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A Different Take on Excellence

BY THE TIME YOU READ THIS MESSAGE, a synopsis of AAC&U’s 2009–12 strategic plan will be on its way to your campus. The plan was developed in dialogue with members from across the United States, and richly informed by our learning from the Liberal Education and America’s Promise (LEAP) initiative. We are grateful to everyone who contributed to the shaping of this vision for AAC&U’s future, and we will work hard with you to achieve the intended goals.

We need to acknowledge at the outset, however, that making progress on the new strategic plan will require far-reaching changes both in our core assumptions about educational excellence, and even more dramatically, in the way institutions and faculty approach the design of students’ educational experiences.

Consider the plan’s title, “Aim High and Make Excellence Inclusive.” At first glance, this may seem only a statement of core values—for higher education and certainly for the AAC&U community. Yet “making excellence inclusive” is a concept that has far-reaching and potentially disruptive implications for every aspect of educational practice. We can no longer assume, for starters, that “excellence” in the student body means primarily what it came to mean in the twentieth century—large applicant pools, a low number of “admits,” and that much coveted label “highly selective.” Nor can we assume that a high ranking by US News and World Report is the acme of excellence.

“Making excellence inclusive” challenges us to focus instead on what it would take to help all students, including those who start much farther behind, develop and demonstrate cross-disciplinary knowledge, strong intellectual and practical skills, an examined sense of personal and social responsibility, and the ability to integrate and apply learning to complex problems. To wide assent, AAC&U’s centennial LEAP initiative has described these learning outcomes as “essential” because they are needed in every sphere of life.

But you, our members—administrators and faculty alike—tell us that far too many college students are slouching through the curriculum, completing their courses, collecting their credits, but, in fact, underperforming on many of the essential capacities they (and society) need. Employers are similarly critical. And when AAC&U gathered focus groups of students, we found that some very crucial outcomes—global knowledge, science, civic responsibility, ethics, and diversity—are among their lowest priorities for their own learning. (For more details, see www.aacu.org/leap.)

In their discussions, members of the LEAP National Leadership Council compared the strategy for excellence we now have with the strategy we need. Up until now, business participants said, higher education has been “harvesting American talent”—selecting for it in admissions, bringing it along, and providing the credential. But in a global environment already becoming dramatically more competitive, the United States now needs to “develop American talent” on a scale never before attempted.
Whereas excellence in the past has been equated with high selectivity, excellence in the twenty-first century will be determined by high expectations, high support, high hands-on practice, and a very high degree of faculty and staff collaboration to create a much more intentional and goal-oriented educational experience. Excellence in the future will require us, in short, to focus as a community both on “essential outcomes” and on collective practices across the curriculum that help students achieve them.

Recently, a colleague told me that one of the accrediting commissions had considered whether teams should look for evidence of students’ critical thinking and communication skills as part of the accreditation visit. They decided, however, that it would be too “intrusive” to set such a standard. I hope my informant was mistaken, but frankly, the story had the ring of validity. “Non-intrusion” pacts are just as much a part of academic culture as the commitments to excellence and inclusion. But as a value, non-intrusion virtually ensures an underachieving curriculum.

Most people in higher education certainly do believe in critical thinking and communication, as both “aims” and “outcomes” of college. Yet many of our colleagues are decidedly reluctant to ask an institution or a department or even most students to demonstrate that they are working intentionally and developmentally to achieve these goals.

Let’s be honest with ourselves. If we want actually to nurture advanced learning, then intrusion is an integral part of the task. Conversely, if we’re willing to settle for harvesting rather than developing students, then we need to recognize that higher education will remain, as it is, dramatically tilted toward higher income students who, thanks to their family resources, typically do better on the measures that have come to define “exclusive excellence.”

AAC&U is fiercely opposed, of course, to external efforts to dictate the curriculum. Freedom from external bureaucratic management has been a huge factor in higher education’s success, and that freedom must be maintained. But the corollary of freedom is responsibility. It is our responsibility to define our core purposes. And there’s no getting around it: some learning outcomes really are essential, not elective, for every campus, every program, and every student.

But once we set these high expectations for ourselves, we have to attend to what happens to students, as they progress, over time. We have to be assertive about our shared expectations, and we have to be intrusive in asking whether students have actually worked on the expected outcomes across the curriculum. Did faculty take responsibility for shared goals? Did courses emphasize them? Did assignments develop them? Did assessments provide formative—and eventually summative—evidence? Did faculty and staff act on that evidence? Did we disaggregate our data? Did students get better? Did we?

With the LEAP initiative—a centerpiece of the new strategic plan—a set of “essential learning outcomes” that can serve as a point of departure for defining your own campus goals—goals that should apply to all students, not just some of them. We drew these outcomes from your insights; now we are ready to work with you to put those insights into action.—CAROL GEARY SCHNEIDER
The remarkable growth of interdisciplinary studies in recent decades has engendered both enthusiasm and skepticism. For the enthusiast, the spread of interdisciplinarity has not yet gone far enough; for the skeptic, its encroachment has gone too far already. While it is probably too soon to say whether, on balance, the rise of interdisciplinarity has had a positive or negative influence on the academy as a whole, now may be the time to raise questions about the future of interdisciplinary studies.

In practice, interdisciplinarity typically involves the integration of two or more disciplinary approaches in order to address common problems or to explore neglected topics. In other words, interdisciplinarity represents an attempt to redress limitations of the disciplines. In this sense, then, an interdisciplinary approach is often ad hoc. Even when they are not amenable to permanent solution, common problems can be exhausted. And the relationship between interdisciplinarity and the disciplines is a dependent one: there can be no interdisciplinarity without disciplines, and interaction among disciplines often results in reciprocal influence. But how sharply drawn is the line between disciplinary and interdisciplinary, really? Regardless of its original impetus, an interdisciplinary approach may eventually be formalized into a more or less distinct methodology; a more or less discrete body of knowledge may emerge; an interdisciplinary field or program may evolve into something very like a discipline or department.

With respect to undergraduate student learning, the question to ask of interdisciplinary studies is whether they put the cart before the horse. The benefits available to a faculty member who is already grounded in a contributing discipline must surely be different from those available to an uninitiated undergraduate. But is the emphasis on methodology achieved at the expense of content? What does the student gain by using a combination of approaches that were developed within particular disciplinary contexts to explore a contemporary social, cultural, or political issue rather than the traditional objects of disciplinary study—and what does he or she lose? Using an interdisciplinary approach to teach science “through” complex public issues may be a good way to motivate students to learn, for example, but is it the best way to acquaint them with the rudiments of physics or biology or chemistry? Is problem-based learning the best or most efficient way for students to attain the broad scientific knowledge and understanding useful to civic participation and personal decision making? Or is the emphasis on social relevance achieved at the expense of scientific content?

As current trends do appear to favor the enthusiasts of interdisciplinarity, the concerns of the skeptics should give pause—especially if, as Ethan Kleinberg argues in this issue, interdisciplinary studies are currently at a crossroads.—DAVID TRITELLI
New Grant Supports Institute for Faculty and Chairs

The Teagle Foundation has awarded AAC&U a $2.4 million grant to support a new initiative designed to examine the multiple purposes of learning assessment and to test the validity, comparability, and appropriate uses of a variety of assessment approaches. Titled “Rising to the Challenge: Meaningful Assessment of Student Learning,” the initiative will establish a consortium among AAC&U, the American Association of State Colleges and Universities, and the National Association of State Universities and Land-Grant Colleges. These three leading national higher education associations will work together to build campus leadership and capacity for implementing meaningful approaches to student learning assessment and for using assessment results to improve levels of student achievement.

