

# Our Students' Best Work:

A Framework for Accountability Worthy of Our Mission



A Statement from the Board of Directors of  
(2ND EDITION, 2008)



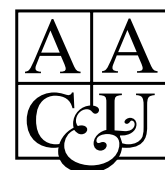
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AAC&U thanks these scholars and numerous faculty members and academic administrators who responded to early drafts of this document.

## Preface

On behalf of the Association of American Colleges and Universities (AAC&U), we are pleased to present this updated edition of *Our Students' Best Work: A Framework for Accountability Worthy of Our Mission*. This statement, framed and approved by the AAC&U Board of Directors, is designed to help campuses respond to calls for greater accountability in ways that strengthen as well as document the quality of student learning in college.

The national dialogue about these issues has become intense, with discussions taking place in statehouses across the country as well as in the U.S. Congress and in the U.S. Department of Education. We believe that it is essential that these accountability efforts focus on the knowledge, skills, and capacities that are most important for today's students. They also should take into account the best campus practices already developed to advance and assess these outcomes.

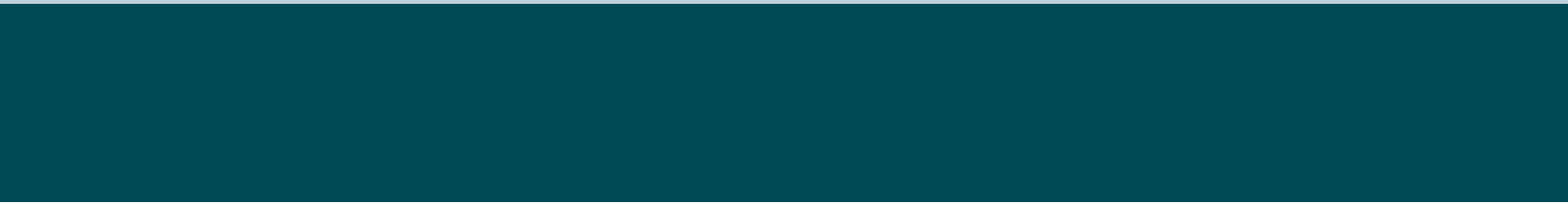
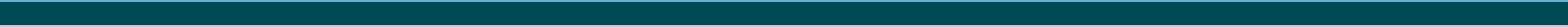
Thoughtful and forceful leadership from within the academy itself on both assessment and accountability is more essential today than ever. Educational leaders are already doing good work to define what academic excellence really means in today's world. It is vitally important that we build on this foundation to find improved ways to demonstrate achievement of academic excellence by students and institutions.

This statement is designed to help colleges and universities as they continue to improve upon strategies of assessment and accountability appropriate to their own missions. It also is intended to assist institutions as they respond to calls for greater accountability from both policy makers and members of the general public.

We hope *Our Students' Best Work* will prove useful in your own campus efforts and policy dialogues. We encourage you to share with AAC&U the promising assessment strategies that you are developing. We will do our best to disseminate your work throughout the AAC&U community and among external stakeholders throughout the country.

Daniel Sullivan  
Chair of the Board of Directors

Carol Geary Schneider  
President





## Introduction

FOR THE PAST TWENTY-FIVE YEARS, the Association of American Colleges and Universities (AAC&U) has repeatedly called for the academy to take responsibility for assessing the quality of student learning in college. The vision developed in its 1984 report, *Integrity in the College Curriculum*, elaborated further in the 2002 report, *Greater Expectations: A New Vision for Learning as a Nation Goes to College*, and most recently in *College Learning for the New Global Century*, contains three elements related to quality:

- A clearly articulated, collective conception of the qualities of a college-educated person
- Intentionality and coherence in educational programs to cultivate those qualities
- Assessment to determine the extent to which the desired learning has been achieved

Yet, despite the development over the past three decades of a veritable “assessment movement,” too many institutions and programs still are unable to answer legitimate questions about what their students are learning in college. Both the aims and the outcomes of college have remained unclear.

Simultaneously, policy leader and employer concerns about the level and quality of college learning have become increasingly urgent. Even the significant trust that the general public has long held for higher education has begun to erode.

Moreover, the lack of evidence on student learning outcomes has proved damaging. In the absence of consistent and broad-based leadership on assessment and accountability from the academy, a politically popular accountability ideology has swept statehouses across the country and is capturing the allegiance of many lawmakers of both major parties. This alternative ideology, in brief, threatens to shortchange accountability by holding the academy to standards for students’ higher learning that are much too low.

While specific accountability proposals from this new source vary, they have one feature in common. They regard a particular kind of standardized testing—multiple-choice, “one-best-answer” tests—as the right way to assess student knowledge and hold the academy “accountable.” Leaders of the testing industry encourage enthusiasm for this kind of thinking by extolling the virtues of their tests.

Interest in mass testing has been fueled nationally by the No Child Left Behind law that mandates school testing in multiple grades. Schools that do not measure up on the chosen tests face serious consequences. While it is certainly a major step forward to hold the schools accountable for all students' academic achievement, knowledgeable researchers have pointed to multiple problems with the state tests being used at various levels, including in high schools. For example, many state high school tests still focus only on easy-to-measure factual knowledge and reactive answers (Achieve 2002), rather than higher-order abilities such as critical thinking, evidence-based reasoning, integrative thinking, and problem solving. Most of the state tests evaluate only an eighth- or ninth-grade level of achievement (Achieve 2004).

**Ignoring these problems, many policy makers now want to use the same logic and make a similar form of mass testing the focus of accountability in higher education. This would be an enormous misuse of time and scarce resources. It is the wrong approach to the challenge of holding higher education accountable.**

Students study at the college level in hundreds of different academic departments and programs. These programs reflect very different communities of inquiry and practice. The kinds of tests being used for school assessment cannot begin to probe the distinctive forms of excellence expected across this multitude of different fields.

**Assessing what students have learned in colleges and universities requires a sophisticated understanding both of context and of how knowledge and skills are to be used.** Students typically do their best and most advanced work in their major fields of specialization, and they should be held accountable for knowledge and skills that are deemed essential at an advanced level, whether the field is physics, psychology, or pharmacy.

What is regarded as excellent writing in chemistry, for example, because of its direct, descriptive, and succinct language, is very different from the well-told analytical narrative in history or the evidence-based scan of policy alternatives appropriate to public administration. A common test of communication skills cannot probe students' highest skill level, because advanced skill takes different forms in different fields. Professional fields such as law and medicine do not test educational accomplishments with the same generic test, and undergraduate institutions should not do so either.

