



UNIVERSITY OF  
SAN FRANCISCO

Office of Student  
Learning Assurance

## **Guidelines for Course Level Student Learning Assurance**

CHANGE THE WORLD FROM HERE  
**January, 2012**



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## INTRODUCTION

The purpose of this manual is to provide Academic Faculty a resource for developing and implementing an effective course learning assurance plan. The guidelines herein provide an overview of the full learning assurance cycle at USF with reference materials for developing meaningful and manageable course strategies, course statement, course learning goals, course learning outcomes, rubrics, and learning assurance measures. Any questions regarding the contents of this manual should be directed to the USF Office of Student Learning Assurance, Bill Murry, x5486, [wmurry@usfca.edu](mailto:wmurry@usfca.edu).

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## CHAPTER 1 Introduction to Course Level Student Learning Assurance

### Purpose of Course Level Student Learning Assurance<sup>1</sup>

The purpose of course student learning assurance is to enhance course quality at USF. In an academic context, course learning assurance involves the continuous, systematic process of collecting and analyzing data and using that information to improve student learning. In other words, what will students know, be able to do, or value when they complete an academic course at USF and how we know these things about our students.

*Benefits of a Systematic Course Level Student Learning Assurance Process:*

- Clarifies teaching goals and what you want students to learn;
- Gives students a better understanding of your expectations for work in our course and how you evaluate their performance;
- Opens greater opportunities for communication and feedback between you and our students;
- Engages students to actively participate in their own learning
- Provides greater information about student learning in the classroom and beyond;
- Allows for immediate adjustment to course delivery as the course progresses;
- Provides information to others such as accreditors, administration, trustees, etc. on the quality of the education students receive;
- Ensures continuous improvement of courses and curricula;
- Aligns courses with Program Level student learning assurance.

*What course level learning assurance is NOT:*

- An evaluation of individual faculty;
- A meaningless bureaucratic exercise;
- A waste of time.

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<sup>1</sup> Source: UMASS

## Best Practices in Program Learning Assurance: A Prelude to Student Learning at the Course Level

### 9 Principles of Good Practice for [Effective] Student Learning<sup>2</sup>

1. The evaluation of student learning begins with educational values.

Evaluation is not an end in itself but a vehicle for educational improvement. Its effective practice, then, begins with and enacts a vision of the kinds of learning we most value for students and strive to help them achieve. Educational values should drive not only what we choose to assess but also how we do so. Where questions about educational mission and values are skipped over, evaluation threatens to be an exercise in measuring what is easy, rather than a process of improving what we really care about. .

2. Evaluation is most effective when it reflects an understanding of learning as multidimensional, integrated, and revealed in performance over time.

Learning is a complex process. It entails not only what students know but what they can do with what they know; it involves not only knowledge and abilities but values, attitudes, and habits of mind that affect both academic success and performance beyond the classroom. Evaluation should reflect these understandings by employing a diverse array of methods, including those that call for actual performance, using them over time so as to reveal change, growth, and increasing degrees of integration. Such an approach aims for a more complete and accurate picture of learning, and therefore firmer bases for improving our student's educational experience.

3. Evaluation works best when the programs it seeks to improve have clear, explicitly stated purposes.

Evaluation is a goal-oriented process it entails comparing educational performance with educational purposes and expectations--these derived from the institution's mission, from faculty intentions in program and course design, and from knowledge of student's own goals. Where program purposes lack specificity or agreement, evaluation as a process pushes a campus toward clarity about where to aim and what standards to apply; evaluation also prompts attention to where and how program goals will be taught and learned. Clear, shared, implementable goals are the cornerstone for evaluation that is focused and useful.

4. Evaluation requires attention to outcomes but also and equally to the experiences that lead to those outcomes.

Information about outcomes is of high importance; where students "end up" matters greatly. But to improve outcomes, we need to know about student experience along the way--about the curricula, teaching, and kind of student effort that lead to particular outcomes. Evaluation can help us understand which students learn best under what conditions; with such knowledge comes the capacity to improve the whole of their learning.

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<sup>2</sup> Alexander W Astin; Trudy W Banta; K Patricia Cross; Elaine El-Khawas; Peter T Ewell; Pat Hutchings; Theodore J Marchese; Kay M McClenney; Marcia Mentkowski; Margaret A Miller; E Thomas Moran; Barbara D Wright. This document was developed under the auspices of the AAHE Assessment Forum with support from the Fund for the Improvement of Post-Secondary Education with additional support for publication and dissemination from the Exxon Education Foundation. Copies may be made without restriction.



5. Evaluation works best when it is ongoing, not episodic. Evaluation is a process whose power is cumulative.

Though isolated, "one-shot" evaluation can be better than none, improvement over time is best fostered when evaluation entails a linked series of cohorts of students; it may mean collecting the same examples of student performance or using the same instrument semester after semester. The point is to monitor progress toward intended goals in a spirit of continuous improvement. Along the way, the evaluation process itself should be evaluated and refined in light of emerging insights.

6. Evaluation fosters wider improvement when representatives from across the educational community are involved.

Student learning is a campus-wide responsibility, and evaluation is a way of enacting that responsibility. Thus, while evaluation efforts may start small, the aim over time is to involve people from across the educational community. Faculty play an especially important role, but evaluation questions can't be fully addressed without participation by student-affairs educators, librarians, administrators, and students. Evaluation may also involve individuals from beyond the campus (alumni/ae, trustees, employers) whose experience can enrich the sense of appropriate aims and standards for learning. Thus understood, evaluation is not a task for small groups of experts but a collaborative activity; its aim is wider, better-informed attention to student learning by all parties with a stake in its improvement.

7. Evaluation makes a difference when it begins with issues of use and illuminates questions that people really care about.

Evaluation recognizes the value of information in the process of improvement. But to be useful, information must be connected to issues or questions that people really care about. This implies evaluation approaches that produce evidence that relevant parties will find credible, suggestive, and applicable to decisions that need to be made. It means thinking in advance about how the information will be used, and by whom. The point of evaluation is not to gather data and return "results"; it is a process that starts with the questions of decision-makers, that involves them in the gathering and interpreting of data, and that informs and helps guide continuous improvement.

8. Evaluation is most likely to lead to improvement when it is part of a larger set of conditions that promote change.

Evaluation alone changes little. Its greatest contribution comes on campuses where the quality of teaching and learning is visibly valued and worked at. On such campuses, the push to improve educational performance is a visible and primary goal of leadership; improving the quality of undergraduate education is central to the institution's planning, budgeting, and personnel decisions. On such campuses, information about learning outcomes is seen as an integral part of decision making, and avidly sought.

9. Through evaluation, educators meet responsibilities to students and to the public.

There is a compelling public stake in education. As educators, we have a responsibility to the public that support or depend on us to provide information about the ways in which our students meet goals and expectations. But that responsibility goes beyond the reporting of such information; our deeper obligation--to ourselves, our students, and society--is to improve. Those to whom educators are accountable have a corresponding obligation to support such attempts at improvement.

## CHAPTER 2

### Student Learning Assurance at USF

#### Role of the USF Office of Student Learning Assurance

The USF Office of Student Learning Assurance (OSLA) was established as part of an overall campus commitment to continuous quality improvement of institutional programs and curricula. In an effort to expand the campus focus on learning assurance activities and to reinforce the importance of the learning assurance function as an academic priority the office is situated within the Office of the Senior Vice-Provost for Academic Affairs along with the Office of Institutional Effectiveness and the Office of Institutional Research. All offices complement and support one other in promoting overall issues related to planning and institutional effectiveness. The OSLA reports directly to the Senior Vice Provost. In response to the strategic priorities set by the USF Leadership Team, WASC accreditation standards, and the needs of the schools, the OSLA directs learning assurance activities within four main areas: institutional strategic goals, program/service quality and assurance, the student/alumni experience, and student learning. The OSLA takes responsibility for informing all divisions of the University about the results and implications of various learning assurance projects.

In addition, the OSLA assists faculty, staff and administrators in planning, designing, implementing, analyzing and reporting University-wide or more targeted learning assurance efforts. These responsibilities include inter alia, planning, locating or developing tools to meet learning assurance needs; offering opportunities for faculty and staff to learn and share learning assurance methods; assisting University offices and its leadership in ensuring that learning assurance results are used effectively for program improvement; and, producing periodic reports on the results of learning assurance efforts. In addition to contributing to university-wide learning assurance efforts, the Director supports schools/colleges or departments in their disciplinary accreditation and other department-based evaluation needs and interact with appropriate members of the University community.

Currently, the OSLA consists of the director who is responsible for providing technical and analytical support related to campus learning assurance activities, as necessary. The director, William D. Murry, Ph.D., has significant experience in institutional learning effectiveness, research, and psychometrics. He is also a Teagle Assessment Scholar with the Wabash College Center for Inquiry that work as applied anthropologists/political scientists/sociologists who focus on developing an understanding of a campus's culture, values, politics, governance structures, and history so that they can help a campus identify ways of using evidence to improve student learning. Bill was also part of the AAC&U's LEAP initiative (Liberal Learning and America's Promise) for championing the importance of undergraduate student learning in all of the Essential Learning Outcomes areas for success in college, the workplace and as global citizens. Specifically the project was to develop VALUE rubrics (Valid Assessment of Learning in Undergraduate Education) for fifteen essential learning outcomes. Most recently, Bill was a key staff person in the University's WASC reaffirmation process. Prior to USF, Bill was on the faculty at Duquesne University in Pittsburgh Pennsylvania, a peer Catholic institution. In his position as Director of Student Learning Assurance here at USF, Bill has established an accessible, client-based office whose key role is to support all campus units in their learning assurance efforts.

#### USF Office of Student Learning Assurance Mission Statement:

The Mission of the Office of Student Learning Assurance (OSLA) shall be to promote *"Excellence in Learning"* within the University of San Francisco academic and non-academic units through the development of a faculty and staff led learning assurance process. The primary function of the OSLA shall be to advise, support and oversee *"student-centered learning"* assurance processes in keeping with

the University mission, vision, and values.

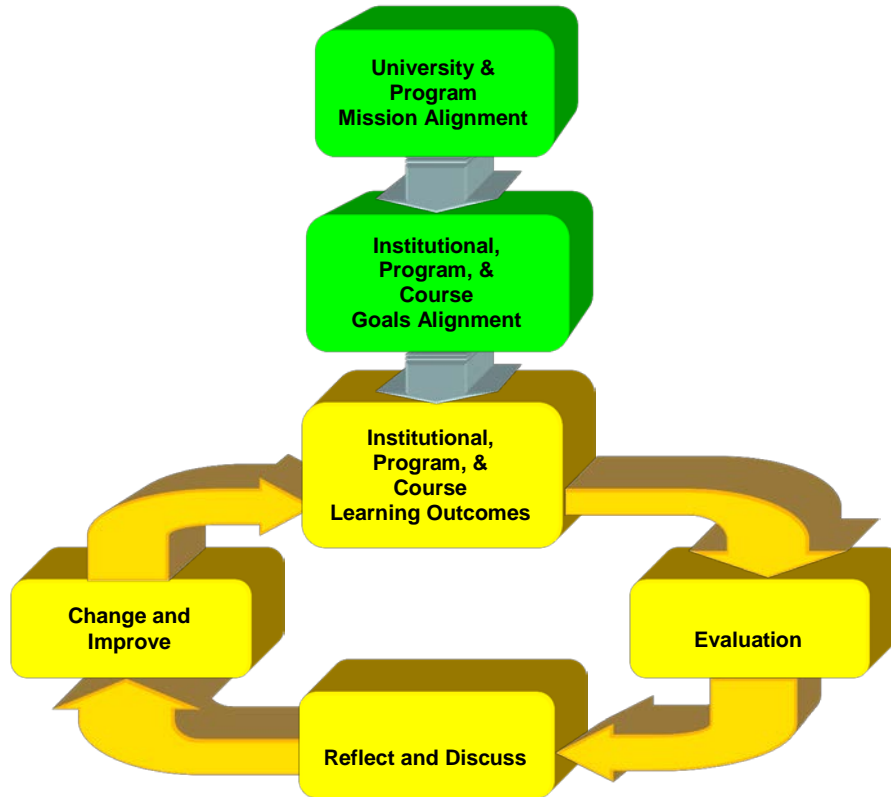
### **Primary Functions of the USF Office of Student Learning Assurance:**

The primary goals of the OSLA in meeting its mission shall be too systematically:

- Provide leadership and support to the University for student learning assurance of programs and activities including the identification and evaluation of student learning goals and outcomes;
- Design workshops and information dissemination strategies to support student learning assurance efforts by faculty and staff;
- Provide support of program reviews;
- Participate in regional and specialty accreditation efforts;
- Serve as an expert to Academic Affairs and University Life for current student learning assurance practices and research findings about student learning in higher education;
- Participate in the analysis and reporting of results of major University-wide learning assurance projects;
- Assess University-wide efforts to address issues including but not limited to:
  - the implementation of the University's Mission;
  - student learning;
  - alumni;
  - improving student retention;
  - optimizing the first year student experience;
  - enhancing student leadership and empowerment;
  - enriching graduate and professional student life;
  - expanding and enhancing student services;
  - and, increasing the effectiveness of the co-curricular learning environment
- Monitor trends and provide information on the student experience;
- Promote opportunities for shared data collection across divisions and across learning assurance projects;
- Participate in the integrated learning experiences and provide support for evidence collection.

