Assessment: Asinine or Aspirational

Report prepared for the faculty by Sharon Alker, based on conversations during a workshop in Spring, 2019.

Workshop Attendees:
M Acuff
Sharon Alker
Tim Doyle
Russ Gordon
Julia Ireland
Kazi Joshua
Helen Kim
Chris Leise

We would like to thank Michelle Janning, Neal Christopherson, and Kendra Golden for their deeply valuable contributions to our discussions, and to thank Dean Perfetti for our funding and productive advice.

Admirable qualities of this report come out of the deeply engaging discussions and generative disagreements our committee had over the course of the Spring, 2019 Semester. Any shortcomings derive from Sharon’s imperfections alone.

Please note: we are not experts in assessment (other than grading our students) so this report is not based on considerable expertise but rather on about nine weeks of reading assessment-related material and on conducting discussions with those who have more expertise than us, followed by four or five weeks on thinking about how to design instruments of assessment that are meaningful for our particular disciplines. So, this report is not designed to provide extensive recommendations for your disciplines, but rather:

- to provide some background and materials on assessment (and its relationship to accreditation) that we found useful as a foundation for designing meaningful instruments;

- and to raise some questions and thoughts that might help to generate discussions in your departments, programs, and divisions on creating meaningful assessment in a way that works for the best interests of your students and your department. And that would have the residual effect of being satisfying to accreditors.

We have attached our syllabus and are in the process of having the CLEo site we used during our Workshop migrate to Canvas. Our site has digital copies of all readings. We would be delighted to add anyone to that site who wants access to these materials. Please just let Sharon know and she will give you access. We also purchased a series of readings on assessment, with funding from Whitman. We will donate these books to our Associate Dean for Faculty Development, Helen Kim, so that they can be borrowed by all faculty who want to investigate creative and effective strategies for assessment.
**Table of Contents:**

**Report:**
- I. An Introduction. Page 4
- II. The relationship between accreditation and assessment. Pages 5-8
- III. The history of assessment. Pages 9-11
- IV. Nuts and bolts of assessment. Page 12-13
- V. Specific problems relating to assessment and metrics. Pages 14-16
- VI. A defense of assessment. Pages 17
- VII. Thoughts and questions to consider as we seek to craft meaningful instruments of appraisal. Pages 18-21
- VIII. A possible assessment checklist Pages 22-23

**Appendix 1:** Syllabus
**Appendix 2:** Draft instruments
**Appendix 3:** VALUE Rubrics from the AACU

(American Association of Colleges and Universities).
“[T]he purposes and processes of assessment – collecting and reporting data to external audiences – continue to take primacy over the institution’s consequential use of the results of outcome assessment” Ikenberry and Kuh, “From Compliance to Ownership: Why and How Colleges and Universities Assess Student Learning.” Using Evidence of Student Learning to Improve Higher Education.

“Philosophy will clip an Angel's wings,
Conquer all mysteries by rule and line,
Empty the haunted air, and gnomed mine—
Unweave a rainbow, as it erewhile made
The tender-person'd Lamia melt into a shade.”

“I now view assessment as a matter of faculty governance, see it as a necessarily multidisciplinary and collaborative, and regard it as inextricably linked with an ethics of intellectual self improvement….In order for assessment to serve learning at the broader, institution-wide level, it must be driven, first of all, by the questions of those most involved with instruction to give its inquiries purpose, direction, and potential usefulness for action.” David Mazella (eighteenth-century literary scholar at the University of Houston) From Assessment in the Disciplines: Literary Study, Measurement, and the Sublime.
Report on Assessment: From a Workshop held in Spring, 2019

I. Introduction

We formed this workshop because we wanted to have a semester-long discussion about whether there could be a way of intellectually appraising our departments and courses that was meaningful and ethical. We came to understand, from an article we read by Stanley Ikenberry and George Kuh, that one way to frame our concern that our early experience of assessment did not seem meaningful (particularly in the humanities and fine arts) was to consider whether this is because we were complying with external demands rather than finding consequential, meaningful ways to engage with student learning more broadly.1 Such cursory compliance is true of many faculty across the nation, not because faculty don’t care about developing teaching, but rather (at least in part) because of the way assessment came into being in general. To many of us it just seems like one more bureaucratic thing to do, or even worse, something that captures and then applies problematic data. So, we wanted to figure out if there was a better way. Here is the goal we set ourselves at the beginning of the semester; whether or not you think we achieved it, we think this is a goal to keep in mind as we think about assessing programs and classes.

**Overarching goal:** to create ethical approaches to intellectual and/or creative appraisal at the course, department, and program level, that involve the student in their own self appraisal and that affirms the joyful, metamorphic liminal space of the dynamic classroom, while recognizing and exploring ways to integrate into appraisal how the student (as a whole being) learns. We also wish to discover how to connect these approaches to our specific accreditation agency on terms that benefit our students.

Although we didn’t revisit it later in our discussions, we did consider at the beginning the importance of language in naming what we do. Given the baggage that the term assessment carries, we wondered if intellectual/creative appraisal might be a better term to use as we further explore evaluating our classes and departments in meaningful ways.

---

II. Assessment and Accreditation

A good starting place for this report is to look at our distinct accreditation handbook from the Northwest Commission on Colleges and Universities. This is a good starting place, because although assessment and accreditation are definitely not the same thing, assessment has been strongly tied to accreditation not only in our case but more generally, so it is good to know what is required of us in terms of assessment by accreditors. This does not mean that assessment should be driven by accreditation but that there are certain features that our accreditation agency requires of us in regards to assessment that we should keep in mind.

You will already know some basic things about accreditation at Whitman:

1) We are on a seven-year cycle.
2) This cycle includes doing annual reports, scheduling self-study reports in years one, three, and seven, and any additional requested reports.
3) That being accredited is tied to federal funding for students and for the college.

However, there is much more to know about accreditation. The NWCCU Accreditation Handbook is 105 pages long. The complexity of the assessment process made us appreciate more fully the extensive workload of the Associate Dean for Academic Affairs and the Assessment and Accreditation Committee (formed in 2010) on which our division chairs sit and represent our interests.

The first edition of the NWCCU Accreditation Handbook, per their copyright page, was produced in 1965. Here is their mission as they define it:

“The mission of the Northwest Commission on Colleges and Universities (NWCCU) is to assure educational quality, enhance institutional effectiveness, and foster continuous improvement of colleges and universities in the Northwest region through in-depth institutional self assessment and critical peer review based upon evaluation criteria that are objectively and equitably applied to institutions with diverse missions, characteristics, and cultures.” (bold is mine)

One of our colleagues noted that the Commission perceives itself as standing between the college/university and the Secretary of the U.S. Department of Education who recognizes the regional accrediting agency as “reliable authorities on the quality of education offered by

---

2 This quote explains who the folks are who run the NWCCU: “The Board of Commissioners of the Northwest Commission on Colleges and Universities consists of a minimum of 14 Commissioners, a chair, and the President who is an ex officio member of the Board. A majority of Commissioners represents NWCCU-accredited institutions; however, at least one-seventh (1/7) of the membership of the Board is comprised of public members who are not affiliated with NWCCU-Accredited, Candidate, or Applicant institutions. Commissioners are elected for staggered three-year terms and serve without compensation. The Board of Commissioners normally meets twice a year, but various committees meet more frequently to facilitate the Commission’s work. The Commission’s day-to-day activities are conducted by its President and staff” (3).
educational institutions;” And of course, whether we are giving a high quality of education is linked to “United States government assistance” for our students (2).

We can see here that, according to the NWCCU handbook, assessment is about accountability (to ensure, or perhaps more accurately to make visible, educational quality) but also about fostering “continuous improvement” which may be more significant to faculty. It is important to keep these two distinct goals in mind because at times they seem in tension with one another.

How does the commission measure success, particularly given it is applied to institutions “with diverse missions, characteristics, and cultures?” It asks institutions to “examine their own missions, operations, and achievements” and then to host periodically peer evaluators to review their findings. So we are to **define what we do** (e.g. through our mission statement, our learning goals in general studies and in departments/programs) and then **evaluate ourselves in a way that is relevant to our distinct sort of institution** (since this accrediting agency evaluates all sorts of institutions, including research universities, community colleges, technical institutions etc. even some Canadian Universities - Simon Fraser University is there - as well as liberal arts colleges). This can be an issue because many of the processes and concepts that become models may come from institutions that are not like us (liberal arts colleges are in the minority here) and that might drive an emphasis on skills or other ways of perceiving learning that don’t capture the essence of what we do.

In year one at Whitman we set out to define what we do for accreditation (this definition is reflected in our mission statement): It includes: accessibility, diversity, and inclusion; a rigorous liberal arts education; and a goal to support life and learning beyond Whitman. Each core theme has to have a benchmark and then there needs to be an indictor (e.g. that 75% of departments will reach their learning outcomes). That pattern in then reproduced in each department and program.

So that is accreditation. Assessment of classes, programs, and departments are a core part of (but definitely not the whole of) the accreditation process and we do have to assess in order to be accredited. **So, what exactly is the faculty part of this?** Faculty are relevant to a lot of the material in the NWCCU handbook, but the crux of what we look at in our departments, programs, and classrooms is from Sections 4A and 4B of the NWCCU handbook, which is within the category Standard Four (Effectiveness and Improvement). Here are the precise sections that we found most important and that we kept coming back to during our discussions:

**Section 4A and B of the Handbook seem to be what is most directly relevant to faculty and classroom assessment. Here are some key quotes. You can see the whole here:**
https://www.nwccu.org/accreditation/standards-policies/standards/

4.A.1 The institution engages in ongoing systematic collection and analysis of **meaningful, assessable, and verifiable** data—**quantitative and/or qualitative, as appropriate to its indicators of achievement**—as the basis for evaluating the accomplishment of its core theme objectives. [bold and underlining are mine]
4.A.3 The institution documents, through an effective, regular, and comprehensive system of assessment of student achievement, that students who complete its educational courses, programs, and degrees, wherever offered and however delivered, achieve identified course, program, and degree learning outcomes. Faculty with teaching responsibilities are responsible for evaluating student achievement of clearly identified learning outcomes. [bold is mine].

4. B. 1 Results of core theme assessments and results of assessments of programs and services are: a) based on meaningful institutionally identified indicators of achievement; b) used for improvement by informing planning, decision making, and allocation of resources and capacity; and c) made available to appropriate constituencies in a timely manner. [bold and underlining are mine]

Members of our workshop were particularly interested in the fact that:

a) Quantitative data is not required if it is not appropriate.

b) “Qualitative” data is affirmed “as appropriate to its indicators of achievement.” To many of us, this seemed crucial to allowing us leeway to be aspirational rather than asinine, since measuring many of our disciplines with numbers is deeply problematic and flattens the meaning of what we do.

c) That the word “meaningful” was particularly significant to us and seems at times to have become lost in or subsumed by assessable and verifiable.

Some of the colleagues that we consulted who have some expertise in assessment noted that there is a push from some assessors towards quantitative data, but that we can push back to a degree. We do need to have a definition that we can say is fulfilled or not; the department or program needs to know if it is succeeding, but this can take different forms (and in the case of the humanities and fine arts, sometimes this can be narrative forms). And what we do needs to be verifiable, so we do need to retain documentation. But within these limits, we can be creative if that’s what we need to do to produce meaningful information.

Most of the regular staff at accrediting agencies who oversee evaluating our assessment have backgrounds in higher education and often were faculty before moving into administration. And the evaluation teams are selected from inside our region but outside our state. This means that they will have an understanding of the challenges that faculty face in crafting appropriate methods and instruments to assess meaningfully.

Although we have framed our discussion with accreditation, we want to reiterate that assessment is not at all the same as accreditation. Our sense was that our assignments and assessment exercises should measure what is important and meaningful in our disciplines and the residue of that should be forwarded to those who are preparing our accreditation materials. In other words, department and program assessment is a scholarly exercise emerging from faculty expertise and a commitment to student learning, and those preparing the accreditation materials for our
accrediting agency can use that material to not only inform but also shape the accreditation process in meaningful ways.
III. The History of Assessment.

We can understand some of the tensions in assessment today if we look at the way it emerged in the last few decades of the twentieth century. One of the first essays we read, from a book entitled: Enhancing Assessment in Higher Education: Putting Psychometrics to Work (2017), reviewed the history of assessment. Here’s what the authors concluded:

**History of Assessment**

Peter T. Ewell and Tammie Cumming identify four intellectual strands that ultimately converged in assessment; they then emphasize that there is tension between these approaches:

1) **A research tradition that began in the 1930s and 40s that took methods from educational and developmental psychology and that generally focused on single undergraduate colleges.** From this tradition came elements like “basic taxonomies of outcomes, models of student growth and development; and tools for research like cognitive examinations, longitudinal and cross-sectional surveys, and quasi-experimental designs.”

2) **A literature that studied retention that emerged in the late 1960s and 70s.** This literature affirmed Tinto’s notion of academic and social integration. Tinto’s concept of student integration was published in the mid 1970s and it argued that “students who socially integrate into the campus community increase their commitment to the institution and are more likely to graduate”. New methodologies came from this literature that involved “longitudinal study designs, specially configured surveys, and multivariate analytical techniques that were later adopted by many assessment practitioners.” Cumming and Ewell note that “retention scholarship was action research: Although theoretically grounded and methodological sophisticated, its object was always informed intervention.”

3) In response to the development of large-scale federal programs in the 1960s and 1970s, that required program evaluation, a scholarship of program evaluation emerged. Initially “program evaluation…relied almost entirely on quantitative methods. It was also related to a wider movement toward ‘scientific management’ that quickly found applications in higher education in the form of strategic planning, program review and budgeting.”

Scientific management, as most of you know, came into being in the very early 20th century. Frederick Winslow Taylor, an American engineer who published The Principles of Scientific Management.
**of Scientific Management** in 1911 is the key figure in this movement. Basically, his interest was to study work and workers for the sake of efficiency.\(^4\) This sort of connection is related to cybernetics which has its background in science and the social sciences.

4) **Mastery learning**: a movement that began in elementary and secondary education but by the mid 1960s had also been applied to postsecondary education. This sort of learning is “based on agreed-upon outcomes, [thus] assessing and certifying individual achievement was always paramount. Cumming and Miller say that this sort of tradition provided “the conceptual foundation for ‘alternative’ institutions” that include Evergreen College. Some of the assessment practices associated with this sort of model were “evaluating student portfolios and other authentic measures of student attainment.”

Number three was of most concern to us because it tends to privilege excessively efficiency and standardization. In regards to the broad history of assessment, and to the third item in particular, we discussed in detail our concern with the language of assessment; its genealogy does not come from the humanities and fine arts and does not and likely cannot assign values to the things that are most meaningful to the humanities and fine arts. And it may not capture elements of other disciplines in the sciences and social sciences.

Ewell and Cummng locate the beginning of assessment proper at the First National Conference in Higher Education in 1985. The sponsors were the National Institute of Education (NIE) and the American Association for Higher Education (AAHE). The conference was responding to a report that had come out the previous year called **Involvement in Learning**. This report recommended: that high expectations be created for students: that students be involved in higher learning environments; that students be provided with prompt and useful feedback. But there were other pressures to create “coherent curricular experiences that could best be shaped by ongoing monitoring of student learning and development.” Ewell and Miller note that “A concomitant enlightened but unexamined, assumption was that the tools of social science and educational measurement, deployed appropriately, could be adapted by all disciplines to further this process of ongoing inquiry and improvement.” (7). And there were pressures outside the academy – a call for more accountability.