This does not mean educators and educational institutions should be exempt from accountability. Rather, accountability for the highest standards of learning calls for new forms of critical inquiry and reflective practice—forms that are both appropriate to higher education's mission and feasible in the contemporary academy.

Even if better tests continue to be developed, standardized tests *alone* are an inadequate and inappropriate strategy to foster advanced learning and accountability in higher education. *Our Students' Best Work* outlines approaches to assessment that focus and deepen student achievement.

## *What Is to Be Done?*

AAC&U AFFIRMS THAT ACCOUNTABILITY IS ESSENTIAL, but that the form it takes must be worthy of our mission. This means we must hold ourselves accountable for assessing our students' best work, not generic skills and not introductory levels of learning. Any accountability framework must first, of course, respect the diversity of institutional missions and students' educational goals in the contemporary academy. The framework suggested below is designed to accommodate differences in institutional mission while still holding higher education institutions accountable for a set of key learning outcomes that all college graduates should achieve regardless of their field of study or choice of institution.

The first step is to establish clarity about the kinds of learning that make a difference for all college graduates over time: as thoughtful people, as participants in the economy, and as citizens.

AAC&U's more than 1,150 college and university members represent the spectrum of postsecondary institutions: two-year and four-year; public and private; large and small. All are committed to ensuring that every student experiences the benefits—intellectual, economic, civic, social, and intercultural—of a well-designed and intellectually challenging liberal education.

Liberal education, as a respected educational tradition, has guided U.S. colleges and universities to unrivaled, world-class standing. Any tradition with deep historical roots necessarily adapts to reflect the many social, economic, cultural, and technological changes that occur over the years. Consider two examples. In the nineteenth century, liberal education primarily served young men who were preparing for leadership positions, often in the clergy, medicine, and law. Now, liberal education aims to be inclusive and to provide an empowering education to widely diverse students. In the twentieth century, many came to contrast liberal education with professional education and to regard it as, by definition, not “practical.” But in today's knowledge-based economy, a good liberal education embraces science and new technologies, hands-on research, global knowledge, teamwork, cross-

cultural learning, active engagement with the world beyond the academy, and a commitment to lifelong learning, as well as the acquisition of knowledge and skills.

These forms of learning provide a strong foundation for success in a dynamic economy. AAC&U has conducted public opinion research that demonstrates clearly that business leaders want more graduates to benefit from a liberal education (pp. 15–19). These outcomes are also essential as a foundation for civic participation and for a meaningful life.

The opposite of liberal education is narrow, situation-specific training. While situation-specific training has many good uses, by itself it is insufficient preparation for a world characterized by complexity, conflicting judgments, and accelerating change. Even students in technical fields, therefore, need and deserve the complementary benefits of a liberal education to help them make sense of the social and environmental contexts in which they will use their skills, and to prepare them for lifelong work rather than just an initial job.

In short, a contemporary liberal education rests on a vital historic tradition and reflects current realities. New frameworks for educational accountability should focus on students' high level of achievement in the college outcomes that characterize a liberal education.

## *Focusing on Key Educational Outcomes*

**THE PUBLIC HAS QUESTIONS ABOUT THE QUALITY OF EDUCATION that colleges and universities are providing, and it deserves to know how well students are doing. It is time for leaders of education to embrace a set of highly valued and widely affirmed educational goals, establish high standards for each, and assess their achievement across the curriculum.**

AAC&U has summarized the essential outcomes of an undergraduate liberal education in its 2007 report, *College Learning for the New Global Century*. We propose using them as a framework for assessment and accountability.

These outcomes for student learning are not arbitrarily chosen. Rather, there is an emerging consensus across many professions, the business community, civic leadership, and the academy that these liberal education capabilities are valuable for work, citizenship, and a satisfying life (see p. 6 and pp. 15–19).

These outcomes are valuable, it is now widely agreed, because they prepare students to bring knowledge, experience, and reflective judgment to the complexity of the contemporary world. As AAC&U noted in its 2007 report, the essential learning outcomes described on page 6 below “are important for a globally engaged democracy, for a dynamic, innovation-fueled economy, and for the development of individual capability” (AAC&U 2007). They give graduates a strong foundation to deal with issues that are challenging, unscripted, and often vigorously contested. They teach students to find and evaluate evidence and to take into account competing perspectives as they form judgments about significant questions. They help develop both a respect for the value of human diversity and a set of internal values that serve as a compass in an era of accelerating change. The outcomes recommended here can and will be achieved in different ways, across highly diverse institutional contexts and fields of study. But these forms of learning are important for all students and should be fostered across the entire educational experience.

# *The Essential Learning Outcomes*

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Beginning in school, and continuing at successively higher levels across their college studies, students should prepare for twenty-first-century challenges by gaining:

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## ■ KNOWLEDGE OF HUMAN CULTURES AND THE PHYSICAL AND NATURAL WORLD

Through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts

*Focused by engagement with big questions, both contemporary and enduring*

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## ■ INTELLECTUAL AND PRACTICAL SKILLS, INCLUDING

Inquiry and analysis  
Critical and creative thinking  
Written and oral communication  
Quantitative literacy  
Information literacy  
Teamwork and problem solving

*Practiced extensively, across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance*

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## ■ PERSONAL AND SOCIAL RESPONSIBILITY, INCLUDING

Civic knowledge and engagement—local and global  
Intercultural knowledge and competence  
Ethical reasoning and action  
Foundations and skills for lifelong learning

*Anchored through active involvement with diverse communities and real-world challenges*

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## ■ INTEGRATIVE AND APPLIED LEARNING, INCLUDING

Synthesis and advanced accomplishment across general and specialized studies

*Demonstrated through the application of knowledge, skills, and responsibilities to new settings and complex problems*

*Note: This listing was developed through a multiyear dialogue with hundreds of colleges and universities about needed goals for student learning; analysis of a long series of recommendations and reports from the business community; and analysis of the accreditation requirements for engineering, business, nursing, and teacher education. The findings are documented in previous publications of the Association of American Colleges and Universities: Greater Expectations: A New Vision for Learning as a Nation Goes to College (2002), Taking Responsibility for Quality of the Baccalaureate Degree (2004), and Liberal Education Outcomes: A Preliminary Report on Achievement in College (2005).*

## *Cultivating and Assessing Liberal Education Outcomes*

**IN PROPOSING THIS FOCUS FOR ACCOUNTABILITY, we offer the following guiding principles:**

- These outcomes do not emerge from taking only one or two relevant courses. Rather, these are complex capabilities which are appropriately **cultivated from school through the final year of college**, at increasingly higher levels of challenge and expected accomplishment.
- There are many ways of fostering these outcomes for today's diverse students and academic institutions. AAC&U does not endorse a "one-size-fits-all" approach to college learning or its assessment.
- College education should help all students achieve the array of liberal education outcomes described above, whatever their particular areas of study or major field(s).
- These liberal education outcomes will reach their highest level of cultivation in the context of the student's area of specialization or major field(s), where advanced achievement appropriately takes different forms.