AAC&U Senior Vice President Addresses Council of Europe Conference

At the Council of Europe conference on “New Challenges to European Higher Education: Managing the Complexities of a Globalised Society,” held in Strasbourg, France, in November, AAC&U Senior Vice President Caryn McTighe Musil gave a keynote address on the enduring qualities of a liberal education. Musil spoke of the need of twenty-first-century students to develop intercultural skills and global perspectives. With this conference, the council launched “The University between Humanism and the Market: Redefining its Values and Functions for the 21st Century,” a new three-year project.

Upcoming Meetings


April 10–12, 2008, Discovering, Integrating, and Applying Knowledge: Effective Educational Practices for Today’s Students and Tomorrow’s Innovation, Network for Academic Renewal conference, Austin, Texas


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Interdisciplinary Studies

In today’s competitive college market, “interdisciplinary studies” are a major selling point for colleges and universities. These once marginal sites for innovative scholarship are now prominently displayed in brochures and Web pages, and they are viewed as necessary for attracting the best students. A Google search for “interdisciplinary major” turns up over six million results that reflect a wide sampling of programs, ranging from fully funded and autonomous departments to loose conglomerates of interested faculty. Johns Hopkins University has an interdisciplinary graduate program in the humanities, for example, and the Claremont Graduate School offers a doctorate in cultural studies. There are interdisciplinary programs in business schools as well as in the sciences. At one level, it is a testament to the success and viability of the many interdisciplinary departments, programs, and centers that they have gained institutional status. One could even claim that the twenty-first-century university marks the ascension of interdisciplinarity as the dominant educational paradigm.

And yet, on closer examination, it is apparent that the academic structure and place of the majority of these programs, departments, and centers are not substantially different from the academic disciplines, departments, and divisions they were originally designed to challenge. When considered within the broader context of the business of education in the twenty-first century, this state of affairs may be more troubling and Faustian than it appears. In The University in Ruins (1997), Bill Readings argues that liberal arts education—and the university in general—has undergone a profound change in its mission and identity as it has been transformed from a site designed to foster a unified national culture into a corporate-style service industry selling a vacuous and indefinable notion of “excellence.” The shift to university-as-service-industry has led to a need for increased specialization to provide specific marketable skills or sites of interests that can attract the student/customer. This most cynical reading sees institutional support for interdisciplinary studies as an attempt to create and foster niche markets. Furthermore, in striking this deal, interdisciplinary studies became complicit, if not responsible, for the fragmentation of the university into a series of localized specializations isolated from, and in competition with, one another to attract niche customers/students. Thus the interdisciplinary departments, programs, and centers found willing partners but at a price: their interdisciplinarity. Far from marking the dawn of an interdisciplinary era, this pact with the devil has marked the end of real interdisciplinarity.

Is the very success of interdisciplinary studies leading to its demise? And are they displacing and discrediting the traditional disciplines along the way? Not yet, but these are real and pressing possibilities. Then again, if Readings’s diagnosis of the contemporary university system is correct, one might be tempted to regard these questions as moot and admit defeat in the face of a higher educational system rendered ineffective and obsolete by current political and market forces. The alternative is to take the threat seriously and use these questions as a springboard to think through the past, present, and future of interdisciplinary studies in an attempt to find productive and substantive ways for it to work and flourish within the current university system. This is what I propose to do.

The professionalization of interdisciplinary studies

Readings’s diagnosis takes account of the place of the university in a globalized economy, but it does not take sufficient account of the profound disconnect between the market-driven

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conditions of the university and the ideals of the faculty who teach in it. Faust may have been given a straight offer, but the institutionalization of interdisciplinary studies was paved with good intentions. The project of interdisciplinary collaboration, research, and teaching did not set out to replicate the established disciplines and departments but to reimage them.

In December 1958, Wesleyan University President Victor Butterfield and the university’s educational policy committee called for doing away entirely with the traditional departmental structure of the American university system. They proposed instead to reorganize Wesleyan University into a collection of semi-autonomous interdisciplinary colleges and divisions. The proposal was presented in response to the perception that the existing educational structure had led to an intellectual malaise and the hope that this interdisciplinary reorganization would revitalize the curriculum, the faculty, and the students. The goals were idealistic and noble; to paraphrase Butterfield in *The College Plan in Perspective*, the plan would break through the artificial barriers of specialized subjects and instead allow these various fields (such as literature, philosophy, art, and science) to “shed light” on one another so as to “extend the body of knowledge and ideas common to teachers and students alike.” This, in turn, would force established scholars and teachers to rethink their own approaches and assumptions. Perhaps most striking is that this plan sought to destabilize the authority of the faculty and the disciplines themselves by asking instructors to move away from disciplinary pronouncements based on past success and formulations and, instead, to extend themselves beyond the areas of their authority and expertise in pursuit of innovation. For its time, it was a radical plan. Indeed, it was so radical that it was not implemented. Wesleyan was not reorganized, although in 1959 it did create three interdisciplinary teaching colleges: the College of Letters, the College of Social Studies, and the College of Quantitative Studies—of which the first two are still active.

In the decades that followed, the proliferation of interdisciplinary scholarship and teaching served as a key factor in empowering previously marginalized subjects through the creation of women’s studies, African American studies, and others. These programs brought together scholars from disparate fields who shared a common goal and who sought to challenge the existing disciplines that had neglected their fields of interest. But it is also true that as these previously marginalized fields grew and legitimized themselves through sound scholarship, curriculum, and teaching, they took on the characteristics of the traditional disciplines they were designed to challenge. Many of these fields now boast journals, monograph series at university presses, and professional associations with annual meetings. Some have control of, or a say in, the hiring and tenuring of faculty and thus have developed institutional networks of senior scholars who serve as referees. These are all developments that mirror the preexisting structure. This is not surprising, considering the need for institutional support, in terms of both funding and staffing, and the ways this support appeared to promote the project of interdisciplinary work and teaching. The professionalization of interdisciplinary studies was also necessary to blunt criticism from the more traditional disciplines and departments that interdisciplinary scholarship and teaching lacked sufficient disciplinary depth, that they could not be sufficiently rigorous, and that there would be no basis upon which to judge the quality of the scholarship and teaching.

**Interdisciplinarity endangered**

Thus interdisciplinary studies programs, departments, and centers slowly entered into the Faustian bargain that has given interdisciplinary scholarship and teaching institutional status but has brought it to a crossroads. One road leads to readings’s “university in ruins.” The danger is that interdisciplinary programs themselves are becoming disciplines. This is not to suggest that there is anything inherently wrong with the traditional disciplines, Butterfield’s observations notwithstanding. It is instead to suggest that interdisciplinary programs are now in a position to make authoritative pronouncements based on substantive and canonical bodies of work and, like the traditional disciplines they sought to challenge, are losing the flexibility, spontaneity,
and open-minded approach that characterized their development. Moreover, as these programs have become more self-assured and independent, often as the result of institutional support, they have become less beholden to the various disciplines that once defined their interdisciplinarity. If this trend continues, then the age of interdisciplinarity will soon be over and “interdisciplinary” will become just another buzzword. This development would dovetail into the creation of niche markets where each “interdisciplinary” site—American studies, Asian studies, cultural studies, European studies, gender studies—becomes its own discipline and erects “artificial barriers” of “specialized subjects” that wall them off from other disciplines.

