LEAP Provides a Guiding Framework for Quality, Equity, and Student Success

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**Liberal and Liberal Arts Education: A Guide to Frequently Confused Terms**

***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 major fields 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 Arts:** Specific disciplines (e.g., the humanities, sciences, arts, and social sciences)

**Liberal Arts College:** A particular institutional type – often small, often residential – that facilitates close interaction between faculty and students, while grounding its curriculum in the liberal arts disciplines.

**Artes Liberales:** Historically, the basis for the modern liberal arts: the trivium (grammar, logic, and rhetoric) and the quadrivium (arithmetic, geometry, astronomy, and music).

**General Education:** The part of a liberal education curriculum shared by all students. It provides broad learning in liberal arts and science disciplines and forms the basis for developing important intellectual, civic, and practical capacities. General education can take many forms, and increasingly includes introductory, advanced, and integrative forms of learning.


**“Three in four employers would recommend this kind of education to their own child or a young person they know.”**

These findings are taken from a survey of employers commissioned by AAC&U and conducted by Hart Associates in 2013. For a full report on the survey, “It Takes More than a Major: Employer Priorities for College Learning Student Success,” and its complete findings, see [www.aacu.org/leap](http://www.aacu.org/leap).

Liberal education has long been recognized as the nation’s—and arguably, the world’s—premier educational tradition, the kind of learning requisite for leadership both in the economy and in democratic society. But until recently, only a small fraction of Americans completed college, and liberal education has been a resource mainly for the fortunate.

In the twenty-first century, however, postsecondary education is becoming the new portal to economic opportunity for US students. In this dramatically altered society, AAC&U’s goal is to ensure that all college students—and the society that depends on their talents—reap the full benefits of a liberal and liberating education. As AAC&U’s mission statement proclaims, liberal education and inclusive excellence—together—need to become the foundations for institutional purpose and educational practice across all parts of postsecondary learning.

With the Principles of Excellence and the Essential Learning Outcomes as a guiding compass, AAC&U will work tirelessly to resist the development of a two-tiered educational system in which some students receive a world-class education while others experience narrower and more limiting forms of training. The transformative change intended is captured in the chart below, which is adapted from the LEAP report, *College Learning for a New Global Century* (AAC&U, 2007).

<table>
<thead>
<tr>
<th>WHAT</th>
<th>LIBERAL EDUCATION IN THE TWENTIETH CENTURY</th>
<th>LIBERAL EDUCATION IN THE TWENTY-FIRST CENTURY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• an elite curriculum</td>
<td>• a necessity for <em>all</em> students</td>
</tr>
<tr>
<td></td>
<td>• nonvocational</td>
<td>• essential for success in a global economy and for informed citizenship, US and global</td>
</tr>
<tr>
<td></td>
<td>• intellectual and personal development</td>
<td>• intellectual, civic, personal, and professional development</td>
</tr>
<tr>
<td></td>
<td>• an option for the fortunate</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HOW</th>
<th>THROUGH STUDIES IN ARTS AND SCIENCES DISCIPLINES (“THE MAJOR”) AND/OR THROUGH GENERAL EDUCATION IN THE INITIAL YEARS OF COLLEGE</th>
<th>THROUGH STUDIES THAT EMPHASIZE THE LEAP ESSENTIAL LEARNING OUTCOMES IN GENERAL EDUCATION AND ACROSS THE ENTIRE EDUCATIONAL CONTINUUM AND <em>ALL</em> FIELDS OF STUDY—FROM SCHOOL THROUGH COLLEGE—AT PROGRESSIVELY HIGHER LEVELS OF ACHIEVEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHERE</td>
<td>LIBERAL ARTS COLLEGES OR COLLEGES OF ARTS AND SCIENCES IN LARGER INSTITUTIONS</td>
<td>ALL SCHOOLS, COMMUNITY COLLEGES, COLLEGES, AND UNIVERSITIES, AS WELL AS ACROSS ALL FIELDS OF STUDY</td>
</tr>
</tbody>
</table>