In other words, even though the outcomes characteristic of liberal education can be described generally, they must be cultivated and assessed in context. Analytical skill, for example, has one kind of applied meaning for an English major, and a quite different kind of applied meaning for an engineer. Similarly, the civic, social, or intercultural questions faced by a student preparing for teaching are likely to be very different from those encountered by a student studying economics or biology.

These insights point toward a curricular strategy for educational accountability, rather than a reliance on standardized and generic testing. The previously listed outcomes of liberal learning should be addressed and cultivated throughout the entire educational experience. Whatever the field of study, therefore, a student's progress in achieving liberal education outcomes ought to be assessed periodically from the initial to the final year, in both general education and the chosen major field(s).

**WITHIN THE COLLEGE OR UNIVERSITY CONTEXT, a comprehensive accountability and assessment framework should include the following elements:**

1. **Orientation** should be provided for the student during the first year about the institution's expectations for important learning outcomes, benchmark assessments of each student's demonstrated accomplishment, and expected further progress in relation to these outcomes should be made.
2. **A plan of study**, constructed with the student's adviser, should transparently connect the expected outcomes to the student's choice of activities, courses, and major field(s).
3. **Milestone assessments** as students progress in their studies should be tied to key outcomes with timely feedback to the student and his or her adviser. These assessments should be aligned between two-year and four-year campuses so that successful transfers are possible, and they can be compiled in an electronic portfolio that demonstrates each student's progress.
4. **Capstone or culminating experiences** allow students to actively demonstrate their cumulative accomplishments in liberal education. The capstone—which can be the centerpiece of an electronic portfolio—is a critical element of this framework because it provides a designated place in the regular curriculum where students do their best work. It should be conceived as both a culminating integrative experience and as the centerpiece of the effort to assess sophisticated learning.

An important foundation for this approach to accountability has already been laid at many colleges and universities. The National Survey of Student Engagement (NSSE) reports that 61 percent of college seniors currently are expected to complete a capstone or culminating experience of some kind (NSSE 2007). Typically, capstones are completed in the student's major field, although some institutions require capstone experiences in general education as well.

Many other institutions and programs already require students to compile portfolios of their work as a requirement for graduation. Increasingly, programs and institutions across the country are putting such portfolios online to both encompass the multiple modes through which achievement can be demonstrated and to address the mobility of students across programs and study and institutions.

Capstone projects and electronic portfolios provide promising anchors for a meaningful approach to educational accountability. They provide contexts in which student work can be assessed for the crosscutting outcomes of liberal education described above as well as for conceptual knowledge and skills appropriate to the students' selected major(s).

In some cases, assignments for portfolios and capstones may need redesign to encompass the array of important liberal education outcomes. In other cases, the primary change needed will be a fuller reading of the available evidence on student's cumulative achievement of the key liberal education outcomes.

Some have suggested that newer forms of standardized testing can indeed be developed to evaluate at least some of the important outcomes of college. What is wrong with using standardized tests of liberal education outcomes to assess the quality of student learning in college?

The first difficulty with widespread use of standardized tests is that currently available tests only measure a very narrow set of capabilities and do not begin to cover all the important areas of college learning (see p. 6). Since institutions should develop their assessment approaches based on the full set of learning outcomes they seek to develop in their students, current standardized tests can only play a small role in any comprehensive assessment approach.

Moreover, by its nature, a standardized test explores what all test takers know in common. But the genius of American higher education is that it helps students develop many different kinds of expertise, across hundreds of disciplinary and interdisciplinary fields. While liberal education outcomes can be described in general terms, in practice, competencies such as communication, critical inquiry, teamwork, or ethical reasoning take very different forms in



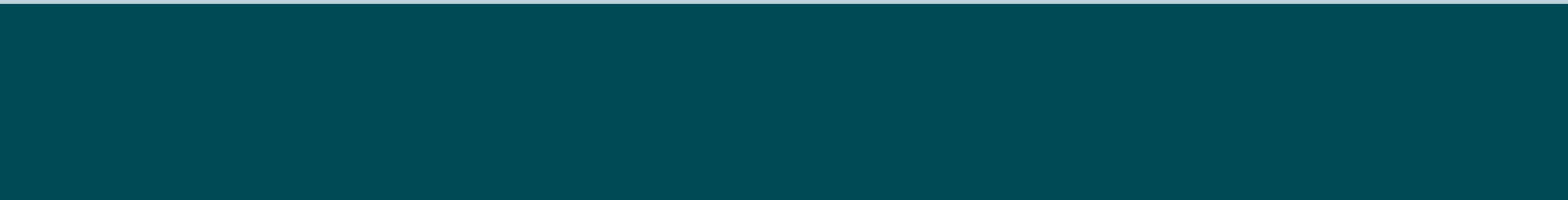
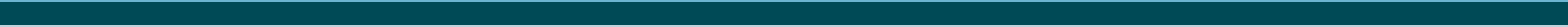
different fields. Biologists use quite different inquiry methods than historians; engineers use different forms of teamwork and communication than teachers.

For these reasons, the best evidence about students' level of achievement on liberal education outcomes will come from assessment of students' authentic and complex performances in the context of their most advanced studies: research projects, community service projects, portfolios of student work, supervised internships, etc. Institutions can and should use a common framework of liberal education outcomes to report externally on students' level of accomplishment, but they should help the public understand that the standards for advanced accomplishment take different forms in different fields. The key accountability question to ask of campuses is whether they currently expect all their students to undertake complex projects and capstone assignments that are assessed for advanced liberal education outcomes.