There is another danger down this road: dilettantism. Because these departments, programs, and centers were designed to be interdisciplinary, they were beholden to the disciplines that contributed their faculty—even if those same scholars were hostile to, or frustrated with, their “home” disciplines. In effect, disciplinary and departmental affiliation was necessary to give these scholars and programs methodological credibility. After a recent conference of the Cultural Studies Association, Jan Mieszkowski, the organizer of a seminar on the status of economic thought in the contemporary humanities, lamented that “rather than reaping the benefits of some magical polymorphic conglomeration of methods and ideals drawn from many fields, we were left with no objects of inquiry and no way to proceed” (pers. comm.). Cut loose from the disciplines and departments that once anchored the programs, both in the sense of keeping them from drifting but also in the sense of weighing them down, what is left to keep interdisciplinary studies from becoming superficial? Have they developed a sufficient and mature theoretical and practical scaffold to guide their students and their work? And if so, are they still interdisciplinary in any sense of the word, or do we again reach the conclusion that they are simply new disciplines? Either the institutional emphasis on and support of superficial teaching and scholarship has compromised the integrity of the university by drawing resources away from traditional disciplines, or interdisciplinary niches have supplanted and replaced the traditional disciplines in terms of utility.

Fostered by the material reality of the current university system and the choices of the faculty members who run them, interdisciplinary programs, departments, and centers are in danger. The worst-case scenario is a situation where the lofty ideals upon which interdisciplinary scholarship and teaching were founded are replaced by the worst tendencies of disciplinarity and interdisciplinarity alike: a secluded, self-legitimizing, and backward-looking field that lacks the rigorous foundation, methodology, and autonomy of more traditional departments.

It is not inevitable that interdisciplinary programs will succumb to the dangers they now face, however; there is another road to follow. As noted, it is the strength of these programs that have led them to a crossroads. It is not too late for interdisciplinary programs, departments, and centers to draw upon their symbolic and actual capital and to blaze a new path, leading the rest of the university into the twenty-first century. This would have to be a path that eschews the market-driven morass surveyed by Readings and that, instead, navigates the university as a matrix of positive and reinforcing connections.

Julie Thompson Klein (2005, 78) has outlined key criteria needed to foster interdisciplinary work in a substantive fashion: “adequate economic and symbolic capital”;
“full-time appointments in an interdisciplinary program, center, or department”; “a secure location in the organizational hierarchy of the campus”; and “control of staffing.” While these are essential requirements, the beauty and utility of interdisciplinary studies reside not in their institutional strength but, rather, in their protean nature and their ability to build bridges and make connections among the disciplines, across departments, and throughout the university. Thus, it is essential that interdisciplinary programs, centers, and departments resist the temptation of total autonomy and independence lest they become isolated fortresses each beholden to their own particular methodology, ideology, or canon. This temptation is often difficult to resist, especially as the promise of independent power can appear to serve as “payback” for past injustices or slights (real or perceived) received at the hands of the traditional disciplines. When an interdisciplinary department is “under siege” and pulls in from the rest of the university to rely solely on its core faculty, the teaching and discussion of the field is restricted to the indoctrinated few. The isolation soon leads to a sense of proprietary ownership and essentialism that short-circuits the interdisciplinary project.

Two models
If the intellectual goals of the interdisciplinary project remain greater than the desire for independence and control, interdisciplinarity can eschew the fragmentation and isolation of the market-driven niche majors while creating idea-driven connections throughout the university. Two models are particularly instructive. The first is the model of an interdisciplinary program based on a large, cohesive theme that spans multiple disciplines. Wesleyan University’s College of Letters is built on such a model. Over three years, students in the College of Letters are required to take five colloquia that span from antiquity to the present. The content of the colloquia are great works of predominantly European literature, philosophy, and history, but there is no fixed canon. Furthermore, each colloquium is taught by two professors from different disciplines and perspectives. Thus, there is no single authority or approach
for the students to imitate, and the larger theme of “great works”—itself always under question—creates a space where many disciplines intersect in conversation, argument, dissent, and even agreement. The goal is to destabilize authority and authoritative pronouncements—not to fall into relativism but, rather, to keep the ideas at play so as to create a space for dynamic discussion. In doing so, one necessarily cedes the authority inherent in the disciplines and embarks on new and often untried domains.

There is an aspect of amateurism in this sort of interdisciplinary work that is often troubling to the traditional disciplines, but this should not be confused with dilettantism. One cannot be expert in everything, and ideally it is the question of the informed amateur or the conflation of two disparate approaches that leads to creativity and fosters new and exciting research. The added benefit is that the student is involved in the project as an active participant judging myriad viable approaches and choosing the most appropriate one.

A second model is project-based and brings multiple disciplines together to address a specific issue or set of issues. A program such as “Science in Society” or “Feminist, Gender, and Sexuality Studies” might fit this model where interested faculty from multiple disciplines are brought together in order to address a specific issue or set of issues and, therefore, the particular combination of disciplines is ephemeral. This protects the program from becoming another “discipline,” while the importance of the project itself protects against dilettantism.

Both models focus on dialogue, exchange, and the infusion of new ideas, and accordingly, both rely on the traditional disciplines. In turn, the traditional disciplines are brought into contact with each other not only through the interaction of scholars and students in the interdisciplinary projects but also through the return of these scholars to their “home” disciplines, where they can share these new ideas and approaches. Such exchange occurs when faculty are discussing ideas instead of competing for funding. The success of interdisciplinary departments, programs, and centers requires institutional support, but it also requires internal self-restraint so that they do not end up as ersatz disciplines. Faust made his bargain for himself at the expense of others; we must avoid such selfishness.

**Conclusion**

Interdisciplinary departments, programs, and centers are poised to lead the university in a new direction, but to do this we need to make the right choices and follow the road of intellectual generosity rather than isolated self-interest. We need to guard against self-serving desires that may appear to promise intellectual autonomy and power but actually lead to isolation, fragmentation, and ultimately, the end of interdisciplinarity. We should work to usher in an era when interdisciplinary departments, programs, and centers do not supplant or replace the traditional disciplines but serve instead to create pathways and intersections, bringing faculty and students together for the common endeavor of intellectual exchange. The benefits will include the production of knowledge through innovative scholarship, the creation of working networks across the disciplines and departments throughout the university, and most important, the fostering of an informed and critical public. When no one discipline or method is privileged over another and all the disciplines are connected, students learn to be critical, syncretic, original thinkers who interrogate authority to find the best and most viable answers regardless of the question.

In the end, intellectual generosity is the antidote to Readings’s diagnosis of a vacuous, market-driven university of competing interests. And at their best, interdisciplinary departments, programs, and centers embody and foster intellectual generosity. Interdisciplinary studies are at a crossroads, and it is up to us to choose the right road.

To respond to this article, e-mail liberaled@aacu.org, with the author’s name on the subject line.

**REFERENCES**


FEATURED TOPIC

Consider four distinct problems confronting society in recent times, today, and perhaps, in the future: (1) finding a way to manage—or ideally eradicate—epidemics (e.g., AIDS, SARS, perhaps avian flu); (2) achieving ways to manage or eliminate terrorism and terrorist attacks; (3) finding ways to combat global warming and related changes in the atmosphere before it is too late to keep the earth habitable to humans; and (4) developing positive, effective, ethical leaders who have at heart the best interests of all their stakeholders, rather than primarily their own interests or those of groups to which they feel they owe allegiance as a result of family, tribal, political party, economic, or religious ties. These four major problems, in common with virtually all problems facing the world, can be solved only through multidisciplinary thinking. They very well could form the bases for problem-based majors and minors in university settings.

Consider, for example, the management of epidemics. Successful management of epidemics may well require biologists to understand the cellular mechanisms by which diseases cause harm, medical researchers to study potential cures, epidemiologists to understand how the diseases spread, psychologists to understand how people can be persuaded to behave in ways to minimize spread of the diseases, political scientists to weigh in on how to work with governments to adopt national and international policies that promote disease prevention, economists to study the costs of and funding mechanisms for managing epidemics, sociologists to understand how societies perceive health threats and react to them, historians to see whether we can learn from the past so as not to repeat mistakes, and perhaps others as well. Ideally, a single individual would have some background in each of the areas so that he or she can understand the issues from a variety of disciplinary standpoints, rather than just his or her own. In the absence of such background, the individual is like the blind person feeling one part of an elephant, but not understanding that it is an elephant that he or she is feeling.