At the conference, the attendees tried to talk through some of the tensions, such as “accountability versus improvement” or whether “quantitative or qualitative methods would

---

\(^{4}\) *Frederick Winslow Taylor: Reflections on the Relevance of The Principles of Scientific Management 100 Years Later*  
predominate.” And they started to develop taxonomies. In the late 1980s (1986-89) “the major testing organizations” started to create instruments that came out of previous prototypes. Slowly but surely, as colleges (like Alvaro College or what is now Truman State University) would implement processes, they would report back and other colleges would take them as models. We might also add to the history outlined in this article the Spelling report of 2006 that critiqued the lack of accountability mechanisms in higher education and put pressure on colleges to design and implement mechanisms deemed to be better.

The article on the history of assessment helped us to recognize the origins of some of our own frustrations. We could see that the divided aims of the formal assessment structure (accountability and improvement) were apparent from its beginning, and some of the historical influences explained why quantitative methods often seemed predominant. Our discussion of this history concluded that a goodly number of our group value the improvement of our students over accountability, not because we don’t think we should be accountable but because we already are accountable, and (particularly for those of us in the humanities and fine arts) we value qualitative measures rather than quantitative measures, which we felt often flattened or removed everything that was meaningful about what we were doing. There was a sense that it may sometimes be beneficial to give the qualitative a place of predominance in some instances.

One place mentioned in this article as a source of information on elements to keep in mind as we re-design assessment are the 2013 “Principles for Effective Assessment of Student Achievement” which you can locate here:

http://www.learningoutcomeassessment.org/documents/endorsedassessmentprinciples_sup.pdf

This document was “adopted by the presidents of major research universities in cooperation with the heads of the nation’s regional accreditation bodies” (Ikenberry & Kuh 16). They note that students need to show success in three domains.

1) Evidence of student learning experience (how students are learning – e.g. kinds of experiences in and out of the classroom).
2) Evaluation of student academic performance (meaningful curricular goals and defensible standards for evaluating whether students are achieving these goals).
3) Post-graduation outcomes.

This document also says: “The accreditation process needs to allow institutions flexibility with regard to the methods for measuring progress toward these goals.” This seems to suggest we are not stuck in as rigid a system as we might think.
IV. What is Assessment Exactly? The Nuts and Bolts of Assessment.

To get a broad overview of what assessment is, you might look at Barbara E. Walvoord’s book: *Assessment Clear and Simple*. We looked at extracts from the second edition. This book addresses a lot of very specific questions we might have, such as why are grades not sufficient for assessment or how goals should be framed in order to be measurable. Chapter 3 is addressed to departments and programs. In it she maps out a range of ways to assess that are specific and practical and gives several case studies. At a minimum she says, there should be:

**A basic no-frills assessment process** in which there are:
* learning goals for each of your degrees, certificates, or programs.
* two measures of how well students are achieving the goals – one direct measure (that would require evaluating student work) and one indirect measure (student surveys or focus groups) that ask how well students achieved goals, what aspects of education in the department were most helpful, and what might the department do differently to help you learn more effectively.
* a process of working with that information to see if changes are needed.

Walvoord acknowledges that we can’t fully assess all qualities, some of which are ineffable, but suggests that we can get indications of how well learning is happening, noting that “[w]e are not caught between objectivity…and subjectivity.” She adds that when we want to measure something more ineffable like “ethical reasoning and action” we might ask students for feedback in surveys alongside evaluating something they do so we gain a more complex understanding not only of the end result of their work but about their intellectual processes.

After reading Walvoord, we read a series of articles that looked at more specific challenges in implementing such processes in different disciplines and talked about some of the very particular issues that we faced. Here are a few examples:

In a discussion of articles about assessment in science, we talked about what happens when you have to cover a certain amount of material (e.g. scientific disciplines) in a course? How can we distinguish the content we are trying to teach and the skills we are trying to evoke from students? Is it more important to assess skills (which are easier to evaluate) or concepts (which are harder, but perhaps more valuable)? Some students who struggle with skills can still solve problems. Is the end result – solving the problem - more important than the methodology? By the end of a content-heavy introductory course, is it more important for students to replicate the content or to be able to apply relevant elements of the content that they have selected as most useful to a problem they haven’t encountered before? Should they be able to apply their knowledge to a very unfamiliar problem, perhaps even from another discipline? How standard does their knowledge have to be?

In a discussion of articles about assessment in fine arts, we talked about the distinct nature of the fine arts from other disciplines, even those affiliated with it in the humanities. There is certainly knowledge of many sorts to be learned and synthesized in the fine arts. For example, oral exams can be particularly meaningful in seeing how well students can weave the work they have crafted into a historical and cultural framework; being able to dynamically move between and
understand multiple points of view can also be indicated in oral exams. And the work itself displays a degree of mastery of specific skills. And yet, experiencing mystery, suspending judgement, disrupting categories, and encountering the immeasurable, is a crucial part of the fine arts (and can also be a part of the humanities). We discussed the way it often can’t be described as well in quantifiable terms as it can in analogies (we might try to explain such an experience by describing spelunking in a cave and encountering its immensity when you enter). Things that might not be so easily evaluated might include things like: nurturing students to acquire and honor peripheral vision, things just out of the line of sight; jarring students out of their way of seeing by giving new ways of looking – seeing the campus layout as a metaphor; teaching them how to “play” in a generative way that creates something we might call beauty or something else. This last grouping can often be the very things that inspire and produce a desire to learn in students.

The scholar Lucinda Cole notes, “Creativity means recognizing the rules, recombining them, and transcending them; it is conditional upon having internalized rules apparent in work whose value is partly dependent upon its difference from what came before. From this perspective, creativity is a sort of divergent thinking, domain-specific knowledge from which deviation may occur” Assessment in the Disciplines: Literary Study, Measurement, and the Sublime. The act of transcending and deviating is a form of higher-order thinking to which advanced students should aspire, but is the very thing that often resists (and perhaps should) measurement.
V. Problems with Assessment and with Problematic Use of Metrics

a) We read a series of arguments that outlined concerns with assessment. Some of these articles were hostile to assessment in general. Others, particularly those by David Eubanks, identified concerns as part of a quest to formulate better ways to approach assessment. Here are some of the key problems identified.

Problems with Assessment.

This information is from specific articles aimed at assessment by Eric Gilbert (Chronicle, 2018), Molly Worthen (NY Times, 2018), David Eubanks (“Guide for the Perplexed” in Intersection, Fall, 2017) and from a broader work that engaged with the use of data (Weapons of Math Destruction, Cathy O’Neil, 2016). Note that Eubanks is the Assistant VP for Assessment and Institutional Effectiveness at Furman University.

* faculty might be tempted to make something up because they have “concluded that assessment data do not tell you anything useful about our program” (Gilbert).

* It devours a lot of money that could be used elsewhere, and this is increasing because commercial interests, such as consulting firms, are getting involved (Worthen).

* It may be significant and worrying that assessment arose at the same time as the “decision of state legislatures all over the country to reduce spending on public universities and other social services.” (Worthen).

* Assessment oversimplifies complex intellectual endeavors (Worthen).

* the methods of gathering and analyzing data are very poor. So, either “the faculty are generating good data” and not using it effectively or the faculty are trying but “the data and methods in general use are very poor at measuring learning.” He thinks it’s the latter (Eubanks).

* Statistical testing can imply a degree of certainty that can create misinterpretations (Eubanks, quoting a concern by Patrick Terenzini in a 1989 article). Eubanks worries that process (checking boxes and cheerfully measuring outcomes) has become more important than creating something meaningful. He questions whether we are emphasizing form over function. When comparing a test at the beginning of a class and then at the end, it is all too easy to draw false conclusions and make changes that actually damage your teaching.5

5 He gives an example from foreign language departments over a two-year period. It would seem that about 16% of students in his example are not meeting the expectation of performance in language skill. Usually, the “correction” would be something like spending extra time at the beginning reviewing basic skills. This change would reduce content for 84% of students who don’t need it. If we study it more carefully, we might discover that students are coming with varied preparation and may wait a few years before taking the course (forgetting earlier language experiences) or that students who are weaker academically might put off taking the course. So a solution might be better advising rather than changing the course.
The mass-produced nature of assessment creates “dozens or hundreds of shallow pools of data, with small decontextualized samples. There is no time to diagnose, let alone fix, the data problems.” When assessing our classes, we are working with small samples (Eubanks).

It is important to note that Eubanks is not rejecting assessment. Rather he says we need to “create and share large sets of high-quality data. These might be organized by discipline or at the institutional level to focus on a manageable number of outcomes – not hundreds of them at once”

He also foregrounds the importance of working as partners with faculty. Pay particular attention to Eubanks since he is particularly well versed in the assessment process. You can read Eubanks’s article here:

b) A Broader Critique of Metrics:

We also read an extract from a book that talked in general about problems with a poor or problematic use of metrics. While we read Weapons of Math Destruction, another relevant work you might consider is Jerry Z. Muller’s The Tyranny of Metrics (2018)

Neither text rejects metrics or the use of data but they do warn that they need to be used with great care, that we ought not to over rely on them, and that we need to recognize the limits and dangers of metrics. Here are some of the key concerns raised in the section we read from Weapons of Math Destruction.


- Using metrics often incentivizes cheating and can damage the very thing it is trying to measure or improve. As an example, she refers to the way that The US News and World Report has inflicted damage on higher education as some have tried to game it or to improve only the metrics the report valued rather than what educators think is important.

- Metrics can privilege efficiency and erase the human cost. Significant problems are created by using data in the workplace to make employee hours more efficient (e.g. “clopening”– the same employee opens and closes, or creating irregular work schedules). This is great for maximizing efficiency and terrible for human lives.

- Metrics can define people in limited ways that do not capture the complexity of human interaction. For example, the Cataphora software system rated technology workers on a number of metrics, including their ability to generate ideas, by burrowing into their emails. Some people, the system thought, based on particular terms used were idea generators, others were connectors. But this data can oversimplify human interaction and also presupposes that employees see email as a space to generate ideas.
The sort of data provided by the Cataphora system and other systems can be used to cull a workforce in ways that are shortsighted and limited. A worker who does not seem to be an idea generator on email might be a vital motivating force to her network of colleagues, but this value is not visible to the algorithm. An algorithm can appear to make tough decisions easy, but producing a neat number or a tidy chart may, in fact, lead to bad decisions based on problematic data.

Statistics are frequently misinterpreted resulting in systems that seem ambiguous and chaotic. She refers to the case of Tim Clifford from New York City, a teacher who, after many years of successful teaching, received 6/100 on a teaching evaluation. If he hadn’t had tenure he could have been fired. He had no idea how to improve it so he just kept on teaching the way he had. The next year his score was 96. He said he realized the system was broken. The model that had been used was deeply problematic. Cathy O’Neil writes that in a well-meaning quest to try to adjust for social inequalities in the student body, administrators had moved to a model that was not based “on direct measurement of the students” but on “the so-called error term – the gap between results and expectations. Mathematically this is a much sketchier proposition. Since the expectations themselves are derived from statistics, these amount to guesses on top of guesses. The result is a model with lots of random results, what statisticians call ‘noise.’” This noise is made worse by the fact that the numbers being measured (a class of twenty-five or thirty students) is too small to “balance out the exceptions and outliers”).
VI. A Defense of Assessment.

We read an article by Kate Drezek McConnell in *Inside Higher Education* called “What Assessment is Really About.” It was written in March 2018 in response to Worthen’s *New York Times* article. McConnell has spent 15 years working “on campuses in assessment and evaluation.” She is currently Senior Director for Research and Assessment at the Association of American Colleges and Universities.

McConnell argues that when she began working in assessment “simplistic quantification of learning was the coin of the realm” but the AAC&U “championed the role of faculty expertise in teaching, learning, and assessment, and created an alternative approach to standardized tests, the VALUE (Valid Assessment of Learning In Undergraduate Education).

[https://www.aacu.org/value/rubrics](https://www.aacu.org/value/rubrics). The rubrics were created by teams of faculty members and they are available for free (and are about 10 years old). We have attached these rubrics as an appendix to this report. She writes:

“Far from a reductionist tool, research has demonstrated that the VALUE rubrics empower faculty members to help translate the learning that takes place when a student completes an assignment they crafted, one that aligns with and promotes disciplinary knowledge, and -- at its best -- gives students not just the requisite skills for the single assignment, but also advances the ultimate purpose of college teaching: long-term retention of knowledge, skills and abilities and the ability to transfer those skills to a completely new or novel situation.”

It is clear from her argument that she recognizes that many issues exist when assessment is done badly and seeks to replace reductive or over simplistic assessment methods with more effective ones. The rubrics to which she refers try to offer a more complex and faculty-designed approach to assessment. They are available in Word as well as PDF format so you can adapt them to your specific needs.

If you want to read an article that discusses both the uses and limits of rubrics, you might look at Sarah Webster Goodwin’s “Fearful Symmetries: Rubrics and Assessment” (in *Literary Study, Measurement and the Sublime*). She argues that rubrics are useful “But rubrics have their limitations that may lead us to a false sense of safety, may make us miss openings onto new ideas and processes.” During our own discussions, although we saw value in rubrics (and the VALUE rubrics recognize complexity), we talked with admiration about the assignments we received from students that brilliantly, powerfully exceeded expectations, often through violating our rubrics, making visible their limits.
VII. Questions and Thoughts that Emerged from our Discussions

A) Primarily relating to faculty:

1) Perhaps a key early step in imagining how to assess meaningfully is to determine precisely what we are trying to accomplish in the classroom, not just in terms of content knowledge or skills, but more broadly. For example, are we trying to develop a robust theory of mind in our students? If so, how might we define such a goal and determine the steps most likely to lead to it?

2) When we are evaluating what is happening in the classroom, how can we integrate our understanding of student abilities and performance with external factors, such as how much sleep students are getting, how much time they are spending on their homework, what sort of preparation they have had for this course of study before coming to Whitman? That is to say, before we make decisions about what might be best for our teaching, how can we get a fuller understanding of the context in which our students are learning? How can we assess the community, interaction with roommates etc.? What would be the best mode of integrating our discoveries with information about what is happening outside the classroom? How are we as an institution blending the data we do collect from assessment with other data (e.g. how many students are dropping out; how many students have mental health issues).

3) Might studying students’ ability not only to provide answers in conventional ways but also to apply their learning to new, unfamiliar situations, help us to understand higher-level thinking in students? If they have learned an array of methods and techniques in a class, this might evaluate how well they understand which methods might work best and whether they can creatively combine methods for better results. Some of us are doing this already (e.g. geology, psychology), but we might ponder whether this might work in other disciplines, such as philosophy or fine arts. For more information about this application approach, or studying student success through projects, you might look at Paul Hanstedt’s Creating Wicked Students (2018).

4) How do we capture some of the most important work we do, which is “unlearning?” Often, we spend a great deal of time teaching students to reject old bad habits and problematic intuitions. While assessment can seem to privilege linearity, transitions can be messy and convoluted, and thus be resistant, to a degree, to tidy rubrics. How can we capture the messiness of intellectual advancement? We discussed the tension that seems present between reason that often measures things and the imagination that often disorients and confuses things productively. Should we have horizontal aspirations (that might capture more intricately getting worse before getting better)? Is this productive disorientation tied to inclusive pedagogy, in particular the idea of productive discomfort, where such moments can be the precursor to big cognitive and neurological leaps (but can be hard to explain as progress)?