### **USF Student Learning Assurance Processes.**

Course level learning assurance at USF is integrated with the program and other institutional processes related to student learning. This type of iterative cycle is graphically represented below.



At the beginning of the student learning assurance cycle, faculty should produce a comprehensive course learning assurance syllabus (see Chapter 4) that includes the following components.

- Course/purpose statement.
- Articulation of how the course purpose aligns with the program mission.
- Overarching course learning goals aligned with the program outcomes.
- Intended student learning outcomes aligned with each course learning goal.
- For each learning outcome, a set of rubrics that articulates the range of levels of student success.
- For each learning outcome, articulation of the intended evaluation method(s) of learning assurance. This should include at least one direct measure of student learning. Faculty are strongly encouraged to utilize multiple measures, both direct and indirect, that incorporate evaluation of student work products, attitudes, behaviors, satisfaction and perceptions with regard to their learning.

## **CHAPTER 3**

### **Preparing for Course Level Student Learning Assurance**

#### **Faculty Involvement.**

There are two primary purposes that ensure effective course learning:

- A faculty commitment to initiate and support the process; and
- A willingness by faculty to use learning assurance results for decision-making and, ultimately, course improvement.

The USF Office of Student Learning Assurance works with faculty to provide resources to assist with learning assurance efforts. The OSLA provides consultation in developing outcome statements and learning assurance methods as well as facilitating the supply of information such as best practices.

#### **Creating Effective Processes**

Planning for course learning assurance is imperative in order to ensure that the critical needs of the faculty person are being met and that learning assurance activities provide meaningful data for the least cost in terms of faculty time/effort. Course level learning assurance should incorporate the following inclusive processes in order to be effective and meaningful in the long term:

- A process for developing the course statement.
- A process for developing course-learning goals.
- A process for developing intended course-learning outcomes and learning assurance measures.

## CHAPTER 4

### Building the Course Syllabus for Student Learning

#### Formulating Statements

*Why do we need a purpose statement?*

Purpose statements are often derided as trite with little or no value in course or curricular activities, hardly read by students. This is a common misconception about the role of purpose statements in the student learning assurance process. Purpose statements should be the guiding philosophy of ALL course activities. Such statements, if thoughtfully developed, provide the foundation, which supports all other aspects of course learning assurance. Purpose statements clarify the *raison d'être* of the course to all students, allowing faculty to focus their resources and efforts on issues that are critical to their course.

*What is a purpose statement?*

The purpose statement should be a distinctive description of the course that identifies what the course is, what it does, and for whom it does it .

*Characteristics of a Well-Defined Purpose Statement:*

- Brief, concise, distinctive.
- Clearly identifies the course's purpose.
- Clearly aligns with the program.
- Explicitly articulates the essential functions/activities of the course.

*General Format of Course/Purpose Statement:*

“The purpose of the [insert name of course] is to [insert primary purpose] by providing [insert essential functions/activities of the course]”.

*Examples of Well-Defined Course/Purpose Statements:*

#### Defining Course Level Student Learning Goals

In a few brief (3-4), succinct statements state the **overarching goals** of the course, particularly as they relate to student learning. Course goals are generally broadly stated and focus on the semester long outcomes of the course.

*Characteristics of Well-Defined Course Goals*

- Clearly related to the course/purpose.
- Reflective of program priorities in the long-term.
- Reflective of course priorities over the semester.
- Illustrate the ‘ideal’ learner of the course.

*Writing Course Goals*

- Focus on a handful of goal statements; less than 5 is best.

- Describe the actions of the course in facilitating the acquisition of certain skills, knowledge or attitudes of the ideal student.
- Use a general format for the goal statement such as “to [insert action verb] [insert object] [insert modifiers]”.

### **Examples of Course Goals**

## **Formulating Course Level Student Learning Outcomes.**

*What is a student learning outcome (SLO)?*

A student learning outcome is a specific, measurable statement of what a student should know, be able to do, or value when they complete a course.

*How is a SLO different from other types of course goals or outcomes?*

A SLO focuses on specific behaviors, attitudes, abilities, etc that a student will demonstrate or possess as a result of instruction or other course activity. There may be other types of outcomes or outcomes that a course might have that are not focused on student characteristics such as targets for student research, service, community outreach, etc. These types of outcomes or outcomes are known as process or performance outcomes. Faculty are encouraged to assess these types of outcomes, but they cannot substitute for a SLO.

*Characteristics of a Well-Defined Student Learning Outcome.<sup>3</sup>(S.M.A.R.T.)*

- **S**pecific; SLOs should be specific to your course and should be stated in clear, definitive terms.
- **M**asurable; SLOs must be stated in terms that are clearly measurable either quantitatively or qualitatively. The use of action verbs in SLO statements can maintain a focus on measurability. Sample action verbs can be found below. Faculty should consider whether data collection for a particular SLO is reasonable and feasible given program resources.
- **A**ttainable; faculty should consider the reality of what they hope to achieve. SLOs should be a reasonable statement of what the course can contribute in terms of student skills, knowledge and abilities.
- **R**esults-oriented; SLOs should focus on the end result rather than an action to be implemented or provided by the course. SLOs should be clearly stated in terms of what exactly a student should know, be able to do, or value.
- **T**ime-bound; SLOs should be framed in such a way that they can be measured within a time period over which the course has some control.

*Anatomy of a Student Learning Outcome.*

- In a SLO statement the focus must be on the student and what s/he will know, do, or value  
Possible formats of SLOs are as follows:
- Students will [insert action verb] [describe expected skill, knowledge or value].
- Students are able to [insert action verb] [describe expected skill, knowledge or value].
- Students will demonstrate the ability to (or knowledge of) [insert action verb] [describe expected skill, knowledge or value].

<sup>3</sup> Adapted from University of Central Florida Program Assessment Handbook (2004).

### **Examples of Student Learning Outcome Statements.**

- Students will demonstrate the ability to organize and deliver a clear and substantive business presentation.
- Students will demonstrate the ability to formulate hypotheses, analyze data and draw conclusions.
- Graduates will be able to evaluate their own artistic skills and that of their peers through critical reasoning about the use of materials, formal elements, and content.
- Students will investigate basic social scientific concepts by systematically studying the observational and analytic methods and findings of social science disciplines.

### **Domains of Learning.**

*What types of skills/knowledge are appropriate for SLOs?*

The most effective way to develop specific learning outcomes is to use a taxonomy of learning domains. These types of matrices provide a standardized framework on which to structure your SLOs. By far, the most well-known and utilized of these taxonomies is Bloom's Taxonomy of Educational Outcomes<sup>4</sup> which was first developed in 1956. Bloom's taxonomy recognizes three domains of educational outcomes:

*Cognitive Learning:*

Cognitive Domain	Description
Knowledge	Mastery of subject material; includes observation and recall of information; knowledge of dates, events, places; knowledge of major ideas.
Comprehension	Ability to predict consequences and future trends; includes understanding information; grasp of meaning; translating knowledge into new contexts; interpreting, comparing and contrasting material; ordering, grouping and inferring causes.
Application	Ability to solve problems using required knowledge/skills; includes using information material, methods, concepts, theories, etc. in new situations.
Analysis	Ability to break down material and recognize structure of organization; includes seeing patterns; organization of parts, recognition of hidden meanings, identification of components.
Synthesis	Ability to use old ideas to create new ones; includes generalizing from given facts, relating knowledge from several areas, predicting and drawing conclusions.
Evaluation	Ability to judge and assess value of material; includes comparing and discriminating between ideas; assessing value of theories, presentations, etc., making choices based on reasoned argument; verifying value of evidence, recognizing subjectivity.

<sup>4</sup> Bloom, B, Englehart, M, Furst, E, Hill, W, and Krathwohl, D (1956) *Taxonomy of Educational Outcomes: Cognitive Domain* New York: David McKay.



*Affective Learning:*

Affective Domain	Description
Receiving	Awareness; willingness to participate
Responding	Actual participation in learning activity; demonstrates interest
Valuing	Attaching value or worth to object, person, activity, phenomenon
Organization	Prioritizing values; comparing and contrasting values to build new value system
Characterization by value	Modifies behavior based on new value system

*Skill-based Learning:*

Skill Domain	Description
Perception	Use of sensory organs to guide actions
Set	Readiness to act
Guided Response	Imitation; knowledge of steps required to complete task
Mechanism	Ability to repeat complex motor skill
Complex Overt Response	Display complex movement with skilled performance
Adaptation	Modifies motor skill to address changed situation
Origination	Creates new movement pattern in changed situations

**Action Verbs Associated with Types of Learning.**

It is helpful to use specific actions verbs associated with the various learning domains in the construction of meaningful learning outcomes. Use of these verbs helps to explicitly articulate what you expect a student to demonstrate in the course of learning outcomes assurance.

Learning Domain	Examples of Action Verbs
Knowledge	Articulate, describe, define, name, indicate, order, recognize, know, repeat, memorize, label, tabulate, quote, etc.
Comprehension	Discuss, explain, interpret, distinguish, suggest, summarize, understand, translate, classify, contrast, etc.
Application	Apply, investigate, experiment, solve, practice, predict, utilize, develop, illustrate, etc.
Analysis	Analyze, categorize, correlate, inform, infer, prioritize, criticize, differentiate, examine, interpret, etc.
Synthesis	Arrange, collect, compose, assemble, compile, create, design, formulate, organize, manage, propose, validate, etc.
Evaluation	Rate, conclude, appraise, evaluate, judge, defend, grade, assess, etc.
Receiving	Identify, select, choose, describe, etc.
Responding	Recite, discuss, present, answer, etc.
Valuing	Describe, explain, differentiate, join, share, etc.
Organization	Order, arrange, combine, integrate, synthesize, generalize, etc.
Characterization by Value	Qualify, practice, listen, influence, share, propose, etc.
Perception	Identify, detect, describe, isolate, etc.

Learning Domain	Examples of Action Verbs
Set	Respond, show, react, display, etc.
Guided Response	Construct, manipulate, assemble, etc.
Mechanism	Build, fix, organize, work, calibrate, etc.
Complex Overt Response	Manipulate, measure, mix, dismantle, etc.
Adaptation	Alter, revise, change, vary, etc.
Origination	Compose, construct, design, etc.

### Developing and Using Rubrics in Student Learning Outcomes

One of the most effective ways to evaluate student work products in learning outcomes assurance is to use a standardized rubric. A rubric is simply a scoring guide used in learning assurance to provide an explicit description of the learning or performance being measured. Some of the benefits of using rubrics in outcomes assurance include the following:

- Expected levels of learning or qualities of performance are clearly defined on a pre-determined rating scale .
- Allows faculty to explicitly articulate their criteria for learning to all students.
- Facilitates discussion of the results and their ultimate incorporation into decision-making processes regarding course or curricular changes.

#### *Best Practices for Developing (see template below) and Using Rubrics in Student Learning Outcomes*

- Identify the skill/knowledge you are assessing.
- Break down the skill/knowledge into its characteristic parts (e.g., if you are assessing the ability to problem solve determine the ideal steps a student would take to successfully demonstrate their ability to solve a problem).
- Develop a scale that would describe low, intermediate and high levels of performance for each characteristic of the skill/knowledge you are assessing (e.g., Beginning, Developing, Accomplished, Exemplary or Beginning, Competent, Outstanding, etc).
- Pilot the rubric on student work with several reviewers and students and obtain feedback.
- Make learning assurance rubrics available to students at the beginning of all assignments.
- Allow students to use rubrics in peer and self-evaluation exercises.
- Develop process to aggregate results of learning assurance using standard rubrics; disseminate results to students and incorporate results into course decision making processes.

## Rubric Template<sup>5</sup>

(Rubric Title: Describe here the skill/knowledge this rubric is designed to evaluate)

	Exemplary 4	Accomplished 3	Developing 2	Beginning 1	Comments
Stated Objective or Performance	Description of identifiable performance characteristics reflecting the highest level of performance	Description of identifiable performance characteristics reflecting mastery of performance.	Description of identifiable performance characteristics reflecting development and movement toward mastery of performance.	Description of identifiable performance characteristics reflecting a beginning level of performance.	
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For further examples of learning outcome rubrics see Appendix D.

## Types of Evidence Based Student Learning Assurance Methods

Faculty should develop learning assurance methods that are appropriate to the outcome being assessed. Best practice is to utilize a variety of methods in order to expand the pool of information available for use in the decision-making process. Methods can be considered direct or indirect, quantitative or qualitative. SLOs should incorporate direct measures of actual student work. Below are some guidelines and examples of the types of learning assurance methods that can be used.

### Direct Measures of Student Learning<sup>6</sup>

<sup>5</sup> This template was developed by the College of Education at San Diego State University available at [http://edwebsdsuedu/triton/july/rubrics/Rubric\\_Templatehtml](http://edwebsdsuedu/triton/july/rubrics/Rubric_Templatehtml).