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17. Adapted from AAC&U, *College Learning*, 18, fig. 5.
The Quality Context: A Volatile and Demanding Economy


“In order to prepare young people to do the jobs computers cannot do we must re-focus our education system around one objective: giving students the foundational skills in problem-solving and communication that computers don’t have. … These skills are not just the skills of professionals with advanced degrees. What computers have done is to make even traditional blue collar jobs like auto-mechanic—dependent upon one’s ability to problem solve and to communicate.” - Dancing with Robots: Human Skills for Computerized Work (Emphasis added by AAC&U)

Employers Seek Graduates Who Can Deal with Complexity

- 93% of employers say that candidates’ demonstrated capacity to think critically, communicate clearly, and solve complex problems is more important than their undergraduate major.

- 93% of employers say that they are “asking employees to take on more responsibilities and to use a broader set of skills than in the past.”

- 92% of employers say that “innovation is essential to our company’s continued success.”

- 95% of employers agree that their companies put a priority on hiring people with the intellectual and interpersonal skills to help them contribute to innovation in the workplace.

- 91% of employers say that “the challenges their employees face are more complex than they were in the past.”

- 91% of employers say that, whatever their major, all students should have experiences in solving problems with colleagues whose views are different from their own.

Too Few Low-Income Students Complete College

While postsecondary institutions are becoming more diverse, the degree attainment gap for low-income individuals is widening. In 2013, individuals from high-income families were eight times more likely to earn a bachelor’s degree by age twenty-four than were those from low-income families. In 1970, the high-income individuals were more than six times more likely to earn a bachelor’s degree. In the intervening 43 years, bachelor degree attainment among those from wealthy families nearly doubled while it barely moved for those in the poorest families.

Higher-income students are more likely to earn degrees

BACHELOR’S DEGREE ATTAINMENT BY AGE TWENTY-FOUR FOR DEPENDENT FAMILY MEMBERS BY FAMILY INCOME QUARTILE


For more information, see Step Up and Lead for Equity: What Higher Education Can Do to Reverse our Deepening Divides (AAC&U, 2015).
THE LEAP FRAMEWORK

Launched in 2005, Liberal Education and America’s Promise (LEAP) is a national public advocacy and campus action initiative of the Association of American Colleges & Universities (AAC&U). LEAP champions the importance of a twenty-first-century liberal education—for individual students and for a nation dependent on economic creativity and democratic vitality. Through LEAP, hundreds of campuses are making far-reaching educational changes to help all their students—whatever their chosen field of study—acquire the broad knowledge, higher order capacities, and real world experience they need to thrive both in the economy and in a globally engaged democracy.

LEAP listens and responds as employers make the case that today’s workers need to be better prepared for a global economy; and focuses on education for knowledgeable citizenship, as well as careers.

TO MAKE EXCELLENCE INCLUSIVE, LEAP PROMOTES

- **Essential Learning Outcomes**—the learning outcomes essential for success in life, civil society, and work in the 21st century. These outcomes include: 1) broad knowledge of culture, science and society, as well as competence in specific fields; 2) intellectual and practical skills, such as inquiry and analysis; critical and creative thinking; written and oral communication; quantitative literacy; information literacy; teamwork and problem-solving; 3) studies and experiences related to democratic and global citizenship and intercultural competence; and 4) integrative, applied and adaptive learning.

- **High-Impact Educational Practices (HIPs)**—ways of engaging and challenging students—such as first year programs, intensive writing, collaborative assignments, undergraduate research, service learning, internships, learning communities, diversity experiences, and major projects that help students achieve essential learning outcomes.

- **Authentic Assessments**—using students’ own work and faculty-validated rubrics, probing whether individual students have developed essential capacities, and can apply their learning to complex problems and real-world challenges.

- **Students’ Signature Work**—challenging higher education to prepare all students to complete a substantial cross-disciplinary project in a topic significant to the student and society, as part of the expected pathway to a degree. The signature project can take one of many forms (e.g., capstone, internship, field work, research, community-based research).

