

## INTRODUCTION

# The LEAP Challenge, Signature Work, and Meaningful Pathways

For well over a decade, the Association of American Colleges and Universities (AAC&U) has been calling for an increase in the level of intentionality in the college curriculum. The Greater Expectations initiative (2000–2006) articulated goals and standards for a twenty-first-century liberal education and urged colleges and universities to undertake comprehensive curricular and pedagogical reform. This effort provided the context and foundation for the Liberal Education and America's Promise (LEAP) initiative (2005–present).

LEAP was framed by principles of excellence (see fig. 1) meant to prompt the design and continual improvement of an inclusive and coherent liberal education that gives students practice in applying key skills to “big questions” through engaged learning approaches that encourage ethical learning. These principles led to the collective articulation of a set of essential learning outcomes (see fig. 2) that cover the spectrum from knowledge and skills to personal and social responsibility and integrative and applied learning, along with descriptions of high-impact practices (such as community-based learning, undergraduate research, global learning, and capstones) that positively affect student learning and are particularly effective for students from historically underserved groups. To encourage authentic assessment of student work, teams of college educators from across the United States then developed the sixteen VALUE (Valid Assessment of Learning in Undergraduate Education) rubrics, which help faculty, staff, and students determine the levels at which students are meeting college-level expectations for writing, quantitative literacy, inquiry and analysis, ethical reasoning, and other crucial learning outcomes.

In part as a result of the work done through Greater Expectations, LEAP, and VALUE, there is a remarkable level of consensus nationwide about key learning outcomes, engaged-learning pedagogies, and effective assessments. More work remains to be done, however, in connecting the dots: mapping curricula and high-impact practices to the outcomes and articulating the point of broad liberal learning. This is where the LEAP Challenge comes in. Among the LEAP Essential Learning Outcomes, it is focused on integrative and applied learning.

According to the most recent National Survey of Student Engagement, 45 percent of college seniors report doing some kind of culminating work,<sup>1</sup> and the types and quality of that work certainly vary. Faculty and employers alike want to see more students pulling together the knowledge and skills they get from both breadth and depth in order to complete a significant inquiry-based project, which AAC&U is calling “signature work.”

The LEAP Challenge is to make signature work a goal for all students and the expected standard of quality learning in college.

Through a signature work project, which lasts at least one semester, students integrate, apply, demonstrate, reflect on, and communicate their cumulative learning as they grapple with complex questions that matter and that require input from multiple disciplines and perspectives. Signature work demonstrates the point of broad liberal learning and articulates a clear purpose for general education; rather than simply making one vaguely “well rounded,” liberal learning provides the big-picture knowledge and skills students will need to solve problems in their civic, professional, and personal lives.

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1 National Survey of Student Engagement, “Participation in High-Impact Practices by Student Characteristics,” *US Summary Percentages by Student Characteristics* (Bloomington, IN: Center for Postsecondary Research, Indiana University School of Education, 2016), 1.

This sort of project is called “signature work” because while students are guided and mentored by faculty and staff, they take the lead in defining the issue on which they want to focus and in communicating its significance. The projects should emerge from students’ own questions, interests, and commitments so that they are motivated to take more responsibility for the quality of their efforts.

Higher-order, integrative, and reflective learning activities have been positively correlated with student growth in critical thinking and moral reasoning and with a stronger inclination toward lifelong learning.<sup>2</sup> In addition, graduates who have had mentors, had internships or jobs in which they could apply their classroom learning, and have done projects demanding a time commitment of a semester or longer are more likely to be engaged in their career responsibilities and to think that college was worth their investment.<sup>3</sup>

Ultimately, the world needs graduates who are skilled in inquiry, analysis, and communication and who have a clear sense of personal and social responsibility, for the purposes of both their own well-being and their ability to contribute to society in important ways.

2 See Ernest T. Pascarella and Charles Blaich, “Lessons from the Wabash National Study of Liberal Arts Education,” *Change* (March-April 2013), [http://www.changemag.org/Archives/Back%20Issues/2013/March-April%202013/wabash\\_full.html](http://www.changemag.org/Archives/Back%20Issues/2013/March-April%202013/wabash_full.html).

3 See Gallup, *Great Jobs, Great Lives: The 2014 Gallup-Purdue Index Report* (Washington, DC: Gallup, 2014); Gallup, *Great Jobs, Great Lives: The Relationship Between Student Debt, Experiences and Perceptions of College Worth; Gallup-Purdue Index 2015 Report* (Washington, DC: Gallup, 2014).

## Figure 1. The LEAP Principles of Excellence

### PRINCIPLE ONE:

#### Aim High—and Make Excellence Inclusive

Make the Essential Learning Outcomes a Framework for the Entire Educational Experience, Connecting School, College, Work, and Life

### PRINCIPLE TWO:

#### Give Students a Compass

Focus Each Student’s Plan of Study on Achieving the Essential Learning Outcomes—and Assess Progress

### PRINCIPLE THREE:

#### Teach the Arts of Inquiry and Innovation

Immerse All Students in Analysis, Discovery, Problem Solving, and Communication—beginning in School and Advancing in College

### PRINCIPLE FOUR:

#### Engage the Big Questions

Teach through the Curriculum to Far-Reaching Issues—Contemporary and Enduring—in Science and Society, Cultures and Values, Global Interdependence, the Changing Economy, and Human Dignity and Freedom

### PRINCIPLE FIVE:

#### Connect Knowledge with Choices and Action

Prepare Students for Citizenship and Work through Engaged and Guided Learning on “Real-World” Problems

### PRINCIPLE SIX:

#### Foster Civic, Intercultural, and Ethical Learning

Emphasize Personal and Social Responsibility, in Every Field of Study

### PRINCIPLE SEVEN:

#### Assess Students’ Ability to Apply Learning to Complex Problems

Use Assessment to Deepen Learning and to Establish a Culture of Shared Purpose and Continuous Improvement

Colleges and universities can prepare students to accomplish signature work through guided-pathway curricula and cocurricular experiences in which they can develop and connect their knowledge and skills across broad and specialized study, and over time. While curricular designs are improving at a number of institutions, many general education programs (and some majors) are still fragmented and incoherent—consisting of disconnected courses focused mostly on content delivery, rather than problem-based inquiry. Students continue to find this approach confusing and seemingly irrelevant.