5) To what extent do learning goals provide effective direction and to what extent do they close down meaning and can that closure be avoided? If we decide on a learning goal or desired outcome at the beginning of a semester is that useful? What is the difference between moving
from the learning goal we crafted at the beginning of the semester down to the reality of what happened during the semester and moving from the classroom up – that is to say recognizing particular problems that happened that semester and responding dynamically to them? Is it sometimes appropriate to throw out a learning goal and respond instead to issues on the ground?

6) Are outcomes more important than processes? One of the articles we read highlighted the potential benefits of measuring flow – moments in a process of learning - rather than conventional outcomes. What might be ways in which we could collect and evaluate the flow of reaching a high-level mindset?

7) For those of us who feel that assessment as it is simply doesn’t measure the things that are important in our discipline, can we redefine assessment in a way that does reflect our discipline? We wondered what assessment would look like if each of our departments had designed it to measure what our discipline most values. If your discipline designed assessment, what would it look like? What are the core concepts that your discipline teaches? How would you measure them in a way that is meaningful to your discipline and that reflects the deep meaning of learning (rather than superficiality – e.g. can they write a thesis statement)? Are there alternate models from ethnography or other disciplines? We particularly wondered about disciplines in the humanities.

8) We spent quite a bit of time talking about the language of assessment, perhaps because the language of assessment, as it has historically evolved, carries implications that are problematic. We read Judith Butler’s essay, “Ordinary, Incredulous” (in The Humanities and Public Life, 2014) in which Butler expressed concern that we accept a certain language as normal that privileges a certain set of values and gets in the way of others. She asserts that things that we in the humanities think are important can’t always be translated into a metric of value as we have inherited it in assessment. Everything becomes focused on “deliverables,” and as a result everything becomes a function of something else. We can’t articulate a language of distinct values because everything becomes a function of deliverables in a chain. Butler suggests citizenry as the basis for a language of meaning that might provide an alternative. During our discussion of language we expressed interest in the term “indicators of student learning” as indicators, a term often used in driving, foregrounds direction rather than an end point. We also talked about the word “index” instead of “measure.” Butler adds that the very thing that the humanities are good at is to critique metrics and the language of instrumentalization. Butler, in fact, argues that we must “think critically about modes of measurement and schemes of evaluation.” How might we in the humanities, fine arts, and beyond respond to her call to action?

9) We spent a lot of time articulating why qualitative information was so important to us. The qualitative, we affirmed, can address things like joy and unexpected learning. Words give texture that we need and breathe life into practice. We did note that numbers can be useful to show sharp shifts and see patterns and trends but words are also very important. We brainstormed about having a collation of interviews or written journals or other qualitative forms of appraisal or indexing along with a statement that noted our strengths and areas of development as an acceptable means of assessment.
10) We raised concerns about the use of numbers flattening the dynamic make up of each class and always leading to the concept that there needs to be a very particular kind of “improvement” (better numbers) and no level is ever enough. This (as discussed in the critique of metrics above) can actually incentivize changes that are not beneficial to students. Numbers can also lead to the foregrounding of standardization and efficiency which can further flatten meaning and erase elements like wonder and curiosity that are central to what we do.

11) We are concerned that sometimes assessment, the way it is currently articulated, seems to suggest that failure is always located in the teacher. Can we reframe appraisal so it is not stuck in a binary of success and/or failure or in the language of culpability, and make it a creative, imaginative discovery process that strengthens intellectual growth in students and inspires the remarkable resource that is our faculty.

12) How do we ensure students collaborate in the assessment process and are not objects of study? What would our students think should be assessed? What sticks in their mind throughout their time here and what is forgotten?

13) If we can use appraisal creatively to inspire and intellectually energize our students and ourselves, do grades help or impede the process?

14) In some ways, the way we, at Whitman, had to rather abruptly frame assessment in terms of accreditation may have led us to emphasize the collection of data over a holistic picture of what we need to make visible to accreditors, which is that we have an iterative appraisal process in our programs and in relation to our individual courses that does consider what students are achieving in our classes and aims to address any concerns that the faculty diagnose. Perhaps as we start thinking about assessment in the future, we might flip that emphasis. Focusing on a meaningful, holistic picture will give us more opportunity to be aspirational.

B) Relating both to faculty and to the administration of assessment

1) The amount of time assessment can take if we do it well and meaningfully is substantial. This raises a series of questions, such as: what are we going to cut back on to fit in this sort of meaningful assessment; what sort of remuneration could be provided; is it the best use of resources for faculty members to assess every course that counts for a general education requirement or would it be more beneficial to target specific courses each year?

2) Should our assessment committee and its leader be connecting with other liberal arts college committees to determine how to craft concepts and rubrics that assess what we think is important for a liberal arts education? In other words, is there way in which we can create a space within our accreditation agency that is even more conducive to the qualities of a liberal arts education?

3) What are effective ways to strengthen reciprocity between the faculty and the administration as we seek to partner to assess meaningfully. For example, should the Associate Dean of Faculty Development be on the Assessment Committee as s/he can be an effective bridge between assessment and faculty development above and beyond the division chairs?
4) We wondered if our assessment committee should investigate other colleges where they are rethinking assessment creatively (one workshop member mentioned: Hampshire College, Fairhaven, and Evergreen). It might be useful to collect a variety of possibilities and then consider if they are useful to us.

5) Is assessment effective when it gathers information about every course every semester/year (e.g. every course in the general education program) or would it be more effective if it was used strategically (e.g. aimed at certain constituencies that we want to help, such as the fly-in students and how to help them succeed)?

6) How ought we to take into account the sort of student we are assessing (what some call Generation Z or the iGeneration)? Is it simply a more transactional generation or not? What are their changes in motivations (e.g. several articles we read suggested they may be more interested in environment and social justice than earlier generations, that inclusion is important to them, that they listen to social influencers, that digitally engaged experiences are important, that they are used to customization of experiences, that they are satisfied with fewer comforts and more flexible, interactive learning spaces, that they are deeply concerned with financial security, that they tend towards majors they believe to be practical, they are interested in learning things they can apply, they often see failure as catastrophic)? When we consider what we need students to learn and then to assess that learning, how do we ensure we are responding to the students we have in this historical moment? In order to give them the in-depth and rigorous intellectual experience that will create life-long learning, where do faculty adapt to help them step into deep learning and where do faculty challenge them to step outside their preconceptions?

7) What should we be looking at in the first year experience? How do we measure deep learning? Are we looking to help guide students to acquire a disposition rather than an outcome? How do we avoid being rigid? It may be important to remember that some students may be deeply immersed and focused and others may be scattered and diffused, but both may be taking part in an intellectual journey. How might we honor these different but perhaps equally intellectually important paths?

8) Since employability is often presented as a key element of learning in the current culture, should we simply reject that paradigm as irrelevant to what we do, or can we invite employers to be our advocate in relation to many things that we deem to be meaningful, but that don’t fit tidily in conventional assessment boxes, like curiosity and passion and focus?

9) If we become more innovative in creative, meaningful assessment techniques, is it worth writing an article or articles aimed at a general audience? It could be shared with other colleges but also perhaps even have an audience with the general public.
VIII. A Possible Assessment Checklist

1) What is a **meaningful** element (end result, part of a process) for me to study in regards to this class, this program, this department? Why is it meaningful? Is it meaningful in and of itself or as part of a broader whole? When considering what is meaningful, you might use your own disciplinary concepts or broader concepts, depending on what you are studying. (When you start developing these elements, they will need to be tied to existing department, program, or course objectives; over time you may find these objectives need to be reworked to respond to what you are finding to be meaningful).

2) If I select to study a broad category (e.g. critical thinking) am I measuring the whole thing (in which case I might need to understand the components that make up this category and ways in which they interrelate, and to design a multi-component instrument) or a crucial part of that category? If it is a part, why am I choosing this part, and will I be appraising other parts at a later date in an order that will give me an understanding of how students are doing in the broad category?

3) Can this element be assessed and verified in a way that does not negate its meaningfulness? What instrument that allows for accessibility and verifiability will flatten the meaning least and how can we communicate in our ultimate assessment the limits of the instrument?

4) What do we want to study in relation to this element? Is an end product suitable or do we want to study moments in a process? Do we want to look at direct evidence (student work) or indirect evidence (student reports)?

5) What are the merits and drawbacks of using quantitative vs. qualitative data to look at this element? Which are you selecting and why?

6) What is the context in which students work towards this goal both inside and outside the classroom (e.g. what scaffolding are you providing to ensure students can accomplish what you want them to accomplish and what supplemental support to they have in office hours, recitations etc.). What is the context outside the classroom? Would it be useful to have student input into aspects of the broader college community and to ways in which their own behavior influenced learning? Which of these elements of context can be influenced by the department? If there are trends that suggest there are issues outside the department, how should they be addressed?

7) Is it better to finalize what you are going to assess at the beginning of the semester/year or should we wait until we have a stronger sense of what is happening in a particular class?
8) How can we meaningfully capture what has happened as we translate this instrument for our colleagues in administration who are trying to convey it to our accreditation agency? Narratives, numbers, images, sample portfolios?

9) Most importantly, how will this benefit students?
Appendix 1: Syllabus
**Syllabus ITL: 10 Feb, 2019 Version**

*Intellectual/Creative Appraisal (formerly known as Assessment)*

**8 Participants:** M. Acuff, Sharon Alker, Tim Doyle, Russ Gordon, Julia Ireland, Kazi Joshua, Helen Kim, Chris Leise.

**Meeting Dates:** Fridays at noon throughout the Spring, 2019 Semester (with Wednesdays at noon as a back up). And possibly a few evening coffees to ensure we can get through the material.

**Objective:** We wish to create ethical approaches to intellectual and/or creative appraisal, at the course, department, and program level, that involves the student in their own self-appraisal and that affirms the joyful, metamorphic liminal space of the dynamic classroom, while recognizing and exploring ways to integrate into appraisal how the student (as a whole being) learns. We also wish to discover how to connect these approaches to our specific accreditation agency on terms that benefit our students.

**Meeting Place:** Maxey 308

**CLEo Site:** Accreditation ITL

---

**I. Prologue**

**January 10th, 2019 (optional):** There is a workshop with Paul Hansted which you do not have to attend (but I will attend and report back on) on assessment. Place: Memorial 331.

**January 11th, 2019:** Our ITL has a private meeting with Paul Hansted, Professor of English at Roanoke College and expert on assessment. Place: Memorial 331.

**Optional Reading to Prepare from Hansted’s Book: Creating Wicked Students (2018)**

- Chapter 2: “Setting Goals for our Courses”
- Chapter 7: “Assessing Wickedness”

Note: By “wickedness,” Hansted is responding to an idea promoted by Edmond Ko who would often say that “his students faced wicked problems, that is, situations where the parameters of the problem and the means available for solving them were changing constantly” (Hansted, 3). Thus, Ko (and Hansted) argued we need to give students “wicked competencies.”
Unit I: A Broad Survey of Assessment: its origins, its purpose, its strengths and its problems.

Week 1: Friday 18th January
General Meeting to discuss objectives and the syllabus.

Week 2: Friday 25th January
Reading: The History of Assessment & Where we are Today

Week 3: Friday 1st February
Reading: Key Problems with Assessment
1) Weapons of Math Destruction. The Introduction and Chapters 3 (Arms Race) and 7 (Sweating Bullets) are not about assessment in particular but they are about the way Big Data is misused and in the way that reducing “human behavior, performance and potential to algorithms” is problematic
Week 4: Friday 8th February

Defining Assessment. What is its Relationship to Accreditation?


2) Assessment Clear and Simple

Chapters 1 “For Everyone: The Basics of Assessment” and 3 “For Departments and Programs”

3) Website of Whitman’s Accreditors. the Northwest Commission on Colleges and Universities for Accreditation (NWCCU).

Week 5: Friday 15th February

Reading: Alternative ideas: “Edumetrics” and “Evaluative Judgement”

1) “The Edumetric Quality of New Modes of Assessment.” Chapter 6 in, Assessment, Learning and Judgement in Higher Education. 2009.


Week 6: Friday 22nd February *Kendra Golden visit

No assigned reading (unless Kendra assigns us anything). Please take a second look at the website of Whitman’s Accreditors: The Northwest Commission on Colleges and Universities for Accreditation.

We will prepare questions that will help us understand how assessment works at Whitman.
Week 7: Friday 1st March

**Assessment in the Humanities/Philosophy**


Week 8: Friday 8th March

**Assessment in the Humanities/Literary Studies and Composition**


SPRING BREAK

Week 9: Friday 29th March

**Assessment and the Fine Arts**

Reading:

1) Chapter 2, “Conversations” from *Why Art Cannot be Taught.*
2) Selections (sample assignments) from *Draw it with your Eyes Closed: The Art of the Art Assignment.* TBD.
3) Selections from *Art School: Propositions for the 21st Century*

Week 10: Friday 5th April

**Assessment in the Science Classroom**

Reading: *Assessment in the College Science Classroom* (2014)

Chapter 3 (Summative Assessment) and 4 (Formative Assessment)
UNIT 3: APPLICATION TO WHITMAN. STARTING TO PLAN WHAT IT WOULD LOOK LIKE IF WE TOOK SOME OF WHAT WE’VE LEARNED BACK TO OUR DIVISIONS.

Week 11: Friday 12th April  ***Michelle Janning will visit***

No Reading: Prepare questions for Michelle Janning. Professor Janning has experience in both assessment at Whitman and outside the college and is interested in helping us envision new possibilities for assessment.

Week 12: Friday 19th April

Assessment in the First-Year Program: Thinking about the students we have.
2) Damon Williams, “Who are the Centennials” Center for Strategic Diversity Leadership and Social Innovation.

Week 13: Friday 26th April

No Reading: Drafting ideas together about intellectual appraisal (as opposed to assessment) for our own use and to present to faculty.

Week 14: Friday 3rd May  Neal Christopherson will visit.  He has generously agreed to attend to talk about some of the reports he has worked on over the past five or six years about the student experience, particularly the longitudinal study that began in 2012 and that followed a random sample of 75 students over their time here and beyond.

No Reading: Prepare questions for Neal Christopherson.

Week 15: Friday 10th May

No Reading: Drafting ideas together about intellectual appraisal (as opposed to assessment) for our own use and to present to faculty.
Bibliography


Banta, Trudy W. and Catherine A. Palomba. Assessment Essentials: Planning, Implementing, and Improving Assessment in Higher Education: Jossey Bass, 2015. (has a section on defining assessment. This is available online through Whitman).


Dirks, Clarissa, Mary Pat Wenderoth, and Michelle Withers, Assessment in the College Science Classroom, W.H. Freeman, 2014.


Kuh, George, D. Using Evidence of Student Learning to Improve Student Learning. Online Access through Whitman.


*White, Katie, Unlocked: Assessment as the Key to Everyday Creativity in the Classroom*, Solution Tree Press, 2019.


**Websites:**

Whitman College’s Accreditation Body is the **Northwest Commission on Colleges and Universities for Accreditation** (NWCCU). Their website is: [http://www.nwccu.org/](http://www.nwccu.org/)

There is a definition of accreditation in the FAQs

**Other resources:**

Survey of Assessment Culture: [https://www.shsu.edu/research/survey-of-assessment-culture/](https://www.shsu.edu/research/survey-of-assessment-culture/)
Appendix 2: Draft Instruments Prepared by Several Members of the Workshop as they Engaged with the Ideas in the Readings.
Philosophy Department ITL Project – Senior Exam Assessment

Julia A. Ireland

**History**
The Philosophy Department adopted a senior exam to replace the “History Sequence Paper” of Senior Philosophy, which is its senior assessment mechanism. Members of the Department felt that the requirement was resulting in papers that were of poor quality; papers were philosophically derivative, lacking strong and analytical complexity theses, and often poorly executed. As a result, we decided to go back to a comprehensive exam focused around 6-7 texts that share a common theme, e.g. Self, Freedom.

