

DRAFT

Principles and Practices of Integrative Liberal Learning¹

Just as the measure of a human brain is not its number of neurons but rather the density of the interconnections between them, so is the long-term value of an education to be found not merely in the accumulation of knowledge or skills but in the capacity to forge fresh connections between them, to integrate different elements from one's education and experience and bring them to bear on new challenges and problems.

The Study of Undergraduate Education at Stanford (2012)

The concept of a liberal education has been traditionally understood as teaching and learning aimed at developing the knowledge and capacities of free individuals. For much of the twentieth century, liberal arts education also signified study in academic arts and sciences subjects primarily, with liberal learning intentionally holding itself apart from pre-professional and vocational concerns. In curricular terms, a liberal education combines breadth and depth of inquiry through general education and the major, with the former often being seen as a prelude to the latter. Typically, arts and sciences departments provide courses that fulfill general education requirements aimed at promoting capacities for life-long learning. Increasingly, higher education also has emphasized the development of various intellectual skills, which also are described as fundamental to a liberal education.²

Over a number of years, there has been increasing dissatisfaction with these conventions and their curricular representation. Faculty believe that sharply separating general education and specialized study makes it less likely that there will be coherence, intentionality, and integration in a student's coursework and less likely that students will gain all that they might from their undergraduate education.

Similarly, keeping formal academic instruction separate from learning experiences in the co-curriculum and communities beyond the classroom misses opportunities to expand students' understanding of the meaning and application of their developing knowledge and skills. At the same time, especially as the cost of education continues to rise, students as well as parents and policymakers question the relevance of the liberal arts—meaning, in this context, humanities and social sciences studies—in preparing students for the career demands in a rapidly changing global economy. This kind of questioning has led to skepticism about traditional arts and sciences areas as well as traditional forms of education, and has encouraged students to seek more efficient, more specialized and career-oriented areas of study.

¹ This draft document grows out of AAC&U's project, Faculty Leadership for Integrative Liberal Learning. With the generous support of the Teagle and Mellon Foundations, this project brings together fifteen residential liberal arts colleges to explore leadership for integrative and engaged educational experiences. The authors of the draft are Ann Ferren, AAC&U Senior Fellow and Director of the project and David Paris, AAC&U Vice President, Office of Integrative Liberal Learning and the Global Commons. Feedback is welcomed at paris@aacu.org.

² Since 2005, AAC&U's Liberal Education and America's Promise (LEAP) initiative has helped formalize both intellectual/practical skills and an array of outcomes requisite to personal and social responsibility as key components of liberal education.

Many colleges and universities are responding to these concerns and rethinking liberal arts education for the 21st century. They are drawing lessons from interdisciplinary courses, majors, and programs to create broader, more intentional curricular designs that better integrate general education and the major across departments and throughout the student's experience. They are developing clearer, more coherent curricular pathways—often associated with thematic, problem- and inquiry-centered courses—that better engages students in their learning and demonstrates its relevance. They are experimenting in sophisticated ways to link co-curricular and service learning activities to specific learning outcomes and to connect these experiences to coursework. Similarly, they are giving greater attention to career preparation through internships and they are engaging employers and students in recognizing opportunities for integrating classroom and applied learning. In this environment, arts and sciences programs increasingly realize the necessity and desirability of addressing students' career concerns, and pre-professional and vocational programs likewise realize the value of grounding their work in a broad liberal education. There also is a notable trend toward including upper level components to general education, including linking them more intentionally to the major.

As the Association of American Colleges and Universities (AAC&U) approaches its centennial, it will seek to support and further these developments. They represent a natural and positive evolution of the idea of a liberal education and an emergent **ideal of integrative liberal learning**. This ideal involves several overlapping principles that reflect a more **holistic concept of undergraduate education** in terms of student (self) development, a view of **integrated learning opportunities and experiences**, and greater **clarity and transparency of learning outcomes** that are understood by students and others. AAC&U also seeks to make clearer the value and use of integrative liberal learning, by underscoring students' needed preparation to apply their learning to complex questions and problems they will face as individuals, as family members, as citizens, and in their careers.

With this goal in view, we offer below—for discussion and debate—a draft outline of the guiding principles for integrative liberal learning and a related set of recommended practices that can help students achieve this goal.

Principles of Integrative Liberal Learning

- **Integrative liberal learning develops the whole student for personal growth, economic productivity, and responsible citizenship.** A college education is more than the accumulation of credits in the arts, humanities, social sciences, mathematics, and sciences—the specific categories of most general education programs. At its best, integrative liberal learning catalyzes a process of intellectual and personal growth by providing students with opportunities and guidance to make sense of the world and their place in it. Students develop and shape their broad identities by integrating the disparate parts of the undergraduate experience.
- **Integrative liberal learning prepares students to tackle complex and unscripted problems – to apply evidence-based reasoning, judgment and ethical responsibility to questions where the answer is not known and the consequences matter.** Most of the problems, the “big questions,” students will face do not lend themselves to simple, well-defined solutions. Students need to engage with a range of such questions in order to develop the analytical skills, including evidence-based reasoning, to respond to them. This includes developing the capacity to make intellectual and ethical judgments grounded in

notions of personal and social responsibility. Students are most likely to engage deeply with their work when they see it as meaningful, relevant, and connected to significant issues.