Standardized testing can play a useful supplementary role in assessment of student learning. High-quality precollegiate tests, used in concert with other evidence, can help institutions assess whether students are ready to undertake college-level work in selected areas. To the extent that standardized tests move away from the multiple-choice only format to include questions eliciting more "authentic" responses like essays and analytical narratives, they can produce insights into more complex learning. They can provide a regional or national comparison to results of local assessments, help local scorers avoid having "halo" effects creep into their process, and contribute significantly to fulfilling the goal of having "multiple measures" of achievement.

**FOR EVERY INSTITUTION, the first accountability questions that should be asked are these:**

1. Are all students expected to produce advanced, culminating work?
2. Is this culminating work assessed for broad liberal education outcomes as well as knowledge relevant to the specific field?
3. Have standards or rubrics been established and made public for what is expected at this advanced level in each program?
4. Are examples of this advanced work and the related standards regularly peer reviewed in the context of accreditation?
5. Have milestone assessments been established that prepare students to meet advanced standards and, where relevant, to plan for successful transfer from one institution to another?
6. Does the curriculum effectively prepare students to meet the standards that will be expected in milestone and culminating assessments?



## *Summarizing Results and Reporting to the Public*

**IN THE CURRENT CLIMATE it is not enough for an institution to assess its students in ways that are grounded in the curriculum;** colleges and universities also must provide useful knowledge to the public about goals, standards, accountability practices, and the quality of student learning. Common rubrics will be needed to summarize levels of student achievement across different academic fields and institutions and for particular groups of students.

AAC&U launched an initiative in 2007 called Valid Assessment of Learning in Undergraduate Education (VALUE) to explore the development of assessment rubrics for the broad range of essential learning outcomes (see p. 6) and to articulate expectations and criteria for student achievement from beginning through advanced levels of performance. This project is testing the application of rubrics to actual student work completed in their courses and cocurricular activities. By evaluating work that students produce in their regular courses and cocurricular activities, many issues of motivation and cost associated with standardized tests are resolved. By relying on students' assigned work, this approach to assessment is more directly useful to faculty as they seek to improve courses and programs and assess student growth and development over time. By gathering and disseminating work through electronic portfolios, the same student work can be assessed at course, program, and institutional levels. Student work from on and off campus and from all the institutions a student may have attended can also be included in an electronic portfolio thus presenting an overview of student accomplishment over time and space.

A summary report to an accreditation body, a state official, or the general public can be prepared that summarizes the data across the institution. Because it may include results from many students majoring in different disciplines, a summary report can include examples to illustrate the larger meaning of its results.

Like standardized testing, this method will allow for summarizing the outcomes of student learning with a few scores. But unlike tests based on quick responses to multiple-choice questions, these will be summaries of higher-order skills such as communication, analytic ability, and integration of knowledge, and will reflect meaningful educational projects judged by professionals.

Also, when the data are available, each campus can take steps to engage faculty and students in interpreting the meaning and implications of assessment outcomes. Faculty members should use the findings as a basis for discussion and a catalyst for needed changes in educational programs.

## Ten Recommendations for a New Accountability

### 1 Make Liberal Education the New Standard of Excellence for All Students

Liberal education should become the new standard of excellence for all students, whatever their major or anticipated career. A set of essential learning outcomes is described in *College Learning for the New Global Century*. These outcomes are important indicators of what students need to accomplish as citizens, as workers in a particular profession or field, and as thoughtful, creative, responsible human beings.

### 2 Articulate Locally Owned Goals for Student Learning Outcomes

Clarity about essential learning outcomes is the foundation of both a robust educational program and an accountability framework. For higher education to be accountable for liberal education outcomes, individual institutions (and systems) must translate these outcomes into goals and language that are meaningful in local contexts. Goals for student accomplishment should be developed and articulated in dialogues that include both faculty members and members of the wider community. To meet the highest standards of excellence, campus (and system) goals for student learning should be challenging, public, and evaluated.

### 3

### Set Standards in Each Goal Area for Basic, Proficient, and Advanced Performance

Levels of performance should be specified in concrete and detailed ways so that student work can be reviewed and judged similarly by different individuals. One of the important benefits of having clearly described goals and levels of achievement is that students themselves will begin to understand the standards for quality in different fields and become more capable of assessing their own learning. Another benefit is that complementary expectations for assessments in the second and final years of college will help students in two-year colleges meet local standards, while anticipating more advanced standards should they elect to transfer.

## Quality Framework

### 4 Develop Clear and Complementary Responsibilities between General Education and Departmental and other Programs for Liberal Education Outcomes

It does little good to agree on valued goals for students if responsibility for cultivating them is not fixed. Similarly, the usual assignment of responsibility for general education goals to one group of faculty, typically in the liberal arts and sciences, and for specialized program goals to another group of faculty members in departmental programs, virtually guarantees a fragmented education. It is far better for students to experience their general education and major as integrated and coherent. Although specific responsibility may be assigned, it is best if there is discussion and understanding among faculty and other professionals about what is expected in all parts of the curriculum and cocurriculum, if students are encouraged to make connections among courses and programs, and if advanced courses intentionally build on prior work.

### 5 Charge Departments and Programs with Responsibility for the Level and Quality of Students' Most Advanced Work

Once goals for student learning have been articulated at the campus level (and, in public higher education, at a system level), they should be translated into program-specific goals for student accomplishment. Goals should be set for general education in ways that respect an individual campus program's particular aims, design, and character. In addition, student learning goals should be articulated within the context of academic majors. For example, while the campus as a whole may hold all students accountable for analysis, communication, and intercultural knowledge, these expectations will and should have different implications for specific departments and programs. Each program should translate campus-wide goals for liberal education into goals appropriate to the field. Programs also should articulate field-specific goals for their students. Each program should communicate how and why these standards contribute to effective accomplishment in that field.

### 6

#### Create Milestone Assessments across the Curriculum

Assessments of student progress in achieving goals should be built into the ongoing curriculum and embedded in designated courses or assignments in general education, departmental majors, and other programs. Assessment of student progress over time requires that campuses distinguish among advanced, proficient, basic, and below basic levels in relation to specific goals. Students should be taught to gauge their progress against high expectations for their most advanced work. No student should learn for the first time about shortfalls in meeting proficiency standards at the point of graduation.

## 7 Set Clear Expectations for Culminating Work Performed at a High Level of Accomplishment

Each department should identify expected proficiency standards and culminating work—encompassing liberal education and specialized outcomes—that will both cultivate advanced knowledge and skill and demonstrate students' cumulative learning. Culminating work may include research projects, supervised internships, capstone courses, public performances, licensure or other validated tests in a field, and/or cumulative electronic portfolios providing examples of student achievement in relation to specific goals.

