Quality Assurance Aligned to a Global Economy: What Employers Say and What Educators Can and Should Do

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www.aacu.org/leap/public-opinion-research

www.aacu.org/value
Liberal Education and America’s Promise (2005-present)

• a national initiative that champions the importance of a twenty-first-century liberal education—for individual students and for a nation dependent on economic creativity and democratic vitality.

• LEAP advocates for a capacious vision of liberal education that is not confined just to liberal arts colleges nor exclusive to liberal arts and sciences disciplines. The LEAP definition of liberal education:

An approach to college learning that empowers individuals and prepares them to deal with complexity, diversity and change. It emphasizes broad knowledge of the wider world (e.g., science, culture and society) as well as in-depth achievement in a specific field of interest. It helps students develop a sense of social responsibility as well as strong intellectual and practical skills that span all areas of study, such as communication, analytical and problem-solving skills, and includes a demonstrated ability to apply knowledge and skills in real-world settings.
Liberal Education and America’s Promise (2005-present)

• Essential Learning Outcomes
  – A Guiding Vision and National Benchmarks for College Learning and Liberal Education in the 21st Century

• High Impact Practices
  – Helping Students Achieve the Essential Learning Outcomes

• Authentic Assessments of Student Learning
  – Probing Whether Students Can APPLY Their Learning – to Complex Problems and Real-World Challenges

– Inclusive Excellence
  – Diversity, Equity, Quality of Learning for All Groups of Students
LEAP Areas of Work

• **Public Advocacy**—leadership through National Leadership Council, Presidents’ Trust, and work in LEAP states to make the case for liberal education and importance of essential learning outcomes

• **Campus Action**—networking and technical assistance to support campus efforts to increase all students’ achievement of essential learning outcomes and to communicate more effectively about liberal education;

• **Authentic Evidence**—reports on public opinion, high-impact practices that lead to essential learning outcomes, assessment approaches that deepen student learning, and periodic reports of national data on student achievement
2015 Public Opinion Research

• Student focus groups (fall 2014)
• Student national survey and employer national survey (commissioned by AAC&U; conducted by Hart Research Associates; first of several reports on findings released January 2015)

Falling Short? College Learning and Career Success

www.aacu.org/leap/public-opinion-research
Three in five employers believe that it takes BOTH specific knowledge/skills and broad knowledge/skills to achieve long-term career success.

Which is more important for recent college graduates to have who want to pursue advancement and long-term career success at your company?

(employers)

Range of knowledge and skills that apply to a range of fields or positions

Knowledge and skills that apply to a specific field or position

25%

15%

60%

College students:
Specific 15%
Both 63%
Broad range 22%

Both field-specific and broad range of knowledge and skills
Employers are in broad agreement on college learning outcomes for all students, regardless of their chosen field of study.

Employers’ agreement with statements about college learning aims regardless of student’s chosen field of study

- All college students should have educational experiences that teach them how to **solve problems with people whose views are different from their own**
  - Strongly agree: 59%
  - Somewhat agree: 37%
  - Total agree: 96%

- All college students should gain an **understanding of democratic institutions and values**
  - Strongly agree: 32%
  - Somewhat agree: 55%
  - Total agree: 87%

- Every college student should take courses that build the **civic knowledge, skills, and judgment** essential for contributing to our democratic society
  - Strongly agree: 33%
  - Somewhat agree: 53%
  - Total agree: 86%

- Every college student should acquire broad **knowledge in the liberal arts and sciences**
  - Strongly agree: 29%
  - Somewhat agree: 49%
  - Total agree: 78%

- All college students should gain **intercultural skills** and an understanding of societies and countries outside the United States
  - Strongly agree: 21%
  - Somewhat agree: 57%
  - Total agree: 78%
## Learning Outcomes that at Least Four in Five Employers Rate as Very Important

*Proportions of employers rating each skill/knowledge area as very important for recent college graduates to have*

<table>
<thead>
<tr>
<th>Skill/Knowledge Area</th>
<th>Employer Rating</th>
<th>Students: Very Important for Success in Workplace</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral communication</td>
<td>85%</td>
<td>78%</td>
</tr>
<tr>
<td>Working effectively with others in teams</td>
<td>83%</td>
<td>77%</td>
</tr>
<tr>
<td>Written communication</td>
<td>82%</td>
<td>75%</td>
</tr>
<tr>
<td>Ethical judgment and decision-making</td>
<td>81%</td>
<td>74%</td>
</tr>
<tr>
<td>Critical/analytical thinking</td>
<td>81%</td>
<td>79%</td>
</tr>
<tr>
<td>Applying knowledge/skills to real world</td>
<td>80%</td>
<td>79%</td>
</tr>
</tbody>
</table>

*8, 9, 10 ratings on zero-to-10 scale, 10 = very important*
Learning Outcomes that More than Half of Employers Rate as Very Important

Proportions of employers rating each skill/knowledge area as very important for recent college graduates to have*