AREAS OF WORK

**Campus Action**
- Faculty-led strategies for deepening and assessing student learning;
- LEAP Campus Action Network (350 two- and four-year institutions – private and public – and organizational partners);
- LEAP Partner States and Consortia – California State University System, Indiana, Kentucky, Massachusetts, Michigan, North Dakota, Oregon, Utah, Virginia, Wisconsin; LEAP Texas; LEAP Washington; COPLAC; NAC&U; several other states seeking inclusion; international partners, including Qatar University and the Japan Association for College and University Education (JACUE);
- Summer institutes for campus teams working on outcomes in general education, arts and science learning, integrative learning and departments, assessment and institutional change to make excellence inclusive;
- Major initiatives to advance STEM reform.

**Authentic Evidence**
- LEAP VALUE Multi-state project – nationally validated rubrics for assessing students and reporting on 16 essential learning outcomes that are integral to a liberal education; proof of concept study in 9 states
- Reports—prepared in concert with research agencies—on students’ achievement of essential learning outcomes and their participation in high impact forms of learning;
- Employer research on learning and experiences students need for success in the workplace.

**Public Advocacy**
- LEAP advocacy seeks to spark public debate about the college learning outcomes essential for all students; to create more informed public support for higher education and for changes to improve quality; and to challenge the belief that students must choose either a broad education or a practical education.
- LEAP Presidents’ Trust – connecting LEAP with public and local priorities – economic and civic
The Essential Learning Outcomes

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

��识和技能的掌握

**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*

**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*

**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*

**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*

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**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: *College Learning for the New Global Century* (2007) and *The LEAP Vision for Learning* (2011). For more information, see www.aacu.org/leap.
## Top Learning Outcomes for All College Students

### Knowledge of Human Cultures and the Physical and Natural World

<table>
<thead>
<tr>
<th>Category</th>
<th>2009</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>92%</td>
<td>92%</td>
</tr>
<tr>
<td>Sciences</td>
<td>91%</td>
<td>92%</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>90%</td>
<td>89%</td>
</tr>
<tr>
<td>Global/World Cultures</td>
<td>87%</td>
<td>89%</td>
</tr>
<tr>
<td>Mathematics</td>
<td>87%</td>
<td>92%</td>
</tr>
<tr>
<td>Diversity in the United States</td>
<td>73%</td>
<td>73%</td>
</tr>
</tbody>
</table>

### Intellectual and Practical Skills

<table>
<thead>
<tr>
<th>Skill</th>
<th>2009</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing Skills</td>
<td>99%</td>
<td>99%</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>95%</td>
<td>98%</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>91%</td>
<td>94%</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>88%</td>
<td>82%</td>
</tr>
<tr>
<td>Intercultural Skills</td>
<td>79%*</td>
<td>79%*</td>
</tr>
<tr>
<td>Information Literacy</td>
<td>76%</td>
<td>76%</td>
</tr>
<tr>
<td>Research Skills</td>
<td>65%</td>
<td>75%</td>
</tr>
</tbody>
</table>

### Personal and Social Responsibility

<table>
<thead>
<tr>
<th>Skill</th>
<th>2009</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercultural Skills</td>
<td>79%*</td>
<td>79%*</td>
</tr>
<tr>
<td>Ethical Reasoning</td>
<td>75%</td>
<td>75%</td>
</tr>
<tr>
<td>Civic Engagement</td>
<td>68%</td>
<td>63%</td>
</tr>
</tbody>
</table>

### Integrative Learning

<table>
<thead>
<tr>
<th>Skill</th>
<th>2009</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application of Learning</td>
<td>66%</td>
<td>65%</td>
</tr>
<tr>
<td>Integration of Learning</td>
<td>63%</td>
<td>68%</td>
</tr>
</tbody>
</table>

Note: In 2015, 85% of AAC&U member institutions surveyed reported that they had a common set of learning outcomes for all students. This percentage was up from 78% who reported this in the earlier 2009 study. Percentages cited above include those outcomes for which 2/3 or more of those with campus-wide goals report that this outcome is one of the learning goals they have for all students.