<sup>6</sup> A note on student learning assurance methods vs. grading: When the issue of course-based assurance method is raised, faculty members often say, "I already do learning assurance (assessment). I grade student assignments." Course grades are indeed one measure of student achievement. However, there are significant drawbacks to using grades to meet the primary goal – to improve teaching and learning. Student learning assurance links student performance to specific learning outcomes in order to provide useful feedback to the instructor and students about how successfully students are meeting these outcomes. Traditional grading, which offers one "score" to represent the sum total of students' performance across a whole host of outcomes, does not provide the sort of detailed and specific information necessary for linking student performance to improvement. Because grades don't tell you about student performance on individual (or specific) learning goals or outcomes, they provide little information on the overall success of your course in helping students attain the specific and distinct learning of interest to the faculty. Grades are global evaluations that represent the overall proficiency of students. They *don't* tell you about student performance on individual learning goals and outcomes.

Direct measures of student learning are those designed to directly measure what a targeted subject knows or is able to do (i.e., requires a subject to actually demonstrate the skill or knowledge). Direct measures of student learning utilize actual student work products as the basis for evaluation as opposed to indicators of student perception or satisfaction. Common direct measures include evaluation of:

- Projects or exams.
- Culminating experiences (e.g. internships, senior thesis, etc).
- Juried review of student projects or performances.
- Student work samples (e.g., case study responses, research papers, essay responses, etc).
- Journals

*Indirect Measures of Student Learning.*

Indirect measures of student learning are those designed to indirectly discern what a target subject knows or is able to do (i.e., what a subject perceives about his/her skills or knowledge). Indirect measures in the context of course SLO assurance focuses on how a student perceives their level of learning and/or their satisfaction with some aspect of the course and for making decisions for course adjustments during the semester or for future improvements. Some examples of indirect measures include:

- One minute paper
- Surveys (open-ended, response ratings, etc).
- Interviews.

## GLOSSARY OF LEARNING ASSURANCE TERMS

Like many academic activities, the practice and scholarship of learning assurance has a terminology specific to its aims and shared by its practitioners. It is important that all involved in learning assurance activities have a common understanding of what different terms mean in a learning assurance context. Below is a list of terms and definitions that allows us to '*speak the same language*' when discussing course learning assurance activities here at USF.

<b>Purpose</b>	A brief, concise statement that articulates the purpose of the course.
<b>Student Learning Goals</b>	Statement of what the course wants students to <u>be</u> able to accomplish upon completion of the course.
<b>Student Learning Outcome</b>	Statement of what students should <u>know</u> , <u>think</u> , or <u>be able to do</u> upon completion of the course.
<b>Rubric</b>	A scoring guide used in learning assurance to provide an explicit description of the learning or performance under consideration. A rubric defines the expected levels of learning or qualities of performance on a pre-determined rating scale.
<b>Learning Assurance Method</b>	A systematically designed process to gather information related to a specified outcome.
<b>Learning Assurance Instrument</b>	A tool designed to measure the extent to which an outcome has been achieved.
<b>Direct Method</b>	A learning assurance method designed to directly measure what a targeted subject knows or is <u>able to do</u> (i.e., requires a subject to actually demonstrate the skill or knowledge).
<b>Indirect Method</b>	A learning assurance method that indirectly measures what a target subject knows or is able to do (i.e., what a subject perceives about his/her skills or knowledge).

## REFERENCES

Anderson, R, & Speck, B (Eds) (1998) *New Direction for Reaching and Learning: Changing the Way We Grade Student Performance: Classroom Assessment and the New Learning Paradigm* San Francisco, CA: Jossey-Bass.

Angelo, T, (Ed) (1998) *Classroom Assessment and Research: An Update on Uses, Approaches, and Research Findings* San Francisco, CA: Jossey-Bass.

Angelo, T, & Cross, P (1993) *Classroom Assessment Techniques: A Handbook for College Teachers* (2<sup>nd</sup> ed) San Francisco, CA: Jossey-Bass.

Astin, A (1993) *What Matters in College?* San Francisco, CA: Jossey-Bass.

Banta, Trudy W (2002) *Building a Scholarship of Assessment* San Francisco: Jossey-Bass Press.

Banta, Trudy W (2004) *Hallmarks of Effective Outcomes Assessment* San Francisco: John Wiley and Sons.

Banta, Trudy W (Ed) (2003) *Portfolio Assessment Uses, Cases, Scoring, and Impact: Assessment Update collections* San Francisco: Jossey-Bass.

Banta, T, Lund, J, Black, K & Oblander, F (1996) *Assessment in Practice: Putting Principles to Work on College Campuses* San Francisco, CA: Jossey-Bass.

Banta, Trudy W, & Palomba, C (1999) *Assessment Essentials* San Francisco: Jossey-Bass.

Bender, B, & Schuh, J (2002) *Using Benchmarking to Inform Practice in Higher Education* San Francisco, CA: Jossey-Bass.

Biemer, Paul P & Lyberg, Lars E (2003) *Introduction to Survey Quality* San Francisco: Jossey-Bass.

Bloom, B, Englehart, M, Furst, E, Hill, W, & Krathwohl, D (1956) *Taxonomy of Educational Outcomes: Cognitive Domain* New York: David McKay.

Braskamp, L, & Ory, J (1994) *Assessing Faculty Work: Enhancing Individual and Institutional Performance* San Francisco, CA: Jossey-Bass.

Cambridge, B (2001) *Electronic Portfolios: Emerging Practices in Student, Faculty, and Institutional Learning* Sterling, VA: AAHE.

Dalton, J, Russell, T, & Kline, S (Eds) (2004) *New Directions for Institutional Research: Assessing Character Outcomes in College (No 122)* San Francisco, CA: Jossey-Bass.

*Developing Rubrics* (2003, September 5) Retrieved on March 10, 2006 from Pennsylvania State University Office of Teaching and Learning with Technology website: [http://tltpsuedu/suggestions/research/Measure\\_devshtml](http://tltpsuedu/suggestions/research/Measure_devshtml) .

Diamond, R (1998) *Designing & Assessment Courses & Curricula: A Practical Guide*, (2<sup>nd</sup> ed) San Francisco, CA: Jossey-Bass.

Grant, J (Ed) (1996) *Assessing Graduate and Professional Education: Current Realities, Future Prospects* (No 92) San Francisco, CA: Jossey-Bass.

Gronlund, N (2000) *How to Write and Use Instructional Outcomes*, 6<sup>th</sup> ed New Jersey: Prentice Hall.

Groves, Robert M, Fowler, Floyd J, Couper, Mick P, Lepkowski, James M, Singer, Eleanor, & Tourangeau, Roger (2004) *Survey Methodology* San Francisco: Jossey-Bass.

*Guidelines to Rubric Development* (1999, March 31) Retrieved on March 10, 2006 from San Diego State University College of Education website: [http://edwebsdsuedu/triton/july/rubrics/Rubric\\_Guidelineshtml](http://edwebsdsuedu/triton/july/rubrics/Rubric_Guidelineshtml).

Harrow, A (1972) *A Taxonomy of the Psychomotor Domain* New York: David McKay.

Haswell, R (Ed) (2001) *Beyond Outcomes: Assessment and Instruction within a University Writing Program* (Vol 5) Westport, CT: Ablex Publishing.

Howard, R, & Borland, K (Eds) (2001) *New Directions for Institutional Research: Balancing Qualitative and Quantitative Information for Effective Decision Support* (No 112) San Francisco, CA: Jossey-Bass.

Huba, Mary E & Freed, Jann E (2001) *Learner-Centered Assessment on College Campuses: Shifting the focus from teaching to learning* Needham Heights, MA: Allyn Bacon Publishers.

Kezar, A, Hirsch, D, & Burack, C (Eds) (2002) *Understanding the Role of Academic and Student Affairs Collaboration in Creating a Successful Learning Environment* (No 116) San Francisco, CA: Jossey-Bass.

Knox, A (2002) *Evaluation for Continuing Education: A Comprehensive Guide to Success* San Francisco, CA: Jossey-Bass.

Krathwohl, D & Masia, B (1964) *Taxonomy of Educational Outcomes: Handbook II, Affective Domain* New York: David McKay.

Kuh, G Kinzie, J, Schuh, J, & Whitt, E (2005) *Assessing Conditions to Enhance Educational Effectiveness: The Inventory for Student Engagement and Success* San Francisco, CA: Jossey-Bass.

Kuh, G Kinzie, J, Schuh, J, Whitt, E & Associates (2005) *Student Success in College: Creating Conditions that Matter* San Francisco, CA: Jossey-Bass.

Leigh, B MacGregor, J, Matthews, R, & Gabelnick, F, (2004) *Learning Communities: Performing Undergraduate Education* San Francisco, CA: Jossey-Bass.

Light, R (2001) *Making the Most in College: Students Speak their Minds* Cambridge, MA & London, England: Harvard University Press.

Maki, Peggy L (2004) *Assessing for Learning: Building a sustainable commitment across the institution* Sterling, VA: Stylus.

Merriam, S & Associates (2002) *Qualitative Research in Practice: Examples for Discussion and Analysis* San Francisco, CA: Jossey-Bass.



- Mertler, Craig A (2001) Designing scoring rubrics for your classroom *Practical Assessment, Research & Evaluation*, 7(25).
- Michelson, E, Mandell, A, et al (2004) *Portfolio Development and the Assessment of Prior Learning* Sterling, VA: Stylus Publishing LLC.
- Moskal, Barbara M (2000) *Scoring rubrics: what, when and how?* *Practical Assessment, Research & Evaluation*, 7(3).
- Narum, J, & Conover, K (Eds) (2002) *New Directions for Higher Education: Building Robust Learning Environments in Undergraduate Science, Technology, Engineering, and Mathematics (No 119)* San Francisco, CA: Jossey-Bass.
- Palomba, C, & Banta, T (1999) *Assessment Essentials: Planning Implementing and Improving Assessment in Higher Education* San Francisco, CA: Jossey-Bass.
- Pascarella, E, & Terenzini, P (2005) *How College Affects Students, (Vol 2)* San Francisco, CA: Jossey-Bass.
- Ratcliff, J, Lubinescu, E, & Gaffney, M (Eds,) (2001) *New Collection for Higher Education: How Accreditation Influences Assessment, (No 113)* San Francisco, CA: Jossey-Bass.
- Rea, Louis M & Parker, Richard A (2005) *Designing and Conducting Survey Research: A comprehensive guide* San Francisco: Jossey-Bass.
- Riordan, T, & Roth, J (Eds,) (2005) *Disciplines as Frameworks for Student Learning: Teaching the Practice of the Disciplines* Sterling, VA: Stylus Publishing LLC.
- Schuh, J, Lee M, & Associates (2001) *Assessment Practice in Student Affairs: An Applications Manual* San Francisco, CA: Jossey-Bass.
- Schwartz, P, & Webb, G (2002) *Assessment: Case Studies, Experience and Practice fro Higher Education* Sterling, VA: Stylus Publishing Inc.
- Sedlacek, W (2004) *Beyond the Big Test* San Francisco, CA: Jossey-Bass.
- Serban, A, & Friedlander, J (Eds) (2004) *Developing and Implementing Assessment of Student Learning Outcomes* San Francisco, CA: Jossey-Bass.
- Stevens, D, & Levi, A (2005) *Introduction to Rubrics: An Assessment Tool To Save Grading Time, Convey Effective Feedback and Promote Student Learning* Sterling, VA: Stylus Publishing LLC.
- Theall, M, Abrami, P, & Mets, L (2001) *New Directions for Institutional Research: The Student Ratings Debate: Are They Valid? How Can We Best Use Them? (No 109)* San Francisco, CA: Jossey-Bass.
- Voorhees, Richard A (Ed) (2001) *New Directions for Institutional Research: Measuring what matters, competency based learning models in higher education* San Francisco: Jossey-Bass.
- Walvoord, B, & Johnson, V (1998) *Effective Grading: A Tool for Learning and Assessment* San Francisco, CA: Jossey-Bass.



Walvoord, Barbara E (2004) *Assessment Clear and Simple: A Practical Guide for Institutions, Departments, and General Education* Jossey Bass, San Francisco: Jossey-Bass.

Wiggins, G (1998) *Educative Assessment: Designing Assessments to Inform and Improve Student Performance* San Francisco, CA: Jossey-Bass .

## APPENDIX A Sample Course Syllabus

### MGMT 499 STRATEGIC MANAGEMENT [Partial] Course Syllabus Spring 2006

	<b>Assistant Professor</b> <b>A.J. Palumbo School of</b> <b>Business Administration</b> <b>Duquesne University</b> <b>Pittsburgh, PA 15282</b>  <b>ph. (412) 396-6256</b> <b>fax (412) 396-4764</b>  <b>e-mail:</b> [REDACTED]		
	<b>Office:</b>	Rockwell Hall	Room 806
	<b>Office Hours:</b>	MW 12:00-14:00 W 17:00-18:00 and by appointment	Room 806
	<b>Secretary:</b>	Ms. Karen Plack 396-6246	Room 806
	<b>Class Meeting Times:</b>	MW 14:00-15:15 W 15:30-16:45	Room RH502 Room RH502

This Strategic Management course is intended to be a challenging integrative capstone course that is about "strategy" and "managing for success". Drawing upon many of the business courses that you have completed in the past, this course integrates, and extends previous learning to provide a "bigger picture" of the organization. It is structured to improve your abilities to think "strategically," and solve real business problems while viewing business processes from the perspective of the total organization rather than from a narrow functional focus. Corporate executives have told us that this is the most important attribute an undergraduate business student can show beyond their individual expertise in a single functional specialty. Rapid development of new technologies, deregulation, new information media, and globalization of markets has blurred the lines between industries and given rise to unexpected new areas of business. These conditions pose major challenges for corporations, their strategic management, and for analyzing their industries and their organization for the sole purpose in seeking competitive advantage in a high velocity world.