AAC&U’s General Education Maps and Markers (GEMs) initiative—a call to colleges and universities to craft more purposeful and relevant general education curricula—produced a set of principles to assist campuses in designing meaningful pathways to student achievement. The GEMs design principles, listed below, are intended to serve as guidelines for a comprehensive reform of undergraduate education—beginning with general education, but not ending there:

- The principle of *proficiency* means that faculty and staff should explain what we want students to know and be able to do, map the curriculum to those goals, and scaffold assignments so that students develop their knowledge and skills over time. Signature work is one way for students to demonstrate their proficiencies.
- The principle of *agency and self-direction* reminds us to ensure that students have a voice in planning their journeys through the curriculum and cocurriculum, that they are completing work that is relevant to them, and that they are given opportunities to reflect on their learning. Student motivation should drive signature work.

## Figure 2. The LEAP 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:

### 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

- The principle of *integrative learning and problem-based inquiry* asks that we design the curriculum so that students' experiences and learning in all contexts are connected, and that we provide them with a chance to apply their knowledge and skills from multiple areas to real-world problems. Signature work should be integrative and address an authentic question.
- The principle of *equity* requires that we ensure that all aspects of a quality, empowering liberal education are accessible to all students, and that all students have an equal opportunity to achieve the essential learning outcomes. All students should have the opportunity to complete signature work, and should be equitably prepared to do so.
- Finally, the principle of *transparency and assessment* asks us to see to it that all of our constituents are aware of institutional learning outcomes, and how we know whether or not students are achieving them. Signature work assignments, clearly designed with institutional outcomes in mind, can serve as excellent sources of evidence of student learning.

The LEAP Challenge, again, is to make signature work a goal for all students and the expected standard of learning in college, and to design meaningful pathways that help students achieve that goal. This monograph profiles thirteen campuses that have done just that, in the hope that they may serve as inspirational models for broader curricular reform.

## THE CASE STUDY SCHOOLS

The institutions represented among the case studies included here vary widely in all kinds of ways—size, Carnegie classification, locale, endowment resources, per-student instructional expenditure, tuition cost, percentage of Pell-eligible students, percentage of underrepresented minority students, average student age, proportion of full-time to part-time students, proportion of full-time to part-time faculty, proportion of degrees offered in various academic disciplines, and other aspects of institutional identity. But whatever their differences, all of them are and have been prioritizing pathways and signature work to some degree.

These schools are being profiled not because they “have it all figured out”—on the contrary, each one of them is continually striving to improve—but because they have emphasized integrative and applied learning for *all* their students for some time. Their curricula developed from varying motives, in different ways, over shorter and longer periods of time—and the resulting structures differ. But the goal of authentic integrative learning, for all students, is the same.

AAC&U brought representatives from all thirteen case study schools together at a case study project meeting in Washington, DC, in January 2016, where they shared information on the following themes: when and why their particular curricular innovations were begun, how they were implemented, and how they are sustained; what the results have been with regard to student learning, faculty engagement, and overall campus culture; how each school is continuing to improve its programs; advice for others hoping to craft more coherent, scaffolded, relevant curricula for their own campuses; and why this work is worthwhile, despite its challenges. These representatives, and others on their respective campuses, then elaborated in response to a number of queries from one another and from the authors of the case studies below. AAC&U thanks all of those who were willing to spend part of their academic year and summer helping us craft this publication.

Within these themes, of course, are many variations. For example, some of the integrative designs for signature work have been in place for a relatively short time, while others were implemented over forty years ago. Some models are more intensive than others in terms of faculty time and load. Some integrate general education and the majors a great deal, others less so. Some schools are further along than others in direct assessment of student learning.

However, all the case study schools were motivated to improve student learning and experiences, to increase the coherence and relevance of their curricula, to help students apply their learning, and to articulate clear outcomes. All the campuses continue to improve on their work through ongoing faculty development, alignment of governance processes and reward structures, prioritization of integrative learning in faculty hiring, and celebration of the achievements of faculty, staff, and students.

## RESULTS AND A CALL TO ACTION

All the case study schools report positive results of their curricular innovations: increased student engagement, reflection, agency, and confidence; more connected opportunities for students to practice inquiry, analysis, communication, teamwork, problem solving, project management, leadership, and dialogue as well as to integrate diverse perspectives, take risks, and develop resilience; higher levels of faculty engagement in the curriculum and involvement in advising and mentoring; a clearer and more distinctive institutional identity; a greater sense of community and belonging for students, faculty, and staff; and an established or developing campus culture of collaboration and continual learning.

The case studies make visible some of the parameters of a quality liberal education—for all students, at all types of schools. We hope that readers will seriously consider how they might apply some of these ideas, designs, and strategies in ways that work in their own institutional contexts in order to improve guided pathways and augment signature work opportunities for students. These inspiring examples, from such a widely differing set of institutions, remind us that there's no excuse for settling for the status quo.