Similarly, the problem of confronting global warming is an interdisciplinary one. In his movie, An Inconvenient Truth, Al Gore draws...
Problem-Based Learning
Featured Topic

on a wide variety of integrated disciplines to discuss the problem of combating global warming, including film studies, meteorology, political science, psychology, economics, graphic design (in the creation of effective charts), and history, among others.

Responding to the four major problems mentioned above—and indeed, almost any serious problem at a global or even national or local level—requires problem-based, interdisciplinary thinking. If this is the case, then is it time to think seriously about alternatives to the traditional undergraduate “major,” which, in the large majority of cases, tends to be focused on just a single field of inquiry?

A problem-based approach

The current idea of a major (or minor) subject may have made more sense in a less complex and interconnected world in which the perspective and method of one discipline could be applied to a fairly confined and narrow problem. In today’s world, however, few problems of any significance are either confined or narrow. Rather, they aggressively cross boundaries that render the perspectives and methods of single disciplines incomplete and inefficacious. In effect, then, we are teaching undergraduates to think in ways that may prepare them less than adequately for the problems they will face once they leave the college environment and face the outside world.

Of course, a liberal arts education teaches students course content from a variety of disciplines, with most of the general education occurring during the first two years of the college experience. The problem is that students learn to think in terms of silos, but do not learn how to connect the silos of learning. It is rare that students are taught how to integrate what they learn in the various subjects they study; despite the fact that such integration is, arguably, what is most important in solving real-world problems.

The current system poses three problems. First, in the first two years of college, students learn to think in silos rather than in an interconnected, multidisciplinary way. A problem-based major or minor provides a way for students to see beyond such silos. Second, when they major (and possibly minor), students learn to think more deeply in one or perhaps, in the case of double majors, two of these silos, still without learning what is most important: how to integrate the knowledge across silos. A problem-based approach teaches such integration of knowledge. Third, students may not realize how limited their thinking is. Like the carpenter desperately looking for some task in which to use a hammer, the student may come to believe that his or her field provides the answers, and that practitioners in other fields have less to offer in the solution of complex problems. A problem-based approach puts the problems before the tools.

As an example, an economist may come to view the world in terms of idealized economic models, paying too little attention to the psychological factors that may contribute to the solution of complex problems; conversely, a psychologist may not fully appreciate the economic problems inhering, say, in the management of mental health care.

In order to prepare students for today’s complex world, some schools engage students in problem-based learning, trying to hone the students’ skills in applying what they learn to the kinds of problems they are likely to face. But more often than not, problem-based learning is employed within the silo of a single discipline, rather than across multiple disciplines. The result may be a false sense of security in approaching problems from a unidisciplinary perspective.

Many colleges and universities have started at least some interdisciplinary majors (and minors). For example, at Tufts University, we have majors such as community health, peace and justice studies, and international relations, and we are starting a minor in leadership. Such interdisciplinary majors are often popular, but may also be viewed by faculty with some suspicion because they are not conducted under the auspices of any one department. Moreover, even they may consist of sequences of isolated courses, where it is left to the student
to draw the connections among the various disciplines and how they approach problems. This is asking a lot of students, as drawing such connections challenges even the faculty who teach the students.

Perhaps it is time to think not only about problem-based learning within disciplines, but also about problem-based major and minor subjects. Clearly, the problem a student might study in such a major or minor—for example, one of the four major problems identified above—is not the only problem a student will ever confront. But what a problem-based major or minor can do is teach students the knowledge and skills needed to think in an interdisciplinary way, so that such thinking is seen as a model for the kind of thinking needed to solve any serious problem. Such majors and minors need not replace traditional ones, but might supplement them as a viable option for many students.

An assumption of the kind of program I sketch is that learning approaches to the acquisition and utilization of knowledge are, in the long run, more important, at least to most people, than is the particular subject matter at a fixed point in time of any one discipline. For example, it is more important to acquire the perspectives of psychologists, economists, historians, chemists, musicians, or philosophers than it is to learn all of the knowledge that currently is taught within the context of a single-disciplinary undergraduate major.

There are three reasons why approaches and modes of thinking are of primary importance in undergraduate education. First, for those who truly want to specialize in great depth, they have the option of going to graduate or professional school and becoming deeply steeped in a discipline. Often, however, students specialize by virtue of the jobs they hold, not necessarily only by virtue of the formal education they receive. Second, no matter how much material one puts in a single silo, the absence of a connection to other silos is what will prevent the problem-solver from being able fully to grasp the essence of a problem and how to solve it in a multidisciplinary way. Third, knowledge becomes outdated very quickly today, or it is limited in terms of its applicability to real-world problems. For example, in my own field of psychology, there is precious little overlap between the content being taught in introductory courses today and the content taught in 1968, when I studied introductory psychology.

**Principles for forming a problem-based major or minor**

How might one go about forming a problem-based major or minor? I suggest six principles for the construction of such courses of study. First, the problems constituting the majors or minors must be truly complex, engaging, and relevant to the concerns facing the world—yesterday, today, and tomorrow. Students will learn best if they are facing large, real problems in their full contexts, rather than small, artificial, or context-limited problems. The problems can be expected to differ across time and space.

Second, the course of study must be truly interdisciplinary. It needs to recognize that complex problems are not solved in a unidisciplinary or even dual-disciplinary way. The program must include instruction that crosses a variety of disciplines, likely bridging aspects of the humanities, arts, social sciences, and natural sciences.

Third, the instruction must be truly transdisciplinary, bridging silos rather than merely teaching an amalgam of courses across different disciplines. In all likelihood, such instruction would involve instructors working together across disciplinary boundaries to teach students to think across disciplines in solving problems. An advantage of this kind of teaching is that the instructors may learn just as much as, or more than, their students.

Fourth, assessment of performance must go beyond traditional disciplinary boundaries, involving projects and other forms of performance that encourage students to apply the full range of what they have learned to the solution of problems. Assessment of progress is likely to involve the efforts of faculty across and not just within disciplines.

Fifth, students must be shown the benefits of the new approach. Students and their parents are often among the more conservative elements in a college or university environment. They often want the traditional rewards of a college education, such as a better job or better admission prospects for the future. Changes in curriculum need to be linked, for them, to enhanced future outcomes. At the same time, employers and graduate and professional schools need to be sold on the idea that the problem-solving skills and attitudes acquired in a problem-based major or minor will be highly useful in the world. The students learn better tools for thinking, and to useful ends.
Sixth, faculty need to be rewarded for participating in such problem-based ventures. The form of reward will depend on the particular situation of the college or university. But if they are expected to take on more than they have done in the past, there needs to be, at the very least, recognition of service, and in all likelihood, a temporary reduction of other responsibilities as they construct new courses based on interdisciplinary, problem-based learning.

**An interdisciplinary, problem-based leadership minor**

An example of the kind of program I am describing here is a program based on the problem of how one can create positive, effective, ethical leaders for the world of the future (the last of the four major problems identified at the beginning of this article). At Tufts, we are creating an interdisciplinary, problem-based leadership minor to enable all interested students to learn the skills and attitudes that are essential to positive, effective, ethical leadership. The minor consists of three tiers.