**Course Goals and Outcomes:** At the end of this course students should have achieved the following in their learning:

**Goal 1:** To develop an understanding of the role a mission and vision statement plays in driving the strategic intent of an organization.

**Learning outcome:** Students will analyze the mission and vision statements of existing organizations and determine the implication for developing a strategic plan.

**Learning outcome:** Students will write a mission and vision statement.

**Measurement technique:** Class Discussion; Strategic Analysis Report; Case Analyses; Class Exercises

**Goal 2:** To learn the importance of strategic analysis and the role it plays in creating competitive advantage.

**Learning outcome:** Students will conduct an analysis of an organizations external environment. **Learning outcome:** Students will conduct an analysis of an organizations internal environment.

**Measurement technique:** Case Analyses; Strategic Analysis Report; Class Exercises.

**Goal 3:** To bridge the gap between strategy formulation and strategy implementation.

**Learning outcome:** Students will be introduced to a framework for understanding how to construct a strategic analysis of a business.

**Learning outcome:** Students will create a strategic analysis for a simulated business.

**Learning outcome:** Students will implement their strategic analysis for their simulated business environment.

**Measurement Techniques:** Strategic Analysis Report; Business Simulation.

**Goal 4:** To become better decision-makers through critical thinking and problem solving

**Learning outcome:** Students will analyze organizational and environmental information for the purpose of identifying problems and issues that affect organizations and develop recommendations for solution (including an assessment of each recommendation) in making appropriate decisions.

**Measurement technique:** Strategic Analysis; Business Simulation

**Goal 5:** Become effective in written business communication

**Learning outcome:** Students will create a professionally written business report that links the business simulation to strategic management principles.

**Measurement technique:** Strategic Plan; Business Simulation

**Goal 6:** To develop an understanding of the interrelationship among core business functions.

**Learning outcome:** Students will participate in a business simulation that develops their skills and understanding of the entire business processes across all core functional disciplines.

**Learning outcome:** Students will be divided into teams that include different disciplines for the purpose of drawing on the knowledge and skills of their teammates for problem solving.

**Measurement technique:** Business Simulation

**Text:** David, F.E. (2004). Strategic Management: Concepts & Cases, 10<sup>th</sup> ed. ISBN: 0-13-128878-4

**Simulation:** CapSim Internet Strategy Simulation <[www.capsim.com](http://www.capsim.com)>.

### Expectations

This is your senior year "capstone" management experience, meaning that everything you have learned up until now from your core courses comes together in practice. To accomplish this successfully it will require a significant commitment on your part outside of the classroom to achieve the desired performance level you aspire to. It has been my experience in this course that a minimum commitment per week equal to about 6 to 9 hours on average is necessary to achieve a performance level equivalent to an 'A'. Of course this depends on your ability to quickly assimilate and understand the material, your study habits, and other personal factors for which I do not have control over. At the very minimum, it is expected that you will have read all the assigned readings for each class prior to entering the classroom, have thoroughly read the user manual for the simulation, have frequently practiced the simulation during the trial period, have turned in all assignments in a completed and professional state on time, and have participated in your team processes and contributed to the discussion in the class room. Sincere effort and high quality output are expected of you. In addition, you are expected to exhibit a high degree of professionalism and integrity in all matters concerning this course.

Knowledge is a source of power and staying "current" is the name of the game in today's business world. Business periodicals such as [Wall Street Journal \(WSJ\)](#), [Business Week](#), [Fast Company](#) and [Fortune](#) help keep you up to date on current events and I strongly urge you make it a habit to read these periodicals on a regular basis, as do today's managers.

## APPENDIX B

### Sample Alignment with Program Outcomes

#### Learning outcomes Assessment Course Mapping

1. Develop core business competencies
2. Develop an ethical and moral perspective on organizational behavior
3. Develop leadership and management skills
4. Become effective in written and oral communication
5. Become better decision-makers through critical thinking and problem solving
6. Develop the proficiency to adapt technology to communicate, analyze and support core business competencies
7. Acquire a knowledge and appreciation of diverse business environments.
8. Develop an understanding of the interaction among core business functions
9. Acquire the knowledge to successfully function in the evolving global marketplace.
10. Become life-long learners through intellectual discovery and professional and personal development

Course	(1) Core Competencies	(2) Ethics	(3) Leadership & Management	(4) Communication	(5) Critical Thinking	(6) Technology	(7) Diversity	(8) Interaction	(9) Globalization	(10) Life time Learners
QSMIS 182										
QSMIS 183										
103										
QSMIS 281	U				E	U		U		
QSMIS 284	U				E	U		U		
ACCTG 214										
ACCTG 215										
ECON 201	E	E			E	U			I	I
ECON 202	E				E	U			I	
BLAW 251										
300										
ECON 342										
FINAN 331										
MGMT 361	E	U	E	U	E		E		U	I
MKTG 371										
MGMT 367										
MGMT 368										
MGMT 499		I	U	U	E	U	I	E	I	I

I = Introduced  
E = Emphasized  
U = Utilized

## APPENDIX C

### Sample Program Goals and Learning Outcomes<sup>7</sup>

*What are some examples of effective goals and outcomes?*

*The goals and outcomes that follow are examples for you to consider as you think about your own.*

#### Biology

##### **Course Goal**

Students will learn and demonstrate use of the scientific method for original scientific research.

##### **Outcomes**

- The student will demonstrate that s/he has formulated an hypothesis, designed a good experiment, controlled variables, operationally defined terms and interpreted data appropriately
- The student will demonstrate understanding of the scope and sequence of the scientific report format by outlining and completing a report based on one of the in-class experiments.

*adapted from California State University Multi-Campus Team Drafts (1998).*



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#### English Composition

##### **Course Goal**

Students will learn to acknowledge and adjust to a variety of writing contexts.

##### **Outcomes**

- The student will demonstrate through discussion, planning and writing an awareness that audiences differ and that readers' needs/expectations must be taken into account as one composes text
- The student will demonstrate in writing the ability to draft and revise work with a sense of purpose and an awareness of audience

*adapted from California State University Multi-Campus Team Drafts (1998).*

#### Management

##### **Course Goal**

The student will identify those activities that are most likely to distinguish effective, well-managed technology development programs from ineffective programs.

##### **Outcomes**

- The student will outline the six components of an effective management development program.
- The student will develop a formal evaluation checklist to assess program success.

*adapted from Diamond, Designing and Assessing Courses and Curricula (1998).*

#### Religion

##### **Course Goal**

The student will demonstrate an understanding of the theological foundation of the course.

##### **Objective**

- When given a definition of the term "religion," the student will identify which of the following characteristics is emphasized: feeling, ritual activity, belief, monotheism, the solitary individual, social valuation, illusion, ultimate reality, and/or value.

*adapted from Diamond, Designing and Assessing Courses and Curricula (1998)*

<sup>7</sup> UMASS

## History

### ***Course Goal***

The student will learn to work as a “knowledgeable practitioner” in the discipline.

### ***Outcomes***

The student will be able to:

- describe relevant historical events and people
- argue as an historian does
- take a position on a debatable historical issue
- use historical data as evidence for a particular position or point of view
- raise and answer counter-arguments

## Mathematics

### ***Course Goal***

The student will be able to apply course concepts to mathematical problem-solving models.

### ***Outcomes***

- The student will be able to solve algebraic and quadratic equations
- The student will demonstrate the ability to explain each step in the problem solving process

## Economics

### ***Course Goal***

Students will use economic theory and modeling to explain government policies and their effects.

### ***Outcomes***

- Students will choose one topic relevant to current economic events and explain its relevance in terms of economic principle and theory
- Students will develop and run a statistical model analyzing the current rate of inflation in relation to the CPI

## Physics

### ***Course Goal***

The student will be able to state and apply physical concepts in their own words and to discuss what they don't know.

### ***Outcomes***

- The student will select one physical law and design an experiment to demonstrate its application
- The student will write a report on the experiment, including a section addressing unanswered questions

## Education

### ***Course Goal***

As a result of taking this course, the student will be able to evaluate and apply educational theory and philosophy to the reality and challenge of today's system of education.

### ***Outcomes***

At the conclusion of this unit, the student will be able to:

- discuss the philosophical foundation of education
- identify popular theories of education and teaching
- begin to apply philosophy and theory of education to their own development as an educator
- assess the contribution and development of the other members of the assigned task group

*Examples on this page have been adapted from Walvoord & Anderson, Effective Grading (1998).*

## APPENDIX D

### Sample Learning Rubrics

#### Example Rubric for Scientific Experiment in Biology Capstone Course<sup>8</sup> by Virginia Johnson Anderson, Towson University

<b>Task Assignment:</b> Semester-long assignment to design an original experiment, carry it out, and write it up in scientific report format. Students are to determine which of two brands of a commercial product (e.g. two brands of popcorn) are "best." They must base their judgment on at least four experimental factors (e.g. "% of kernels popped" is an experimental factor. Price is not, because it is written on the package).					
	5	4	3	2	1
Title	Is appropriate in tone and structure to science journal; contains necessary descriptors, brand names, and allows reader to anticipate design.	Is appropriate in tone and structure to science journal; most descriptors present; identifies function of experimentation, suggests design, but lacks brand names.	Identifies function, brand name, but does not allow reader to anticipate design.	Identifies function or brand name, but not both; lacks design information or is misleading	Is patterned after another discipline or missing.
Introduction	Clearly identifies the purpose of the research; identifies interested audiences(s); adopts an appropriate tone.	Clearly identifies the purpose of the research; identifies interested audience(s).	Clearly identifies the purpose of the research.	Purpose present in Introduction, but must be identified by reader.	Fails to identify the purpose of the research.
Scientific Format Demands	All material placed in the correct sections; organized logically within each section; runs parallel among different sections.	All material placed in correct sections; organized logically within sections, but may lack parallelism among sections.	Material place is right sections but not well organized within the sections; disregards parallelism.	Some materials are placed in the wrong sections or are not adequately organized wherever they are placed.	Material placed in wrong sections or not sectioned; poorly organized wherever placed.
Materials and Methods Section	Contains effective, quantifiable, concisely-organized information that allows the experiment to be replicated; is written so that all information inherent to the document can be related back to this section; identifies sources of all data to be collected; identifies sequential information in an appropriate chronology; does not contain unnecessary, wordy descriptions of procedures.	As 5, but contains unnecessary information, and/or wordy descriptions within the section.	Presents an experiment that is definitely replicable; all information in document may be related to this section; however, fails to identify some sources of data and/or presents sequential information in a disorganized, difficult pattern.	Presents an experiment that is marginally replicable; parts of the basic design must be inferred by the reader; procedures not quantitatively described; some information in Results or Conclusions cannot be anticipated by reading the Methods and Materials section.	Describes the experiment so poorly or in such a nonscientific way that is cannot be replicated.
Non-experimental Information	Student researches and includes price and other non-experimental information that would be expected to be significant to the audience in determining the better product, or specifically states non-experimental factors excluded by design; interjects these at appropriate positions in text and/or develops a weighted rating scale; integrates non-experimental information in the Conclusions.	Student acts as above, but is somewhat less effective in developing the significance of the non-experimental information.	Student introduces price and other non-experimental information, but does not integrate them into Conclusions.	Student researches and includes price effectively; does not include or specifically exclude other non-experimental information.	Student considers price and/or other non-experimental variables as research variables; fails to identify the significance of these factors to the research.

<sup>8</sup> (From Walvoord and Anderson, Effective Grading: A Tool for Learning and Assessment, 1998, pp. 197-201)



<b>Task Assignment:</b> Semester-long assignment to design an original experiment, carry it out, and write it up in scientific report format. Students are to determine which of two brands of a commercial product (e.g. two brands of popcorn) are "best." They must base their judgment on at least four experimental factors (e.g. "% of kernels popped" is an experimental factor. Price is not, because it is written on the package).					
	5	4	3	2	1
Designing an Experiment	Student selects experimental factors that are appropriate to the research purpose and audience; measures adequate aspects of these selected factors; establishes discrete subgroups for which data significance may vary; student demonstrates an ability to eliminate bias from the design and bias-ridden statements from the research; student selects appropriate sample size, equivalent groups, and statistics; student designs a superior experiment.	As 5, but student designs an adequate experiment.	Student selects experimental factors that are appropriate to the research purpose and audience; measures adequate aspects of these selected factors; establishes discrete subgroups for which data significance may vary; research is weakened by bias OR by sample size of less than 10.	As 3, but research is weakened by bias AND inappropriate sample size	Student designs a poor experiment.
Defining Operationally	Student constructs a stated comprehensive operational definition and well-developed specific operational definitions.	Student constructs an implied comprehensive operational definition and well-developed specific operational definitions.	Student constructs an implied comprehensive operational definition (possible less clear) and some specific operational definitions.	Student constructs specific operational definitions, but fails to construct a comprehensive definition.	Student lacks understanding of operation definition.
Controlling Variables	Student demonstrates, by written statement, the ability to control variables by experimental control and by randomization; student makes reference to, or implies, factors to be disregarded by reference to pilot or experience; superior overall control of variables.	As 5, but student demonstrates an adequate control of variables.	Student demonstrates the ability to control important variables experimentally; Methods and Materials section does not indicate knowledge of randomization and/or selected disregard of variables.	Student demonstrates the ability to control some, but not all, of the important variables experimentally.	Student demonstrates a lack of understanding about controlling variables.
Collecting Data and Communicating Results	Student selects quantifiable experimental factors and/or defines and establishes quantitative units of comparison; measures the quantifiable factors and/or units in appropriate quantities or intervals; student selects appropriate statistical information to be utilized in the results; when effective, student displays results in graphs with correctly labeled axes; data are presented to the reader in text as well as graphic forms; tables or graphs have self-contained	As 5, but the student did not prepare self-contained headings for tables or graphs.	As 4, but data reported in graphs or tables contain materials that are irrelevant. and/or not statistically appropriate.	Student selects quantifiable experimental factors and/or defines and establishes quantitative units of comparison; fails to select appropriate quantities or intervals and/or fails to display information graphically when appropriate.	Student does not select, collect, and/or communicate quantifiable results.
Interpreting Data: Drawing Conclusions/Implications	Student summarizes the purpose and findings of the research; student draws inferences that are consistent with the data and scientific reasoning and relates these to interested audiences; student explains expected results and offers explanations and/or suggestions for further research for unexpected results; student presents data honestly, distinguishes between fact and implication, and avoids over-generalizing; student organizes non-experimental information to support conclusion; student accepts or rejects the hypothesis.	As 5, but student does not accept or reject the hypothesis.	As 4, but the student over-generalizes and/or fails to organize non-experimental information to support conclusions.	Student summarizes the purpose and findings of the research; student explains expected results, but ignores unexpected results.	Student may or may not summarize the results, but fails to interpret their significance to interested audiences.