The four categories of learning outcomes correspond to a set of “Essential Learning Outcomes” developed as part of AAC&U’s LEAP initiative. See www.aacu.org/leap. For 2009 findings, see Learning and Assessment: Trends in Undergraduate Education—A Survey Among Members of the Association of American Colleges and Universities (AAC&U and Hart Research Associates, 2009). For 2015 findings, see National Trends in General Education Design, Learning Outcomes, and Teaching Approaches (AAC&U and Hart Research Associates, forthcoming January 2016). AAC&U’s 1350 institutional members represent the entire spectrum of regionally accredited postsecondary institutions. Member institutions are half public, half private, and include two-year and four-year institutions, liberal arts colleges, comprehensive institutions, and research universities, both public and private.

* The starred items are shown in two learning outcome categories because they apply to both.
Employer Priorities for Most Important College Learning Outcomes

#### Knowledge of Human Cultures and the Physical and Natural World
- Broad knowledge in the liberal arts and sciences: 78%
- Knowledge and understanding of democratic institutions and values: 87%
- Intercultural skills and understanding of societies and cultures outside the US: 78%

#### Intellectual and Practical Skills
- Oral communication: 85%
- Teamwork skills in diverse groups: 83%
- Written communication: 82%
- Critical thinking and analytic reasoning: 81%
- Complex problem solving: 70%
- Information literacy: 68%
- Innovation and creativity: 65%
- Technological skills: 60%
- Quantitative reasoning: 56%

#### Personal and Social Responsibility
- Problem solving in diverse settings: 96%
- Civic knowledge, skills, and judgment essential for contributing to the community and to our democratic society: 86%
- Ethical judgment and decision making: 81%

#### Integrative and Applied Learning
- Applied knowledge in real-world settings: 80%

**Note:** These data are taken from *Falling Short? College Learning and Career Success*, a 2015 report on findings from a survey of employers and a survey of college students conducted for AAC&U by Hart Research Associates. For a full report on this survey and earlier reports on employer views, see www.aacu.org/leap.

- Indicates percentage of employers who “strongly agree” or “somewhat agree” that, “regardless of a student’s chosen field of study,” every student should attain this area of knowledge or skill.
- Indicates percentage of employers who rate this outcome as very important (8-10 on a 10 point scale) for recent graduates entering the job market.
These widely tested teaching and learning innovations show substantial educational benefits, especially for college students from historically underserved backgrounds. But these practices remain optional rather than expected on most campuses.

**First-Year Seminars and Experiences**

Many schools now build into the curriculum first-year seminars or other programs that bring small groups of students together with faculty or staff on a regular basis. The highest-quality first-year experiences place a strong emphasis on critical inquiry, frequent writing, information literacy, collaborative learning, and other skills that develop students’ intellectual and practical competencies. First-year seminars can also involve students with cutting-edge questions in scholarship and with faculty members’ own research.

**Common Intellectual Experiences**

The older idea of a “core” curriculum has evolved into a variety of modern forms, such as a set of required common courses or a vertically organized general education program that includes advanced integrative studies and/or required participation in a learning community (see below). These programs often combine broad themes—e.g., technology and society, global interdependence—with a variety of curricular and cocurricular options for students.

**Learning Communities**

The key goals for learning communities are to encourage integration of learning across courses and to involve students with “big questions” that matter beyond the classroom. Students take two or more linked courses as a group and work closely with one another and with their professors. Many learning communities explore a common topic and/or common readings through the lenses of different disciplines. Some deliberately link “liberal arts” and “professional courses”; others feature service learning.