**Learning Goals**
In adopting the exam, the Department was focused on the specific Learning Goals:

[fill in specific goals]

In addition, we hoped the exam would foster intellectual community among our seniors – something flagged in our most recent External Review as weak in our Department and especially desired by Seniors in the absence of a senior capstone or equivalent.

**Exam Formulation Process**
The Department spent substantial hours discussing the theme for the exam, reading seven very different texts, discussing format as well as to how to engage students in the process of studying for the exam (the goal of community), the composition of exam questions, and its alignment with student learning goals. This took a considerable amount of Departmental time and energy when we were also seeking to bring our new colleague, Wenqing Zhao, into departmental and campus culture. One component of the assessment is to review through a questionnaire and follow-up discussion faculty perception of the exam with respect to its success in meeting learning goals and time spent on senior assessment – including the Senior Honors Thesis – in relation to other possible Department conversations, e.g. scaffolding the curriculum, Departmental mentoring, broader initiatives geared toward departmental community, research. Michelle Janning recommended a three to five year timeline to assess the implementation of the exam. With this first year of faculty assessment, the goal is to simply gather information about our respective experiences in order to then get a sense for one or two changes that would improve the process for ourselves next year and to pose the next set of questions with respect to the exam’s implementation.
**Faculty Questionnaire**

1. Was the adoption of the exam an improvement over the “History Sequence” paper and previous iterations of the comprehensive exam? Why or why not?
2. Did the process and construction of the exam succeed in addressing or meeting departmental “Learning Goals”? What did the exam do best, what did the exam do least well, and how do we know?
3. What is the one improvement that could be made that would address what the exam did least well?
4. Do you feel that the Department effectively communicated to students the purpose, goals, and expectations of the exam as part of community? Why or why not?
5. How could the Department improve its own process with respect to the exam, especially its extensive time commitment? Would a 2-credit Senior Seminar improve this process?

**Student Experience**

The assessment of student experience will roughly follow the same structure as the Departmental assessment of the questionnaire and follow-up conversation; Michelle Janning reiterated the significance of the latter as fulfilling the goals of community. The questionnaire will include Departmental and pose some of the same versions of questions included on the faculty questionnaire.

**Student Questionnaire**

1. What was your experience of the Philosophy Department’s exam in general terms? What did you learn, how did you learn it, and did the exam succeed in addressing the Departments “Learning Goals”? Why or why not?
2. Comment on the theme and selection of texts. Were there too many texts? Too few? Was the exam too hard? Too easy?
3. A Departmental goal as part of the process of the exam was creating community in the Philosophy Department the senior year. Did we succeed? What are your thoughts about the 2-credit Senior Seminar to read and discuss the required texts?
4. What did the exam do best, and what did the exam do least well?
5. Did the Department effectively communicate the purpose, goals, and expectations of the exam?
6. What is the single improvement you would make for the exam next year? And what advice would you give to next year’s seniors about how to study for the exam?
7. What is a good question to ask about the exam that would have been important for your own learning?
8. Include one thing (or more) you would like the Department to know about your experience in the major or – more particularly – your experience during your Senior year.
Assessment Format and Outcomes

The responses to both questionnaires will be reviewed and discussed by the Department; notes from the discussion will be taken as part of the generating raw data, and a one to two page document will be generated that provides a summary overview to serve as the basis for future reference. The Department is currently in the process of revising a rubric to grade the history of philosophy question on the exam, and will use the questionnaire information to help inform that discussion; this rubric will be communicated to students. The Department hopes to identify one to two improvements that can be made to the exam with respect to its own process, and one to two improvements that can be made with respect to student experience. We hope to clarify whether we need a 2-credit Senior Seminar to support the exam structure and the goal of community to be adopted Fall 2020. The goal for this year is to generate some raw data, make in reach changes that will in turn assist future assessment with respect to student learning outcomes, and clarify how the exam aligns with departmental “Learning Goals” as reflected in other part of our curriculum. A good and measurable outcome will be coming up with the right questions to understanding the trajectory of student learning. The form of the assessment will be a narrative overview of the exam, supported and converted into numerical data, and a brief commentary on “outliers” and “concerns.”

2) Russ Gordon

Writing Assignment for the Math 126 Final Exam

As you may recall from the syllabus, the goals for this course include the following items:

1. to develop quantitative reasoning skills;
2. to learn how to read technical material;
3. to learn to write technical information correctly and clearly;
4. to take pride in your work and to avoid errors;
5. to learn how to solve non-routine problems;
6. to appreciate/understand how mathematicians view mathematics;
7. to comprehend some aspects of calculus.

The in-class portion of the final exam will be checking your success on item (7). However, I am curious about your thoughts on items (1) through (6). Consequently, I am requesting that you write three paragraphs discussing these items: one paragraph on item (3) and one paragraph each on two other items of your choosing that seem significant to you. For each goal, you may discuss ways in which you improved over the course of the semester (and how you know that you have
done so) or you may discuss how or why you feel you made little progress toward that goal. You should include specific details and/or general impressions that indicate how you recognize that you have made progress in a given area or to better explain why you made little progress on a given goal. You may also discuss things that you could have done differently (study habits, asking for and receiving assistance, etc.) or things that I (as professor) could have done differently to help you accomplish the goals.

The total word count for all of the paragraphs (that is, the entire paper, should be 300–500 words. I will be looking for depth of thought/analysis and engagement with the goals rather than a mere list of platitudes. I will also check for correct use of language and coherence of thought. The paper needs to be typed, with appropriate line spacing and font size, as you see fit. The assignment is due at the beginning of the scheduled final exam.

The syllabus states that the final exam is comprehensive and is worth 80 points. Twelve of those points will be allotted for this paper.

A discussion of the results:

I decided to try a different type of assessment for Math 126 this semester, one that is more qualitative than quantitative. As indicated by the assignment on the previous page, I had the students write a short paper expressing their thoughts on some of the learning goals that I state on the syllabus and discuss during the semester. The assignment is essentially assessing item (ii) in the quantitative reasoning distribution area, namely, “Represent, communicate, and analyze ideas and data using symbols, graphs, or tables.”

The students (there were 17 total in my two sections) wrote on a variety of items, expressing their thoughts and discussing their accomplishments or lack thereof. The main take-away for me was the realization that there is a significant gap between my idea of what the goals are and what the students think the goals are. Here are three examples to indicate the discrepancy.

1. For item (4), I want students to write their work neatly and to include clear steps so that others can read their solutions. I also expect them to make a concerted effort to avoid careless errors (such as 4 · 2 = 6). Some students more or less stated that they could not take pride in their work unless they were getting a good grade. However, a person needs to realize that doing your best, whatever that may be, is a source for feeling good about your work. In addition, students interpreted errors as any mistakes at all. However, as you learn new material, some errors are inevitable and you can learn from your mistakes.

2. In reference to item (5), some students interpreted non-routine problems as difficult problems, that is, problems similar to examples but with more complicated functions or algebra. However, problems that are non-routine are those for which you have seen and practiced the skills and ideas necessary to solve the problem, but it is unclear how to proceed because the problem looks very different from the examples or requires multiple ideas in the same problem. Solving these
sorts of problems involves having a mental list of options to try as you ponder the problem, perhaps over an extended period of time.

3. For item (6), during the semester, I talk about the history of various mathematical topics, mention further applications of some of the math we are doing, and illustrate how some topics lead to interesting mathematical problems that may have no immediate applications at all. In their paragraphs, the students focused more on notation and solving problems the way a mathematician might, rather than looking at the bigger picture and realizing the breadth and depth of mathematics.

In hindsight, perhaps I should have known that there was a potential for misinterpretation of these goals, but this assessment really opened my eyes. Hence, moving forward, I plan to rephrase the goals for the course to make them clearer to the students. I also plan to mention the goals more often during the semester and provide explicit examples of the various items.

3) **Tim Doyle, Proposal for Assessment for First-Year Pods**

I'm writing to share my thoughts RE assessment and the opportunity presented by the new FYE model to bake in a natural structure for assessment. Here I will focus more on the Pod semester because I think it presents the greatest opportunity to change how we approach assessment within the FYE. Forgive me for ignoring Encounters in this discussion---it's a little macabre, but it feels a bit like planning a vacation in front of a dying friend.

What I’m presenting here is a structure for generating assessments that plays an organic role in the life of the FYE, serves several of our own individual needs as instructors staffing the FYE, and also targets the crafting of productive, open faculty collaborations. This is not a proposal for a particular instrument but a discussion of the positive structural role that assessment might play if we build it in from the outset in a way that resists flattening forms of measurement and the generation of data that aren’t directly relevant to the faculty making decisions about how to revise course content and approaches."

A principle, an observation, and a rhetorical question:

(1) Assessment should be a byproduct of the regular process we use to reflect on and revise our courses, not the reason that induces us to reflect on our courses.

(2) Because substantial aspects of the new FYE involve collaborative course development and teaching we already need to document and share our reflections as a natural part of collaborating to improve the experience of the FYE for all involved. In essence, the structure of the FYE already necessitates some sharing and expression of reflections on course content and efficacy.

(3) Staffing for pods should be integrated with the process by which pods self-appraise and revise their themes/questions and shared learning experiences---how else should someone timing into teaching the FYE know what group they want to join?
Here's my proposal in response to these three thoughts:

Let's skip to the planning stages for year two or three of the new FYE when the original pods are starting to need new bodies as individuals who founded them are timing out, going on sabbatical, 3AM rage emailing the faculty list and refusing to ever... whatever. This is the time when we need to figure out how to sustain or terminate and replace pods to facilitate staffing.

My suggestion is that we ask each pod to prepare a report at the end of the fall semester that details how and how well they are tackling the shared learning goals with a special eye to how the shared theme/question or shared texts or shared student experiences are playing into this performance. The report should conclude with a set of concerns or critiques and possible actions as recommended by the current year's teaching faculty for the pod. This should be made available to all faculty who are currently teaching or timing in to the FYE. Second semester "seminar" instructors need to know this sort of thing so they know what to be prepared for as the next semester begins; Pod people need to know what's going on in the pods so that they can opt into the pods that are taking on the tasks to which they believe they have the most to contribute. Changes to each pod should be made in the form of having the newly constituted pod write a short letter detailing the changes they will make and how they believe they are responding to the strengths and weaknesses identified in the previous semester's report.

The previous pod report and the response from the newly constituted pod---their plan for the next year---should be the raw materials from which we glean an assessment of the program from year to year. This takes a process that we need to undertake to organize and sustain pods and gives us assessment of pods as a byproduct.

Some further thoughts on sustaining pods:

Back before the Big Vote there was a lot of reasonable concern about how we will staff the pods. Some of that concern was from folks who didn't want to have the additional contact hours involved in organizing pods; I have nothing to say to that. But another set of concerns arose about how pods grow, live, and die. This second set of concerns is something that we can use the above-mentioned process to address.

How should we handle a pod with dwindling faculty interest?

A pod should only run if there are at least two instructors (three instructors?) committed to it. A pod that runs in a year with less than four instructors should be terminated in the subsequent year unless four or more instructors commit to it for the subsequent year. This allows instructors to get a decent return on preparations made in the service of a pod even if it doesn't have the momentum required to persist indefinitely. The pod report will be a major way for pods to recruit new members. [This requires an addendum to the motion we passed to lower the minimum pod size to accommodate some occasional shrivel.]

How should we handle a pod with excessive interest?
A pod with over seven faculty members committed to it should split in two—cell division. Each half should craft its own response to the previous report/plan for the next year. These pods might recombine as interest fluctuates, or they might diverge and really become quite separate over a few years. They may have some shared activities between pods, but they may diverge immediately. The title and catalog text for a pod should be the purview of the newly constituted pod. [This would require an addendum to the motion we passed to raise the maximum size of a pod from six to seven sections. This is just a mathematical issue: if the normal minimum is 4, we need to allow the full 4-7 range so that the first too big pod can split into two pods of four and not immediately enter a state of shrivel.]

This proposal also has the advantage that there is no problem of popularity. A popular pod will just undergo cell division, and an unpopular pod will have some life support available to allow committed faculty to rally interest or at least repay investments if faculty prefer to stick it out for another year rather than opting into a new pod.

Essential to all this are the ideas that (a) pod content is under the purview of those teaching, and (b) teaching within a pod can still, under this model, be a matter of great individual freedom. Because these reporting and redesign efforts are concentrated near the moment when hand the baton, the wisdom of a prior cohort informs the deliberations of the new cohort, but nobody who is not teaching a pod dictates anything about content to anyone who is teaching in that pod. This model for growth and death of pods is consonant with maximum faculty autonomy while focusing our attention on our shared purpose, indeed on revisiting our shared purpose each year.


This brief portion of an instrument to learn how to capture flow was inspired by “Approaching the Ineffable: Flow, Sublimity, and Student Learning” by Donna Heiland. She builds on ideas inherited from psychology about flow experiences, which “can help shape particularly intense forms of student engagement in learning, and move on to consider such engagement as not only affective but also as cognitive and even creative experience.” She discusses why people, students and otherwise, do things passionately (rock climb, play chess, play musical instruments etc.) for which they are neither famous nor paid, and suggests it is tied to a flow experience that begins with clear goals, immediate feedback, a balance between challenges and skills, and ultimately leads to a loss of self-consciousness and a loss of one’s self in the project (something we might call transcendence and explains why we might seem to lose time when we are in the thrall of such an experience).

**Goal:** Capture the ephemera of learning and teaching experiences (in-class, in-office, and outside of structured environments) to help students identify when they undergo transformative changes in their thinking. Concentrate on embodied/affective phenomena as well as intellectual realizations.

**Outcome assessed:** “Recognize and delight in moments when engaging with texts generates surprising effects.”
**Teaching approach:** As instructors—in classes and in office meetings—identify moments when students appear to experience breakthroughs in learning. Point it out, then warmly invite student(s) in questions to notice as much as they can about what’s going on. What did it feel like? What specific elements combined to produce the outcome? Can they identify an underlying generality from the specifics that reveal something about how they learn best?

Ask students to take learning notes over the course of the term, alongside their normal notes on content and method.

**Collection of indirect data:** Have students submit a single paragraph reporting a significant breakthrough moment prompted by class. What aspect of their learning improved at that time? What content and/or method contributed most to producing the outcome? If they can recall, what did the breakthrough feel like?

Use that indirect data to engage with the student’s work (direct data). If a student, for example, reported a breakthrough in being able to hold both parts of a metaphor (tenor and vehicle) in their mind at once and see how they interact, that is something you would look for and reward in their work.

Start to study what you are seeing in the class as a whole. Do these breakthroughs occur at certain moments? You might, yourself write a few sentences of reflection down after a class in which a breakthrough occurs about what else was happening in the class and with the student. How do your own experiences interact with or even differ from those recorded by students?

---

**6) Art Assessment - Acuff**

More than anything, participation in this CDTLI permitted me to move from an admittedly cynical view of assessment and its history, issues, rewards, risks and failures, to a focused set of questions about the fundamental meaningfulness of college-level art instruction, and the relationship of the arts to the larger project of a small liberal arts college.