## American Association of Colleges and Universities Value Rubrics

### Overview

As part of AAC&U's [Liberal Education and America's Promise](#) (LEAP) initiative, the VALUE project seeks to contribute to the national dialogue on assessment of college student learning. It builds on a philosophy of learning assessment that privileges multiple expert judgments of the quality of student work over reliance on standardized tests administered to samples of students outside of their required courses. The assessment approaches that VALUE advances are based on the shared understanding of faculty and academic professionals on campuses from across the country.

VALUE assumes that:

- to achieve a high-quality education for all students, valid assessment data are needed to guide planning, teaching, and improvement;
- colleges and universities seek to foster and assess numerous essential learning outcomes beyond those addressed by currently available standardized tests;
- learning develops over time and should become more complex and sophisticated as students move through their curricular and cocurricular educational pathways toward a degree;
- good practice in assessment requires multiple assessments, over time; well-planned electronic portfolios provide opportunities to collect data from multiple assessments across a broad range of learning outcomes while guiding student learning and building self-assessment capabilities;
- eportfolios and assessment of work in them can inform programs and institutions on progress in achieving expected goals.

As part of the VALUE project, teams of faculty and other academic and student affairs professionals engaged in an iterative process over eighteen months wherein they gathered, analyzed, synthesized, and then drafted institutional level rubrics (and related materials) for 15 of the AAC&U [Essential Learning Outcomes](#), creating the set of VALUE rubrics that appears below. The rubric development teams relied on existing campus rubrics when available, other organizational statements on outcomes, experts in the respective fields and faculty feedback from campuses throughout the process. Each VALUE rubric contains the most common and broadly shared criteria or core characteristics considered critical for judging the quality of student work in that outcome area.

The VALUE rubrics reflect faculty expectations for essential learning across the nation regardless of type of institution, mission, size or location. In several cases, outcomes that AAC&U paired in the Essential Learning Outcomes (e.g., written and oral communication) have been separated with the intent of developing individual VALUE rubrics for each.

[Place AAC&U Value Rubrics Here]

# CIVIC ENGAGEMENT VALUE RUBRIC

for more information, please contact [valuel@aacu.org](mailto:valuel@aacu.org)



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

## Definition

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

## Framing Language

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

- The student creates and manages a service program that engages others (such as youth or members of a neighborhood) in learning about and taking action on an issue they care about. In the process, the student also teaches and models processes that engage others in deliberative democracy, in having a voice, participating in democratic processes, and taking specific actions to affect an issue.
- 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 citizen concerned with the affairs of the community and nation as contrasted with private or personal life, which is devoted to the pursuit of private and personal interests.
- Politics: A process by which a group of people, whose opinions or interests might be divergent, reach collective decisions that are generally regarded as binding on the group and enforced as common policy. Political life enables people to accomplish goals they could not realize as individuals. Politics necessarily arises whenever groups of people live together, since they must always reach collective decisions of one kind or another.
- Government: "The formal institutions of a society with the authority to make and implement binding decisions about such matters as the distribution of resources, allocation of benefits and burdens, and the management of conflicts." (Retrieved from the Center for Civic Engagement website, May 5, 2009.)
- Civic/community contexts: Organizations, movements, campaigns, a place or locus where people and/or living creatures inhabit, which may be defined by a locality (school, national park, non-profit organization, town, state, nation) or defined by shared identity (i.e., African-Americans, North Carolinians, Americans, the Republican or Democratic Party, refugees, etc.). In addition, contexts for civic engagement may be defined by a variety of approaches intended to benefit a person, group, or community, including community service or volunteer work, academic work.

# CIVIC ENGAGEMENT VALUE RUBRIC

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## Definition

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

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

	Capstone 4	Milestones 3                      2		Benchmark 1
<b>Diversity of Communities and Cultures</b>	Demonstrates evidence of adjustment in own attitudes and beliefs because of working within and learning from diversity of communities and cultures. Promotes others' engagement with diversity.	Reflects on how own attitudes and beliefs are different from those of other cultures and communities. Exhibits curiosity about what can be learned from diversity of communities and cultures.	Has awareness that own attitudes and beliefs are different from those of other cultures and communities. Exhibits little curiosity about what can be learned from diversity of communities and cultures.	Expresses attitudes and beliefs as an individual, from a one-sided view. Is indifferent or resistant to what can be learned from diversity of communities and cultures.
<b>Analysis of Knowledge</b>	Connects and extends knowledge (facts, theories, etc.) from one's own academic study/field/discipline to civic engagement and to one's own participation in civic life, politics, and government.	Analyzes knowledge (facts, theories, etc.) from one's own academic study/field/discipline making relevant connections to civic engagement and to one's own participation in civic life, politics, and government.	Begins to connect knowledge (facts, theories, etc.) from one's own academic study/field/discipline to civic engagement and to one's own participation in civic life, politics, and government.	Begins to identify knowledge (facts, theories, etc.) from one's own academic study/field/discipline that is relevant to civic engagement and to one's own participation in civic life, politics, and government.
<b>Civic-Identity and Commitment</b>	Provides evidence of experience in civic-engagement activities and describes what she/he has learned about her or himself as it relates to a reinforced and clarified sense of civic-identity and continued commitment to public action.	Provides evidence of experience in civic-engagement activities and describes what she/he has learned about her or himself as it relates to a growing sense of civic-identity and commitment.	Evidence suggests involvement in civic-engagement activities is generated from expectations or course requirements rather than from a sense of civic-identity.	Provides little evidence of her/his experience in civic-engagement activities and does not connect experiences to civic-identity.
<b>Civic Communication</b>	Tailors communication strategies to effectively express, listen, and adapt to others to establish relationships to further civic action	Effectively communicates in civic context, showing ability to do all of the following: express, listen and adapt ideas and messages based on others' perspectives.	Communicates in civic context, showing ability to do more than one of the following: express, listen and adapt ideas and messages based on others' perspectives.	Communicates in civic context, showing ability to do one of the following: express, listen and adapt ideas and messages based on others' perspectives.
<b>Civic Action and Reflection</b>	Demonstrates independent experience and <i>shows initiative in team leadership</i> of complex or multiple civic engagement activities, accompanied by reflective insights or analysis about the aims and accomplishments of one's actions.	Demonstrates independent experience and <i>team leadership</i> of civic action, with reflective insights or analysis about the aims and accomplishments of one's actions.	Has clearly <i>participated</i> in civically-focused actions and begins to reflect or describe how these actions may benefit individual(s) or communities.	Has <i>experimented</i> with some civic activities but shows little internalized understanding of its aims or effects and little commitment to future action.
<b>Civic Contexts/Structures</b>	Demonstrates ability and commitment to <i>collaboratively work across and within</i> community contexts and structures <i>to achieve a civic aim</i> .	Demonstrates ability and commitment to work actively <i>within</i> community contexts and structures <i>to achieve a civic aim</i> .	Demonstrates experience identifying intentional ways to <i>participate in</i> civic contexts and structures.	Experiments with civic contexts and structures, <i>tries out a few to see what fits</i> .

# CREATIVE THINKING VALUE RUBRIC

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## 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 <http://dictionary.reference.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 [value@aacu.org](mailto:value@aacu.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.*

	Capstone 4	Milestones 3                      2		Benchmark 1
<b>Acquiring competencies</b> <i>This step refers to acquiring strategies and skills within a particular domain.</i>	Reflect: Evaluates creative process and product using domain-appropriate criteria.	Create: Creates an entirely new object, solution or idea that is appropriate to the domain.	Adapt: Successfully adapts an appropriate exemplar to his/her own specifications.	Model: Successfully reproduces an appropriate exemplar.
<b>Taking risks</b> <i>May include personal risk (fear of embarrassment or rejection) or risk of failure in successfully completing assignment, i.e. going beyond original parameters of assignment, introducing new materials and forms, tackling controversial topics, advocating unpopular ideas or solutions.</i>	Actively seeks out and follows through on untested and potentially risky directions or approaches to the assignment in the final product.	Incorporates new directions or approaches to the assignment in the final product.	Considers new directions or approaches without going beyond the guidelines of the assignment.	Stays strictly within the guidelines of the assignment.
<b>Solving Problems</b>	Not only develops a logical, consistent plan to solve problem, but recognizes consequences of solution and can articulate reason for choosing solution.	Having selected from among alternatives, develops a logical, consistent plan to solve the problem.	Considers and rejects less acceptable approaches to solving problem.	Only a single approach is considered and is used to solve the problem.
<b>Embracing Contradictions</b>	Integrates alternate, divergent or contradictory perspectives or ideas fully.	Incorporates alternate, divergent or contradictory perspectives or ideas in a exploratory way.	Includes (recognizes the value of) alternate, divergent or contradictory perspectives or ideas in a small way.	Acknowledges (mentions in passing) alternate, divergent, or contradictory perspectives or ideas.
<b>Innovative Thinking</b> <i>Novelty or Uniqueness (of Idea, Claim, Question, Form, etc.)</i>	Extends a novel or unique idea, question, format, or product to create new knowledge or knowledge that crosses boundaries.	Creates a novel or unique idea, question, format, or product.	Experiments with creating a novel or unique idea, question, format, or product.	Reformulates a collection of available ideas.
<b>Connecting, Synthesizing, Transforming</b>	Transforms ideas or solutions into entirely new forms.	Synthesizes ideas or solutions into a coherent whole.	Connects ideas or solutions in novel ways.	Recognizes existing connections among ideas or solutions.

# CRITICAL THINKING VALUE RUBRIC

*for more information, please contact [value@aacu.org](mailto:value@aacu.org)*



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## Definition

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

## Framing Language

This rubric is designed to be transdisciplinary, reflecting the recognition that success in all disciplines increasingly need to be able to apply those habits in various and changing situations encountered in all walks of life. Further, research suggests that successful critical thinkers from all disciplines increasingly need to be able to apply those habits in various and changing situations encountered in all walks of life.

This rubric is designed for use with many different types of assignments and the suggestions here are not an exhaustive list of possibilities. Critical thinking can be demonstrated in assignments that require students to complete analyses of text, data, or issues. Assignments that cut across presentation mode might be especially useful in some fields. If insight into the process components of critical thinking (e.g., how information sources were evaluated regardless of whether they were included in the product) is important, assignments focused on student reflection might be especially illuminating.