- **Integrative liberal learning intentionally and coherently connects student experiences in the curriculum, between the curriculum and co-curriculum, and with larger communities.** Coursework can be organized in ways that go beyond the simple categories of general education and the major to form an intentional program of study. Student learning and development in academic settings is enhanced when clearly connected to co-curricular activities and community service and internships where ideas and theories are tested and applied. In this way, students make sense and see the relevance of their academic work in terms of their self-development and aspirations.
- **Integrative liberal learning allows students to demonstrate to themselves and to others the gains made through curricula, programs, and the educational experience as a whole.** Students can describe their accomplishments and growth in ways that go beyond the transcript and the resume. They can discuss the point and pattern in their courses, assignments, and projects. They can point to a “body of work” that stands as evidence of intellectual and personal growth, development, and potential.
- **Integrative liberal learning provides the greatest value for both the individual and society.** It does more than prepare students for a career. It provides the tools for personal development and responsible citizenship across a lifetime. The key elements of integrative liberal learning—an understanding of the foundations of knowledge and inquiry about nature, culture and society; mastery of core skills of perception, analysis, and expression; cultivation of a respect for truth; recognition of the importance of historical and cultural context; and exploration of connections among formal learning, citizenship, and service to different communities—provide the basis for a full and meaningful life.
- **Integrative liberal learning promotes adaptability, creativity, and new perspectives so students can apply their knowledge and skills to new situations.** Employers want and society needs the general skills, knowledge, and attitudes that students develop through integrative liberal learning. As new jobs appear and old ones evolve, employers value the abilities to see connections, adapt to different situations, solve problems, and work with others as much as specific technical skills. Increasingly, students will need experience working collaboratively on a range of problems, as well as a commitment to taking seriously the perspectives and needs of others.
- **Integrative liberal learning is powerful for all students across all types of institutions and modes of education.** We cannot and should not have narrowly vocational or technical undergraduate education for some and a richer, broader education for others. We cannot and should not have one form of higher education for the privileged and wealthy and another, lesser program for disadvantaged populations. Every effort must be made to provide integrative liberal learning to all students regardless of background and educational experience. Integrative liberal learning is a vehicle for making excellence inclusive.

Practices of Integrative Liberal Learning

- **Integrative liberal learning features curricular designs that recognize the stages of student development and the importance of scaffolding learning experiences.** Thematic first-year seminars, second year community projects, upper level interdisciplinary seminars, and capstone experiences

support students as they take on more cognitively ambitious tasks. The educational impact of experiences both in and out of the classroom is strengthened when the intellectual and social learning experiences are developmentally appropriate and build upon one another in progressively more challenging ways.

- **Integrative liberal learning practices make explicit connections among a variety of learning experiences.** Courses and programs should encourage students to demonstrate the ability to draw upon knowledge, skills, and methods encountered in many aspects of their educational experiences and practice rigorous inquiry, analysis, and synthesis as they address problems. Opportunities to apply theory to practice in community projects and to bring experience from service and study abroad to inform classroom discussion help students understand liberal learning as relevant and useful.
- **Integrative liberal learning requires students to spend substantial time on significant questions of their own choosing.** Integrative liberal learning calls for active engagement and learning outcomes that are student-centered, not course-centered. Educational experiences include collaborative work as well as individual advising and mentoring. Integrative liberal learning is highly personalized and should be operationally defined in terms of what students are actually able to do, in what context, and at what stage in their education.
- **Integrative liberal learning develops advanced skills, such as in communication, quantitative literacy, and research methods, when students find them integrated throughout the curriculum.** Students should have multiple opportunities to practice skills in a variety of forms, across disciplines, and at increasingly advanced levels. Curricular designs should lead students from introductory work in general education, through development in specialized courses, to mastery in capstone work in ways that allow students to see and demonstrate the development of their skills.
- **Integrative liberal learning takes advantage of pedagogies that are challenging, supportive, and adaptable to success for diverse student populations.** Both faculty and staff share responsibility for ensuring students have adequate support services along with their academic experience. Orientation and advising help students take full advantage of integrative learning opportunities in academic programs, living-learning communities, co-curricular programs, and internships and career planning. Faculty and staff work together to see that academic and student life programs are well integrated, so that each student can develop a clear understanding of program and progress. With support and guidance, students can see how designing and interpreting their individual educational process is a creative activity.
- **Integrative liberal learning builds upon assessment strategies that help students integrate their learning, reflect on their progress, and establish future goals.** Course assignments and projects are evaluated with rubrics shared with students. Portfolios offer students multiple opportunities to identify exemplars of their best classroom and experiential work, reflect upon their developing competencies, and receive feedback and guidance as they make sense of their education. Each artifact contributes to a holistic understanding of how students are connecting their interests and abilities to their aspirations. In this way, students gain skill in reflection, self-assessment, goal setting, and problem solving.

