In the summer of 2003, the Carnegie Foundation for the Advancement of Teaching and the Association of American Colleges and Universities (AAC&U) issued a call for campus participation in a new national project to investigate and promote integrative learning in undergraduate education, Integrative Learning: Opportunities to Connect. While only ten campuses could be selected for this three-year effort, the pool of 139 applications revealed widespread progress and significant challenges in meeting integrative learning goals. Helping students connect skills and knowledge within and across their academic and nonacademic experiences is a priority on many campuses, and a survey of the proposed projects provides a window into the current state of integrative learning nationally.

Using the responses to the call's criteria—a description of institutional context and current accomplishments in integrative programming, a proposed project, and questions to be answered by the work—the three authors of this paper developed a protocol to collect relevant information and analyze results. In this article we highlight areas that campuses mentioned most frequently for piloting or implementation, note other areas less frequently mentioned, and examine important themes and practices that emerged from the analysis.

Surveying the Terrain
The process of using proposals to analyze institutional efforts to support integrative learning has both benefits and limitations. Although the proposals are only five pages long and respond to specific criteria in the call, they are detailed enough to suggest the emergent nature of this work. For instance, we found that campuses do not use the language of integration consistently; the phrase “integrative learning” has limited common meaning. Even familiar concepts like learning community, capstone, first-year experience, general education, interdisciplinary (or, variously, cross-disciplinary, multidisciplinary, or transdisciplinary) courses or studies have differing applications, and we had to be flexible in categorizing project information.

Nevertheless, major lines of work are taking shape in the name of integrative learning, and the protocol allowed us to aggregate the data and observe themes...
across institutions in a meaningful way. With some caution about overstating findings, this survey could serve as a baseline for contributions to larger efforts to build coherent programs of integrated undergraduate experiences in classrooms, across disciplines, and on and off campuses.

The protocol lists twenty-four primary and secondary focal points for campus projects, and single projects often had multiple foci. For example, a campus might propose assessment and faculty development as part of a new first-year learning community. The areas of activity with highest combined totals are assessment (70 percent), faculty development (63 percent), curriculum development (37 percent), capstones and first-year experiences (each 30 percent), student self-assessment and portfolios (29 percent), civic engagement (18 percent), and learning communities (16 percent). Interdisciplinary studies and courses, advising, middle years and bridging programs, honors programs, and programs for transfer students are identified in fewer than ten proposals.

Assessment is the focus for 70 percent of the projects. The range of activity varies greatly, but involves some measurement of student learning, skills and attitudes, and program outcomes; the development of rubrics; use of data from the National Survey of Student Engagement; and portfolios. In fact, nearly 30 percent of proposals center on student, faculty, and program portfolios, and of those over half are e-portfolios. Many campuses report they were already experimenting with portfolios, electronic or otherwise, in some part of the curriculum. At the same time, many lament the lack of models for reliably measuring how well students integrate their learning.

Sixty-three percent of proposals identify faculty development as a project focus. As one campus states, “Faculty have difficulty moving outside their own disciplines.” Another campus acknowledges the challenge of teaching for integrative learning and the consequent need for work with faculty: “Our students find it hard to make integrative connections unless the faculty can model integrative thinking in the ways in which they teach their classes.”

Thirty-seven percent of campuses propose work that could be categorized primarily as curriculum development. Institutions are seeking coherence and synthesis, for example, within the disciplines, between general education and the major or preprofessional studies, in linking and bridging first-year experiences and capstones, and the like. Indeed, 21 percent focus on the integration of disciplinary course work with general education courses.

Separate from but overlapping with the focus on curriculum development are first-year and capstone experiences—both totaling about 30 percent of the projects. More than half already use one or both, and a quarter of the proposals focus on revising and expanding them. Capstones, in particular, are cited as promising sites for determining whether—and for ensuring that—students integrate their learning in the general or core curriculum with learning in their major. Interestingly, only 3 percent of applicants submitted proposals for the sophomore or junior years, specifically middle-year and bridging programs.

One might envision integrative learning being strengthened through diversity and multicultural efforts, undergraduate research, independent study, global/international efforts, and career development. However, these are rarely mentioned as a project focus, although they are identified among existing institutional activities.

Also interesting is the preponderance of applications from doctoral/research and master’s colleges and universities (58 percent), on the one hand, and the large proportion (21 percent) from private, faith-based institutions on the other (see table 1). Although further analysis is needed to determine whether foci differ by institutional type, the work undertaken by the ten campuses selected to participate in the project suggests that most of these practices are available to campuses across the spectrum. Indeed, our experience on the project is that very different campuses are learning a great deal from each other’s efforts (see sidebar on page 27).