## Glossary

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

- **Ambiguity:** Information that may be interpreted in more than one way.
- **Assumptions:** Ideas, conditions, or beliefs (often implicit or unstated) that are "taken for granted or accepted as true without proof." (quoted from <http://dictionary.reference.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

for more information, please contact [value@aacu.org](mailto:value@aacu.org)



## 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 collection of work that does not meet benchmark (cell one) level performance.*

	Capstone 4	Milestones 3                      2		Benchmark 1
<b>Explanation of issues</b>	Issue/problem to be considered critically is stated clearly and described comprehensively, delivering all relevant information necessary for full understanding.	Issue/problem to be considered critically is stated, described and clarified so that understanding is not seriously impeded by omissions.	Issue/problem to be considered critically is stated but description leaves some terms undefined, ambiguities unexplored, boundaries undetermined, and/or backgrounds unknown.	Issue/problem to be considered critically is stated without clarification or description.
<b>Evidence</b> <i>Selecting and using information to investigate a point of view or conclusion</i>	Information is taken from source(s) with enough interpretation/evaluation, to develop a comprehensive analysis or synthesis. Viewpoints of experts are questioned thoroughly.	Information is taken from source(s) with enough interpretation/evaluation to develop a coherent analysis or synthesis. Viewpoints of experts are subject to questioning.	Information is taken from source(s) with some interpretation/evaluation, but not enough to develop a coherent analysis or synthesis. Viewpoints of experts are taken as mostly fact, with little questioning.	Information is taken from source(s) without any interpretation/evaluation. Viewpoints of experts are taken as fact, without question.
<b>Influence of context and assumptions</b>	Thoroughly (systematically and methodically) analyzes own and others' assumptions and carefully evaluates the relevance of contexts when presenting a position.	Identifies own and others' assumptions and several relevant contexts when presenting a position.	Questions some assumptions. Identifies several relevant contexts when presenting a position. May be more aware of others' assumptions than one's own (or vice versa).	Shows an emerging awareness of present assumptions (sometimes labels assertions as assumptions). Begins to identify some contexts when presenting a position.
<b>Student's position (perspective, thesis/hypothesis)</b>	Specific position (perspective, thesis/hypothesis) is imaginative, taking into account the complexities of an issue. Limits of position (perspective, thesis/hypothesis) are acknowledged. Others' points of view are synthesized within position (perspective, thesis/hypothesis).	Specific position (perspective, thesis/hypothesis) takes into account the complexities of an issue. Others' points of view are acknowledged within position (perspective, thesis/hypothesis).	Specific position (perspective, thesis/hypothesis) acknowledges different sides of an issue.	Specific position (perspective, thesis/hypothesis) is stated, but is simplistic and obvious.
<b>Conclusions and related outcomes (implications and consequences)</b>	Conclusions and related outcomes (consequences and implications) are logical and reflect student's informed evaluation and ability to place evidence and perspectives discussed in priority order	Conclusion is logically tied to a range of information, including opposing viewpoints; related outcomes (consequences and implications) are identified clearly.	Conclusion is logically tied to information (because information is chosen to fit the desired conclusion); some related outcomes (consequences and implications) are identified clearly.	Conclusion is inconsistently tied to some of the information discussed; related outcomes (consequences and implications) are oversimplified.



# ETHICAL REASONING VALUE RUBRIC

*for more information, please contact [value@aacu.org](mailto:value@aacu.org)*



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

## Definition

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

## Framing Language

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

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

## Glossary

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

- Core Beliefs: Those fundamental principles that consciously or unconsciously influence one's ethical conduct and ethical thinking. Even when unacknowledged, core beliefs shape one's responses. Core beliefs can reflect one's environment, religion, culture or training. A person may or may not choose to act on their core beliefs.
- Ethical Perspectives/concepts: The different theoretical means through which ethical issues are analyzed, such as ethical theories (e.g., utilitarian, natural law, virtue) or ethical concepts (e.g., rights, justice, duty).
- Complex, multi-layered (grey) 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@aacu.org](mailto:value@aacu.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 self identity evolves as they practice ethical decision-making skills and learn how to describe and analyze positions on ethical issues.

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

	Capstone 4	Milestones 3                      2		Benchmark 1
<b>Ethical Self Awareness</b>	Student discusses in detail/analyzes both core beliefs and the origins of the core beliefs and discussion has greater depth and clarity.	Student discusses in detail/analyzes both core beliefs and the origins of the core beliefs.	Student states both core beliefs and the origins of the core beliefs.	Student states either their core beliefs or articulates the origins of the core beliefs but not both.
<b>Understanding Different Ethical Perspectives/Concepts</b>	Student names the theory or theories, can present the gist of said theory or theories, and accurately explains the details of the theory or theories used.	Student can name the major theory or theories she/he uses, can present the gist of said theory or theories, and attempts to explain the details of the theory or theories used, but has some inaccuracies.	Student can name the major theory she/he uses, and is only able to present the gist of the named theory.	Student only names the major theory she/he uses.
<b>Ethical Issue Recognition</b>	Student can recognize ethical issues when presented in a complex, multi-layered (grey) context AND can recognize cross-relationships among the issues.	Student can recognize ethical issues when issues are presented in a complex, multi-layered (grey) context OR can grasp cross-relationships among the issues.	Student can recognize basic and obvious ethical issues and grasp (incompletely) the complexities or inter-relationships among the issues.	Student can recognize basic and obvious ethical issues but fails to grasp complexity or inter-relationships.
<b>Application of Ethical Perspectives/Concepts</b>	Student can independently apply ethical perspectives/concepts to an ethical question, accurately, and is able to consider full implications of the application.	Student can independently (to a new example) apply ethical perspectives/concepts to an ethical question, accurately, but does not consider the specific implications of the application.	Student can apply ethical perspectives/concepts to an ethical question, independently (to a new example) and the application is inaccurate.	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.).
<b>Evaluation of Different Ethical Perspectives/Concepts</b>	Student states a position and can state the objections to, assumptions and implications of and can reasonably defend against the objections to, assumptions and implications of different ethical perspectives/concepts and the student's defense is adequate and effective.	Student states a position and can state the objections to, assumptions and implications and respond to the objections to, assumptions and implications of different ethical perspectives/concepts but the student's response is inadequate.	Student states a position and can state the objections to, assumptions and implications of different ethical perspectives/concepts but does not respond to them (and ultimately objections, assumptions and implications are compartmentalized by student and do not affect student's position.)	Student states a position but cannot state the objections to and assumptions and limitations of the different perspectives/concepts.

## INFORMATION LITERACY VALUE RUBRIC

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### 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

for more information, please contact [value@aacu.org](mailto:value@aacu.org)



## 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

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

	Capstone 4	Milestones		Benchmark 1
		3	2	
Determine the extent of information needed	Effectively defines the scope of the research question or thesis. Effectively determines key concepts. Types of information (sources) selected directly relate to concepts or answer research question.	Defines the scope of the research question or thesis completely. Can determine key concepts. Types of information (sources) selected relate to concepts or answer research question.	Defines the scope of the research question or thesis incompletely (parts are missing, remains too broad or too narrow, etc.). Can determine key concepts. Types of information (sources) selected partially relate to concepts or answer research question.	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.
Access the needed information	Accesses information using effective, well-designed search strategies and most appropriate information sources.	Accesses information using variety of search strategies and some relevant information sources. Demonstrates ability to refine search.	Accesses information using simple search strategies, retrieves information from limited and similar sources.	Accesses information randomly, retrieves information that lacks relevance and quality.
Evaluate information and its sources critically	Thoroughly (systematically and methodically) analyzes own and others' assumptions and carefully evaluates the relevance of contexts when presenting a position.	Identifies own and others' assumptions and several relevant contexts when presenting a position.	Questions some assumptions. Identifies several relevant contexts when presenting a position. May be more aware of others' assumptions than one's own (or vice versa).	Shows an emerging awareness of present assumptions (sometimes labels assertions as assumptions). Begins to identify some contexts when presenting a position.
Use information effectively to accomplish a specific purpose	Communicates, organizes and synthesizes information from sources to fully achieve a specific purpose, with clarity and depth	Communicates, organizes and synthesizes information from sources. Intended purpose is achieved.	Communicates and organizes information from sources. The information is not yet synthesized, so the intended purpose is not fully achieved.	Communicates information from sources. The information is fragmented and/or used inappropriately (misquoted, taken out of context, or incorrectly paraphrased, etc.), so the intended purpose is not achieved.
Access and use information ethically and legally	Students use correctly all of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrate a full understanding of the ethical and legal restrictions on the use of published, confidential and/or proprietary information.	Students use correctly three of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential and/or proprietary information.	Students use correctly two of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential and/or proprietary information.	Students use correctly one 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.

# INQUIRY AND ANALYSIS VALUE RUBRIC

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## 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.

*for more information, please contact [value@aacu.org](mailto:value@aacu.org)*



### Definition

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

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

	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
<b>Topic selection</b>	Identifies a creative, focused, and manageable topic that addresses potentially significant yet previously less-explored aspects of the topic.	Identifies a focused and manageable/doable topic that appropriately addresses relevant aspects of the topic.	Identifies a topic that while manageable/doable, is too narrowly focused and leaves out relevant aspects of the topic.	Identifies a topic that is far too general and wide-ranging as to be manageable and doable.
<b>Existing knowledge, research, and/or views</b>	Synthesizes in depth information from relevant sources representing various points of view/approaches.	Presents in depth information from relevant sources representing various points of view/approaches.	Presents information from relevant sources representing limited points of view/approaches.	Presents information from irrelevant sources representing limited points of view/approaches.
<b>Design process</b>	All elements of the methodology or theoretical framework are skillfully developed. Appropriate methodology or theoretical frameworks may be synthesized from across disciplines or from relevant sub-disciplines.	Critical elements of the methodology or theoretical framework are appropriately developed however more subtle elements are ignored or unaccounted for.	Critical elements of the methodology or theoretical framework are missing, incorrectly developed or unfocused.	Inquiry design demonstrates a misunderstanding of the methodology or theoretical framework.
<b>Analysis</b>	Organizes and synthesizes evidence to reveal insightful patterns, differences, or similarities related to focus.	Organizes evidence to reveal important patterns, differences, or similarities related to focus.	Organizes evidence but the organization is not effective in revealing important patterns, differences or similarities.	Lists evidence but it is not organized and/or is unrelated to focus.
<b>Conclusions</b>	States a conclusion that is a logical extrapolation from the inquiry findings.	States a conclusion focused solely on the inquiry findings. The conclusion arises specifically from and responds specifically to the inquiry findings.	States a general conclusion that, because it is so general, also applies beyond the scope of the inquiry findings.	States an ambiguous, illogical or unsupportable conclusion from inquiry findings.
<b>Limitations and implications</b>	Insightfully discusses in detail relevant and supported limitations and implications	Discusses relevant and supported limitations and implications	Presents relevant and supported limitations and implications	Presents limitations and implications, but they are possibly irrelevant and unsupported

# INTEGRATIVE LEARNING VALUE RUBRIC

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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

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 connected 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 connecting both theory and practice toward a deepened 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 require 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 so extensively in 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; learning from academic study, texts, etc.
- Content: The information conveyed in the work samples or collections of work.
- Contexts: Actual or simulated situations in which a student demonstrates learning outcomes. New and challenging contexts encourage students to stretch beyond their current frames of reference.
- Co-curriculum: A parallel component of the academic curriculum that is in addition to formal classroom (student government, community service, residence hall activities, student organizations, etc.).
- Experience: Learning that takes place in a setting outside of the formal classroom, such as workplace, service learning site, internship site or another.
- Form: The external frameworks in which information and evidence are presented, ranging from choices for particular work sample or collection of works (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 knowing 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.

# INTEGRATIVE LEARNING VALUE RUBRIC

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## 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.

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

	Capstone 4	Milestones 3                      2		Benchmark 1
<b>Connections to experience</b> <i>Connects relevant experience and academic knowledge</i>	Meaningfully <b>synthesizes</b> connections among experiences outside of the formal classroom (including life experiences and academic experiences such as internships and travel abroad) to <b>deepen understanding</b> of fields of study and to broaden own points of view.	Effectively <b>selects and develops</b> examples of life experiences, drawn from a variety of contexts (e.g. family life, artistic participation, civic involvement, work experience), to <b>illuminate</b> concepts/theories/frameworks of fields of study.	<b>Compares</b> life experiences and academic knowledge to infer differences, as well as similarities, and <b>acknowledge perspectives</b> other than own.	<b>Identifies</b> connections between life experiences and those academic texts and ideas <b>perceived as similar and related</b> to own interests.
<b>Connections to discipline</b> <i>Sees (makes) connections across disciplines, perspectives</i>	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.	Independently connects examples, facts, or theories from more than one field of study or perspective.	When prompted, connects examples, facts, or theories from more than one field of study or perspective.	When prompted, presents examples, facts, or theories from more than one field of study or perspective.
<b>Transfer</b> <i>Adapts and applies skills, abilities, theories, or methodologies gained in one situation to new situations</i>	When prompted, presents examples, facts, or theories from more than one field of study or perspective.	Adapts and applies skills, abilities, theories, or methodologies gained in one situation to new situations <b>to solve problems or explore issues</b> .	Uses skills, abilities, theories, or methodologies gained in one situation in a new situation <b>to contribute to understanding of problems or issues</b> .	Uses, in a basic way, skills, abilities, theories, or methodologies gained in one situation <b>in a new situation</b> .
<b>Integrated Communication</b>	Fulfills the assignment(s) by choosing a format, language or graph (or other visual representation) <b>in ways that enhance meaning</b> , making clear the interdependence of language and meaning, thought and expression.	Fulfills the assignment(s) by choosing a format, language or graph (or other visual representation) <b>to explicitly connect content and form</b> , demonstrating awareness of purpose and audience.	Fulfills the assignment(s) by choosing a format, language or graph (or other visual representation) that <b>connects in a basic way</b> what is being communicated (content) with how it is said (form).	Fulfills the assignment(s) (i.e. to produce an essay, a poster, a video, a powerpoint presentation, etc.) <b>in an appropriate form</b> .
<b>Reflection and Self Assessment</b> <i>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, reflective, or creative work)</i>	Envisions a future self (and possibly makes plans that build on past experiences) that have occurred across multiple and diverse contexts.	Evaluates changes in own learning over time, recognizing complex contextual factors (e.g., works with ambiguity and risk, deals with frustration, considers ethical frameworks).	Articulates strengths and challenges (within specific performances or events) to increase effectiveness in different contexts (through increased self awareness).	Describes own performances with general descriptors of success and failure.



# INTERCULTURAL KNOWLEDGE AND COMPETENCE VALUE RUBRIC

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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 M. A. Moodian (Ed.), *Contemporary leadership and intercultural competence: Understanding and utilizing cultural diversity to build successful organizations* (pp. 95-110). Thousand Oaks, CA: Sage.)