Principles and Practices of Faculty Leadership for Integrative Learning

The evolving ideas about curriculum and pedagogy above are just part of the significant transformation underway in American higher education stimulated by economic considerations, increasing diversity in students and faculty, and new technologies. Budget constraints require campuses to think strategically about how to align resources with priorities. New types of faculty appointments and standards for contract renewal lead to shifts in faculty roles, responsibilities, and commitments. Recognition of education as critical to social mobility and social cohesion calls for campuses to make inclusive excellence their goal as they embrace greater diversity and work to ensure that all students receive a high quality education. As technology breaks down boundaries to knowledge and to colleagues around the world, both pedagogical and research opportunities are leading to innovation, experimentation, and new definitions of what an institution of higher learning is and how it is organized and administered.

In this dynamic environment, faculty must play a larger role in institutional adaptation, understand how to contribute new ideas, and share the commitment to change in order to ensure alignment of their own energies with the emerging vision of integrative liberal education.

Discussions of the role of faculty in promoting integrative learning typically focus on course and curricular design and the related pedagogies. The underlying assumption is that integrative liberal learning is the result of faculty shaping the educational program to create intentional connections among a variety of experiences in and out of the classroom. While curriculum and instruction are an important focus, AAC&U's work across all types of campuses suggests that to develop, extend and sustain integrative learning requires careful design, indeed reshaping, of institutional relationships and infrastructure. Faculty engaged in integrative learning need to know how to build additional professional capacity for this work and reduce the barriers to involvement. Campus projects aimed at strengthening integrative learning reveal the various ways in which faculty leadership initiates and supports this transforming work and, in turn, impacts the institution, colleagues, and students.

Collaborative faculty leadership is central to effective integrative liberal education. When faculty relate to each other as colleagues and collaborators rather than in hierarchical and department bound relationships, it is easier to model for students the connections across courses, disciplines, and ideas. Faculty who consider themselves experimental and are willing to try new things can guide both colleagues and students in taking on significant projects and learning from trial and error as they apply theory to practice. Every campus needs faculty who are seen as the "go to" people for new projects who can turn ideas into action and are supportive and appreciative of colleagues who join the effort. Finally, a faculty mindset of shared responsibility for the outcomes of an undergraduate education helps faculty and staff appreciate that they can share a sense of common purpose while also holding to diverse views, methods, and standards about learning.

AAC&U's work to build faculty capacity for change is well known and continues as a central commitment. Among the emerging ideas to enhance faculty leadership and oversight for integrative learning is the importance of the **role of faculty development** in facilitating change and socializing new faculty, the value of both formal and informal processes to **reach across boundaries and create a collaborative environment**, and the way in which **reform initiatives build campus community**.

Principles of Faculty Leadership for Integrative Learning

- **Faculty leaders promote collective responsibility for student learning outcomes, making the crucial shift from “my work” to “our work.”** They engage colleagues in collaborative curricular design and assessment that crosses disciplinary, departmental, and institutional boundaries. To overcome the typical fragmentation of campus activity, faculty must be actively involved in sharing ideas for assignments and projects, reviewing assessment data, and understanding their contribution to the whole. Faculty leaders should help colleagues see and articulate how their work fits into the larger picture of promoting integrative liberal learning for student development, to see beyond the boundaries of departments and programs.
- **Faculty leaders recognize the importance of infrastructure—the alignment of policies, procedures, relationships, faculty responsibilities and rewards, with curricular and co-curricular outcomes and assessments—so that efforts to implement and extend integrative learning are lasting, sustainable, and institutionalized.** As curricular designs and faculty expectations evolve, so too should appropriate governance structures emerge to support these cross-campus relationships. Policies and procedures, rewards and recognition should all aim toward enhancing student development and integrative learning. New faculty must be oriented to the institutional commitment to integrative learning and included in activities, councils, and other fora that advance integrative work so that they can be active contributors both in the short term and the long run.
- **Faculty leaders facilitate communication among practitioners, experimenters, and observers to help make visible the variety of forms integrative learning takes, increase understanding about the value of integrative learning, and connect the work to the guiding vision for the institution.** Faculty leaders emerge naturally from those who are trusted as boundary crossers, innovators, mentors, and supporters of educational improvement. They stay informed about new ideas and opportunities both on their own campus and across higher education and help assure that colleagues are aware of these developments and their implications for their individual and collective efforts.
- **Faculty leaders create a shared culture receptive to innovation.** They notice what colleagues are doing and identify and appreciate exemplars of integrative and interdisciplinary work and build a community of learners. Broad engagement in various institutional initiatives gives faculty of all ages, backgrounds, and disciplines opportunities to work with colleagues and get to know their capacities. Such faculty leaders have no need to be “in charge” but build good will by engaging many across the institution, both formally and informally, in work that contributes to integrative learning.
- **Faculty leaders see integrative learning as open-ended and encourage continuous improvement in student achievement.** Through deep understanding of their students, faculty leaders recognize their capacities and urge colleagues to push toward more advanced levels of intellectual inquiry in student learning rather than work just to achieve some set standard or intended outcome. By example and in engaging with their colleagues, faculty leaders’ change efforts help student achieve their full potential.
- **Faculty leaders understand the process of change from initiation to implementation to sustainability and adapt their strategies accordingly.** Faculty leaders for integrative learning understand the culture of their institution, the role of opinion leaders, the authority of administrators,