The first tier involves courses across the disciplines that directly teach about leadership— theories of leadership, research on leadership, cases studies of leadership, ethics, and so forth. The second tier involves courses in the entire range of the liberal arts that pertain to leadership, but do not directly teach it. Students might learn about leadership through literature (the foibles of Othello or King Lear), philosophy (Plato’s or Aristotle’s views of leadership), the history of art (how great artists have depicted leaders at different times and what these depictions show about their views of leadership), political science (theories of presidential leadership or leadership as it applies in different forms of government), history (studies of successful and failed leaders throughout history), psychology (interactions between persons and situations that lead to successful leadership), sociology (leadership of social movements), anthropology (conceptions of leadership in diverse cultures), the sciences (the role of good taste in problems in scientific leadership, the interaction between theory and data in scientific advances), and so forth.

The third tier involves a substantial leadership experience and a reflective paper written about it that shows how what one learned in the first two more academic tiers can be applied in the third, more practical tier. The paper should be interdisciplinary, cutting across the various disciplines that contribute to a comprehensive understanding of what constitutes good and effective leadership, from local to global levels. It provides a chance to put together all one has learned in the various courses one has taken.

Some might argue that what constitutes good leadership—or addressing problems of epidemics or global warming—cannot be directly taught, as no one is sure of the answers. This is probably true. But it is the nature of real-world problems that they are ill-defined and ill-structured, and the sooner students learn to deal with such problems, the better. What one can do is to create the kinds of experiences that enable students to learn about leadership, global warming, or anything else.

In my own undergraduate course on the nature of leadership, I design a series of experiences that enable students to learn what it means to be a leader. As in most other courses, I use books, articles, and some lectures. But the course also contains more distinctive features. Every class except the first and the last features a leader taken from industry, finance, government, religion, education, consulting, or some other field, who talks to students for a quarter of an hour about his or her own practice of leadership, and then engages the students for another three-quarters of an hour in a dialogue on how they can apply the individual’s ideas to their own lives. In this way, students learn from diverse leaders in the everyday world how principles can be transformed into practices. This is the most popular part of the course, as it exposes students to the thoughts and actions of people confronting real problems in real jobs.

Almost all of the classes also include active learning about leadership. For example, in the first class of the semester, after I reviewed the syllabus, an individual in the class spoke up, loudly and obnoxiously complaining about the syllabus and how unreasonable it was. Other students were flabbergasted until I thanked and dismissed the individual, who was a shill I had planted in the classroom. I then pointed out to the students that in leadership roles, the question is not whether someone will publicly...
challenge your authority, but rather, how you, as a leader, deal with such challenges to your authority. I then divided the class into three groups, and had each group simulate how it would handle public challenges of this kind. In another exercise, I taught in a blatantly incompetent way for five minutes. I then pointed out that leaders always encounter, sooner or later, incompetent team members who drag down their team but who the leader is unable, for one reason or another, to remove from the team. Three teams then had to simulate how they would handle an incompetent superior, coordinate, or subordinate member of their work team. In yet another class, students had to hire a team member (a dean), going through the steps of choosing the team member—from vision statement to job interview to the interview in which the team attempts to persuade the selected candidate to take the position.

Students also were actively involved in interviewing a leader, analyzing his or her leadership, and evaluating their own leadership. They further analyzed, as a team, the leadership of a well-known leader. Groups selected leaders as diverse as Bill Clinton, Bill Gates, and Kenneth Lay.

The goal of a leadership minor, then, is to prepare students to be in the vanguard of new leaders for a changing world. Rather than hope students will inadvertently pick up the skills of good and effective leadership, the minor helps ensure, to the extent possible, that they do. Most gratifying to me was when a student from the class came to my office this spring and said that he and other students had been observing that the course differed from many others in that the students could use what they had learned in the course almost every day of their lives.

How to create positive leaders is only one example of the kinds of problems students might confront in a problem-based major or minor. Other topics, such as how to deal with epidemics or other catastrophes, how to deal with global warming, or how to deal with human conflicts, also form bases for such academic programs. In the end, problems are interrelated. For example, there are many elements of crises that are the same, regardless of their particular content—whether it is war against an epidemic, global warming, terrorism, or corruption in leadership. Problem-based major and minor subjects will enable students to learn the wide variety of knowledge, skills, perspectives, and attitudes that will enable them to solve the wide variety of problems they will face in their lives. Most importantly, students will learn to think across rather than merely within silos—to see problems in their full complexity rather than in the limited ways any single discipline can bring to bear.

Conclusion

The proposal in this article is not without challenges. Colleges and universities, and the stakeholders within them, are used to traditional majors and minors, and have based their instruction for many years on this traditional system. Problem-based study would cause some dislocation for those used to the traditional system. But I view problem-based majors and minors as a supplement to traditional offerings, rather than a replacement. Undoubtedly, most students would continue to major in traditional fields of study, which have served as useful bases for undergraduate education in the past and will continue to do so in the future. Students should have the option of choosing what they want to learn, and teachers the option of choosing what they want to teach.

The kind of system proposed here is not altogether new. Many colleges already have problem-based offerings. Tufts University is one. Wheaton College in Norton, Massachusetts, is another. At Wheaton, there is a program that enables students to explore different areas of knowledge and different approaches to problems in an integrated way. At Hollins University, students can study a concept such as human freedom from multidisciplinary standpoints, such as philosophy, psychology, sociology, and political science. At the University of Virginia, there are multidisciplinary majors such as medical ethics. So the seeds of the kind of system described in this article already exist. Such a system would probably have to be phased in over a period of years, but it would not replace more traditional offerings. Phasing it in would have one great advantage: it would prepare students to think in an interdisciplinary way so that, when they are confronted with the problems of tomorrow, they start with the problem rather than with their toolbox, and then work with others to choose the set of toolboxes that will best address the problem at hand.

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The Transformative

DANA GIOIA

There was a bit of controversy when my name was announced as the 2007 graduation speaker at Stanford University. A few students were especially concerned that I lacked celebrity status; it seemed I wasn’t famous enough. I couldn’t agree more. As I have often told my wife and children, “I’m simply not famous enough.” And that—in a more general and less personal sense—is the subject I wanted to address, the fact that we live in a culture that barely acknowledges and rarely celebrates the arts or artists.

There is an experiment I’d love to conduct. I’d like to survey a cross-section of Americans and ask them how many active NBA players, Major League Baseball players, and American Idol finalists they can name. Then I’d ask them how many living American poets, playwrights, painters, sculptors, architects, classical musicians, conductors, and composers they can name. I’d even like to ask how many living American scientists or social thinkers they can name.

Fifty years ago, I suspect that along with Mickey Mantle, Willie Mays, and Sandy Koufax, most Americans could have named, at the very least, Robert Frost, Carl Sandburg, Arthur Miller, Thornton Wilder, Georgia O’Keeffe, Leonard Bernstein, Leontyne Price, and Frank Lloyd Wright. Not to mention scientists and thinkers like Linus Pauling, Jonas Salk, Rachel Carson, Margaret Mead, and especially Dr. Alfred Kinsey. I don’t think that Americans were smarter then, but American culture was. Even the mass media placed a greater emphasis on presenting a broad range of human achievement.

I grew up mostly among immigrants, many of whom never learned to speak English. But at night watching television variety programs like the Ed Sullivan Show or the Perry Como Music Hall, I saw—along with comedians, popular singers, and movie stars—classical musicians like Jascha Heifetz and Arthur Rubinstein, opera singers like Robert Merrill and Anna Moffo, and jazz greats like Duke Ellington and Louis Armstrong captivate an audience of millions with their art. The same was even true of literature. I first encountered Robert Frost, John Steinbeck, Lillian Hellman, and James Baldwin on general interest television shows.

All of these people were famous to the average American—because the culture considered them important. Today, no working-class or immigrant kid would encounter that range of arts and ideas in the popular culture. Almost everything in our national culture, even the news, has been reduced to entertainment or altogether eliminated.

