



Integrative Learning for Liberal Education

By **Mary Taylor Huber**, senior scholar; **Pat Hutchings**, vice president; and **Richard Gale**, senior scholar— all at the Carnegie Foundation for the Advancement of Teaching

Educators who follow the listserv of the Professional and Organizational Development Network in Higher Education (POD)—whose members staff and direct teaching and learning support centers—may have seen the following query pass over their screens in January this year: “Dear PODers,” wrote Victoria Mundy Bhavsar, “In my discipline (agriculture), we are very fond of talking about integrated multidisciplinary learning experiences. I imagine other disciplines do this, too. Could I get some reflections on what this might actually mean in practice? Besides making students take a whole big lot of classes in several different departments and hoping they ‘get it’ by the end!”

This is the \$64,000 question for many educators concerned with the reform of undergraduate education today. Convinced that undergraduates’ experience has become too fragmented to prepare them for the complexities of today’s world, educators across the country are designing new opportunities to help students put the pieces together. These innovations and experiments aim to help students connect their learning across fields, and also to integrate classroom work with experiences in larger campus and community contexts—and to do so in ways that strengthen learning throughout the college years and beyond.

Such work is in keeping with recent thinking by Carol Geary Schneider and her colleagues at the Association of American Colleges and Universities (AAC&U), who identify three key themes in the “reinvention of liberal education” today—themes that,

taken together, define a “New Academy that is taking shape within the old one” through a variety of campus, system-wide, and national initiatives. These include a new, across-the-curriculum focus on “inquiry and intellectual judgment,” a renewed concern with “social responsibility and civic engagement,” and a new interest in “integrative learning.” Indeed, they suggest that integrative learning may one day “take its rightful place alongside breadth and depth as a hallmark of a quality undergraduate education” (Schneider 2004, Leskes 2004).

This interest in integrative learning is the focus of a partnership between the Carnegie Foundation for the Advancement of Teaching and AAC&U—a national project involving ten campuses, each committed to deepening our understanding of this crucial aspect of undergraduate education. One of the first products of this work has been a “Statement on Integrative Learning,” which points out: “Integrative learning comes in many varieties: connecting skills and knowledge from multiple sources and experiences; applying theory to practice in various settings; utilizing diverse and even contradictory points of view; and, understanding issues and positions contextually.” Of course, developing such a synthesizing, creative cast of mind has long been a goal of liberal education, albeit one that students have been expected, more often than not, to pick up for themselves. What’s new today is that institutions are seeking to help students see the larger patterns in their college experience, and to pursue their learning



in more intentionally connected ways. To put it a bit differently, the capacity for integrative learning—for connection making—has come to be recognized as an important learning outcome in its own right, not simply a hoped-for consequence of the mix of experiences that constitute undergraduate education.

Integrative Learning for Twenty-First-Century Life

There are many good reasons for this emphasis, including a new appreciation of the importance of integrative learning for contemporary life and thought. Students headed for professional careers will still need specialized expertise. But with flexibility and mobility as watchwords in today's economy, few college graduates can expect to spend a whole career with the same employer or even in the same line of work. Further, the role of interdisciplinary collaboration and exchange is growing both within and outside the academy. In government, industry, medicine, and higher education alike, problems are vetted and solved by bringing together people who are trained in different fields. Because of changes in knowledge and communication practices, including technological advances and globalization, all of us are faced with information that is more complex, fast moving, and accessible than ever before, challenging the integrative and critical capacities of experts and novices alike. Psychologist Robert Kegan summarizes the scope of the issue succinctly in the title of his 1998 book *In Over Our Heads: The Mental Demands of Modern Life*.

This is true of civic life as well. We no longer live in a world where it is easy to feel in control or empowered to affect what's happening in one's own neighborhood, much less in the nation or the world. Yet at the same time, our personal choices, even the food, clothing, and cars we buy, have immediate consequences for those far away. Speaking about the results of a massive international study of air pollution, University of New Hampshire scientist Berrien Moore said in an interview on the *NewsHour with Jim Lehrer*, "What happens in Beijing will affect Boston, what happens in Boston will affect Paris, et cetera. And I think that's one thing that we will have . . . even as we begin to solve local problems, this connectivity of the planet will come back at us time and again" (2004). To participate responsibly as local citizens, then, people must also be citizens of the world, aware of complex interdependencies and able to synthesize information from a wide array of sources, learn from experience, and make connections between theory and practice.