## 8

### Provide Periodic External Review and Validation of Assessment Practices and Standards

There should be periodic evaluation by external reviewers of the goals, the proficiency standards, and work samples submitted by students to meet standards. Such external reviews provide validation of both the goals and standards. A representative sample of student performances in different fields will provide sufficient evidence for external feedback.

## 9

### Make Assessment Findings Part of a Campuswide Commitment to Inquiry and Educational Improvement

Accountability efforts should be part of a continuous engagement with the quality of students' actual achievement in relation to important educational goals. Each campus and program should review the quality and level of students' best work, and seek ways to ensure that the educational program provides repeated opportunities for students to practice and reach expected levels of learning. Campus reward systems should incorporate the importance of faculty members' intellectual and professional leadership in both assessment and educational improvement.

## 10 Increase Public Visibility and Transparency of Learning Goals and Student Achievement Levels

Each college and university should make public on its Web site:

- a. General and program goals for student learning
- b. Proficiency expectations for rating levels of student achievement in relation to these goals
- c. A description of the kinds and range of performances that are used in assessing student progress (with links to different programs)
- d. A report on student achievement levels (e.g., advanced, proficient, basic, and below basic) in relation to each goal

For purposes of publicity and comparison, a campus may translate program-specific assessments back into general categories (e.g., 75 percent of the students in the college of arts and sciences met a proficient standard for analytical skill and collaborative problem-solving). The institution should also make public its procedures for reviewing and validating assessment practices, standards, and findings.

These recommendations are offered as guidelines for institutions of all sorts working to demonstrate the level of student achievement of key outcomes of liberal education and to respond with integrity to calls for greater accountability.

## *Do Employers Value Liberal Education?*

In 2006 and 2007, AAC&U commissioned Peter D. Hart Research Associates to conduct several studies of employers' views on student learning in college.\*

The surveys and focus groups reveal strong support among employers for an increased emphasis on providing all students with the LEAP “essential learning outcomes.” Employers reject any trend toward narrow technical training and believe that students need more liberal education, not less (see p. 16).

Employers want college graduates to acquire versatile knowledge and skills. They also expressed a strong desire to see more emphasis on helping students put their knowledge and skills to practical use in “real-world” settings. This preference was reaffirmed when employers were asked how colleges can productively assess whether students have achieved the essential outcomes.

Employers in the 2008 LEAP survey dismissed multiple choice tests in favor of assessments that evaluate communication skills and analytic reasoning and students' ability to apply what they are learning to complex problems.

### **Employers Are Dissatisfied With Skills and Abilities of Recent Graduates**

- Fully 63 percent of employers believe that too many recent college graduates do not have the skills they need to succeed in the global economy. Employers recognize the importance of higher education, but they see significant room for improvement in graduates' levels of preparation.
- A majority of employers believe that only half or fewer of recent graduates have the skills and knowledge needed to advance or be promoted in their companies.
- In none of twelve skills and areas of knowledge tested—from writing to global knowledge to ethical judgment—do a majority of employers rate recent graduates as “very well prepared.” Only eighteen percent of employers rate college graduates as “very well prepared” in the area of global knowledge. More than 45 percent rate them as “not well prepared” at all in this area.

\*In November/December 2006, Peter D. Hart Research Associates, Inc., interviewed 305 employers whose companies have at least twenty-five employees and report that 25 percent or more of their new hires hold at least a bachelor's degree from a four-year college. The margin of error for this survey was +/-5.7 percentage points. In November/December 2007, Hart Research interviewed another 301 employers. This survey's margin of error was also +/- 5.7 percentage points. The complete findings from these and other surveys can be found online at [www.aacu.org/leap](http://www.aacu.org/leap).

## *Percentage of Employers Who Want Colleges to “Place More Emphasis” on Essential Learning Outcomes*

### ■ KNOWLEDGE OF HUMAN CULTURES AND THE PHYSICAL AND NATURAL WORLD

• Science and technology	82%
• Global issues	72%*
• The role of the United States in the world	60%
• Cultural values and traditions (U.S./global)	53%*

### ■ INTELLECTUAL AND PRACTICAL SKILLS

• Teamwork skills in diverse groups	76%*
• Critical thinking and analytic reasoning	73%
• Written and oral communication	73%
• Information literacy	70%
• Creativity and innovation	70%
• Complex problem solving	64%
• Quantitative reasoning	60%

### ■ PERSONAL AND SOCIAL RESPONSIBILITY

• Intercultural competence (teamwork in diverse groups)	76%*
• Intercultural knowledge (global issues)	72%*
• Ethics and values	56%
• Cultural values/traditions (U.S./global)	53%*

### ■ INTEGRATIVE LEARNING

• Applied knowledge in real-world settings	73%
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*Note: These findings are taken from a survey of employers commissioned by the Association of American Colleges and Universities and conducted by Peter D. Hart Associates in November and December 2006. For a full report on the survey and its complete findings, see [www.aacu.org/leap](http://www.aacu.org/leap).*

*\*Three starred items are shown in two learning outcome categories because they apply to both.*



## Employers Seek Broad Knowledge and Skills, and More Real-World and Applied Learning

- Fifty-six percent of employers think colleges and universities should focus on providing all students with both a well-rounded education—broad knowledge and skills that apply to a variety of fields—and knowledge and skills in a specific field. Eleven percent of employers favor a primary focus only on providing a well-rounded education, and just 22 percent favor a narrow focus on providing skills and knowledge mainly in a specific field.
- A majority of employers think that colleges and universities should place more emphasis on skills and areas of knowledge that are cultivated through a liberal education (see p. 16 and fig. 1 below).
- The majority of employers surveyed think colleges and universities should also place more emphasis on helping students develop the ability to apply knowledge and skills to real-world settings through internships or other hands-on experiences. Several focus group participants were especially critical of colleges and universities for providing an education that is too theoretical and disconnected from the real world. Or as one executive says, colleges and universities equal “delayed reality.”