**Writing-Intensive Courses**

These courses emphasize writing at all levels of instruction and across the curriculum, including final-year projects. Students are encouraged to produce and revise various forms of writing for different audiences in different disciplines. The effectiveness of this repeated practice “across the curriculum” has led to parallel efforts in such areas as quantitative reasoning, oral communication, information literacy, and, on some campuses, ethical inquiry.

**Collaborative Assignments and Projects**

Collaborative learning combines two key goals: learning to work and solve problems in the company of others, and sharpening one’s own understanding by listening seriously to the insights of others, especially those with different backgrounds and life experiences. Approaches range from study groups within a course, to team-based assignments and writing, to cooperative projects and research.

**Undergraduate Research**

Many colleges and universities are now providing research experiences for students in all disciplines. Undergraduate research, however, has been most prominently used in science disciplines. With strong support from the National Science Foundation and the research community, scientists are reshaping their courses to connect key concepts and questions with students’ early and active involvement in systematic investigation and research. The goal is to involve students with actively contested questions, empirical observation, cutting-edge technologies, and the sense of excitement that comes from working to answer important questions.

**Diversity/Global Learning**

Many colleges and universities now emphasize courses and programs that help students explore cultures, life experiences, and worldviews different from their own. These studies—which may address U.S. diversity, world cultures, or both—often explore “difficult differences” such as racial, ethnic, and gender inequality, or continuing struggles around the globe for human rights, freedom, and power. Frequently, intercultural studies are augmented by experiential learning in the community and/or by study abroad.

**Service Learning, Community-Based Learning**

In these programs, field-based “experiential learning” with community partners is an instructional strategy—and often a required part of the course. The idea is to give students direct experience with issues they are studying in the curriculum and with ongoing efforts to analyze and solve problems in the community. A key element in these programs is the opportunity students have to both apply what they are learning in real-world settings and reflect in a classroom setting on their service experiences. These programs model the idea that giving something back to the community is an important college outcome, and that working with community partners is good preparation for citizenship, work, and life.

**Internships**

Internships are another increasingly common form of experiential learning. The idea is to provide students with direct experience in a work setting—usually related to their career interests—and to give them the benefit of supervision and coaching from professionals in the field. If the internship is taken for course credit, students complete a project or paper that is approved by a faculty member.

**Capstone Courses and Projects**

Whether they’re called “senior capstones” or some other name, these culminating experiences require students nearing the end of their college years to create a project of some sort that integrates and applies what they’ve learned. The project might be a research paper, a performance, a portfolio of “best work,” or an exhibit of artwork. Capstones are offered both in departmental programs and, increasingly, in general education as well.

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Employer Support for Applied Learning Practices

- 73% of employers believe that college graduates’ preparation for careers would improve if they were required to complete a significant applied learning project.*
- College graduates are 2.4 times as likely to be engaged at work if they had an internship or job that allowed them to apply their classroom learning, were active in cocurricular activities, and worked on a project that took a semester or more to complete.**
- 91% of employers say that, whatever their major, all students should have experiences in solving problems with people whose views are different than their own.*

Employer Endorsement of High-Impact Practices*

A majority of employers say they are more likely to hire college graduates who have completed:

<table>
<thead>
<tr>
<th>Internships</th>
<th>Internship or apprenticeship with a company or organization</th>
<th>94%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Projects</td>
<td>Advanced, comprehensive project in senior year, such as a thesis, senior project, or other major assignment that requires the student to demonstrate depth of knowledge in their major AND their acquisition of research, problem-solving, and communication skills</td>
<td>87%</td>
</tr>
<tr>
<td>Writing-Intensive Courses</td>
<td>Multiple courses requiring significant writing assignments</td>
<td>81%</td>
</tr>
<tr>
<td>Collaborative Research</td>
<td>Research project done collaboratively with peers</td>
<td>80%</td>
</tr>
<tr>
<td>Community-Based/Service Learning</td>
<td>A community-based or service learning project with a community organization</td>
<td>69%</td>
</tr>
<tr>
<td>Study Abroad</td>
<td>Study abroad program in which a student lives and studies abroad for a semester or longer</td>
<td>51%</td>
</tr>
</tbody>
</table>

The Completion and Learning Benefits of Multiple HIPs

Impact of Participation in Multiple High Impact Practices on Percentage of Senior NSSE Respondents Graduating on Time by Racial & Ethnic Background

Source: Does Participation in Multiple High Impact Practices Affect Student Success at Cal State Northridge? by Bettina Huber (unpublished paper on California State University, Northridge students, 2010).