The loss of recognition for artists, thinkers, and scientists has impoverished our culture in innumerable ways, but let me mention one. When virtually all of a culture’s celebrated figures are in sports or entertainment, how few possible role models we offer the young. There are so many other ways to lead a successful and meaningful life that are not denominated by money or fame. Adult life begins in a child’s imagination, and we’ve relinquished that imagination to the marketplace.

Of course, I’m not forgetting that politicians can also be famous, but it is interesting how our political process grows more like the entertainment industry each year. When a successful guest appearance on the Colbert Report becomes more important than passing legislation, democracy gets scary. No wonder Hollywood considers politics “show business for ugly people.” Everything now is entertainment. And the purpose of this omnipresent commercial entertainment is to sell us something. American culture has mostly become one vast infomercial.

I have a recurring nightmare. I am in Rome visiting the Sistine Chapel. I look up at Michelangelo’s incomparable fresco of the Creation of Man. I see God stretching out his arm to touch the reclining Adam’s finger. And

DANA GIOIA is chairman of the National Endowment for the Arts. This article is adapted from the commencement address delivered by the author at Stanford University in June 2007. Copyright held by the author.
then I notice in the other hand Adam is holding a Diet Pepsi.

When was the last time you saw a featured guest on David Letterman or Jay Leno who wasn’t trying to sell you something? A new movie, a new television show, a new book, or a new vote? Don’t get me wrong. I love entertainment, and I love the free market. I have a Stanford MBA and spent fifteen years in the food industry. I adore my big-screen TV. The productivity and efficiency of the free market is beyond dispute. It has created a society of unprecedented prosperity. But we must remember that the marketplace does only one thing—it puts a price on everything.

The role of culture, however, must go beyond economics. Culture is not focused on the price of things, but on their value. And, above all, it should tell us what is beyond price, including what does not belong in the marketplace. A culture should also provide some cogent view of the good life beyond mass accumulation. In this respect, our culture is failing us.

**Education and the arts**

There is only one social force in America potentially large and strong enough to counterbalance this profit-driven commercialization of cultural values, and that is our educational system—especially public education. Traditionally, education has been one thing that our nation has agreed cannot be left entirely to the marketplace; it must, instead, be made mandatory and freely available to everyone.

At fifty-six, I am just old enough to remember a time when every public high school in this country had a music program with choir and band, usually a jazz band, too, sometimes...
even orchestra. Every high school offered a drama program, sometimes with dance instruction. And there were writing opportunities in the school paper and literary magazine, as well as studio art training.

I am sorry to say that these programs are no longer widely available to the new generation of Americans. This once visionary and democratic system has been almost entirely dismantled by well-meaning but myopic school boards, county commissioners, and state officials, with the federal government largely indifferent to the issue. Art became an expendable luxury, and fifty million students have paid the price. Today, a child’s access to arts education is largely a function of his or her parents’ income.

In a time of social progress and economic prosperity, why have we experienced this colossal cultural and political decline? There are several reasons, but I must risk offending many friends and colleagues by saying that surely artists and intellectuals are partly to blame. Most American artists, intellectuals, and academics have lost their ability to converse with the rest of society. We have become wonderfully expert in talking to one another, but we have become almost invisible and inaudible in the general culture. This mutual estrangement has had enormous cultural, social, and political consequences. America needs its artists and intellectuals, and they need to reestablish their rightful place in the general culture. If we could reopen the conversation between our best minds and the broader public, the results would not only transform society but also artistic and intellectual life.

There is no better place to start this rapprochement than in arts education. How do we explain to the larger society the benefits of this civic investment when they have been convinced that the purpose of arts education is mostly to produce more artists—hardly a compelling argument to either the average taxpayer or a financially strapped school board?

We need to create a new national consensus. The purpose of arts education is not to produce more artists, though that is a byproduct. The real purpose of arts education is to create complete human beings who are capable of leading successful and productive lives in a free society. This is not happening now in American schools. Even if you forget the larger catastrophe that only 70 percent of American kids now graduate from high school, what are we to make of a public education system whose highest goal seems to be producing minimally competent entry-level workers?

The situation is a cultural and educational disaster, but it also has huge and alarming economic consequences. If the United States is to compete effectively with the rest of the world in the new global marketplace, it is not going to succeed through cheap labor or cheap raw materials, nor even the free flow of capital or a streamlined industrial base. To compete successfully, this country needs continued creativity, ingenuity, and innovation. It is hard to see those qualities thriving in a nation whose educational system ranks at the bottom of the developed world and has mostly eliminated the arts from the curriculum.

The transformative power of the arts

I have seen firsthand the enormous transformative power of the arts—in the lives of individuals, in communities, and even in society at large. Marcus Aurelius believed that the course of wisdom consisted of learning to trade easy pleasures for more complex and challenging ones. I worry about a culture that, bit by bit, trades the challenging pleasures of art for the easy comforts of entertainment. And that is exactly what is happening—not just in the media, but in our schools and in our civic life.
Entertainment promises us a predictable pleasure—humor, thrills, emotional titillation, or even the odd delight of being vicariously terrified. It exploits and manipulates who we are rather than challenges us with a vision of who we might become. A child who spends a month mastering *Halo* or *NBA Live* on Xbox has not been awakened and transformed the way that child would be if he or she had spent time rehearsing a play or learning to draw.

If you don’t believe me, you should read the statistical studies that are now coming out about American civic participation. Our country is dividing into two distinct behavioral groups. One group spends most of its free time sitting at home as passive consumers of electronic entertainment. Even family communication is breaking down as members increasingly spend their time alone, staring at their individual screens. The other group also uses and enjoys the new technology, but these individuals balance it with a broader range of activities. They go out—to exercise, play sports, volunteer—and they do charity work at about three times the level of the first group. By every measure, they are vastly more active and socially engaged than the first group.

What is the defining difference between passive and active citizens? Curiously, it isn’t income, geography, or even education. It depends on whether they read for pleasure and participate in the arts. These cultural activities seem to awaken a heightened sense of individual awareness and social responsibility.

Why do these issues matter to today’s students? This is the culture they will enter. During the college years, they have the privilege of being at some of the world’s greatest universities—not only studying, but being a part of a community that takes arts and ideas seriously. Even if they spend most of their free time watching *Grey’s Anatomy*, playing *Guitar Hero*, or Facebooking their friends, those important endeavors are balanced by courses and conversations about literature, politics, technology, and ideas.

Upon graduation, this support system comes to an end. Graduates face the choice of whether they want to be passive consumers or active citizens, whether they want to watch the world on a screen or live in it so meaningfully that they change it. That’s no easy task, so we must hope they don’t forget what the arts provide.

Art is an irreplaceable way of understanding and expressing the world—equal to but distinct from scientific and conceptual methods. Art addresses us in the fullness of our being—simultaneously speaking to our intellect, emotions, intuition, imagination, memory, and physical senses. There are some truths about life that can be expressed only as stories, or songs, or images. You don’t outgrow art. The same work can mean something different at each stage of life. A good book changes as you change.

Art delights, instructs, consoles. It educates our emotions. And it remembers. As Robert Frost once said about poetry, “it is a way of remembering that which it would impoverish us to forget.” Art awakens, enlarges, refines, and restores our humanity.

To respond to this article, e-mail liberaled@aacu.org, with the author’s name on the subject line.
A Liberal Education Scorecard

MICHAEL R. WICK and ANDREW T. PHILLIPS

The University of Wisconsin–Eau Claire is currently conducting an institutional self-study as part of the reaccreditation process, and we both have been heavily involved in reflecting on what we do, on how we do it, and on our structures for ensuring the best quality of both. For us, this deliberate reflection has brought a moment of clarity that has changed how we view ourselves as educators: we have come to realize the truly great disconnect between what we teach and what we want our students to learn. While the details of our story are specific to us as individuals, the lessons we have learned surely are not.