**Figure 1**

### SKILLS AND AREAS OF KNOWLEDGE A MAJORITY OF EMPLOYERS WOULD LIKE COLLEGES AND UNIVERSITIES TO EMPHASIZE MORE

Concepts and new developments in science and technology.....	82%
Teamwork skills and the ability to collaborate with others in diverse group settings .....	76%
The ability to apply knowledge and skills to real-world settings through internships or other hands-on experiences.....	73%
The ability to effectively communicate orally and in writing .....	73%
Critical thinking and analytical reasoning skills.....	73%
Global issues and developments and their implications for the future .....	72%
The ability to locate, organize, and evaluate information from multiple sources.....	70%
The ability to be innovative and think creatively.....	70%
The ability to solve complex problems.....	64%
The ability to work with numbers and understand statistics.....	60%
The role of the United States in the world .....	60%
A sense of integrity and ethics.....	56%
Cultural values and traditions in America and other countries .....	53%

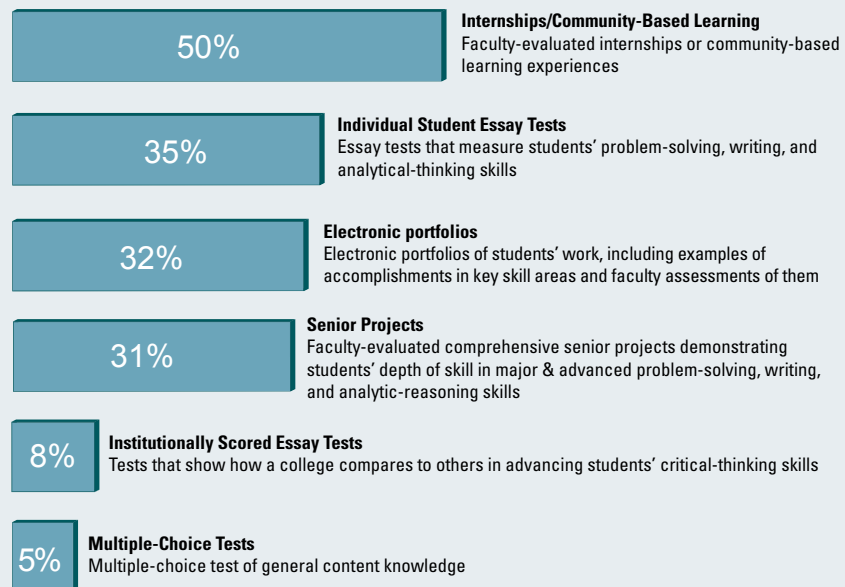
Source: *How Should Colleges Prepare Students To Succeed in Today's Global Economy?*  
AAC&U/Peter D. Hart Research, 2007.

## Employers Seek New Forms of Assessment and Reject Multiple-Choice Tests

- Very few employers surveyed find college transcripts very useful (13 percent) in evaluating whether candidates have achieved the most important outcomes of college.
- Employers seek assessments that demonstrate graduates' ability to apply their learning to real-world challenges. More than two-thirds of employers believe that an assessment of a students' internship or community-based project would be very or fairly useful in evaluating graduates' potential for success.
- Employers also would recommend to colleges that they invest scarce resources in qualitative assessment methods that demonstrate students' advanced ability to integrate and apply their learning, (see fig. 2).
- Employers do not recommend that college leaders invest in assessment practices that are based on a small sample of students. They are much more interested in individual readiness.

**Figure 2**

### EMPLOYERS ADVISE ON WHERE TO FOCUS ASSESSMENT RESOURCES One/Two Practices to Which Colleges Should Devote Resources



Source: *How Should Colleges Assess and Improve Student Learning?* AAC&U/Peter D. Hart Research, 2008.

## Employers Endorse New Vision of Liberal Education

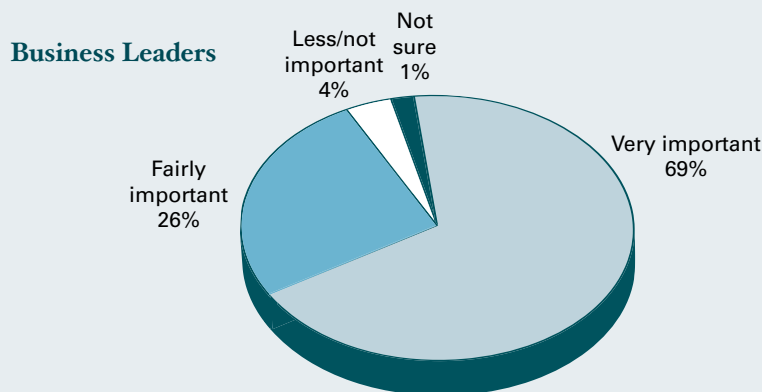
- Employers strongly endorse the practices that characterize liberal education. When presented with a description, employers overwhelmingly recognize liberal education as important (see fig. 3).

**Figure 3**

### EMPLOYERS ENDORSE LIBERAL EDUCATION AS PREFERRED APPROACH

*Employers were asked, “How important is it for today’s colleges and universities to provide the type of education described below?”*

This particular approach to a four-year college education provides both broad knowledge in a variety of areas of study and more in-depth knowledge in a specific major or field of interest. It also helps students develop a sense of social responsibility, as well as intellectual and practical skills that span all areas of study, such as communication, analytical, and problem-solving skills, and a demonstrated ability to apply knowledge and skills in real-world settings.