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<th>Table 1. Applicant Institutions</th>
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<td>Associate’s colleges</td>
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Emerging Themes and Variations

Five interrelated themes recurred throughout the proposals.

1. Institutional Context. Based on the application narratives, most of the 139 institutions are already deeply engaged in a multiplicity of reform efforts in undergraduate education, including innovations in curriculum, instruction, and assessment. Thus, the proposed campus projects emerge from dynamic institutional contexts of ongoing reform. They are not isolated activities, nor are they presented as activities that will catalyze dormant or troubled institutions. These campuses chronicle an impressive array of existing educational experiences that are themselves integrative, including learning communities, first-year programs, interdisciplinary courses, multicultural experiences, service learning, study abroad and other experiential opportunities, and general education reform more broadly.

Many campuses also identify ongoing efforts to document student learning outcomes using, for example, portfolios or capstone courses within the major. Several proposed projects build on these earlier, more limited integrative assessment efforts and take them to the next level by developing, for example, e-portfolios or capstone courses to integrate general education and the major. Thus, many of the campus projects are innovative in that they take an integrative process or activity that has been productive within a more limited frame and expand its capacity to integrate more elements of the collegiate experience, include more students, or expand its reach horizontally and vertically through time. The projects emerge from and reflect the ongoing institutional commitment to educational experimentation in teaching, learning, and assessment.

2. Intentional Designs to Promote Coherence. The multiplicity of rich educational activities already flourishing on these campuses is essential to understanding their need and readiness to pursue a project on integrative learning. Campuses recognize that they are providing an array of powerful educational experiences, but are looking for more formal, systematic ways to help students make meaning of these varied and often fragmented experiences. Whether the proposed project is intended to enable students to connect liberal arts and the major or curricular and cocurricular experiences or “head, heart, and hands”—characteristic of the goals of faith-based institutions—the underlying concern is to promote coherence across the undergraduate experience. The projects are framed as the connective tissue among collegiate experiences so that the whole will be greater than the sum of its parts, and are designed intentionally to clarify and amplify what students learn to enable them to access and apply this learning more readily in the future. Stated simply, campuses want to ensure that students can “connect the dots” regardless of their unique undergraduate careers in order to maximize the aggregate experience we call “college.”

3. Prognosis for Transformational Change. One might conclude that a new capstone course or e-portfolio is nothing more than another isolated experience to add to the litany of requirements. Carefully planned and enacted, capstones, portfolios, and other projects hold promise of being transformative by changing the expectations that students, faculty, and administrators have for the undergraduate experience as a whole. The projects support development of reflective and intentional learners who will be able to make meaning of and bring coherence to the disparate paths they take through college and into their lives beyond graduation. To accomplish this goal requires a reinvention of the undergraduate experience with collective responsibility for its coherent design, implementation, and assessment. In that sense, many of the projects, even those limited to the development of a single integrative course or assessment tool, have the potential to instigate change throughout the curriculum. For many campuses, the project is designed to serve as a change agent, mobilizing faculty and campus leaders to reflect on the need for greater integration and coherence, to consider their roles and responsibilities in this effort, and to provide “opportunities to connect.”

The projects differ in their focus, scope, and capacity to drive change, but taken together, they offer a portrait of an emerging movement in higher education. The signs have been there for several years and were captured in AAC&U’s 2002 report, Greater Expectations: A New Vision for Learning as a Nation Goes to College, and more recently in Integrative Learning: Mapping the Terrain by Mary Huber and Pat Hutchings (2004), but the Integrative
Integrative Learning Project Campuses

Carleton College (Northfield, MN) is studying how it collectively integrates important literacies into a student's education. The goals are to implement a plan to discover and articulate how faculty are defining and teaching transferable, cross-cutting skills and literacies and to free faculty from the notion that they are singularly responsible for a student's education. Carleton will use its experiences with the required sophomore writing portfolio and senior capstone projects to provide checks and guideposts for all of the literacies identified.

College of San Mateo (San Mateo, CA) is measurably expanding its learning communities program to promote "shared knowledge" and "shared knowing" among students and faculty, thus providing an overarching academic success strategy for its fragmented and transient community college population.

LaGuardia Community College CUNY (Long Island City, NY) is using electronic student portfolios that link to first-year initiatives and a college-wide assessment plan in order to investigate the integration of learning across classes, the role of digital tools in this process, and the impact of such a project at an urban community college with a student body overwhelmingly immigrant, female, and economically disadvantaged.