Our colleges and universities can play an important role in helping students develop the "integrative arts" necessary for meeting today's challenges (Schneider 2004), and many campuses already embrace such a goal. College catalogs make powerful promises about students' personal and intellectual development as thinkers and citizens—and certainly there are inspiring models and existing proof to show what may be possible (Colby et al.

2003). To meet these commitments to integrative learning more fully, and to meet them for all students, is the difficult challenge ahead.

A Difficult Challenge

No one should underestimate the difficulty of this new direction because it runs against the grain of many of the most established features of the undergraduate experience. Consider, for example the experience of University of Kansas psychologist Dan Bernstein, who wants his psychology majors to develop "a nuanced understanding of the complex origins of human action," but worries that "individual courses typically promote specialized understanding of *one* explanatory model":

Teachers who are trying to cover as much of the course material as possible rarely give assignments that ask students to step back and compare different models of human action. Instead they typically presume (or hope) that the range of courses required for the major will provide an occasion for students to make those comparative reflections on their own (Bernstein, Marx, and Bender 2005, 40).

Clearly Bernstein's analysis applies well beyond the field of psychology, and the challenges are not only at the level of the individual course. There are structural arrangements that privilege departmental and disciplinary agendas over general education and interdisciplinary work. Administrative systems that define faculty roles and rewards have been slow to recognize interdisciplinary and applied



scholarship, not to mention the extra efforts involved in designing, teaching, and assessing courses aimed at integrative learning, and the persistent gaps between programs in the professions and the liberal arts and sciences, the curriculum and the cocurriculum, and campus and community life.

Many of the ways that courses are delivered and taken encourage faculty and students alike to think of learning as discrete, unconnected chunks. As Gerald Graff explained in the *Chronicle of Higher Education* in 1991, “The classes being taught at any moment on a campus represent rich potential conversations between scholars and across disciplines. But since these conversations are experienced as a series of monologues, the possible links are apparent only to the minority of students who can connect disparate ideas on their own.” Faculty often talk about valuing the transferability of knowledge and the meaning making that occurs when students link diverse ideas from multiple sources, classes, courses, and disciplines—but teaching for such outcomes can be difficult, and is rarely explicit.

Exacerbating this tacit message of fragmentation is the increasing complexity of students’ lives. According to the U.S. Department of Education, traditional students entering college full-time right after high school, supported by parents or working only part-time, now account for only 27 percent of undergraduates; and more than 40 percent in 1999–2000 were more than twenty-four years old. Many have families and jobs that necessarily take precedence

over schoolwork. And a growing proportion of students are attending more than one institution over their college careers (McCormick 2003). By further fracturing undergraduates’ college experience, these “swirling” patterns of enrollment make integrative learning across courses and contexts even more difficult.

They suggest, too, that while curricular changes can do a lot to help students connect the dots, such changes cannot be the only solution. We also need approaches that help students develop these capacities to make connections for *themselves*. Helping students to become more self-aware and purposeful—more intentional—about their studies is a powerful idea, and it is, in our view, the key to fostering integrative learning.

Intentional Integration

Integrative learning does not just happen—though it may come more easily for some than for others. Whether one is talking about making connections within a major, between fields, between curriculum and cocurriculum, or between academic knowledge and practice, integrative learning requires work. Of course, students must play an important role in making this happen, but their success depends in large part on commitment and creativity from everyone involved.

To support integration, many colleges and universities are developing new kinds of institutional scaffolding within and between their general education programs (breadth), their majors (depth), and—in many cases—campus and community life.

On a national tour of campuses today, one will find linked courses that invite students to take different perspectives on an important issue, capstone projects that ask students to draw on learning from earlier courses to explore a new topic or solve a problem, experiences that combine academic and community-based work, or systems of journaling and reflection like those known as learning portfolios. But these useful examples also serve to highlight one of the next challenges: to link the various sites and strategies for integration by putting in place a variety of structures and practices that enable students to connect, say, their first-year learning-communities experience to a final capstone course or to study abroad in the junior year. In order to be truly effective for students, integrative learning must be not an isolated event but a regular part of intellectual life.