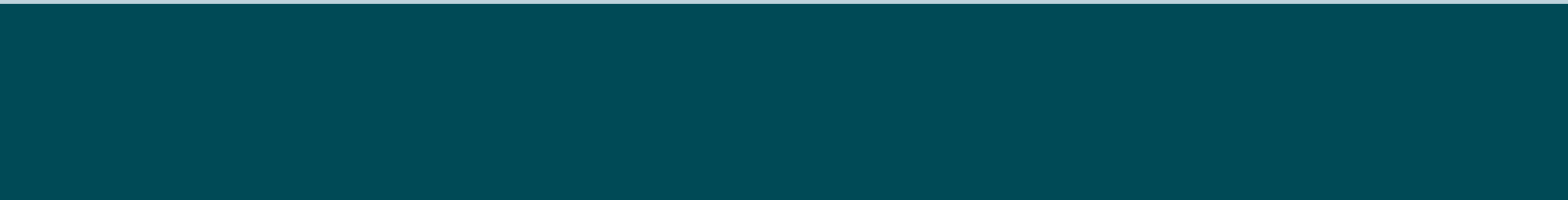
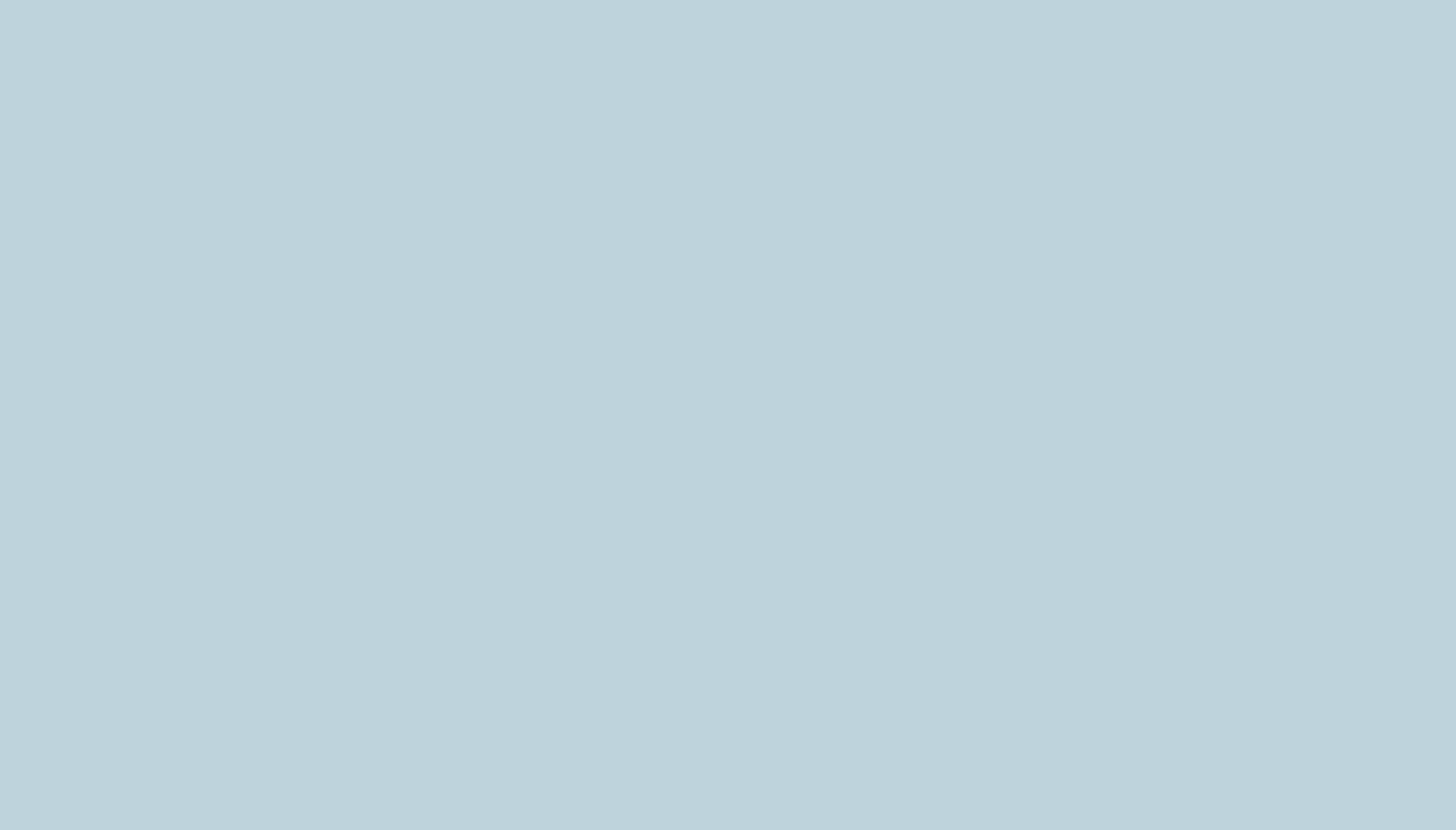
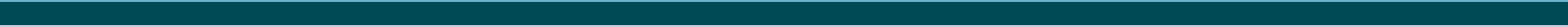
In addition, 76 percent of employers would recommend this type of education to a young person they know.

*Source: How Should Colleges Prepare Students To Succeed in Today's Global Economy? AAC&U/ Peter D. Hart Research, 2007.*

In sum, employers do not necessarily use the vocabulary of “liberal education.” But when asked about the learning students need, they give responses that address all the broad areas of knowledge and skill that are central to a strong liberal education.

Campus leaders can use these survey findings to build public and student understanding that the learning outcomes that characterize liberal education have become essential, not elective. In an economy fueled by innovation, the outcomes of a liberal education have become the essential passport to economic opportunity. And as campus leaders consider strategies for assessing student cumulative learning, employers clearly recommend more integrated and applied learning assessments for all students.

The question confronting higher education is whether it can and will meet this challenging standard for inclusive excellence.



## Additional Resources

- American Council on Education. 2004. *Public accountability for student learning in higher education: Issues and options*. Washington, DC: ACE.

This position paper from the Business-Higher Education Forum provides a comprehensive explanatory framework for issues of accountability for student learning in higher education. It provides a discussion of the reasons for the heightened demand for evidence about performance in higher education and a description of various approaches to learning assessments, institutional performance review, and quality review in higher education. It also includes a set of recommendations for design principles for a public accountability structure appropriate to the diverse system of American higher education.

- Association of American Colleges and Universities and Council for Higher Education Accreditation. 2008. *New leadership for student learning and accountability: A statement of principles, commitments to action*. Washington, DC: AAC&U and CHEA.

With support from the Teagle Foundation, this statement was developed jointly by the Association of American Colleges and Universities (AAC&U) and the Council for Higher Education Accreditation (CHEA) in dialogue with leaders in higher education and accreditation. It sketches out a set of principles and action steps through which colleges and universities can take responsibility and exercise leadership for assessment and accountability. For instance, it recommends that colleges and universities “develop clear descriptions of educational goals and assessments anchored in the curriculum that faculty teach.”

- Middle States Commission on Higher Education

On its Web site, the Middle States regional accrediting association provides many useful resources and publications on assessment and accreditation.

See [www.msache.org](http://www.msache.org).

- Miller, Ross. 2007. *Assessment in cycles of improvement: Faculty designs for essential learning outcomes*. Washington, DC: AAC&U.

This publication features a series of reports on how selected colleges and universities foster and assess student learning in twelve liberal education outcome areas, including writing, quantitative literacy, critical thinking, ethics, intercultural knowledge, and

information literacy. Moving from goals to experiences, assessments, and improvements driven by assessment data, each institutional story illustrates how complex learning can be shaped over time and across programs to bring students to higher levels of achievement of these important outcomes.