<table>
<thead>
<tr>
<th>Skill/Knowledge Area</th>
<th>Percentage</th>
<th>Students: very important for success in workplace*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyzing/solving complex problems</td>
<td>70%</td>
<td>73%</td>
</tr>
<tr>
<td>Locating, organizing, evaluating information</td>
<td>68%</td>
<td>73%</td>
</tr>
<tr>
<td>Being innovative/creative</td>
<td>65%</td>
<td>69%</td>
</tr>
<tr>
<td>Staying current on technologies</td>
<td>60%</td>
<td>68%</td>
</tr>
<tr>
<td>Working with numbers/statistics</td>
<td>56%</td>
<td>55%</td>
</tr>
<tr>
<td>Analyzing/solving problems with people from different backgrounds</td>
<td>56%</td>
<td>71%</td>
</tr>
</tbody>
</table>

*8, 9, 10 ratings on zero-to-10 scale, 10 = very important
Learning Outcomes that Fewer than Two in Five Employers Rate as Very Important

Proportions of employers rating each skill/knowledge area as very important for recent college graduates to have*

- Awareness of diverse cultures within the U.S.: 37%
- Staying current on developments in science: 26%
- Staying current on global developments, trends: 25%
- Awareness of diverse cultures outside of the U.S.: 23%
- Proficiency in language other than English: 23%

Students: very important for success in workplace*

- 58%
- 49%
- 49%
- 46%
- 35%

*8, 9, 10 ratings on zero-to-10 scale, 10 = very important
Employers perceive great value in students’ completing applied learning projects, but see room to improve college students’ preparedness to complete applied learning projects.

- 88% think that it is important for colleges to ensure that ALL students are prepared with the skills/knowledge needed to complete a significant applied learning project.

  ➔ BUT just 14% of employers think that most college students are prepared with the skills/knowledge needed to complete a significant applied learning project.

- 80% say that it is very important for recent graduates to demonstrate the ability to apply learning in real-world settings.

  ➔ BUT only 23% of employers think that recent college graduates are very well prepared to apply knowledge and skills in real-world settings.

- 60% believe that ALL college students should be expected to complete a significant applied learning project before graduating.
Employers say they are more likely to consider hiring recent college graduates who have completed an applied learning or project-based learning experience.

*How much more likely is your company to consider hiring recent college graduates if they have had this experience?*

<table>
<thead>
<tr>
<th>Experience Description</th>
<th>Much more likely to consider</th>
<th>Somewhat more likely to consider</th>
<th>Students: more likely to be hired</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internship/apprenticeship with company/organization</td>
<td>60%</td>
<td></td>
<td>94%</td>
</tr>
<tr>
<td>Senior thesis/project demonstrating knowledge, research, problem-solving, communication skills</td>
<td>39%</td>
<td></td>
<td>87%</td>
</tr>
<tr>
<td>Multiple courses involving significant writing</td>
<td>27%</td>
<td></td>
<td>81%</td>
</tr>
<tr>
<td>Research project done collaboratively with peers</td>
<td>24%</td>
<td></td>
<td>80%</td>
</tr>
<tr>
<td>Service-learning project with community organization</td>
<td>21%</td>
<td></td>
<td>69%</td>
</tr>
<tr>
<td>Field project in diverse community with people from different background/culture</td>
<td>22%</td>
<td></td>
<td>66%</td>
</tr>
<tr>
<td>Study abroad program</td>
<td>13%</td>
<td></td>
<td>51%</td>
</tr>
</tbody>
</table>
Employers give college graduates lower scores for preparedness across learning outcomes than current students give themselves.

Proportions who believe they/recent college graduates are well prepared in each area*

*8-10 ratings on zero-to-ten scale
Employers give college graduates lower scores for preparedness across learning outcomes than current students give themselves.

Proportions who believe they/recent college graduates are well prepared in each area*

(continued)

- Analyzing/solving complex problems: Employers 24%, Students 59%
- Applying knowledge/skills to real world: Employers 23%, Students 59%
- Awareness of/experience with diverse cultures/communities in the US: Employers 21%, Students 48%
- Staying current on developments in science: Employers 21%, Students 44%
- Working with people from different backgrounds: Employers 18%, Students 55%
- Staying current on global developments/trends: Employers 18%, Students 43%
- Proficient in other language: Employers 16%, Students 34%
- Awareness of/experience with diverse cultures outside the US: Employers 15%, Students 42%

*8-10 ratings on zero-to-ten scale
Most employers say they would find e-portfolios useful.

Employers: How useful do you find/would you find this in helping you evaluate job applicants’/recent college graduates’ potential to succeed at your company?