As the articles and examples in this issue of *Peer Review* attest, combinations of such designs can be found in institutions of all types and persuasions. Although each has a unique approach growing out of campus mission and history, there are common threads. Most institutions that have made headway are creating new and varied opportunities for integrative learning, engaging students in reflection on their learning, involving faculty in teaching that nurtures integrative arts, and building campus-wide interest and experience in assessment.

If there is a through-line, in all these initiatives, it is the importance for everyone involved of being intentional about pursuing integrative learning goals.

Indeed, as Carnegie Foundation President Lee Shulman reminded participants in the Integrative Learning Project in July 2004, there's a sense in which all learning is integrative—the real questions are around what, for what purposes, and how intentionally integration is sought. It is hard to think of a college course or curriculum that could *not* be taught or designed—and taken—with integrative learning in mind.

We conclude by returning to the \$64,000 question with which this article began. “Could I get some reflections on what this might actually mean in practice?” This is the winning question not only because of its focus but also because it was asked in a public forum. It is a reminder that efforts to strengthen programs that foster integration need not, and should not, be pursued alone. Too often, good work in teaching and learning remains with its creators, unavailable for others to consult, review, and build on and inaccessible to those who really want the help. Colleagues—and campuses—need to work together, sharing what they are finding out about integrative learning, developing new assignments for fostering integration, creating new models for assessing outcomes, and building on one another's insights and accomplishments.

Local efforts can be reinvigorated through participation in a community of educators working toward similar goals, and that community, in turn, can contribute to building knowledge that informs efforts to foster integrative learning at colleges and universities around the

world. Such an approach will not only deepen our collective understanding of how students learn to integrate their undergraduate experiences and what that “might actually mean in practice”; it will give us the tools and knowledge and networks necessary to go beyond “hoping they ‘get it’ by the end.” ■

This article draws on a publication by Mary Taylor Huber and Pat Hutchings, Integrative Learning: Mapping the Terrain (Association of American Colleges and Universities, 2004).

References

- Bernstein, D., M. S. Marx, and H. Bender. 2005. Disciplining the minds of students. *Change* 37 (2): 36–43.
- Colby, A., T. Ehrlich, E. Beaumont, and J. Stephens. 2003. *Educating citizens: Preparing America's undergraduates for lives of moral and civic responsibility*. San Francisco: Jossey-Bass.
- Graff, G. Colleges are depriving students of a connected view of scholarship. *Chronicle of Higher Education*. (February 13, 1991).
- Leskes, A. 2004. Foreword to *Integrative learning: Mapping the terrain*, by M. T. Huber and P. Hutchings. Washington, DC: Association of American Colleges and Universities.
- McCormick, A. C. 2003. Swirling and double-dipping: New patterns of student attendance and their implications for higher education. *New Directions for Higher Education* 121:13–24.
- Moore, Berrien. 2004. Interview by Betty Ann Bowser. *The NewsHour with Jim Lehrer*. PBS. September 9.
- Schneider, C. G. 2004. Practicing liberal education: Formative themes in the reinvention of liberal learning. *Liberal Education* 90 (2): 6–11.

In addition to its annual meeting, AAC&U offers a series of working conferences and institutes each year. Additional information about the upcoming meetings listed below is available online at www.aacu.org/meetings.

Network for Academic Renewal Meetings

October 20–22, 2005

Integrative Learning:

Creating Opportunities to Connect
Denver, Colorado

November 10–12, 2005

The Civic Engagement

Imperative:

Student Learning and the
Public Good

Providence, Rhode Island

March 9–11, 2006

General Education and

Outcomes That Matter in a
Changing World

Phoenix, Arizona

April 20–22, 2006

Learning and Technology:

Implications for Liberal
Education and the Disciplines

Seattle, Washington

AAC&U's Annual Meeting

January 25–28, 2006

Demanding Excellence:

Liberal Education in an Era of
Global Competition, Anti-
Intellectualism, and Disinvestment

Washington, DC