We are both computer scientists, and we consider ourselves to be dedicated educators. We work hard to modernize our courses and improve our pedagogy. For nearly twenty years each, we have kept diligently abreast of the most recent developments in our field, integrated these developments with the fundamental principles of our discipline, and worked to develop intentional pedagogical practices for teaching our students the resulting content. While we believe this content is necessary for our students as computer scientists, we now understand it is not sufficient for them as citizens or lifelong learners. In fact, when considered within the broader context of their lives after college, the computer science content we teach is the least important thing we want our students to learn.

Even our most successful graduates will founder within a few months after graduation unless they continue to learn and relate what they know and do to the world around them. Without the transferable knowledge, skills, and attitudes that characterize a liberally educated person, all the discipline-specific content knowledge we impart today will be insufficient for tomorrow. Unfortunately, we have left it to our students’ own initiative and abilities to extract these more important elements of their education from the explicit discussion of the less important discipline-specific content. We must do better.

On being a liberal educator
How can we help our students understand and embrace the most important outcomes of a liberal education? This, we believe, is our primary mission as educators, and we think the answer must start with us—all of us. We must first create a mindset that is truly student-centered, one that supports student learning through a cohesive and integrated mosaic of curricular and cocurricular experiences united in common purpose by the fundamental goal of transforming students into liberally educated, global citizens. As faculty and staff members committed to the purposes of higher education, we must move away from protecting and defending our specialized areas of expertise, whether in academic disciplines or in cocurricular areas. We must all become liberal educators who hold our students and ourselves accountable for the desired outcomes of a liberal education.

We understand how discipline-specific (major) curricula are designed and how those designs are influenced by the system of curricular rules enforced by an institution. We understand the desire to create efficient pathways within the curriculum that enable students to navigate through those rules and meet general

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The scorecard provides a format to guide, assess, and document the development of student learning.

PERSPECTIVES
university requirements as a natural consequence of taking courses in their majors. But we now also understand that focusing too narrowly on our own discipline and our “turf” has worked against the purposes of a liberal education. To make this point more clearly, we admit that we have found ourselves on occasion proposing and supporting ideas that may have been good for us as disciplinary specialists and that have made our lives in academe easier, but that do not serve students well for the future. Again, we must do better.

Relevance to general education
Like general education programs at many colleges and universities across the nation, the program on our campus is the product of over a decade of incremental revisions and extensions. And while not all of our colleagues will agree, we believe the result is a complex labyrinth of curricular requirements that is frustrating and confusing to faculty and students alike, and that is only marginally based upon a clear philosophy of what general education should mean or how it should support liberal education. In fact, students no longer view our general education program as the core, or foundation, of a liberal education that will empower them with the knowledge, skills, and values for personal enrichment, lifelong learning, civic engagement, and social responsibility. Instead, they view general education as a disconnected set of requirements to meet, or obstacles to remove, so that they can “get to what matters.”

In a recent survey, first-semester students enrolled in first-year-experience courses on our campus were provided with five descriptions and asked to identify the one that best describes the purpose of a liberal education. Despite the fact that one of the explicit goals of the first-year-experience courses is to introduce students to the purpose of a liberal education, only 24 percent identified the correct definition: “a philosophy of education that empowers individuals with broad knowledge and transferable skills, a strong sense of values, ethics, and civic engagement.” The majority of students (62 percent) selected “an integrated collection of courses that includes philosophy, history, literature, music, art, and science.”

The survey revealed that, as we have feared for a number of years, our students equate liberal education with a collection of specific disciplines rather than viewing it as the intellectual foundation of their entire undergraduate experience and their lifelong learning. How can it be that first-semester students enrolled in special courses that explicitly target liberal education principles can so quickly “learn” to equate a liberal education with a distributive collection of courses in the arts and sciences? For faculty and staff at colleges and universities like ours, the answer is simple: our actions speak louder than our words.

Our general education program has grown into a potpourri of over four hundred courses, each satisfying one or more specific graduation requirements. Students are quick to recognize and seek out individual courses that satisfy multiple requirements—the two-fers and three-fers, or even the elusive four-fer—as the most effective means for “satisfying GE.” Moreover, students are not the only ones who try to kill two birds with one stone. Faculty members often spend their student advising time discussing the major requirements, while marginalizing the general education core. They recommend, for example, that a student “take this course to get both the X and Y requirements out of the way.” The result is a student body that views the discipline-specific major as the heart, or main purpose, of the educational experience and that views general education and liberal education as the “stuff to get out of the way” via the path of least resistance.

The liberal education scorecard
To guide our own evolution and development from disciplinary experts focused on improving our teaching in computer science to liberal educators focused on improving student learning on a broader level, we have developed a visual tool that supports both intentionality and accountability in the design of a student-centered program of study (see fig. 1). The tool—which we call the “liberal education scorecard,” or just “scorecard” for short—can be used to help an individual instructor, a department or program, or even an entire institution maintain focus on the learning outcomes of a liberal education. The scorecard is not specific to any particular discipline or to any particular curricular model. It does not attempt to describe how an instructor (or department or institution) delivers a liberal education, but rather it provides a format to guide, assess, and document the development of student learning.
The scorecard overlays the three dimensions of Bloom’s taxonomy of understanding (Bloom 1956) onto the essential student learning outcomes identified in *College Learning for the New Global Century*, the 2007 report from the Liberal Education and America’s Promise (LEAP) initiative of the Association of American Colleges and Universities. The LEAP report describes the essential goals, learning outcomes, and guiding principles of a twenty-first-century college education. To be fully accurate, we have modified both the taxonomy and the LEAP outcomes in three important ways. First, the levels of understanding associated with the skill (or psychomotor) domain are based not on the work of Bloom but, instead, on the subsequent work of Dave (1970), whose version is more relevant for skill development related to work and life. Second, following Anderson and Krathwohl’s revision of Bloom’s original taxonomy (2001), the two highest levels of behavior in the cognitive domain are “evaluate” and “create,” rather than “synthesize” and “evaluate.” However, we retain the labeling of the second level of understanding, using “comprehend” rather than “understand.”
And third, the LEAP skills of critical thinking, creative thinking, and problem solving are represented as the core of integrative learning, which draws from all of the learning outcomes in each of the three domains.

In the scorecard model, the concentric circles within each domain expand outward from the most basic level of understanding at the center to the most advanced level of understanding at the perimeter. Ideally, we would like every student to achieve the highest possible level of understanding in each dimension for all three domains, but such a goal is much too ambitious for a single baccalaureate program of study. In fact, expecting students to reach the highest level of understanding (the perimeter) in each dimension and in each domain would probably spread resources too thinly and fail to do justice to any dimension or domain. Instead, instructors, programs, or institutions should intentionally reflect on their core values and their mission in order to determine the level of expected attainment in each dimension and domain that is most appropriate and realistic for their particular students. It should come as no surprise that the levels of attainment might
differ from one dimension to another; different instructors and programs and institutions surely will emphasize different components of a liberal education, and at different levels, based on their varied roles and missions. This is entirely appropriate.

As a specific example, the scorecard shown in figure 2a might represent the desired level of educational achievement expected of all graduates of a program that emphasizes the “great books” approach, whereas the scorecard in Figure 2b might represent the achievement expected in a program that emphasizes “scientific reasoning.” Such a scorecard can represent any type of educational program—general education programs, major programs, minor programs, cocurricular programs, and so forth. In fact, it shouldn’t be difficult to visualize the scorecard for a forensics team or even a volleyball team. The granularity with which each dimension is further subdivided into subdimensions corresponding to various program-specific goals or outcomes can be varied to meet the needs of the analysis. (For the sake of simplicity, however, most of our figures assume no subdimensions.) The point is that the scorecard provides a way...
to be intentional about the desired liberal education outcomes, the level at which students are expected to achieve them, and the granularity at which we wish to measure them.