Figure 1.3
Self-Reported Gains by Cumulative Participation in High-Impact Practices (HIPs)

Figure 1.4
Within-Group Comparisons for First-Generation and Transfer Students: Average Boost in Deep Learning Experiences and Self-Reported Gains with Multiple High-Impact Practices (HIPs) vs. No Participation

Figure 1.5
Within-Group Comparisons by Racial or Ethnic Category: Average Boost in Deep Approaches to Learning and Self-Reported Gains in Learning with Multiple High-Impact Practices (HIPs) vs. No Participation

THE LEAP CHALLENGE:
MAKE APPLIED OR “SIGNATURE WORK” A GOAL FOR ALL STUDENTS—
AND THE EXPECTED STANDARD FOR QUALITY LEARNING IN COLLEGE

**Definition**: Signature Work describes students’ learning related to a problem or project over at least a semester and often longer. It may include work in and across thematically linked courses, research, practicums, community service, or other experiential learning. It will always include writing and reflection of multiple kinds. **The key idea is that the student takes the lead, with faculty and mentors, in pursuing a significant question and in producing work that expresses the insights and learning gained from the inquiry.** Signature Work will show, in sum, what students can do with their learning.

A second key idea is that students need frequent practice to prepare for signature work.

**Rationale**: As educators, we are preparing students both for an economy that is fueled by successful innovation and for life in diverse communities that urgently need solutions to festering problems on every level: from human dignity and well-being to long-term issues of environmental sustainability. In this context, higher education should help graduates develop the capacities—including investigation, evidence-based reasoning, social imagination, collaborative competence—to grapple with problems where the “right answer” is still unknown and where any answer may be actively contested.

We also are preparing students to navigate in a context of ongoing and often disruptive change, in which their own inner resources — e.g., their sense of purpose, motivation, ethical compass, resilience, and grit—will be important components in their achievement of “success,” in all its multiple manifestations.

To prepare students for a lifetime of working with unscripted questions—in their careers, in diverse communities, and their own lives—college study should immerse them—early and often—in their own explorations of significant and complex problems, questions that matter to them and whose significance to others they are prepared to explain. In exploring these significant questions and problems, students should, with guidance from faculty, take the lead in framing the question, exploring the options, engaging diverse views, and producing visible results—whether through research, writing, practicums, service, social media, e-portfolios, or other forms of invention and problem-solving.

**The LEAP Challenge in Brief**: Educational institutions should expect and prepare students to produce “signature work” on one or more problems that matter to the students and matter to society. The problems may be *contemporary*—issues that need to be solved in a timely and practical way, or they may be *enduring and/or personal*—issues of values, identity, integrity, spiritual quests, justice, obligations to self and others.

What matters is that each student is expected to devote time and talent to significant explorations—enacted across multiple courses and/or assignments—and to produce signature work as a degree requirement.

Students’ signature work can be assessed for evidence of their proficiency on key learning outcomes. **But the purpose of signature work is much more than assessment. The goal is tapping students’ own motivations—which begin with their own questions and priorities—kindling imagination, making higher learning really matter, and providing opportunities for learning-in-depth that go well beyond the traditional compilation of course credits, grades, transcripts and credentials.**

*For more information, please see [www.aacu.org/leap/challenge](http://www.aacu.org/leap/challenge) and the “AAC&U Centennial Video” on YouTube. See also: Carol Geary Schneider, “Foreword,” *General Education Maps and Markers* (AAC&U, 2015) and “The LEAP Challenge: Transforming for Students, Essential for Liberal Education,” which appears in the Winter/Spring 2015 issue of *Liberal Education*. 
Designing Guided Learning Pathways for Quality and Inclusive Excellence