- College transcript: 45% (Very useful 9%, Very/fairly useful 36%)
- Electronic portfolio of student work summarizing and demonstrating accomplishments in key skill and knowledge areas: 80% (Very useful 36%, Very/fairly useful 44%)
VALUE [Valid Assessment of Learning in Undergraduate Assessment] Project
(www.aacu.org/value)

- 16 national rubrics

-Created to:
- Develop shared understanding of common learning outcomes
- Improve direct assessment of student learning (in text and non-text formats)
- Encourage transparency and student self-evaluation of learning

Rubric Development & Use

- National Advisory Panel (12 people)
- 16 Inter-disc/Inter-institutional teams of faculty/scholars (Over 120)
- Reviewed existing rubrics to develop broad agreement on dimensions of outcomes
- Tested in 2-4 waves on over 100 campuses
- National reliability study
- As of Sept. 2014 accessed by over 5661 institutions/organizations, 32,729 individuals
- Domestic & international, K-12, state university systems
- Consortia: RAILS, Connect2Learning, South Metropolitan Higher Education Consortium, Multi-State Collaborative for Learning Outcomes Assessment
- Approved for use in Voluntary System of Accountability (VSA)

From Creation to Capture: Assessment that Matters:
Articulating Outcomes to Gauge Improvement
List of VALUE Rubrics

- Knowledge of Human Cultures & the Physical & Natural Worlds
  - Content Areas \( \rightarrow \) No Rubrics
- Intellectual and Practical Skills
  - Inquiry & Analysis
  - Critical Thinking
  - Creative Thinking
  - Written Communication
  - Oral Communication
  - Reading
  - Quantitative Literacy
  - Information Literacy
  - Teamwork
  - Problem-solving
- Personal & Social Responsibility
  - Civic Knowledge & Engagement
  - Intercultural Knowledge & Competence
  - Ethical Reasoning
  - Foundations & Skills for Lifelong Learning
  - Global learning
- Integrative & Applied Learning
  - Integrative & Applied Learning
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 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 adopt 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-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, 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.
# The Anatomy of a VALUE Rubric

**Criteria**

**Connections to Experience**
Connects relevant experience and academic knowledge

- **Capacity**
  - 4: Mentally synthesizes connections among experiences outside of the formal classroom (e.g., life experiences, civic involvements, work experiences, etc.), to broaden own points of view
  - 3: Independently creates wholes out of multiple parts (e.g., examples, facts, theories from more than one field of study or perspective)
  - 2: Adapts and applies skills, abilities, theories, or methodologies gained in one situation to new situations
  - 1: Reflects on past and challenging contexts, may be evident in self-assessment, reflection, or creative work

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**Levels**

- **Performance**
- **Descriptors**

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**Integrative Learning VALUE Rubric** for more information, please visit:valueRubric.org

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

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

<table>
<thead>
<tr>
<th>Connections to Experience</th>
<th>Capacity</th>
<th>Milestones</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentally synthesizes connections among experiences outside of the formal classroom (e.g., life experiences, civic involvements, work experiences, etc.), to broaden own points of view.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Independently creates wholes out of multiple parts (e.g., examples, facts, theories from more than one field of study or perspective).</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adapts and applies skills, abilities, theories, or methodologies gained in one situation to new situations.</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflects on past and challenging contexts, may be evident in self-assessment, reflection, or creative work.</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Power of Rubrics as Tools for Both Assessment and High-Impact Learning

• Rubrics to help guide students and faculty
• Places individual faculty judgment within national shared experience; national benchmarks
• Encourages students’ best work, encourages self-assessment, and allows for mining of samples for assessment purposes
• Allows learning to be seen as portable, for cumulative learning and assessment, to complement other high-impact practices, e.g. e-portfolios
• Can build up from course level to institutional reporting needs AND down from general to specific program/course context
Quality Assurance Today: Must Account for Vision of Integrative and Problem-Based Learning

- What students can do with knowledge and experience
- Portable, significant and connected - ePortfolios
- Well-structured knowledge (skill and drill), plus ill-structured knowledge (problems, complex, no one answer – identify/define the problem)
- Hard skills (memorization, calculation) and Soft skills (critical thinking, teamwork, ethics, equity) = Essential skills
- Learning is social (individuals learn; learning is a shared enterprise)
- Meaning-making and authorship – signature work (generators of knowledge)
- Benchmarks (transparency) – local and nationwide
Multistate Collaborative to Advance Learning Outcomes – Taking VALUE to Scale

Multistate Collaborative to Advance Learning Outcomes Assessment
9 states + SHEEO + AAC&U

Multistate Collaborative (MSC)
State Partners:
CT, IN, KY, MA, MO, MN, OR, RI, and UT

Steering Committee:
Made up of state leads
Pilot Test a multi-state model of outcomes assessment

www.aacu.org/value/msc
www.sheeo.org
https://sites.google.com/site/MADHESTUDENTLEARNING
AAC&U Resources to Help

- **The VALUE Breakthrough: Getting the Assessment of Student Learning in College Right** by Daniel F. Sullivan (2015)
- **Using the VALUE Rubrics for Improvement of Learning and Authentic Assessment** by Terrel Rhodes and Ashley Finley (2013)