rubrics were developed by teams of faculty experts representing colleges and universities across the United States through a process that examined many existing campus rubrics and related documents for each learning outcome and incorporated additional feedback from faculty. The rubrics articulate fundamental criteria for each learning outcome, with performance descriptors demonstrating progressively more sophisticated levels of attainment. The rubrics are intended for institutional-level use in evaluating and discussing student learning, not for grading. The core expectations articulated in all 15 of the VALUE rubrics can and should be translated into the language of individual campuses, disciplines, and even courses. The utility of the VALUE rubrics is to position learning at all undergraduate levels within a basic framework of expectations such that evidence of learning can be shared nationally through a common dialog and understanding of student success.

Definition

Inquiry is 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

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.
INQUIRY AND ANALYSIS VALUE Rubric

Inquiry is 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.

<table>
<thead>
<tr>
<th>Capstone</th>
<th>Milestones</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic selection</td>
<td>Identifies a creative, focused, and manageable topic that addresses potentially significant yet previously less-explored aspects of the topic.</td>
<td>Identifies a focused and manageable/doable topic that appropriately addresses relevant aspects of the topic.</td>
</tr>
<tr>
<td>Existing Knowledge, Research, and/or Views</td>
<td>Synthesizes in-depth information from relevant sources representing various points of view/approaches.</td>
<td>Presents in-depth information from relevant sources representing various points of view/approaches.</td>
</tr>
<tr>
<td>Design Process</td>
<td>All elements of the methodology or theoretical framework are skillfully developed. Appropriate methodology or theoretical frameworks may be synthesized from across disciplines or from relevant subdisciplines.</td>
<td>Critical elements of the methodology or theoretical framework are appropriately developed, however, more subtle elements are ignored or unaccounted for.</td>
</tr>
<tr>
<td>Analysis</td>
<td>Organizes and synthesizes evidence to reveal insightful patterns, differences, or similarities related to focus.</td>
<td>Organizes evidence to reveal important patterns, differences, or similarities related to focus.</td>
</tr>
<tr>
<td>Conclusions</td>
<td>States a conclusion that is a logical extrapolation from the inquiry findings.</td>
<td>States a conclusion focused solely on the inquiry findings. The conclusion arises specifically from and responds specifically to the inquiry findings.</td>
</tr>
<tr>
<td>Limitations and Implications</td>
<td>Insightfully discusses in detail relevant and supported limitations and implications.</td>
<td>Discusses relevant and supported limitations and implications.</td>
</tr>
</tbody>
</table>

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The effectiveness of a baseball pitcher is measured by his/her earned run average (ERA). ERA is calculated as the average number of earned runs per game scored by opposing teams while a particular player is pitching.

The effectiveness of any given pitch is generally considered to be due to three variables: velocity, movement and location. Velocity refers to the speed with which the ball travels from the pitcher to the plate. The faster the ball gets to the plate, the less time the batter has to react to the pitch. Movement refers to the arc the ball travels while approaching the plate. The more the arc deviates from a straight line the harder the ball is to hit. Location refers to where the ball crosses the strike zone. Well thrown pitches cross at the corners of the strike zone. Poorly thrown pitches cross near the middle or top of the strike zone, or don’t cross the strike zone at all (four of these and the batter draws a walk).

One coach, Jack, prefers those pitchers with great velocity. He tends to ignore control pitchers (good location) or pitchers with good movement (breaking ball pitchers). He believes ERA’s are explained by velocity alone. He argues that the only reason some breaking ball pitchers are effective is that they also have great fast balls.

If Jack knew the difference between a partial correlation and a pouch of chewing tobacco, he would say that the suspected relationship between the variables of movement (X) and ERA (Y) is insignificant when the variation due to velocity (Z) is removed.

To test Jack’s hypothesis, 60 randomly selected baseball pitchers were observed during a single season. Each pitcher’s ERA (Y) for the season was recorded. The average velocity (Z) of each pitcher’s fastball was calculated from measurements taken on a radar gun. Baseball scouts also rated each pitcher on a scale of 1 to 10 for both movement (X) and location. A correlation matrix for the four variables is reproduced below.