- Palomba, Catherine A., and Trudy W. Banta. 1999. *Assessment essentials: Planning, implementing, and improving assessment in higher education*. San Francisco: Jossey-Bass.

This volume presents an overview of widely used assessment practices and provides a useful introduction to how assessment is currently being accomplished on college campuses today.

- State Higher Education Executive Officers. 2005. *Accountability for Better Results: A National Imperative for Higher Education*. Denver: SHEEO.

The National Commission on Accountability in Higher Education was organized by the national association of State Higher Education Executive Officers (SHEEO) to reflect on the state of American higher education, the states, and the nation in articulating priorities and assessing and improving performance in higher education. This report articulates significant lessons and observations gleaned from the collective experience of institutions across the country and recommends principles and practices to help institutions, states, and the nation make continuous progress toward shared goals for higher education.

## Works Cited

Achieve, Inc. 2004. *Ready or not: Creating a high school diploma that counts*. Washington, DC: Achieve, Inc.

Achieve, Inc. 2002. *Staying the course: Standards-based reform in America's schools: Progress and prospects*. Washington, DC: Achieve, Inc.

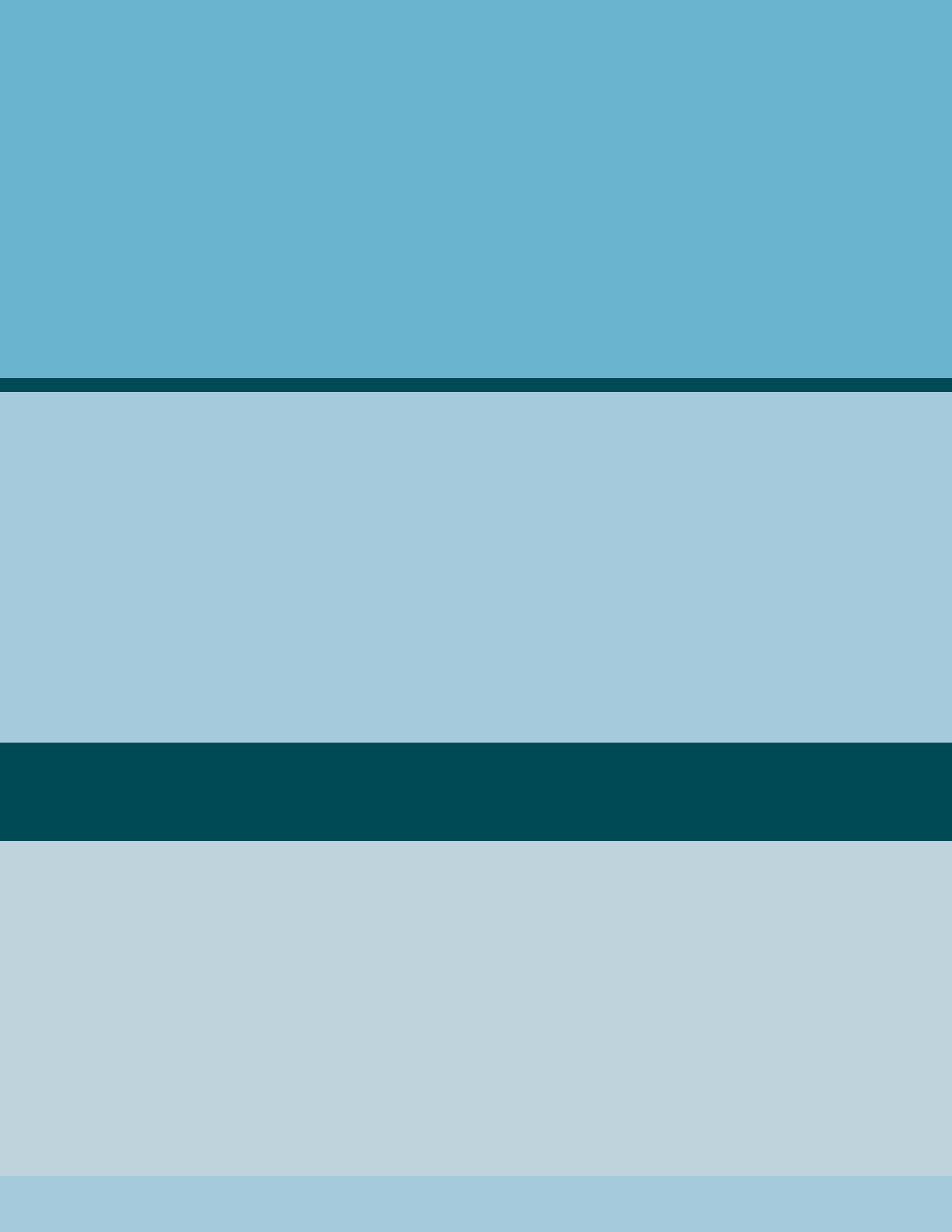
Association of American Colleges. 1985. *Integrity in the college curriculum*. Washington, DC: AAC.

Association of American Colleges and Universities. 2002. *Greater expectations: A new vision for learning as a nation goes to college*. Washington, DC: AAC&U.

Association of American Colleges and Universities. 2007. *College learning for the new global century*. Washington, DC: AAC&U.

Association of American Colleges and Universities. 2008. *College learning for the new global century—Executive summary with employers' views on learning outcomes and assessment approaches*. Washington, DC: AAC&U.

National Survey of Student Engagement. 2007. *Experiences that matter: Enhancing student learning and success*. Bloomington, IN: NSSE.





*Association  
of American  
Colleges and  
Universities*

AAC&U is the leading national association concerned with the quality, vitality, and public standing of undergraduate liberal education. Its members are committed to extending the advantages of a liberal education to all students, regardless of academic specialization or intended career. Since its founding in 1915, AAC&U's membership has grown to more than 1,150 accredited public and private colleges and universities of every type and size.

AAC&U functions as a catalyst and facilitator, forging links among presidents, administrators, and faculty members who are engaged in institutional and curricular planning. Its mission is to reinforce the collective commitment to liberal education at both the national and local levels and to help individual institutions keep the quality of student learning at the core of their work as they evolve to meet new economic and social challenges.

Information about AAC&U membership, programs, and publications can be found at [www.aacu.org](http://www.aacu.org).