Massachusetts College of Liberal Arts (North Adams, MA) is developing objectives, assessment methods, and courses for the upper-level integrated capstone course in its developmental core curriculum. MCLA will add the third level of capstones to tiers already in place, and build a multimodal system of assessing student achievement.

Michigan State University (East Lansing, MI) is addressing the study abroad option for earning required credits in integrative studies. The project will connect the integrative studies and global competencies outcomes, create criteria for study abroad options that are likely to meet those outcomes, and develop an assessment protocol for measuring study abroad.

Philadelphia University (Philadelphia, PA) is promoting student integrative learning that connects its professional programs with its liberal education core by expanding the involvement of faculty from the professional majors in the general education program, creating a forum for university-wide planning for liberal-professional integration, and making curricular connections more transparent and intentional for students.

Portland State University (Portland, OR) is implementing a revision of the middle portion of the interdisciplinary general education program, University Studies, which includes designing new courses and assessing the revision and program, primarily using electronic student portfolios.

Salve Regina University (Newport, RI) is developing a senior capstone experience that both integrates liberal learning and links that learning to specialized study in the major, and an integrative learning portfolio that assesses student progress over four years of study.

State University of New York at Oswego (Oswego, NY) is modifying a first-year program, integrative interdisciplinary general education requirement, and capstone to create a core curriculum with a focus on developmentally appropriate integrative skills. Prior to this consultative program revision, it is conducting a qualitative assessment to define and develop rubrics for integrative skills.

University of Charleston (Charleston, WV) is focusing on enhancing and celebrating integrated learning assignments that are aligned with program and liberal learning outcomes in order to demonstrate growth rates equal to or exceeding the current ones.
Learning Project enabled us to see even more clearly the breadth of institutional interest and activities and the challenges inherent in this work.

4. Faculty and Faculty Development as Integral to Change. To meet the challenges and to promote transformation, the majority of campuses identify faculty engagement and faculty development as key elements of campus change efforts. The discussion of faculty involvement is prominent in several proposals, with references to the number and range of faculty across the disciplines who participated in planning the proposed projects, concern for how best to engage faculty in ongoing efforts, and discussion of why faculty engagement is both essential and challenging. Several applications note that the proposed projects had been approved by academic governance and care had been taken to vet the projects with faculty and advisory groups. All of this bespeaks the recognition that efforts to promote integrative learning should engage faculty who ultimately will do the heavy lifting of planning, implementing, and assessing its impact.

The proposed approaches to faculty development vary widely and include faculty learning communities and communities of practice; workshops; faculty conversations; collaborative development of integrative assignments, assessments, and scoring processes as forms of faculty development; and faculty mentoring. The proposals that focus on faculty development do a compelling job of establishing the need for it, although some provide only limited discussion of their conceptual framework or plans for faculty development beyond cursory references to a method (e.g., workshops), without further explication. Nonetheless, faculty development is on the radar screen for the majority of campuses as a valued and important dimension of their change efforts.

5. Back to Basics. The theme of faculty development underscores the recognition that integrative learning requires new ways of thinking about teaching, learning, and assessment and the development of new skills. This need is particularly evident in the questions posed by campuses. The call for proposals asked campuses to identify questions that they hoped to answer through their proposed work. A few campuses indicated they would frame their questions later in the process. Several posed procedural questions—variants of “how can we do what we propose?” But one of the most frequent responses was a list of fundamental questions that go to the heart of the matter: What is integrative learning? How do you teach for it? How do you assess it? How do you prepare faculty to teach and assess it? A few campuses asked if there is a developmental sequence in integrative learning, and, if so, how colleges could promote student development from one stage to the next. Finally, a few asked questions about the impact of different approaches to integration on student learning and retention or about how faculty themselves learn to integrate across courses and disciplines.

In short, even though campuses indicated that they were eager to pursue integrative learning as a valued goal, many nonetheless asked the most basic questions about it. What does this tell us? It reveals that institutions are just beginning the quest to understand what integrative learning means for their faculty and students, even as they pursue it with commitment in order to redress the fragmentation of the undergraduate experience. Asking these fundamental questions is a bold, honest, even audacious way to begin that quest in earnest. We recognize that our analysis is based on applications with the inherent biases of self-report and self-promotion. It is therefore all the more surprising to hear so many institutions say with candor that they are still actively grappling with the meaning of integrative learning. Both their candor and their search for understanding offer further compelling evidence of the intense interest in integrative learning on American campuses. Certainly this was so among the 139 colleges and universities vying for inclusion in the Integrative Learning Project.

References