I have come to see assessment as: 1) a means to stimulate specific and meaningful questions about student learning (quite distinct from grading); 2) an organic and reflexive mechanism that can be incorporated fairly painlessly into my teaching; 3) a recursive process that will help to hone pedagogy and concentrate my energies; 4) a way to kindle, build and examine a departmental ethos through ongoing reflections on what and how we teach.

I have gathered below three different written articulations of what we think we are doing as defined by 1) our current major/thesis Assessment rubric, 2) the Fine Arts Learning Outcomes from the Gen Ed Requirements, and 3) the Learning Goals as listed on our department website.

All three descriptions of what we are hoping to achieve are useful but play to distinct audiences. The Assessment Model’s 10 questions are powerful in their focus on senior work/outcomes while the others are more broadly conceived to apply to our beginning level classes that serve mostly non-majors/gen-ed requirements.
Since we transitioned to on-line assessment in 2018 the department has abandoned the use of the 10 questions. I’d like to try to resurrect them in some form, preferably in a real life conversation at the end of every year, as opposed to the simple quantitative metric we have been doing (mostly, if not exclusively) out of institutional obligation.

I’m also proposing to lead a yearlong conversation about pedagogy and assessment within the structure of monthly Art Department meetings throughout the next academic year. Beneath the rubrics I’ve compiled a list of what I think are some of the more interesting questions for our department to consider in light of what we’ve explored this semester.

Finally, as part of my course wrap-up I have asked students to answer a series of questions about what and how they learned during the semester. I’ve been doing a version of this for a long time (tailored to and in preparation for them to fill out their course evaluations) but my questions have become more pointed over the years and now reflect many of things we thought through in our CDTLI. That is the last item included in this document.

I’m deeply indebted for the ways I’ve been able to listen to how others wrestle with giving and getting the most out of our chosen professions. Most special to me was hearing how everyone spoke from a place of deep conviction and commitment.

I also appreciated the shared skepticism about using logics of extreme capitalism and reducing everything to a market-based language in which only the measurable is valued. This will undoubtedly be an ongoing concern for all of us. I have faith that we will hold space for mystery and all that is un-measurable, un-namable and unknown!

Current Model

The departmental model for assessment of the senior thesis in art consists of the following 10 questions. Each year the faculty rank each thesis and accompanying artist statement on a scale of 5-1, 5=excellent, 1=unacceptable.

1) Give an overall rating of the student’s artwork in comparison to other students within BA studio art programs in small liberal arts colleges with no portfolio requirement for the major.

2) How well does the student’s artist statement discuss the work presented in the exhibition?

3) Does the statement demonstrate an awareness and understanding of historical precedent, contemporary parallels of thought, and relevant critical issues and theories within their work?

4) Does the student’s artist statement justify the nature, suitability, and integrity of the formal processes and materials utilized in the work?

5) Does the student demonstrate strong self-evaluation or critical assessment of their own work through the editing process?
6) Has the student made sound and thoughtful decisions regarding presentation, utilization of space and viewer interaction?

7) Is the work well crafted? Are the technical aspects of the work resolved at a level appropriate to the piece?

8) Does the work demonstrate innovation and a willingness to take risks?

9) Does the work demonstrate a substantial physical and mental investment and personal responsibility?

10) Is the convergence of form, content and context resolved?

General Education Requirements
Fine Arts – Learning Outcomes
Students will be able to do one or more of the following:
• Solve problems in creative ways
• Recognize the techniques used in at least one art form
• Understand different theoretical approaches to artistic production
• Develop their ability to express themselves artistically
• Critically analyze and interpret their own and others' artistic work

Program Learning Goals
Students in art classes learn creative problem-solving skills, non-linear and abstract-thinking skills, and how to interpret and express complex ideas in a wide range of sensorial forms. Upon graduation, a student will:

Demonstrate technical skills and processes associated with a wide variety of visual media. Generate images/objects. Interpret the visual language and meanings of art works. Pursue courses of study in both traditional materials/visually based art practices, and conceptually and technologically driven modes of art production.
Be informed by the critical and formal discourses of the discipline(s). Learn to research in libraries, archives, galleries, and museums.
Interpret and express ideas in a wide range of sensorial, visual and verbal forms.
Acquire creative problem solving skills, and non-linear and abstract-thinking skills. Understand and position their endeavors within a cultural and historic framework.
Travel to NYC on a research trip and attend exhibitions in the numerous venues on campus.

- What can be measured in our classes? What constitutes effective measurement in the arts? Are there aspects of what we do that absolutely cannot be measured?
- Do the values espoused in the documents above correspond to our courses? Are our courses designed to achieve these outcomes? How can we get really specific about this?
- Are there things we would like to achieve that are not reflected in the documents/goals above?
- What are the specific skills on which we place emphasis and how do we know whether they have been engaged with to a satisfactory degree?
- Are we grading the work produced, the process that leads up to the work, or some combination of both? How exactly do we do that? What are reasons for emphasizing process over or equal to product? What other activities are graded in our classes?
- Is studio practice one of a variety of ways of constructing knowledge, alongside and equal to other disciplinary endeavors? Are specific things emphasized that we can highlight (irrationality, emotion, abstract reasoning, embodied intelligence, non-linear thinking, etc.)
- How can the arts and humanities resist becoming mere accessories to a STEM-driven agenda?
- Is the kind of thinking we ask of our students different in kind from other ways of constructing knowledge across the college? Should we be messaging around this more?
- What ideas from positive psychology’s notion of “flow state” that can help us in our teaching? For example, certain student learning studies suggest, “engagement is linked with attainment.” What if creativity is seen not in traditional terms (as an inherent, individual trait) but as “a process that takes place within a system?” Can instruction be designed to create the conditions in which “flow” is likely to occur?
- What cultural changes in the student body must we contend with and orient to? (e.g. shorter/fractured attention spans, remedial needs of incoming students drawn from more diverse backgrounds and educational experience, heightened fragility, greater levels of generalized cultural anxiety, consciousness around trauma and its effects, micro-aggressions, ongoing systemic issues of inequality and injustice, etc.)
- What makes students approach art classes in un-academic ways, hoping for and anticipating the “easy” A, and what can be done to disabuse them of these attitudes?
- How do student learning outcomes shift in the context of majors and non-majors or beginning/intermediate vs. advanced art courses?
- Is the intellectual isolation of the arts valuable in any way? Or is a more “discipline-dynamic” relation desirable? What is possible?
- Can the lack of coherency of the art curriculum be considered a strength? A weakness? Where and when?
- How can meta-cognition serve us in our teaching and students in their learning (e.g. “learning how to learn”, contractual learning, the value of failure)?
- Are “new kinds of learning” that focus on leadership, interpersonal skills, ethics, communication, character, tolerance, citizenship and endurance things we want to incorporate actively into our classes?
- For the most part, students operate out of a default 19th/20th century paradigm in their understanding of art. The last 100 years have occasioned radical revisions to traditional ways of thinking with regard to notions of beauty and truth. Each semester feels like a struggle to find common ground. How are we dealing with this?
- How do/can the visual arts situate themselves in relation to the broader liberal arts at Whitman? Where would we like to see a shift?
- How can we accurately measure student motivation in our classes?
- I’m inspired by my English colleague’s idea of recognizing transformation as a marker of a particularly powerful classroom experience/example of learning. They attempt to track it by pointing it out in class and in-office meetings as well as encouraging students to take “learning notes” throughout the semester. What would this look like in the arts?
I’m interested in what and how you learned in this course. Many of you will never use plaster or a band saw or weird plastic detritus again, but the experience of putting materials together in new ways, of acquiring a visual language, syntax, a sense of the historical trajectory of sculpture and ultimately an understanding of the kinds of explorations sculpture is good for will hopefully persist inside of you, someway, somehow.

(Think of a seed planted therein.)

Please answer the following questions re: your experience in this class, making and interpreting things:

1) The role of “peripheral vision.” How did witnessing your classmates make things change you? What did you feel when you saw people making things radically different from what you made? How can that experience be made more powerful? Do you feel confident that your peripheral vision benefited you? How?

2) Can you describe a moment during the semester when your thinking about art shifted in a meaningful way? I’m curious if a “rupture” of sorts took place, what prompted it, and how you moved through it.

3) Were you able to achieve a “flow state” during the semester? Flow states are characterized by a mental state in which a person performing an activity is fully immersed in a feeling of energized focus, full involvement, and enjoyment in the process of the activity. In essence, flow is characterized by complete absorption in what one does, and a resulting loss in one's sense of space and time (Wikipedia). If you weren’t able to achieve this, why do you think that is?

4) Rank your motivation to work in this class on a scale of 1-10.

1 = oxen needed to pull you to the studio to do things;
10 = whenever anyone texted “where u?” you were often here, in the sculpture room.

What motivated you in this class to make your work? Were you excited about the ideas and materials presented? Were you in search of an A? Do you just want to graduate and needed fine art credit? Was there some other force that kept you grinding and cutting, welding and laminating?
7) Sharon Alker: Encounters

(this is an adapted version of the actual series of assessment exercises I did in my Spring, 2019 semester.

Learning Outcome: Students need to develop a writing process that includes an understanding of the recursive nature of writing

I became very excited with the possibilities of this learning objective, given the workshop I had done on assessment this semester. I decided I wanted it to be meaningful. It is important to me that students going forward understand the value of recursive writing and also recognize that (while it can be challenging to make time) it ultimately results in a higher quality of work. I had worked extensively with them through the Fall semester, making them rewrite every single paper. On the first paper, they met first with a writing fellow with a draft, and then with me, with a revised draft. So when they handed it in, it had been through two sets of revisions. For the next two papers, they had to meet with me with a draft. For the final portfolio at the end of the semester, they had to include a fourth paper that was a rewritten paper, adding another primary source into the argument. 100% of students crafted a more complex argument (albeit sometimes a structurally messier one) by the end of the Fall. Thus, by the end of the semester, I had normalized rewriting as part of the writing process. As you can imagine, this is very time consuming. Three paper meetings (that can be up to an hour each) with 17 students can be an additional 51 hours (on top of office hours) for one class. Some students asked to meet with me multiple times, which I did.

In the second semester, I generally take a step back and no longer mandate meetings. I will meet with students on request but I want them to ask for a meeting if they want one. For the first paper, approximately 12 students still met with me, about 9 for the second paper, and about 9 for the third paper. Some students met with me multiple times. I still used a writing fellow and students also met with the writing fellow and went to the writing center.

I wanted to test whether all of this emphasis on rewriting had had an effect. But it had been a while since I had compelled them to do recursive writing rather than just encouraging them. So I decided to do an in-class exercise towards the end of the semester in which I had them (over three classes) do a very brief recursive writing exercise. And then I gave them a final in-class questionnaire that asked them to talk about recursive writing. This took up 10 minutes in 4 classes (so a total of 40 minutes). I have listed below the three recursive assignments I gave them:

- **1) Day 1 of All About my Mother**

Recursive Activity

Write a paragraph about one element of the film that touched you. It might be a particular moment. It might be a recurrent theme. It might be a sound or music. Just free-write your
recollection of that moment/moments etc. Include an assessment of why it was important to you.

2) **Day 2 of All About my Mother**

Recursive Activity

Review the paragraph you wrote last class. You have had time to mull over the film between classes and during class today. Given that extra time, note places you would need to push your idea further, complicate your idea or even change your idea. This could include crossing things out, adding things in, mapping out an alternate or more nuanced idea. In general, today you should be doing things that help you think more deeply about your original idea.

3) **Day 3 of All About my Mother**

Recursive Exercise

Look over your paragraph and the notes you made last class suggesting changes. Put the heading: “Final Version” on a new page. Under that heading, start crafting a thesis. If you have time, you can write a new paragraph making an argument, but in general all you need to do is to craft a richer thesis statement/argument than you had in your original version.

At the end of the three days, I thought that the idea of recursive writing would have been reaffirmed in their minds. I did read these exercises and found that the students did work hard to enrich and deepen their concepts. If I had wanted I could have actually tried to evaluate these revisions alongside collecting student opinion. In the future this is something I would consider, but I was concerned that doing that while the work was still in process might not capture linear growth and could thus imply learning is not happening when in fact it is. Developing an idea is messy and concepts sometimes go backwards as well as forwards. The more difficult and interesting the idea that evolves, the more likely the student is to become muddled. So, I would like to think in more detail about how to measure in-process work before attempting to evaluate it. And since the outcome I was trying to measure in this instance was centered on whether they had developed a recursive writing process (rather than measuring output) it didn’t seem necessary to do so.

I then gave the students the actual recursive writing instrument which was as follows:

**FINAL EXERCISE ON THE LAST DAY OF CLASS:**

One of the learning goals of Encounters is to: **Develop a writing process that includes an understanding of the recursive nature of writing.** Please answer the following questions to help me see how this class has engaged with that goal.
1) Based on the rewriting we started last semester (with visits to my office) and that we concluded recently in our in-class writing, what is the value of recursive writing (writing and rewriting)? List ways in which it can be or has been beneficial to you.

2) What obstacles stand in your way in using recursive writing in your writing process in the future in other classes?

3) How might you address these obstacles?

I wanted to make this an open-ended answer so that I captured their own interpretation of the recursive writing process rather than a limited set of things I thought was important. Narrative is more important to me than numbers; qualitative information is more important than numbers. What I was looking for in this answer was the following:

1) **Do they understand what recursive writing is?** Yes or No? I hoped 100% of them knew that.

2) **Do they agree that it is valuable?** Yes or No? I hoped 100% of them knew that.

3) **Can they identify a series of values that they get from recursive writing?** In particular I was looking for at least 85% of them to identify values relating to either:

   * higher order thinking
   or
   * structural cohesion

4) **Could they then identify and offer solutions for problems they face in** trying to do this process that they found valuable.

Here are the results.

Out of 17 students:

100% (17 students) understood what recursive writing is.

100% (17 students) were able to define it as valuable.

70% of students (12 students) connected recursive writing to higher order thinking

70% of students (12 students) connected it to organization and cohesion

This meant, I met my goal. These students did overlap in the last two answers, but well over 80% identified either one or both higher order thinking OR organization and cohesion.
Here were other elements of recursive writing that students identified as important to the recursive process:

65% of students (11 students) said they now recognized that writing is just a process, and that early drafts are just brainstorming.

29% of students (5 students) said recursive writing gives students the opportunity to see leaps or other holes in your thinking and fix them.

12% of students (2 students) said the peer review process that my model promoted (getting an outside writer to question your choices) was extremely helpful.

Problems they had with recursive writing:

The single problem they identified facing with recursive writing was that it is time consuming (76% of students, 13 students, made this claim). Other single students mentioned the trouble they had focusing on a single topic over many weeks, laziness, the tendency to become narrow minded, and think one’s original idea is fine. 2 students (12%) said that they will mostly be doing science writing going forward and are not sure if recursive writing is appropriate in that field, but that they did see it as important in writing-heavy courses (Professor Gordon has reassured me that in future I can tell them that recursive writing is indeed highly relevant to science writing).

How might you address obstacles?

Above all, they said that to retain this writing process in future courses, they needed to ensure they continued to work on excellent time management skills (11 students or 65%). A significant number (6 students or 35%) said they would make appointments with their professor or COWS to force them to meet deadlines. Other minor things mentioned by a single student were: learning to self-motivate; getting better at rewriting preparatory outlines or mind maps so that rewrites of the whole paper are not so extensive; getting in the habit of writing more often; setting regular writing goals; focusing on school work and not being distracted; and letting go of an over attachment to one’s original idea. Two students said they just needed to make themselves do it [recursive writing].