## Framing Language

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

The levels of this rubric are informed in part by M. Bennett's Developmental Model of Intercultural Sensitivity (Bennett, M.J. (1993), "Towards Ethnorelativism: A Developmental Model of Intercultural Sensitivity". In R. M. Paige (Ed.) *Education for the Intercultural Experience* (pp. 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" in *Journal of Studies in International Education*, Vol. 10, No. 3, 241-266). It is also important to understand that intercultural knowledge and competence is more complex than what is reflected in this rubric. This rubric identifies six of the key components of intercultural knowledge and competence, but there are other components as identified in the Deardorff model and in other research.

## Glossary

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

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

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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 M. A. Moodian (Ed.), *Contemporary leadership and intercultural competence: Understanding and utilizing cultural diversity to build successful organizations* (pp. 95-110). Thousand Oaks, CA: Sage.)

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

	Capstone 4	Milestones		Benchmark 1
		3	2	
<b>Knowledge</b> <i>Cultural self-awareness</i>	Articulates insights into own cultural rules and biases (e.g. seeking complexity; aware of how her/his experiences have shaped these rules, and how to recognize and respond to cultural biases, resulting in a shift in self-description.)	Recognizes new perspectives about own cultural rules and biases (e.g. not looking for sameness; comfortable with the complexities that new perspectives offer.)	Identifies own cultural rules and biases (e.g. with a strong preference for those rules shared with own cultural group and seeks the same in others.)	Shows minimal awareness of own cultural rules and biases (even those shared with own cultural group(s)) (e.g. uncomfortable with identifying possible cultural differences with others.)
<b>Knowledge</b> <i>Knowledge of cultural worldview frameworks</i>	Demonstrates sophisticated understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs & practices.	Demonstrates adequate understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs & practices.	Demonstrates partial understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs & practices.	Demonstrates surface understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs & practices.
<b>Skills</b> <i>Empathy</i>	Interprets intercultural experience from the perspectives of own and more than one worldview and demonstrates ability to act in a supportive manner that recognizes the feelings of another cultural group	Recognizes intellectual and emotional dimensions of more than one worldview and sometimes uses more than one worldview in interactions	Identifies components of other cultural perspectives but responds in all situations with own worldview	Views the experience of others but does so through own cultural worldview
<b>Skills</b> <i>Verbal and non-verbal communication</i>	Articulates a complex understanding of cultural differences in verbal and nonverbal communication (e.g., demonstrates understanding of the degree to which people use physical contact while communicating in different cultures or use direct/indirect and explicit/implicit meanings) and is able to skillfully negotiate a shared understanding based on those differences.	Recognizes and participates in cultural differences in verbal and nonverbal communication and begins to negotiate a shared understanding based on those differences.	Identifies some cultural differences in verbal and nonverbal communication and is aware that misunderstandings can occur based on those differences but is still unable to negotiate a shared understanding.	Has a minimal level of understanding of cultural differences in verbal and nonverbal communication; is unable to negotiate a shared understanding.
<b>Attitudes</b> <i>Curiosity</i>	Asks complex questions about other cultures, seeks out and articulates answers to those questions which reflect multiple cultural perspectives	Asks deeper questions about other cultures and seeks out answers to those questions	Asks simple or surface questions about other cultures	States minimal interest in learning more about other cultures
<b>Attitudes</b> <i>Openness</i>	Initiates and develops interactions with culturally different others. Suspends judgment in valuing her/his interactions with culturally different others.	Begins to initiate and develop interactions with culturally different others. Begins to suspend judgment in her/his valuing interactions with culturally different others.	Expresses openness to most if not all interactions with culturally different others. Has difficulty suspending any judgment in her/his interactions with culturally different others, and is aware of own judgment and expresses a willingness to change.	Receptive to interacting with culturally different others. Has difficulty suspending any judgment in her/his interactions with culturally different others, but is unaware of own judgment.

# FOUNDATIONS AND SKILLS FOR LIFELONG LEARNING VALUE RUBRIC

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## 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 [http://www.see-educoop.net/education\\_in/pdf/lifelong-oth-enl-t02.pdf](http://www.see-educoop.net/education_in/pdf/lifelong-oth-enl-t02.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

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### Definition

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

	Capstone 4	Milestones 3                      2		Benchmark 1
Curiosity	Explores a topic in depth yielding a rich awareness and/or little known information indicating intense interest in the subject.	Explores a topic in depth, yielding insight and/or information indicating interest in the subject.	Explores a topic with some evidence of depth, providing occasional insight and/or information indicating mild interest in the subject.	Explores a topic at a surface level, providing little insight and/or information beyond the very basic facts indicating low interest in the subject.
Initiative	Completes required work, generates and pursues opportunities to expand knowledge, skills, and abilities.	Completes required work, identifies and pursues opportunities to expand knowledge, skills, and abilities.	Completes required work and identifies opportunities to expand knowledge, skills, and abilities.	Completes required work.
Independence	Educational interests and pursuits exist and flourish outside classroom requirements. Knowledge and/or experiences are pursued independently.	Beyond classroom requirements, pursues substantial, additional knowledge and/or actively pursues independent educational experiences	Beyond classroom requirements, pursues additional knowledge and/or shows interest in pursuing independent educational experiences	Begins to look beyond classroom requirements, showing interest in pursuing knowledge independently
Transfer	Makes explicit references to previous learning and applies in an innovative (new & creative) way that knowledge and those skills to demonstrate comprehension and performance in novel situations.	Makes references to previous learning and shows evidence of applying that knowledge and those skills to demonstrate comprehension and performance in novel situations.	Makes references to previous learning and attempts to apply that knowledge and those skills to demonstrate comprehension and performance in novel situations.	Makes vague references to previous learning but does not apply knowledge and skills to demonstrate comprehension and performance in novel situations.
Reflection	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.	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.	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.	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.

# ORAL COMMUNICATION VALUE RUBRIC

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

## Definition

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

## Framing Language

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

## Glossary

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

- **Central message:** The main point/thesis/"bottom line"/"take-away" of a presentation. A clear central message is easy to identify; a compelling central message is also vivid and memorable.
- **Delivery techniques:** Posture, gestures, eye contact, and use of the voice. Delivery techniques enhance the effectiveness of the presentation when the speaker stands and moves with authority, looks more often at the audience than at his/her speaking materials/notes, uses the voice expressively, and uses few vocal fillers ("um," "uh," "like," "you know," etc.).
- **Language:** Vocabulary, terminology, and sentence structure. Language that supports the effectiveness of a presentation is appropriate to the topic and audience, grammatical, clear, and free from bias. Language that enhances the effectiveness of a presentation is also vivid, imaginative, and expressive.
- **Organization:** The grouping and sequencing of ideas and supporting material in a presentation. An organizational pattern that supports the effectiveness of a presentation typically includes an introduction, one or more identifiable sections in the body of the speech, and a conclusion. An organizational pattern that enhances the effectiveness of the presentation reflects a purposeful choice among possible alternatives, such as a chronological pattern, a problem-solution pattern, an analysis-of-parts pattern, etc., that makes the content of the presentation easier to follow and more likely to accomplish its purpose.
- **Supporting material:** Explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities, and other kinds of information or analysis that supports the principal ideas of the presentation. Supporting material is generally credible when it is relevant and derived from reliable and appropriate sources. Supporting material is highly credible when it is also vivid and varied across the types listed above (e.g., a mix of examples, statistics, and references to authorities). Supporting material may also serve the purpose of establishing the speaker's 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

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## Definition

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

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

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

# PROBLEM SOLVING VALUE RUBRIC

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## 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" solution: A simplistic option that is familiar from everyday experience but not tailored to the problem at hand (e.g. holding a bake sale to "save" an underfunded public library).
- Solution: An appropriate response to a challenge or a problem.
- Strategy: A plan of action or an approach designed to arrive at a solution. ( If the problem is a river that needs to be crossed, there could be a construction-oriented, cooperative (build a bridge with your community) approach and a personally-oriented, physical (swim across alone) approach. An approach that partially applies would be a personal, physical approach for someone who doesn't know how to swim.
- Support: Specific rationale, evidence, etc. for solution or selection of solution.

# PROBLEM SOLVING VALUE RUBRIC

for more information, please contact [value@aacu.org](mailto:value@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 (cell one) level performance.*

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



# QUANTITATIVE LITERACY VALUE RUBRIC

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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 career choice, will need basic QL skills such as the ability to draw information from charts, graphs, and geometric figures, and the ability to accurately complete straightforward estimations and calculations.

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

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

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

## Framing Language

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

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

# QUANTITATIVE LITERACY VALUE RUBRIC

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## Definition

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

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

	Capstone 4	Milestones		
		3	2	1
<b>Interpretation</b> <i>Ability to explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words).</i>	Provides accurate explanations of information presented in mathematical forms. Makes appropriate inferences based on that information. <i>For example, accurately explain the trend data shown in a graph and make reasonable predictions regarding what the data suggest about future events.</i>	Provides accurate explanations of information presented in mathematical forms. <i>For instance, accurately explain the trend data shown in a graph.</i>	Provides somewhat accurate explanations of information presented in mathematical forms, but occasionally makes minor errors related to computations or units. <i>For instance, accurately explain trend data shown in a graph, but may miscalculate the slope of the trend line.</i>	Attempts to explain information presented in mathematical forms, but draws incorrect conclusions about what the information means. <i>For example, attempt to explain the trend data shown in a graph, but will frequently misinterpret the nature of that trend, perhaps by confusing positive and negative trends.</i>
<b>Representation</b> <i>Ability to convert relevant information into various mathematical forms (e.g., equations, graphs, diagrams, tables, words).</i>	Skillfully converts relevant information into an insightful mathematical portrayal in a way that contributes to a further or deeper understanding.	Competently converts relevant information into an appropriate and desired mathematical portrayal.	Completes conversion of information but resulting mathematical portrayal is only partially appropriate or accurate.	Completes conversion of information but resulting mathematical portrayal is inappropriate or inaccurate.
<b>Calculation</b>	Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem. Calculations are also presented elegantly (clearly, concisely, etc.)	Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem.	Calculations attempted are either unsuccessful or represent only a portion of the calculations required to comprehensively solve the problem.	Calculations are attempted but are both unsuccessful and are not comprehensive.
<b>Application / Analysis</b> <i>Ability to make judgments and draw appropriate conclusions based on the quantitative analysis of data, while recognizing the limits of this analysis.</i>	Uses the quantitative analysis of data as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions from this work.	Uses the quantitative analysis of data as the basis for competent judgments, drawing reasonable and appropriately qualified conclusions from this work.	Uses the quantitative analysis of data as the basis for workmanlike (without inspiration or nuance, ordinary) judgments, drawing plausible conclusions from this work.	Uses the quantitative analysis of data as the basis for tentative, basic judgments, although is hesitant or uncertain about drawing conclusions from this work.
<b>Assumptions</b> <i>Ability to make and evaluate important assumptions in estimation, modeling, and data analysis.</i>	Explicitly describes assumptions and provides compelling rationale for why each assumption is appropriate. Shows awareness that confidence in final conclusions is limited by the accuracy of the assumptions.	Explicitly describes assumptions and provides compelling rationale for why assumptions are appropriate.	Explicitly describes assumptions.	Attempts to describe assumptions.
<b>Communication</b> <i>Expressing quantitative evidence in support of the argument or purpose of the work (in terms of what evidence is used and how it is formatted, presented, and contextualized).</i>	Uses quantitative information in connection with the argument or purpose of the work, presents it in an effective format, and explicates it with consistently high quality.	Uses quantitative information in connection with the argument or purpose of the work, though data may be presented in a less than completely effective format or some parts of the explication may be uneven.	Uses quantitative information, but does not effectively connect it to the argument or purpose of the work.	Presents an argument for which quantitative evidence is pertinent, but does not provide adequate explicit numerical support. (May use quasi-quantitative words such as "many," "few," "increasing," "small," and the like in place of actual quantities.)