and stages of previously successful change efforts. They should be able to interpret how new ideas will fit the situation of the intended adopters, build on faculty interest, emphasize transparency, and connect their work to other significant campus initiatives.

Practices of Faculty Leadership for Integrative Learning

- **Faculty leaders effectively balance collaborative curricular decisions with respect for academic freedom.** Faculty recognize the need of colleagues to pursue a variety of interesting initiatives such as seminars on big questions, writing assignments calling for two different methodologies, and community-based work in a variety of courses, yet at the same time they encourage faculty to agree on meaningful pathways from first to last year and the value of mapping and tracking to frame the outcomes and experiences of students as they move in and out of institutions. They reassure faculty that agreeing on initiatives such as developmental advising and more careful integration of general education and the major need not interfere with the individual choices of faculty.
- **Faculty leaders share responsibility with many levels of decision makers for ensuring that faculty incentives and rewards are aligned with the variety of new activities and pedagogies to support integrative liberal learning.** Working at both the institutional and the departmental level, faculty leaders identify barriers to experimentation, advocate for resources and support for innovation, and facilitate revisions of policies and procedures to match new curricular forms. They recognize that it is an iterative process and takes time to adapt infrastructure to emerging expectations.
- **Faculty leaders use both formal and informal opportunities to overcome boundaries, help faculty recognize their common purpose, and stimulate creativity and commitment.** Faculty leaders should take advantage of a variety of opportunities to increase faculty awareness and understanding of integrative learning including lecture series, study groups, learning circles, and town hall meetings. Faculty leaders are articulate advocates, good listeners, and effective managers of group dynamics so that these activities are productive and encourage collaboration and continued communication.
- **Faculty leaders promote faculty development to enhance faculty capacity.** Many aspects of integrative liberal learning call for broader shared understanding of course design, pedagogy, and student development. A robust faculty development program can cross departmental boundaries to support interdisciplinary courses and team teaching, introduce high impact practices, and strengthen the kind of advising that will help students master the skills and tools they need to plan their program, reflect on their learning, and understand their progress.
- **Faculty leaders, through identifying exemplars, demonstrate that integrative liberal learning requires re-conceptualizing the faculty role from “designing” the learning experiences to “constructing” the learning as a coach and co-learner with students.** In this role, faculty ask meaningful questions about complex issues; encourage students to use multiple ways of “knowing;” suggest relationships, patterns, and alternative perspectives to inform understanding; and support students as they struggle with ambiguity, uncertainty, and unanticipated conclusions. Faculty require support as they adopt new roles and relinquish some control of the classroom.
- **Faculty leaders use evidence to promote commitment to integrative liberal learning and demonstrate its effectiveness for all students.** Assessment data should guide faculty in planning new

curricular designs, making intentional connections, undertaking collaborative work, and engaging students in a holistic understanding of their learning attainment. Use of the VALUE Rubric on Integrative Learning or any other valid assessment is necessary to demonstrate progress in student learning and encourage further work to extend and sustain institutional commitment to integrative learning.

A Final Note

These principles of integrative liberal learning and faculty leadership for it should guide the education of all students in all settings, regardless of the mode of instruction. As fewer and fewer students experience a continuous four-year residential experience at one institution, it becomes even more imperative that students be able to clearly understand their education in holistic and developmental terms. The practices of integrative learning and faculty leadership for it will necessarily be adapted to both the specific students and the instructional setting in order to achieve both students' highest potential and a high quality education for all. These adaptations should be consistent with developing students' skills and capacities in ways that allow them to reflect and make sense of their educational experiences and to demonstrate their progress and potential to themselves and others. All students deserve a real opportunity to have a liberal education guided by faculty and consistent with the above principles and associated practices.