Going Forward: I will not be teaching Encounters again but (as with all of us) will be moving to the new model. I will hopefully be teaching the pod model and so plan to brainstorm with my pod about ways in which to use this information in a different, abbreviated system in which I will not have students for an entire year. It is clear to me that continual exposure to recursive writing and a strong support system (professor, writing fellow, COWS) over the course of a year does make clear to students the value and concrete effects of recursive writing on their own work. It is not simply the saying – my constant reminder that writing is rewriting – but also the doing (the managing to reach higher ideas and to write clearer work) that helped students gain insight.
Appendix 3:
Association of American Colleges and Universities

VALUE Rubrics (in document form)

Reprinted with permission from "VALUE: Valid Assessment of Learning in Undergraduate Education." Copyright 2018 by the Association of American Colleges and Universities. https://www.aacu.org/value.

*Note, when reviewing these rubrics and deploying them in ways that are meaningful to our disciplines and objectives, we might keep in mind Sarah Webster Goodwin’s admonition that “rubrics are useful; most importantly, they are deservedly seen as democratic, in that they make our assumptions and aims transparent and accessible to all students. But rubrics have their limitations: they may lead us to a false sense of safety, may make us miss openings onto new ideas and processes. Rubrics, like our goals for student learning, and our assessments, must be conceived in an ongoing dialogue (explicit or implicit) and are themselves subject to evaluation” Assessment in the Disciplines: Literary Study, Measurement, and the Sublime.

We hope you find these rubrics useful. Just keep in mind that in our discussions we talked about remarkable moments when students “blew up the rubric” with their performance in ways that were inspiring and powerful.
CIVIC ENGAGEMENT 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 dialogue and understanding of student success.

**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 Elklit, 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 volunteering 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:

- 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, including voting, participating in democratic processes, and taking specific actions to affect an issue.
- 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.
- 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.
- 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 citizens 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 enforce binding decisions about such matters as the distribution of resources, allocation of benefits and burdens, and the management of conflicts." (Strengthening the 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, towns, 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 value@aacu.org

**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 Responsibilities 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.

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><strong>Diversity of Communities and Cultures</strong></td>
<td>Demonstrates evidence of understanding in own attitudes and beliefs because of working within and learning from diversity of communities and cultures, promotes others' engagement with diversity.</td>
<td>Reflects the importance of understanding 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.</td>
</tr>
<tr>
<td><strong>Analysis of Knowledge</strong></td>
<td>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.</td>
<td>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.</td>
</tr>
<tr>
<td><strong>Civic Identity and Commitment</strong></td>
<td>Provides evidence of experience in civic engagement activities and describes what he/she has learned about his/her role as it relates to a reinforced and clarified sense of civic identity and continued commitment to public action.</td>
<td>Provides evidence of experience in civic engagement activities and describes what he/she has learned about his/her role as it relates to a growing sense of civic identity and commitment.</td>
</tr>
<tr>
<td><strong>Civic Communication</strong></td>
<td>Tailors communication strategies to effectively express, listen, and adapt to others to establish relationships to further civic action.</td>
<td>Effectively communicates in civic context, showing ability to do all of the following: express, listen, and adapt ideas and messages based on others' perspectives.</td>
</tr>
<tr>
<td><strong>Civic Action and Reflection</strong></td>
<td>Demonstrates independent experience and shows initiative in team leadership of complex or multiple civic engagement activities, accompanied by reflective insights or analysis about the aims and accomplishments of one's actions.</td>
<td>Demonstrates independent experience and team leadership of civic action, with reflective insights or analysis about the aims and accomplishments of one's actions.</td>
</tr>
<tr>
<td><strong>Civic Contexts/Structures</strong></td>
<td>Demonstrates ability and commitment to collaboratively work across and within community contexts and structures to achieve a civic aim.</td>
<td>Demonstrates ability and commitment to work actively within community contexts and structures to achieve a civic aim.</td>
</tr>
</tbody>
</table>
CREATIVE THINKING 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

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

Framing Language

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

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

Glossary

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

- Exemplar: A model or pattern to be copied or imitated (quoted from www.dictionaryreference.com/browse/exemplar).
- Domain: Field of study or activity and a sphere of knowledge and influence.
# Creative Thinking VALUE Rubric

*for more information, please contact info@acce.org*

## Definition

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

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>Acquiring Competencies</th>
<th>Capstone 4</th>
<th>Milestones 3</th>
<th>Milestones 2</th>
<th>Benchmark 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reflect:</strong> Evaluates creative process and product using domain-appropriate criteria.</td>
<td>Create: Creates an entirely new object, solution or idea that is appropriate to the domain.</td>
<td>Adapt: Successfully adapts an appropriate exemplar to his/her own specifications</td>
<td>Model: Successfully reproduces an appropriate exemplar.</td>
<td></td>
</tr>
<tr>
<td><strong>Taking Risks</strong></td>
<td>Actively seeks out and follows through on untested and potentially risky directions or approaches to the assignment in the final product.</td>
<td>Incorporates new directions or approaches to the assignment in the final product.</td>
<td>Considers new directions or approaches without going beyond the guidelines of the assignment.</td>
<td>Stays strictly within the guidelines of the assignment.</td>
</tr>
<tr>
<td><strong>Solving Problems</strong></td>
<td>Not only develops a logical, consistent plan to solve problem, but recognizes consequences of solution and can articulate reason for choosing solution.</td>
<td>Having selected from among alternatives, develops a logical, consistent plan to solve the problem.</td>
<td>Considers and rejects less acceptable approaches to solving problem.</td>
<td>Only a single approach is considered and is used to solve the problem.</td>
</tr>
<tr>
<td><strong>Embracing Contradictions</strong></td>
<td>Integrates alternate, divergent, or contradictory perspectives or ideas fully.</td>
<td>Incorporates alternate, divergent, or contradictory perspectives or ideas in a exploratory way.</td>
<td>Includes (recognizes the value of) alternate, divergent, or contradictory perspectives or ideas in a small way.</td>
<td>Acknowledges (mentions in passing) alternate, divergent, or contradictory perspectives or ideas.</td>
</tr>
<tr>
<td><strong>Innovative Thinking</strong></td>
<td>Extends a novel or unique idea, question, format, or product to create new knowledge or knowledge that crosses boundaries.</td>
<td>Creates a novel or unique idea, question, format, or product.</td>
<td>Experiments with creating a novel or unique idea, question, format, or product.</td>
<td>Reformulates a collection of available ideas.</td>
</tr>
<tr>
<td><strong>Connecting, Synthesizing, Transforming</strong></td>
<td>Transforms ideas or solutions into entirely new forms.</td>
<td>Synthesizes ideas or solutions into a coherent whole.</td>
<td>Connects ideas or solutions in novel ways.</td>
<td>Recognizes existing connections among ideas or solutions.</td>
</tr>
</tbody>
</table>
CRITICAL THINKING 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 rationally through a common dialog and understanding of student success.

Definition

Critical thinking is a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.

Framing Language

This rubric is designed to be transdisciplinary, reflecting the recognition that success in all disciplines requires habits of inquiry and analysis that share common attributes. Further, research suggests that successful critical thinkers from all disciplines increasingly need to be able to apply these 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

**Definition**
Critical thinking is a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.

Evaluators are encouraged to assign a zero to any work sample or selection of work that does not meet benchmark (full out) level performance.

<table>
<thead>
<tr>
<th>Capstone</th>
<th>Milestones</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation of issues</strong>&lt;br&gt;Issue/problem to be considered critically is stated clearly and comprehensively, delivering all relevant information necessary for full understanding.</td>
<td>Issue/problem to be considered critically is stated, described, and clarified so that understanding is not seriously impeded by omissions.</td>
<td>Issue/problem to be considered critically is stated but description leaves some terms undefined, ambiguities unexplored, boundaries undetermined, and/or backgrounds unknown.</td>
</tr>
<tr>
<td><strong>Evidence</strong>&lt;br&gt;Selecting and using evidence to investigate a point of view or conclusion&lt;br&gt;Information is taken from source(s) with enough interpretation/evaluation to develop a comprehensive analysis or synthesis&lt;br&gt;Viewpoints of experts are questioned thoroughly.</td>
<td>Information is taken from source(s) with enough interpretation/evaluation to develop a coherent analysis or synthesis&lt;br&gt;Viewpoints of experts are subject to questioning.</td>
<td>Information is taken from source(s) without any interpretation/evaluation. Viewpoints of experts are taken as fact, without question.</td>
</tr>
<tr>
<td><strong>Influence of context and assumptions</strong>&lt;br&gt;Thoroughly (systematically and methodically) analyzes own and others' assumptions and carefully evaluates the relevance of contexts when presenting a position.</td>
<td>Identifies own and others' assumptions and several relevant contexts when presenting a position.</td>
<td>Shows an emerging awareness of present assumptions (sometimes labels assertions as assumptions). Begins to identify some contexts when presenting a position.</td>
</tr>
<tr>
<td><strong>Student's position (perspective, thesis/hypothesis)</strong>&lt;br&gt;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).</td>
<td>Specific position (perspective, thesis/hypothesis) takes into account the complexities of an issue. Others' points of view are acknowledged within position (perspective, thesis/hypothesis).</td>
<td>Specific position (perspective, thesis/hypothesis) is stated, but is simplistic and obvious.</td>
</tr>
<tr>
<td><strong>Conclusions and related outcomes (implications and consequences)</strong>&lt;br&gt;Conclusions and related outcomes (consequences and implications) are logical and reflect student's informed evaluation and ability to place evidence and perspectives discussed in priority order.</td>
<td>Conclusion is logically tied to a range of information, including opposing viewpoints; related outcomes (consequences and implications) are identified clearly.</td>
<td>Conclusion is inconsistently tied to some of the information discussed; related outcomes (consequences and implications) are oversimplified.</td>
</tr>
</tbody>
</table>
ETHICAL REASONING 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 notionally 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).
# Ethical Reasoning VALUE Rubric

*for more information, please contact value@aaacu.org*

**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 identity evolves as they practice ethical decision-making skills and learn how to describe and analyze positions on ethical issues.

**Evaluator are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (full use) level performance.**

<table>
<thead>
<tr>
<th>Ethical Self-Awareness</th>
<th>Capstone 4</th>
<th>Milestones 3</th>
<th>Milestones 2</th>
<th>Benchmark 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student discusses in detail/analyzes both core beliefs and the origins of the core beliefs and discussion has greater depth and clarity.</td>
<td>Student discusses in detail/analyzes both core beliefs and the origins of the core beliefs.</td>
<td>Student states both core beliefs and the origins of the core beliefs.</td>
<td>Student states either their core beliefs or articulates the origins of the core beliefs but not both.</td>
<td></td>
</tr>
<tr>
<td>Understanding Different Ethical Perspectives/Concepts</td>
<td>Student names the theory or theories, can present the gist of said theory or theories, and accurately explain the details of the theory or theories used.</td>
<td>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.</td>
<td>Student can name the major theory she/he uses, and is only able to present the gist of the named theory.</td>
<td>Student only names the major theory she/he uses.</td>
</tr>
<tr>
<td>Ethical Issue Recognition</td>
<td>Student can recognize ethical issues when presented in a complex, multilayered (gray) context AND can recognize cross-relationships among the issues.</td>
<td>Student can recognize ethical issues when issues are presented in a complex, multilayered (gray) context OR can grasp cross-relationships among the issues.</td>
<td>Student can recognize basic and obvious ethical issues and grasp (incompletely) the complexities or interrelationships among the issues.</td>
<td>Student can recognize basic and obvious ethical issues but fails to grasp complexity or interrelationships.</td>
</tr>
<tr>
<td>Application of Ethical Perspectives/Concepts</td>
<td>Student can independently apply ethical perspectives/concepts to an ethical question, accurately, and is able to consider full implications of the application.</td>
<td>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.</td>
<td>Student can apply ethical perspectives/concepts to an ethical question with support (using examples, in a class, in a group, or a fixed-choice setting) but is unable to apply ethical perspectives/concepts independently (to a new example).</td>
<td>Student can apply ethical perspectives/concepts to an ethical question independently (to a new example).</td>
</tr>
<tr>
<td>Evaluation of Different Ethical Perspectives/Concepts</td>
<td>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.</td>
<td>Student states a position and can state the objections to, assumptions and implications of different ethical perspectives/concepts, but the student's response is inadequate.</td>
<td>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.)</td>
<td>Student states a position but cannot state the objections to and assumptions and implications of the different perspectives/concepts.</td>
</tr>
</tbody>
</table>
GLOBAL LEARNING VALUE RUBRIC

for more information, please contact value@acu.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.

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 as 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, Inter-cultural 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 which and can vary over time and place. This can include, but is not limited to, understanding race, ethnicity, gender, nationhood, religion, 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 are often affected by or are the result of human design or disruptions. 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, and 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@acru.org

Definition

Global learning is a critical analysis of and an engagement with complex, interdependent global systems and logics (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 attuned 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.

<table>
<thead>
<tr>
<th>Capstone</th>
<th>3</th>
<th>Milestone 2</th>
<th>Benchmark 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global Self-Awareness</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effectively addresses significant issues in the natural and human world based on articulating one's identity in a global context.</td>
<td>Evaluates the global impact of one's own and others' specific local actions on the natural and human world.</td>
<td>Analyzes ways that human actions influence the natural and human world.</td>
<td>Identifies some connections between an individual's personal decision-making and certain local and global issues.</td>
</tr>
<tr>
<td><strong>Perspective Taking</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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).</td>
<td>Synthesizes other perspectives (such as cultural, disciplinary, and ethical) when investigating subjects within natural and human systems.</td>
<td>Identifies and explains multiple perspectives (such as cultural, disciplinary, and ethical) when exploring subjects within natural and human systems.</td>
<td>Identifies multiple perspectives while maintaining a value preference for one position (such as cultural, disciplinary, and ethical).</td>
</tr>
<tr>
<td><strong>Cultural Diversity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td>Analyzes substantial connections between the worldviews, power structures, and experiences of multiple cultures historically or in contemporary contexts, incorporating respectful interactions with other cultures.</td>
<td>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.</td>
<td>Describes the experiences of others historically or in contemporary contexts primarily through one cultural perspective, demonstrating some openness to varied cultures and worldviews.</td>
</tr>
<tr>
<td><strong>Personal and Social Responsibility</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td>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.</td>
<td>Explains the ethical, social, and environmental consequences of local and national decisions on global systems.</td>
<td>Identifies basic ethical dimensions of some local or national decisions that have global import.</td>
</tr>
<tr>
<td><strong>Understanding Global Systems</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uses deep knowledge of the historic and contemporary role and differential effects of human organizations and actions or global systems to develop and advocate for informed, appropriate action to solve complex problems in the human and natural worlds.</td>
<td>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.</td>
<td>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.</td>
<td>Identifies the basic role of some global and local institutions, ideas, and processes in the human and natural worlds.</td>
</tr>
<tr>
<td><strong>Applying Knowledge to Contemporary Global Issues</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applies knowledge and skills to implement sophisticated, appropriate, and workable solutions to address complex global issues using transdisciplinary perspectives independently or with others.</td>
<td>Plans and evaluates more complex solutions to global challenges that are appropriate to their contexts using multiple transdisciplinary perspectives (such as cultural, historical, and scientific).</td>
<td>Formulates practical yet elementary solutions to global challenges that use at least two disciplinary perspectives (such as cultural, historical, and scientific).</td>
<td>Defines global challenges in basic ways, including a limited number of perspectives and solutions.</td>
</tr>
</tbody>
</table>
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

**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. - The National Forum on Information Literacy

**Evaluations are encouraged to assign a 5% to any work sample or collection of work that does not meet benchmark (sell only low performance).**

<table>
<thead>
<tr>
<th>Capstone</th>
<th>Milestones</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Determine the Extent of Information Needed</strong></td>
<td>Defines the scope of the research question or thesis completely. Can determine key concepts. Types of information (sources) selected partially relate to concepts or answer research question.</td>
<td>Has difficulty defining the scope of the research question or thesis. Has difficulty determining key concepts. Types of information (sources) selected do not relate to concepts or answer research question.</td>
</tr>
<tr>
<td><strong>Access the Needed Information</strong></td>
<td>Accesses information using a variety of search strategies and some relevant information sources. Demonstrates ability to refine search.</td>
<td>Accesses information randomly, retrieves information that lacks relevance and quality.</td>
</tr>
<tr>
<td><strong>Evaluate Information and its Sources Critically</strong></td>
<td>Chooses a variety of information sources appropriate to the scope and discipline of the research question. Selects sources to consider, 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).</td>
<td>Chooses a few information sources. Selects sources using limited criteria (such as relevance to the research question).</td>
</tr>
<tr>
<td><strong>Use Information Effectively to Accomplish a Specific Purpose</strong></td>
<td>Communicates, organizes and synthesizes information from sources to fully achieve a specific purpose, with clarity and depth.</td>
<td>Communicates information from sources. The information is not yet synthesized, so the intended purpose is not fully achieved.</td>
</tr>
<tr>
<td><strong>Access and Use Information Ethically and Legally</strong></td>
<td>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.</td>
<td>Students use correctly some 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.</td>
</tr>
</tbody>
</table>

*Corrected Dimension 3: Evaluate Information and its Sources Critically in July 2013
INQUIRY AND ANALYSIS 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
Inquiry is a systematic process of exploring issues, objects or works through the collection and analysis of evidence that results in informed conclusions or judgments. Analysis is the process of breaking complex topics or issues into parts to gain a better understanding of them.