# READING VALUE RUBRIC

*for more information, please contact [valuc@aacu.org](mailto:valuc@aacu.org)*



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

## Definition

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

## Framing Language

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

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

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

## Glossary

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

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

# READING VALUE RUBRIC

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## Definition

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

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

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

## TEAMWORK VALUE RUBRIC

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### 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.

for more information, please contact [value@aacu.org](mailto:value@aacu.org)



### 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.)

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

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

# WRITTEN COMMUNICATION VALUE RUBRIC

*for more information, please contact [valuc@aacu.org](mailto:valuc@aacu.org)*



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## Definition

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

## Framing Language

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

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

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

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

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

## Glossary

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

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



# WRITTEN COMMUNICATION VALUE RUBRIC

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## Definition

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

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

	Capstone 4	Milestones 3                      2		Benchmark 1
<b>Context of and purpose for writing</b> <i>Includes considerations of audience, purpose, and the circumstances surrounding the writing task(s).</i>	Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.	Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context).	Demonstrates awareness of context, audience, purpose, and to the assigned tasks(s) (e.g., begins to show awareness of audience's perceptions and assumptions).	Demonstrates minimal attention to context, audience, purpose, and to the assigned tasks(s) (e.g., expectation of instructor or self as audience).
<b>Content Development</b>	Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work.	Uses appropriate, relevant, and compelling content to explore ideas within the context of the discipline and shape the whole work	Uses appropriate and relevant content to develop and explore ideas through most of the work.	Uses appropriate and relevant content to develop simple ideas in some parts of the work.
<b>Genre and disciplinary conventions</b> <i>Formal and informal rules inherent in the expectations for writing in particular forms and/or academic fields (please see glossary).</i>	Demonstrates detailed attention to and successful execution of a wide range of conventions particular to a specific discipline and/or writing task (s) including organization, content, presentation, formatting, and stylistic choices	Demonstrates consistent use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices	Follows expectations appropriate to a specific discipline and/or writing task(s) for basic organization, content, and presentation	Attempts to use a consistent system for basic organization and presentation
<b>Sources and evidence</b>	Demonstrates skillful use of high quality, credible, relevant sources to develop ideas that are appropriate for the discipline and genre of the writing	Demonstrates consistent use of credible, relevant sources to support ideas that are situated within the discipline and genre of the writing.	Demonstrates an attempt to use credible and/or relevant sources to support ideas that are appropriate for the discipline and genre of the writing.	Demonstrates an attempt to use sources to support ideas in the writing.
<b>Control of syntax and mechanics</b>	Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free.	Uses straightforward language that generally conveys meaning to readers. The language in the portfolio has few errors.	Uses language that generally conveys meaning to readers with clarity, although writing may include some errors.	Uses language that sometimes impedes meaning because of errors in usage



## APPENDIX E

### Templates

#### Defining Your Student Learning Goals:

Planning courses by asking ourselves what we want students to know and know how to do by the end of our classes helps us create courses that include reading, assignments, and exams that help students meet those goals. However, even though we often begin course planning with learning goals in mind, we sometimes do not share those goals with our students. Research on learning suggests that students learn more if we let them know at the beginning where they will end up. Such knowledge allows them to create a kind of roadmap, drawing the connections between the major places in the course, and identifying purposes for what faculty ask them to do and think about. This page provides faculty with information on articulating and assessing course goals.

In the boxes below briefly list words or descriptions of the actions of the course that facilitate the acquisition of certain skills, knowledge or attitudes of the ideal student as they relate to the course/purpose, are reflective of program priorities in the long-term, are reflective of course priorities over the semester, and that illustrate the 'ideal' learner of the course.

<b><u>Actions of the course</u> that facilitate the acquisition of attitudes or values developed as related to the purpose statement and that illustrate the 'ideal' learner of the course</b>	
<b><u>Actions of the course</u> that facilitate the acquisition of skills or performance ability acquired as related to the purpose statement and that illustrate the 'ideal' learner of the course.</b>	
<b><u>Actions of the course</u> that facilitate the acquisition of knowledge and concepts students will have as related to the purpose statement and that illustrate the 'ideal' learner of the course.</b>	

### Drafting your Learning Goals:

In the boxes below write a few brief (3-4), succinct statements state the **overarching goals** of the course, particularly as they relate to student learning. Course goals are generally broadly stated and focus on the semester long outcomes of the course

1	
2	
3	
4	
5	

### Writing Your Student Learning Outcomes: Knowledge, Skills, Abilities, Values and Attitudes<sup>9</sup>

In the boxes below briefly list works or descriptions of attitudes, skills, performance level, or knowledge that you would like your students to have or do as a result of this course.

<b>Attitudes or values developed as a result of this course.</b>	
<b>Skills or performance ability acquired as a result of this course.</b>	
<b>Knowledge and concepts students will have as a result of this course.</b>	

<sup>9</sup> Adapted from SRJC Project Learn: Course and Program Student Learning Outcomes Assessment Handbook

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**Drafting your Learning Outcomes:<sup>10</sup>**

<b>1</b>	
<b>2</b>	
<b>3</b>	
<b>4</b>	
<b>5</b>	
<b>6</b>	
<b>7</b>	

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<sup>10</sup> Op. cit.

## Writing Your Rubrics

### Example 1: Build your learning rubrics

Outcomes	Very Poor Achievement of Outcome (1)*	Poor Achievement of Outcome (2)	Average Achievement of Outcome [Benchmark Standard] (3)	Good Achievement of Outcome (4)	Very Good Achievement of Outcome (5)

\*Rubric criteria explain “explicitly” a particular level of success on a given criterion. Space below each criterion is a space for grading comments by the professor.

## Example 2: Using your outcomes/rubrics for grading purposes

Outcomes*	Initial (1)**	Emerging (2)	Developed (3)	Mostly Developed (4)	Highly Developed (5)

\*Criterion would be the parameters by which you are going to grade a given assignment.

\*\*Rubric criteria explain “explicitly” a particular level of success on a given criterion. Space below each criterion is a space for grading comments by the professor.

## APPENDIX F Choosing the Right Measure

### Choosing the Right Assessment Tools<sup>11</sup>

Examples of various assessment tools are included in the table below. It should be noted that the categorizations may vary depending upon your perspective and the way in which you construct the assessment.

<b>Tool</b>	<b>Method</b> D= Direct I= Indirect	<b>Domain</b> C= Cognitive P= Psychomotor A= Affective	<b>Usage Type</b> F= Formative S= Summative	<b>Bloom's level</b> K= Knowledge C= Comprehension A= Application ASE= Analysis or Synthesis or Evaluation	<b>Pros</b>	<b>Cons</b>
<b>Multiple Choice Exam</b>	D	C	F or S	K, C If carefully constructed ASE	easy to grade; objective	reduces assessment to multiple choice answers
<b>Licensing Exams</b>	D	C	S	K, C, A	easy to score and compare	no authentic testing, may outdate
<b>Standardized Cognitive Tests</b>	D	C	S	K, C, A?	comparable between students	heavily dependent on exposure to topics on test
<b>Checklists</b>	D	C, A, P	F or S	Variable	very useful for skills or performances; students know exactly what is missing	can minimize large picture and interrelatedness; evaluation feedback is basically a yes/no - present/absent - without detail
<b>Essay</b>	D	C, A	F or S	K, C, A, ASE	displays analytical and synthetic thinking well	time consuming to grade, can be subjective
<b>Case Study</b>	D	C, A	F or S	K, C, A, ASE	displays analytical and synthetic thinking well; connects other knowledge to topic	creating the case is time consuming, dependent on student knowledge from multiple areas
<b>Problem Solving</b>	D	C	F or S	K, C, A, ASE	displays analytical and synthetic thinking well; authentic if real world situations are used	difficult to grade due to multiple methods and potential multiple solutions

<sup>11</sup> (Based on Fulks, Janet, "Assessing Student Learning in Community Colleges", Bakersfield College, 2004 obtained at <http://online.bakersfieldcollege.edu/courseassessment/Default.htm>)

<b>Tool</b>	<b>Method</b> D= Direct I= Indirect	<b>Domain</b> C= Cognitive P= Psychomotor A= Affective	<b>Usage Type</b> F= Formative S= Summative	<b>Bloom's level</b> K= Knowledge C= Comprehension A= Application ASE= Analysis or Synthesis or Evaluation	<b>Pros</b>	<b>Cons</b>
<b>Oral Speech</b>	D	C	F or S	Variable K, C, A, ASE	easily graded with rubric; allows other students to see and learn what each student learned; connects general education goals with discipline-specific courses	difficult for ESL students; stressful for students; takes course time; must fairly grade course content beyond delivery
<b>Debate</b>	D	C, A	F or S	K, C, A, ASE	provides immediate feedback to the student; reveals thinking and ability to respond based on background knowledge and critical thinking ability	requires good rubric; more than one evaluator is helpful; difficult for ESL students; stressful for students; takes course time
<b>Product Creation &amp; Special Reports</b>	D	C, P, A	F or S	Variable K, C, A, ASE	students can display skills, knowledge, and abilities in a way that is suited to them	must have clearly defined criteria and evaluative measures; "the look" can not override the content
<b>Flowchart or Diagram</b>	D	C	F or S	C, A, ASE	displays original synthetic thinking on the part of the student; perhaps the best way to display overall high level thinking and articulation abilities	more difficult to grade, requiring a checklist or rubric for a variety of different answers; difficult for some students to do on the spot
<b>Portfolios</b>	D	C, P	S	Variable	provides the students with a clear record of their work and growth; best evidence of growth and change over time; students can display skills, knowledge, and abilities in a way that is suited to them; promotes self-assessment	Time consuming to grade; different content in portfolio makes evaluating difficult and may require training; bulky to manage depending on size
<b>Exit Surveys</b>	D and I	A	S	ASE	provides good summative data; easy to manage data if Likert-scaled responses are used	Likert scales limit feedback, open-ended responses are bulky to manage



<b>Tool</b>	<b>Method</b> D= Direct I= Indirect	<b>Domain</b> C= Cognitive P= Psychomotor A= Affective	<b>Usage Type</b> F= Formative S= Summative	<b>Bloom's level</b> K= Knowledge C= Comprehension A= Application ASE= Analysis or Synthesis or Evaluation	<b>Pros</b>	<b>Cons</b>
<b>Performance</b>	D	C, P	F or S	Variable K, C, A, ASE	provides best display of skills and abilities; provides excellent opportunity for peer review; students can display skills, knowledge, and abilities in a way that is suited to them	stressful for students; may take course time; some students may take the evaluation very hard - evaluative statements must be carefully framed
<b>Capstone project or course</b>	D	C, P, A	F or S	ASE	best method to measure growth overtime with regards to a course or program - cumulative	focus and breadth of assessment and understanding all the variables to produce assessment results are important; may result in additional course requirements; requires coordination and agreement on standards
<b>Team Project</b>	D	C, A	F or S	Variable K, C, A, ASE	connects general education goals with discipline-specific courses	must fairly grade individuals as well as team; grading is slightly more complicated; student interaction may be a challenge
<b>Reflective self-assessment essay</b>	D and I	C, A	S	ASE	provides invaluable ability to evaluate affective growth in students	must use evidence to support conclusions, not just self-opinionated assessment
<b>Satisfaction and Perception Surveys</b>	I	C, P, A	S	C, A, ASE	provides good indirect data; data can be compared longitudinally; can be used to determine outcomes over a long period of time	respondents may be influenced by factors other than those being considered; validity and reliability must be closely watched

## APPENDIX G Improving Learning

### Collection and Analysis<sup>12</sup>

Identifying how you can use the results of your assessment data to improve teaching and learning in your course is essential to the assessment process. The first step is organizing the information you have collected. Think about what you were assessing and what assessment method you used. What type of data did that method yield? For example, if you decided to assess student knowledge at the beginning of the course you may have chosen to use a Student Background Probe as an initial assessment tool. This probe provides a variety of data, both qualitative and quantitative, on each student in your class and offers a good starting point from which to implement other evaluations and assessments.

After you determined the types of data you collected through the background knowledge probe, you will want to analyze the data and determine what these results tell you. There are a variety of ways to analyze your data, ranging from informal “eye-balling” analysis to more formal statistical manipulation. You may find the following worksheet helpful in organizing the information you’ve collected.

**Analyzing Your Data** (the first entry offers examples of answers you may give)

Assessing What?	Assessment Method	Type of Data Collected	What Do the Results Say?	What Will You Do?	Any Surprises?
Student knowledge of course content prior to beginning course	Student background probe	Quantitative survey data and open-ended response	60% of students have some pre-knowledge. 40% have none.	Challenge those who know, bring those who don't up to speed.	I thought more students would already know the information I asked for.

<sup>12</sup> OAPA Handbook COURSE-Based Review and Assessment • UMass Amherst

**An Action Plan** (entries 1 and 2 offer examples of answers you may give)<sup>13</sup>

Action Item	Action to Take	Steps to Improve
1	Encourage students who have demonstrated prior knowledge	1. From the data, identify content areas of greater knowledge 2. Develop extra credit tasks for students to complete to build on their knowledge 3. Establish a reward system to eliminate sense of extra work as “punitive”
2	Bring those with less prior knowledge up to speed	1. 2. 3.
3		1. 2. 3.
4		1. 2. 3.
5		1. 2. 3.

*Using an action plan such as the one above can help you determine and frame your experience with assessment in terms of these results. This information can help you determine what you liked about the process, what you didn't like and what you found out. A plan like this can also be useful if you are thinking about adjusting your instructional methods during the semester, or at the beginning of the course when you teach it again, based on the results of your assessment work. Collecting and analyzing the data, then deciding in a concrete way what you will do with the data in the context of course instruction and student learning can help you to document your own effectiveness in the classroom as well as to identify areas of assessment that might be more broadly useful.*

<sup>13</sup> OAPA Handbook COURSE-Based Review and Assessment • UMass Amherst

## Reporting Your Results<sup>14</sup>

In many cases, the sole purpose of your assessment activity may be for your own edification. If so, you need go no further with your results. However, in other situations, your assessment information may also be valuable to your department's curricular revisions, general education reform, or to granting organizations that help support your course revisions. In order for your findings to be more broadly useful, you will need to communicate your findings to other audiences. This type of "report" should cover five major components of assessment:

1. the goals and objectives you established for your course
2. the assessment methods you chose or designed
3. what you found out about student learning in your classroom
4. how these findings are being used for improvement
5. action to take

The matrix which follows may help you organize your results.

### Assessment Matrix

Goal/Outcome	Method	Results	Interpretation	Action to Take

<sup>14</sup> adapted from Palomba, C. A., & Banta, T. W., *Assessment essentials* (1999).