<table>
<thead>
<tr>
<th></th>
<th>Velocity</th>
<th>Movement</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Velocity</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Movement</td>
<td>.38</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>.17</td>
<td>-.11</td>
<td>1.00</td>
</tr>
<tr>
<td>ERA</td>
<td>.62</td>
<td>.32</td>
<td>.45</td>
</tr>
</tbody>
</table>
PART I: CALCULATION

1. Variation of residuals for X with Z
   a) .144
   b) .320
   c) .616
   d) .856

2. Variation of residuals for Y with Z
   a) .144
   b) .320
   c) .616
   d) .856

3. $r_{xy}^2$ (movement with ERA) before partialling
   a) .08
   b) .10
   c) .24
   d) .32

4. Covariation of residuals (movement with ERA; velocity partialled out)
   a) .08
   b) .10
   c) .24
   d) .32

5. $r_{xy,z}$ (movement with ERA; velocity partialled out)
   a) .12
   b) .32
   c) .45
   d) .77

PART II: TRUE (a) FALSE (b)

6. Before partialling out the effects of velocity there was a significant correlation between movement (X) and ERA (Y).

7. Velocity explains the apparent relationship between movement (X) and ERA (Y).

8. The correlation between movement (X) and ERA (Y) was spurious.

9. Better “movement” can properly be said to be a cause of lower ERA scores.
10. Partial correlation is similar in function to that of experimental design, except that experimental design is a physical control of spurious correlation, whereas partial correlation is a statistical control of spurious correlation.

11. A spurious correlation is one in which the correlation between variable X and variable Y is statistically significant, but the correlation between variable Y and variable X is not statistically significant.

PART III: MATCHING: Each alternative may be used more than once.

12. $r^2_{xy}$

13. $r^2_{xy-z}$

14. 1-$r^2_{yz}$

15. Initial shared Variation between X and Y.

16. Sum of the squared difference between every Y score and the mean of Y.
***************

A) Partial Correlation
B) Bivariate Correlation
C) Estimate of the shared variation between X and Y
D) Residual variation

17. $r_{xy}$
18. $r_{xy}^2$
19. $r_{xy,z}^2$
20. $1 - r^2$

**Part IV: Review Matching** (Items may be used more than once, or not at all)

A) Nominal data – one variable
B) Interval data – one variable
C) Nominal data IV – Nominal data DV
D) Nominal data IV – Interval data DV
E) Interval data IV – Interval data DV

21. Standard Deviation
22. $X^2$ (chi square)
23. r statistic
24. Eta Squared
25. One-way ANOVA
PART I: MULTIPLE CHOICE

1. If you want to describe a typical score and you have nominal data you should use a...
   
   a) Standard deviation  
   b) Mean  
   c) Mode  
   d) Median  

2. If you want to compare two individual scores from different distributions, having different means and variabilities you should use...
   
   a) Means  
   b) Z scores.  
   c) Partial correlation  
   d) ANOVA  

3. If you want to rule out a possible spurious relationship between variables you could control for variation by using...
   
   a) a two-way ANOVA  
   b) a partial correlation  
   c) a multiple correlation  
   d) an eta squared statistic.  

4. If you want to test both statistical significance and strength of association for interval level variables you could use a/an...
   
   a) r statistic.  
   b) Eta squared  
   c) Chi square  
   d) Square root of variance  

5. An appropriate measure of statistical significance for nominal independent and nominal dependent variables is...
   
   a) a chi square  
   b) variation  
   c) an $r^2$ statistic.  
   d) an eta² statistic.
PART II MATCHING: With any of the matching sets, items may be used more than once, or not used at all.

A) Central Tendency
B) Weighted average variability
C) Statistical significance
D) Strength of relationship
E) Prediction

6. Eta$^2$
7. Two-way ANOVA
8. Mean
10. Multiple regression

A) One-way ANOVA
B) Chi squared
C) Pearson r
D) Mean, median or mode
E) Multiple Regression

11. One nominal independent variable and one nominal dependent variable
12. One nominal independent variable and one interval dependent variable
13. One interval independent variable and one interval dependent variable
14. No independent or dependent variables, just one variable
15. Two or more independent variables
A) Mean
B) Variance
C) Statistical Significance
D) Standard Deviation
E) ANOVA

16. $S^2$
17. X
18. Y
19. F
20. $\eta^2$

A) Multivariate
B) Bivariate
C) Univariate

21. Standard deviation
22. Chi square
23. One-way ANOVA
24. Multiple regression
25. Pearson r
On a quest to discover the essence of quantitative data analysis, you could fly to the Himalayas, drive two days, hike another three, then climb to the top of a mountain to converse with me, while I am wrapped in bed sheets. If you begged me for the answer to your question I would tell you, “r^2. Now go in peace my child.”

Would I say that because: (1) I’m off my rocker? (2) Old age has made me senile? Or (3) I have great wisdom and an almost mystical insight into the heart of data analysis?

Pick one of the three and construct a thoughtful and detailed argument in defense of your choice. If you choose #3, relate your answer to fundamental concepts that provided continuity during the semester, and organized the course from the start to the finish. If you choose #1 or #2, we’ll see you next semester. Limit your answer to 250 words. Good luck. Congratulations graduates!