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

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

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

• Conclusions: A synthesis of key findings drawn from research/evidence.
• Limitations: Critique of the process or evidence.
• Implications: How inquiry results apply to a larger context or the real world.
# Inquiry and Analysis VALUE Rubric

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 not) level performance.*

<table>
<thead>
<tr>
<th>Topic selection</th>
<th>Capstone 4</th>
<th>Milestones 3</th>
<th>Milestones 2</th>
<th>Benchmark 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifies a creative, focused, and manageable topic that addresses potentially significant yet previously lesser-explored aspects of the topic.</td>
<td>Identifies a focused and manageable/double topic that appropriately addresses relevant aspects of the topic.</td>
<td>Identifies a topic that while manageable/double, is too narrowly focused and leaves out relevant aspects of the topic.</td>
<td>Identifies a topic that is too general and wide-ranging as to be manageable and double.</td>
<td></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>
<td>Presents information from relevant sources representing limited points of view/approaches.</td>
<td>Presents information from irrelevant sources representing limited points of view/approaches.</td>
</tr>
<tr>
<td>Design Process</td>
<td>All elements of the methodology or theoretical framework are skillfully developed. A 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>
<td>Critical elements of the methodology or theoretical framework are missing, incorrectly developed, or unfocused.</td>
<td>Inquiry design demonstrates a misunderstanding of the methodology or theoretical framework.</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>
<td>Organizes evidence, but the organization is not effective in revealing important patterns, differences, or similarities.</td>
<td>Lists evidence, but it is not organized and/or is unrelated 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>
<td>States a general conclusion that, because it is so general, also applies beyond the scope of the inquiry findings.</td>
<td>States an ambiguous, illogical, or unsupportable conclusion from 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>
<td>Presents relevant and supported limitations and implications.</td>
<td>Presents limitations and implications, but they are possibly irrelevant and unsupported.</td>
</tr>
</tbody>
</table>
INTEGRATIVE LEARNING VALUE RUBRIC
for more information, please contact reli@ncsu.edu

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- and course-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 dialogue and understanding of student success.

Definition
Integrative learning is an understanding and a disposition that a student builds across the curriculum and co-curriculum, from making simple connections among ideas and experiences to synthesizing and transferring learning to new, complex situations within and beyond the campus.

Framing Language
Fostering students' abilities to integrate learning—across courses, over time, and between campus and community life—is one of the most important goals and challenges for higher education. Initially, students connect previous learning to new classroom learning. Later, significant knowledge within individual disciplines serves as the foundation, but integrative learning goes beyond academic boundaries. Indeed, integrative experiences often occur as learners address real-world problems, unscripted and sufficiently broad, to require multiple areas of knowledge and multiple modes of inquiry, offering multiple solutions and benefiting from multiple perspectives. Integrative learning also involves internal changes in the learner. These internal changes, which indicate growth as a confident, lifelong learner, include the ability to adapt one's intellectual skills, to contribute in a wide variety of situations, and to understand and develop individual purpose, values and ethics. Developing students' capacities for integrative learning is central to personal success, social responsibility, and civic engagement in today's global society. Students face a rapidly changing and increasingly complex world where integrative learning becomes not just a benefit, but a necessity.

Because integrative learning is about making connections, this learning may not be as evident in traditional academic artifacts such as research papers and academic projects unless the student, for example, is prompted to draw implications for practice. These connections often surface, however, in reflective work, self-assessment, or creative endeavors of all kinds. Integrative assignments foster learning between courses or by connecting courses to experientially-based work. Work samples or collections of work that include such artifacts give evidence of integrative learning. Faculty are encouraged to look for evidence that the student connects the learning gained in classroom study to learning gained in real life situations that are related to other learning experiences, extra-curricular activities, or work. Through integrative learning, students pull together their entire experience inside and outside of the formal classroom; thus, artificial barriers between formal study and informal or tacit learning become permeable. Integrative learning, whatever the context or source, builds upon connection of the theory and practice toward a deeper understanding.

Assignments to foster such connections and understanding could include, for example, composition papers that focus on topics from biology, economics, or history; mathematics assignments that apply mathematical tools to important issues and required written analysis to explain the implications and limitations of the mathematical treatment; or art history presentations that demonstrate aesthetic connections between selected paintings and novels. In this regard, some majors (e.g., interdisciplinary majors or problem-based field studies) seem to inherently evoke characteristics of integrative learning and result in work samples or collections of work that significantly demonstrate this outcome. However, fields of study that require accumulation of extensive and high-consensus content knowledge (such as accounting, engineering, or chemistry) also involve the kinds of complex and integrative constructions (e.g., ethical dilemmas and social consciousness) that seem to be highlighted in extensive self-reflection in arts and humanities, but they may be embedded in individual performances and less evident. The key in the development of such work samples or collections of work will be in designing structures that include artifacts and reflective writing or feedback that support students' examination of their learning and give evidence that, as graduates, they will extend their integrative abilities into the challenges of personal, professional, and civic life.

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

- **Academic Knowledge**: Disciplinary learning from academic study, tests, etc.
- **Context**: The information conveyed in the work sample or collection of work.
- **Co-curriculum**: A parallel component of the academic curriculum that is in addition to formal classrooms (student government, community service, residence hall activities, student organizations, etc.).
- **Experience**: Learning that takes place outside of the formal classroom, such as web-based, service learning sites, internship sites, etc.
- **Form**: The external frameworks in which information and evidence are presented, ranging from choices for particular work sample or collection of work (such as a research paper, PowerPoint, video recording, etc.) to choices in make-up of the portfolio.
- **Performance**: A dynamic and sustained act that brings together knowledge and doing (creating a painting, solving an experimental design problem, developing a public relations strategy for a business, etc.); performance makes learning observable.
- **Reflection**: A meta-cognitive act of examining a performance in order to explore its significance and consequences.
- **Self-Assessment**: Describing, interpreting, and judging a performance based on stated or implied expectations followed by planning for further learning.

For more information, please contact reli@ncsu.edu.
**INTEGRATIVE LEARNING VALUE Rubric**

for more information, please contact sales@aacu.org

**Definition**
Integrative learning is an understanding and a disposition that a student builds across the curriculum and cocurriculum, from making simple connections among ideas and experiences to synthesizing and transferring learning to new, complex situations within and beyond the campus.

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>Connections to Experience</th>
<th>Capstone 4</th>
<th>Milestones 3</th>
<th>Milestones 2</th>
<th>Benchmark 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connects relevant experience and academic knowledge</td>
<td>Meaningfully synthesizes connections among experiences outside of the formal classroom (including life experiences and academic experiences such as internships and travel abroad) to deepen understanding of fields of study and to broaden own points of view</td>
<td>Effectively selects and develops examples of life experiences, drawn from a variety of contexts (e.g., family life, artistic participation, civic involvement, work experience), to illuminate concepts/theories/frameworks of fields of study</td>
<td>Compares life experiences and academic knowledge to infer differences, as well as similarities, and acknowledge perspectives other than own</td>
<td>Identifies connections between life experiences and those academic texts and ideas perceived as similar and related to own interests</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Connections to Discipline</th>
<th>Capstone 4</th>
<th>Milestones 3</th>
<th>Milestones 2</th>
<th>Benchmark 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sees (makes) connections across disciplines, perspective</td>
<td>Independently creates wholes out of multiple parts (synthesizes) or draws conclusions by combining examples, facts, or theories from more than one field of study or perspective</td>
<td>Independently connects examples, facts, or theories from more than one field of study or perspective</td>
<td>When prompted, connects examples, facts, or theories from more than one field of study or perspective</td>
<td>When prompted, presents examples, facts, or theories from more than one field of study or perspective</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transfer</th>
<th>Capstone 4</th>
<th>Milestones 3</th>
<th>Milestones 2</th>
<th>Benchmark 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adapts and applies skills, abilities, theories, or methodologies gained in one situation to new situations</td>
<td>Adapts and applies, independently, skills, abilities, theories, or methodologies gained in one situation to new situations to solve difficult problems or explore complex issues in original ways</td>
<td>Adapts and applies skills, abilities, theories, or methodologies gained in one situation to new situations to solve problems or explore issues</td>
<td>Uses skills, abilities, theories, or methodologies gained in one situation to contribute to understanding of problems or issues</td>
<td>Uses, in a basic way, skills, abilities, theories, or methodologies gained in one situation in a new situation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Integrated Communication</th>
<th>Capstone 4</th>
<th>Milestones 3</th>
<th>Milestones 2</th>
<th>Benchmark 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fulfills the assignment(s) by choosing a format, language, or graph (or other visual representation) in ways that enhance meaning, making clear the interdependence of language and meaning, thought, and expression.</td>
<td>Fulfills the assignment(s) by choosing a format, language, or graph (or other visual representation) to explicitly connect content and form, demonstrating awareness of purpose and audience.</td>
<td>Fulfills the assignment(s) by choosing a format, language, or graph (or other visual representation) that connects in a basic way what is being communicated (content) with how it is said (form).</td>
<td>Fulfills the assignment(s) (i.e., to produce an essay, a poster, a video, a PowerPoint presentation, etc.) in an appropriate form</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reflection and Self-Assessment</th>
<th>Capstone 4</th>
<th>Milestones 3</th>
<th>Milestones 2</th>
<th>Benchmark 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrates a developing sense of self as a learner, building on prior experiences to respond to new and challenging contexts (may be evident in self-assessment, reflection, or creative work)</td>
<td>Envisions a future self (and possibly makes plans that build on past experiences) that have occurred across multiple and diverse contexts.</td>
<td>Evaluates changes in own learning over time, recognizing complex contextual factors (e.g., work, with ambiguity and risk, deals with frustration, considers ethical frameworks).</td>
<td>Articulates strengths and challenges (within specific performances or events) to increase effectiveness in different contexts (through increased self-awareness).</td>
<td>Describes own performances with general descriptors of success and failure</td>
</tr>
</tbody>
</table>
**Intercultural Knowledge and Competence VALUE Rubric**

for more information, please contact value@aauu.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. Toward ethnorelativism: 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 imaginative 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. 1996. 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**: Value 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

**Definition**


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

<table>
<thead>
<tr>
<th>Capstone</th>
<th>Milestones</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowledge Cultural self-awareness</strong></td>
<td>Articulates insights into own cultural rules and biases (e.g., working 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)</td>
<td>Recognizes new perspectives about own cultural rules and biases (e.g., not looking for commonalities, comfort with the complexities that new perspectives offer)</td>
</tr>
<tr>
<td><strong>Knowledge Knowledge of cultural worldview frameworks</strong></td>
<td>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</td>
<td>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</td>
</tr>
<tr>
<td><strong>Skills Empathy</strong></td>
<td>Interprets intercultural experience from the perspectives of one (and more than one) worldview and demonstrates ability to act in a supportive manner that recognizes the feelings of another cultural group</td>
<td>Recognizes intellectual and emotional dimensions of more than one worldview and sometimes uses more than one worldview in interactions</td>
</tr>
<tr>
<td><strong>Skills Verbal and nonverbal communication</strong></td>
<td>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 these differences</td>
<td>Recognizes and participates in cultural differences in verbal and nonverbal communication and begins to negotiate a shared understanding based on these differences</td>
</tr>
<tr>
<td><strong>Attitudes Curiosity</strong></td>
<td>Asks complex questions about other cultures, seeks out and articulates answers to these questions that reflect multiple cultural perspectives</td>
<td>Asks deeper questions about other cultures and seek out answers to these questions</td>
</tr>
<tr>
<td><strong>Attitudes Openness</strong></td>
<td>Initiates and develops interactions with culturally different others. Seeks judgment in valuing her/his interactions with culturally different others</td>
<td>Begins to initiate and develop interactions with culturally different others. Begins to suspend judgment in valuing her/his interactions with culturally different others</td>
</tr>
</tbody>
</table>
FOUNDATIONS AND SKILLS FOR LIFELONG LEARNING 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

Lifelong learning is "all purposeful learning activity, undertaken on an ongoing basis with the aim of improving knowledge, skills and competence". An endeavor of higher education is to prepare students to be this type of learner by developing specific dispositions and skills described in this rubric while in school. (From: The European Commission. 2000. Commission staff working paper: A memorandum on lifelong learning. Retrieved September 3, 2003, www.eace-europa.net/education_in/pdf/lifelong-cth-enl-02.pdf.)

Framing Language

This rubric is designed to assess the skills and dispositions involved in lifelong learning, which are curiosity, transfer, independence, initiative, and reflection. Assignments that encourage students to reflect on how they incorporated their lifelong learning skills into their work samples or collections of work by applying above skills and dispositions will provide the means for assessing those criteria. Work samples or collections of work tell what is known or can be done by students, while reflections tell what students think or feel or perceive. Reflection provides the evaluator with a much better understanding of who students are because through reflection students share how they feel about or make sense of their learning experiences. Reflection allows analysis and interpretation of the work samples or collections of work for the reader. Reflection also allows exploration of alternatives, the consideration of future plans, and provides evidence related to students' growth and development. Perhaps the best fit for this rubric are those assignments that prompt the integration of experience beyond the classroom.
# Foundations and Skills for Lifelong Learning VALUE Rubric

**Definition**
Lifelong learning is "all purposeful learning activity, undertaken on an ongoing basis with the aim of improving knowledge, skills and competence." An endeavor of higher education is to prepare students to be this type of learner by developing specific dispositions and skills (described in this rubric) while in school. (From The European Commission. 2000. Commission staff working paper: A memorandum on lifelong learning. Retrieved September 3, 2003, from www.esa-educoop.net/education_ru/pdf/lifelong-ehr-en-02.pdf.)