*With Equity and Belonging Paramount Values, Institutions Meld High Touch and High Tech to Support and Monitor Student Engagement and Progress, Giving Special Attention to Frequent or Systemic Barriers and Challenges*

Build an intentional and welcoming community so that every student feels known, respected, supported and savvy about where to find help

High touch: provide mentoring and individualized degree plans to connect degree program pathways (and developmental education, if needed) with students’ own goals, lives, and emerging interests

High tech: deploy data analytics to provide timely information about student progress and problems, and to address systemic disparities or barriers

*Faculty Define and Programs Address Essential Learning Outcomes — Across Systems and Within Institutions*

Enable a constant curricular and co-curricular focus on the most important purposes of college learning—preparing students to tackle complex questions, economic, democratic, and personal

Map Essential Learning Outcomes across all courses and requirements in the program, at progressively more challenging levels from initial courses to final studies. (Lumina Foundation’s Degree Qualifications Profile provides helpful prompts for designing programs that foster high quality learning. See www.luminafoundation.org/DQP.)

*Sequence Programs, Courses and Well-Designed Assignments to Foster Essential Learning Outcomes*

Connect the curriculum visibly with the wider world and students’ own questions and career hopes, while providing clarity, direction and progress points or “markers” for students

Provide multiple on-ramps for students in transition and/or who need supplemental work

Where relevant, use digital tools to free time for student/faculty work on projects

*All Students Participate Frequently in High Impact or Active Learning Practices, From First to Final Year*

Shift the focus from passive listening and rote assessments to students’ own effortful engagement with questions, problems, and projects, including community- or work-based projects

Ensure students’ constant practice of essential learning outcomes such as analytic inquiry, engaging diverse perspectives, collaborative problem-solving, ethical inquiry, quantitative reasoning, information literacy, communication skills, etc.

*Every Student Completes Applied Learning Projects—Connected to Program and Student Goals*

Connect college learning with open or unscripted questions important to the student and to society

Prepare and enable students to become self-directed learners

Embrace AAC&U’s LEAP Challenge: which invites higher education to make students’ “signature work” a catalyst for their integrative and applied learning

*Students’ Own Work—including Their Applied Learning Projects—Provides the Primary Evidence of their Progress Toward Degree Level Learning and Educational Achievement*

Reduce the emphasis on assessments that are disconnected by design from the actual program of study; shift our focus to students’ own “best work.” [Use AAC&U’s LEAP VALUE rubrics to track student progress on key learning outcomes and monitor equity of learning (see www.aacu.org/VALUE)]
SAMPLE GUIDED PATHWAY WITH SIGNATURE WORK

Preparing students to do Signature Work will require thoughtful redesign of curricular pathways. This example of a general education pathway is rich in problem-based learning. It can be integrated with any well-designed major. Students taking this pathway would develop core intellectual skills and knowledge through exploration of big questions, and they would be required to apply their learning in their own Signature Work.

E-portfolio shows student’s problem-based learning and proficiencies over time

First-Year Inquiry and College Writing
Cross-Cultural and Global Studies
Quantitative Reasoning
Creative & Artistic Inquiry
Cultural/Historical Interpretation
Science Explorations
Socioeconomic Analysis

Second-Year Inquiry Seminar*
Cross-disciplinary questions and student signature project

Thematic Course Clusters
Three or more courses across multiple disciplines, including the major field. A student examines questions important to him/her and to society.

Thematic Course 1
Thematic Course 2
Thematic Course 3

Signature Work
A student’s best work, which can take many forms (e.g., capstone, internship, field work, research, community-based research)

*For students in two-year degree programs, this work is Signature Work. For students in four-year degree programs, it is preparation for Signature Work. Transfer students may take the second-year inquiry seminar at the original institution or following transfer.