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>Milestones 1</th>
<th>Milestones 2</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Curiosity</strong></td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Explores a topic in depth, yielding a rich awareness and/or little-known information indicating intense interest in the subject.</td>
<td>Explores a topic in depth, yielding insight and/or information indicating interest in the subject.</td>
<td>Explores a topic with some evidence of depth, providing occasional insight and/or information indicating mild interest in the subject.</td>
<td>Explores a topic at a superficial level, providing minimal insight and/or information beyond the very basic facts indicating low interest in the subject.</td>
<td></td>
</tr>
<tr>
<td><strong>Initiative</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completes required work, generates and pursues opportunities to expand knowledge, skills, and abilities.</td>
<td>Completes required work, identifies and pursues opportunities to expand knowledge, skills, and abilities.</td>
<td>Completes required work and identifies opportunities to expand knowledge, skills, and abilities.</td>
<td>Completes required work.</td>
<td></td>
</tr>
<tr>
<td><strong>Independence</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational interests and pursues exist and flourish outside classroom requirements. Knowledge and/or experiences are pursued independently.</td>
<td>Beyond classroom requirements, pursues substantive, additional knowledge and/or actively pursues independent educational experiences.</td>
<td>Beyond classroom requirements, pursues additional knowledge and/or shows interest in pursuing independent educational experiences.</td>
<td>Begins to look beyond classroom requirements, showing interest in pursuing knowledge independently.</td>
<td></td>
</tr>
<tr>
<td><strong>Transfer</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Makes explicit references to previous learning and applies in an innovative (new and creative) way that knowledge and those skills to demonstrate comprehension and performance in novel situations.</td>
<td>Makes references to previous learning and shows evidence of applying that knowledge and those skills to demonstrate comprehension and performance in novel situations.</td>
<td>Makes references to previous learning and attempts to apply that knowledge and those skills to demonstrate comprehension and performance in novel situations.</td>
<td>Makes vague references to previous learning but does not apply knowledge and skills to demonstrate comprehension and performance in novel situations.</td>
<td></td>
</tr>
<tr>
<td><strong>Reflection</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reviews prior learning (past experiences inside and outside of the classroom) in depth to reveal significantly changed perspectives about educational and life experiences, which provide foundation for expanded knowledge, growth, and maturity over time.</td>
<td>Reviews prior learning (past experiences inside and outside of the classroom) in depth, revealing fully clarified meanings or indicating broader perspectives about educational or life events.</td>
<td>Reviews prior learning (past experiences inside and outside of the classroom) with some depth, revealing slightly clarified meanings or indicating a somewhat broader perspectives about educational or life events.</td>
<td>Reviews prior learning (past experiences inside and outside of the classroom) at a surface level, without revealing clarified meaning or indicating a broader perspective about educational or life events.</td>
<td></td>
</tr>
</tbody>
</table>
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.

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, 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 technique: 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/note, 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

[Logo: Association of American Colleges and Universities]

**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 (all one) level performance.*

<table>
<thead>
<tr>
<th></th>
<th>Capstone</th>
<th>Milestones</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organization</strong></td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Organizational pattern</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(specific introduction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and conclusion,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sequenced material</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>within the body, and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>transitions) is</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>clearly and consistently</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>observable and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>skillful and makes the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>content of the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>presentation cohesive.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational pattern</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(specific introduction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and conclusion,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sequenced material</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>within the body, and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>transitions) is</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>clearly and consistently</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>observable within the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>presentation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational pattern</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(specific introduction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and conclusion,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sequenced material</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>within the body, and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>transitions) is</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>intrinsically observable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>within the presentation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language <strong>choices are</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>imaginative,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>memorable, and compelling,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>enhance the effectiveness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of the presentation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language in presentation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>is appropriate to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>audience.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language choices</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>are mundane and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>commonplace and partially</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>support the effectiveness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of the presentation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language in presentation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>is appropriate to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>audience.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language choices are</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>unclear and minimally</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>support the effectiveness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of the presentation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language in presentation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>is not appropriate to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>audience.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Delivery</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery techniques</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(posture, gesture, eye</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>contact, and vocal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>expressiveness) make the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>presentation compelling,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and speaker appears</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>comfortable.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery techniques</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(posture, gesture, eye</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>contact, and vocal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>expressiveness) make the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>presentation interesting,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and speaker appears</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>comfortable.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery techniques</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(posture, gesture, eye</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>contact, and vocal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>expressiveness) detract</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>from the understandability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of the presentation, and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>speaker appears</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>uncomfortable.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Supporting Material</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A variety of types of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>supporting materials</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(explanations, examples,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>illustrations, statistics,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>analogies, quotations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>from relevant authorities)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>make appropriate reference</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to information or analysis that significantly supports the presentation or establishes the presenter's credibility/authority on the topic.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supporting materials</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(explanations, examples,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>illustrations, statistics,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>analogies, quotations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>from relevant authorities)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>make appropriate reference</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to information or analysis that generally supports the presentation or establishes the presenter's credibility/authority on the topic.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<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>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Central Message</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central message is</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>compelling (precisely</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>stated, appropriately</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>repeated, memorable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and strongly supported.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central message is</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>clear and consistent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with the supporting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>material.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central message is</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>basically understandable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>but is not often repeated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and is not memorable.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central message can be</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>deducted, but is not</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>explicitly stated in the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>presentation.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PROBLEM SOLVING VALUE RUBRIC
for more information, please contact value@aceli.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

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” solutions: 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 rule@aacu.org.*

**Definition**

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 (all one) level performance.*

<table>
<thead>
<tr>
<th></th>
<th>Capstone 4</th>
<th>Milestones 2</th>
<th>Benchmark 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Define Problem</strong></td>
<td>Demonstrates the ability to construct a clear and insightful problem statement with evidence of all relevant contextual factors.</td>
<td>Begins to demonstrate the ability to construct a problem statement with evidence of most relevant contextual factors, but problem statement is superficial.</td>
<td>Demonstrates a limited ability in identifying a problem statement or related contextual factors.</td>
</tr>
<tr>
<td><strong>Identify Strategies</strong></td>
<td>Identifies multiple approaches for solving the problem that apply within a specific context.</td>
<td>Identifies only a single approach for solving the problem that does apply within a specific context.</td>
<td>Identifies one or more approaches for solving the problem that do not apply within a specific context.</td>
</tr>
<tr>
<td><strong>Propose Solutions/Hypotheses</strong></td>
<td>Proposes one or more solutions/hypotheses that indicate a deep comprehension of the problem. Solutions/hypotheses are sensitive to contextual factors as well as all of the following: ethical, logical, and cultural dimensions of the problem.</td>
<td>Proposes one or more solutions/hypotheses that indicate 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.</td>
<td>Proposes a solution/hypothesis that is off the shelf rather than individually designed to address the specific contextual factors of the problem.</td>
</tr>
<tr>
<td><strong>Evaluate Potential Solutions</strong></td>
<td>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.</td>
<td>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.</td>
<td>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.</td>
</tr>
<tr>
<td><strong>Implement Solution</strong></td>
<td>Implements the solution in a manner that addresses thoroughly and deeply multiple contextual factors of the problem.</td>
<td>Implements the solution in a manner that addresses multiple contextual factors of the problem in a surface manner.</td>
<td>Implements the solution in a manner that does not directly address the problem statement.</td>
</tr>
<tr>
<td><strong>Evaluate Outcomes</strong></td>
<td>Reviews results relative to the problem defined with thorough, specific considerations of need for further work.</td>
<td>Reviews results relative to the problem defined with some consideration of need for further work.</td>
<td>Reviews results superficially in terms of the problem defined with no consideration of need for further work.</td>
</tr>
</tbody>
</table>
QUANTITATIVE LITERACY VALUE RUBRIC

for more information, please contact valere@aacc.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

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 major 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 problems sets 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 the evaluator can 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 students 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 (all one) level performance.

<table>
<thead>
<tr>
<th>Interpretation</th>
<th>Capstone 4</th>
<th>Milestones 3</th>
<th>Milestones 2</th>
<th>Benchmark 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words)</td>
<td>Provides accurate explanations of information presented in mathematical forms. Makes appropriate inferences based on that information.</td>
<td>Provides accurate explanations of information presented in mathematical forms. For instance, accurately explains the trend data shown in a graph.</td>
<td>Provides somewhat accurate explanations of information presented in mathematical forms, but occasionally makes minor errors related to computations or units. For instance, accurately explains trend data shown in a graph, but may mislabel the slope of the trend line.</td>
<td>Attempts to explain information presented in mathematical forms, but draws incorrect conclusions about what the information means. For example, attempts to explain the trend data shown in a graph, but often frequently misinterprets the nature of the trend, perhaps by confusing positive and negative trends.</td>
</tr>
<tr>
<td>Representation</td>
<td>Skillfully converts relevant information into an insightful mathematical portrayal in a way that contributes to a further or deeper understanding.</td>
<td>Competently converts relevant information into an appropriate and desired mathematical portrayal.</td>
<td>Completes conversion of information but resulting mathematical portrayal is only partially appropriate or accurate.</td>
<td>Completes conversion of information but resulting mathematical portrayal is inappropriate or inaccurate.</td>
</tr>
<tr>
<td>Calculation</td>
<td>Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem. Calculations are also presented elegantly (clearly, concisely, etc.)</td>
<td>Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem.</td>
<td>Calculations attempted are other unsuccessful or represent only a portion of the calculations required to comprehensively solve the problem.</td>
<td>Calculations are attempted but are both unsuccessful and are not comprehensive.</td>
</tr>
<tr>
<td>Application / Analysis</td>
<td>Uses the quantitative analysis of data as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions from this work.</td>
<td>Uses the quantitative analysis of data as the basis for competent judgments, drawing reasonable and appropriately qualified conclusions from this work.</td>
<td>Uses the quantitative analysis of data as the basis for tentative, basic judgments, although is hesitant or uncertain about drawing conclusions from this work.</td>
<td>Uses the quantitative analysis of data as the basis for tentative, basic judgments, although is hesitant or uncertain about drawing conclusions from this work.</td>
</tr>
<tr>
<td>Assumptions</td>
<td>Explicitly describes assumptions and provides compelling rationale for why each assumption is appropriate. Shows awareness that conclusions in final conclusion is limited by the accuracy of the assumptions.</td>
<td>Explicitly describes assumptions and provides compelling rationale for why assumptions are appropriate.</td>
<td>Attempt to describe assumptions.</td>
<td>Attempts to describe assumptions.</td>
</tr>
<tr>
<td>Communication</td>
<td>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.</td>
<td>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 explanation may be uneven.</td>
<td>Uses quantitative information, but does not effectively connect it to the argument or purpose of the work.</td>
<td>Presents an argument for which quantitative evidence is pertinent, but does not provide adequate explicit numerical support. (May use quasi-quantitative words such as &quot;many&quot;, &quot;few&quot;, &quot;increasing&quot;, &quot;small,&quot; and the like in place of actual quantitate.)</td>
</tr>
</tbody>
</table>

For more information, please contact value@aacc.org
The VALUE rubric is a process of simultaneously extracting and constructing meaning through interaction and involvement with written language. It helps students to understand and apply the text, and it is used to evaluate their understanding of the text. The rubric is designed to assess students' ability to read critically and to think analytically. It is based on the principle that reading is an active process that involves understanding, interpretation, and critical thinking. The rubric is used to evaluate students' ability to comprehend, analyze, and apply what they read. It is designed to help students develop a deeper understanding of the text and to encourage them to think critically about the content. The rubric is used to assess students' ability to read and understand complex texts, and it is designed to help students develop the skills they need to succeed in college and in their careers.
# Reading VALUE Rubric

## Definition
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/RB902/sindex1.html)

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

<table>
<thead>
<tr>
<th>Capstone 4</th>
<th>Milestones 3</th>
<th>Benchmark 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comprehension</strong></td>
<td>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).</td>
<td>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.</td>
</tr>
</tbody>
</table>

| **Genres** | 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 text genre knowledge to a variety of classroom reading assignments in productive, if unreflective, ways. |

| **Relationship to Text**<br>Making meanings with texts in their contexts | 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. |

| **Analysis**<br>Interacting with texts in parts and as wholes | 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. |

| **Interpretation**<br>Making sense with texts as blueprints for meaning | 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. |

| **Reader's Voice**<br>Participating in academic discourse about texts | Discusses texts with an independent intellectual and ethical disposition so as to further or maintain disciplinary conversations. | Elaborates on the texts (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. |
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**

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) students' 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

**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.)

*Teachers are encouraged to assign a zero to any work sample or elicitation of work that does not meet benchmark (falling below performance).*

<table>
<thead>
<tr>
<th>Capstone</th>
<th>Milestones</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contributes to Team Meetings</strong></td>
<td>Helps the team move forward by articulating the merits of alternative ideas or proposals.</td>
<td>Offers alternative solutions or courses of action that build on the ideas of others.</td>
</tr>
<tr>
<td><strong>Facilitates the Contributions of Team Members</strong></td>
<td>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.</td>
<td>Engages team members in ways that facilitate their contributions to meetings by constructively building upon or synthesizing the contributions of others.</td>
</tr>
<tr>
<td><strong>Individual Contributions Outside of Team Meetings</strong></td>
<td>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.</td>
<td>Completes all assigned tasks by deadline; work accomplished is thorough, comprehensive, and advances the project.</td>
</tr>
</tbody>
</table>
| **Fosters Constructive Team Climate** | Supports a constructive team climate by doing any one of the following:  
- 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 encouragement to team members. | Supports a constructive team climate by doing any two of the following:  
- 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 encouragement to team members. | Supports a constructive team climate by doing any one of the following:  
- 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 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. | Passively accepts alternate viewpoints/ideas/opinions. |

*For more information, please contact valoe@aacu.org*
**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 missing texts, data, and images. Written communication abilities develop through iterative experiences across the curriculum.

**Frame 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, writer's fluency with different modes of textual production or publication, or writer's growing engagement with writing and discipline 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 completed the work in the portfolio? How are those choices evident in the writing—to the content, organization and structure, reasoning, evidence, mechanical and surface conventions, and informational 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 context 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's *Council of Writing Program Administrators' White Paper on Writing Assessment* (2008; www.ncte.org/wwpa) and the Conference on College Composition and Communication's *Writing Assessment: Position Statement* (2008; www.ncte.org/cccc/resources/positions/12584.html)

**Glossary**

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

- **Context**: 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; or 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 source 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 topic 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, websites, 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**

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>Capstone</th>
<th>Milestones</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Context of and Purpose for Writing</strong>&lt;br&gt;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>
</tr>
<tr>
<td><strong>Content Development</strong></td>
<td>Uses appropriate, relevant, and compelling context to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work.</td>
<td>Uses appropriate, relevant, and compelling context to explore ideas within the context of the discipline and shape the whole work.</td>
</tr>
<tr>
<td><strong>Genre and Disciplinary Conventions</strong>&lt;br&gt;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>
</tr>
<tr>
<td><strong>Sources and Evidence</strong></td>
<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>
</tr>
<tr>
<td><strong>Control of Syntax and Mechanics</strong></td>
<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>
</tr>
</tbody>
</table>

| 4 | 1 | 2 | 1 |
Thank you for reading this report. We hope it will help you open discussions on assessment in your own departments, programs and divisions.