If the scorecards created for each curricular and cocurricular program at an institution are overlaid, the resulting composite scorecard presents a picture of the core values and mission of the institution. Imagine the insight to be gained from comparing this “living mission” to the official mission stated in the institution’s formal documents. Further, the areas of such a composite scorecard that appear in each academic program essentially constitute the general education program, since they represent the common knowledge and skills that all students are expected to learn or experience. This emergent approach to defining a general education program can help an institution better articulate its core learning principles, and it can do so while avoiding the tendency to focus on disciplinary specialties and academic “turf.”

In addition, the scorecard can be used visually to compare the difference between the desired outcomes of an educational program and the levels at which those outcomes are actually demonstrated by students. To highlight areas for improvement (or celebration), an institution need only overlay the scorecard representing the learning actually demonstrated by students onto the scorecard representing the desired learning outcomes. That is, the scorecard can be used as a student learning assessment tool. Over the last fifty years, educators have made considerable strides in developing assessment instruments that target the various levels of Bloom’s taxonomy (Bloom, Hastings, and Madaus 1971; Phye 1997). While much of this work involves high school content, the material also can be extended to the university level. The scorecard’s explicit use of Bloom’s levels of understanding can provide focus and guidance in leveraging this body of work to assess student learning.

The liberal education scorecard applied
At the beginning of this article, we shared a personal revelation pertaining to our own shortcomings as liberal educators. Here, we discuss the use of the scorecard to better understand these shortcomings and to inform our plans for self-improvement. For the sake of brevity, we consider only the intellectual and practical skills domain of the scorecard, and in particular, only the intellectual and practical skills associated with the development of a software system—the hallmark of our computer science program. As figure 3 shows, we expect graduates from our computer science program to reach the “articulate” level of understanding in the quantitative literacy and information literacy dimensions (relative to software development); the “precise” level of understanding in the written communication, oral communication, and teamwork dimensions; and because of our use of subdimensions, the “articulate” and the “precise” levels of understanding within the inquiry and analysis dimension.

Using Dave’s terminology (1970), in the inquiry and analysis dimension we expect our students to be able to adapt and integrate their coding expertise to satisfy nonstandard objectives (the “articulate” level of understanding) and to be able to execute software engineering, testing, and debugging reliably and independent of help (the “precise” level of understanding). Of course, these represent desired outcomes. Figure 4 presents an expanded view of the inquiry and analysis dimension of the demonstrated scorecard that corresponds to what our assessment measures indicate students actually learn in these four areas.
For two of the four topical areas, we found that student learning was below the desired outcome in that subdimension. This begs the question, whose fault is it that the students fail to obtain the desired level of understanding? In inspecting our curriculum, we found that our program is designed to educate students at the “imitate” level in debugging and the “manipulate” level in testing, nothing more. This suggests the need for a third scorecard, an enabling scorecard, to document the level at which we actually provide experiences that enable our students to achieve the desired outcomes in each dimension. In the end, we have what we desire for our students to learn (the desired scorecard), what we actually have our students experience (the enabling scorecard), and what our students really learn (the demonstrated scorecard). Sadly, in our program, we have a mismatch across all three. Alas, the scorecards confirm what we have already admitted: as liberal educators, we must do better.

As a result of this analysis, we are now modifying our computer science curriculum specifically to include instructional experiences at the appropriate level for each subdimension, and more generally to include an explicit discussion of, and emphasis on, the liberal education outcomes that are supported by this discipline-specific outcome.

Figure 4  Demonstrated Intellectual and Practical Skills for Software Development

Conclusion
There are several important benefits to using the liberal education scorecard. Foremost is that it keeps our attention as educators on the primary objectives: effective student learning based on liberal education principles, and an intentional approach to assessing the effect of our efforts. In fact, we have come to understand the purposes of the reaccreditation process much more clearly as a result of developing the scorecard. We now see that it is not about compliance or “passing a test” but rather about being reflective and intentional about our purpose and seeking to measure our effectiveness.

We hope that by admitting our own shortcomings as liberal educators and by sharing our growth experience and the resulting scorecard model, we will encourage others to find the motivation and humility to reflect on their own maturation as liberal educators. As William Faulkner said, “do not bother just to be better than your contemporaries or predecessors. Try to be better than yourself.”

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REFERENCES
Effective university leadership has been both the focus of concern and the target of criticism for most of the past half-century. University leaders, it seems, can’t do anything right. If they focus on intellectual leadership, they are criticized for ivory-towerism and for not being sufficiently “engaged” with their communities. If they focus on external constituencies, they are accused of neglecting the core purposes of the academy, or worse, of intellectual cowardice. We believe that it’s time for a reframing of what, exactly, university leaders should be. We offer such a reframing in this article.

Our argument is based on two related premises. First, academic leadership is not just for designated leaders but is a responsibility of all members of the academic community. This will require a return to a collegial model of governance but with a modern twist. Our second premise holds that leadership is more than someone in formal authority trying to persuade followers. All members of the academic community have both the opportunity and the responsibility to step up and take on leadership roles, whether formally or informally, and the choice to do so is anchored by vocation, a sense of calling to a higher purpose.

Those who lead from the inside out engage in two interdependent activities. They discover their vocations (an intrapersonal activity), and they lead with vocation (an interpersonal activity). The interplay of these two activities results in a form of leadership that is inner-based and outer-focused, an institutional activity (see fig. 1).

Leaders with vocation lead from within, but they keep their leadership efforts focused on something outside of themselves—the institution, a program, or a cause.

Living with vocation
Finding your vocation is a lifelong process of discovering who you are, who you desire to become, and how you want to live your life. It is a dynamic process filled with tensions, conflicts, challenges, and disappointments, but also with joy and fulfillment. Living with vocation involves three interconnected elements: listening, reflecting, and committing.

The word vocation is derived from the Latin word vocare, which means “to call,” and one cannot talk about vocation without first considering the notion of “being called.” Living with vocation begins with the experience of listening for, hearing, and following a call. A person finds his or her calling by looking inward. As John Neafsey describes it (2004, 4), “from a psychological perspective, the voice of vocation can be understood as the voice of our ‘true self’ or ‘best self.’” Many refer to this as following one’s “passion,” but vocation is deeper than that; it inevitably requires sacrifice and hard work. Finding a vocation is a deeply personal process of going into the silence and creating a space that will allow us to listen to ourselves.

Living with vocation also requires engagement in serious reflection. As Neafsey notes (2004, 4), “however we understand it, the
sense of vocation is an experience of someone or something which speaks to our hearts in a compelling way that calls for us to listen and follow. This requires, first of all, a capacity to hear the voice as it speaks within ourselves or through our life experiences. Once we have heard the call, we then face the challenge of making intelligent and discerning and courageous choices to follow where it is leading.” In this process of reflection, two major questions need to be addressed: Who am I? And, how do I best serve others?

The first question concerns self-identity and self-identification—developing a sense of self. This dimension represents the source of the calling, both internal and external. We get to know ourselves—our talents, values, and aspirations—not only through reading, studying, and thinking, but also through interacting with others and inviting them to challenge our assumptions of what the world is like and what our role in it should be (Mezirow and Associates 2000). The second question refers to the need to incorporate the social and interpersonal dimension into finding a vocation. How do we live and contribute in ways defined by our relationships with others and with society in general? To what extent is service to others a central focus of our discernment and action? From both religious and secular perspectives, social responsibility is more virtuous than self-centeredness. This does not mean that the ideal or only “true” vocation is one in which a person is involved directly in helping others, however; not everyone needs to become a pastor or a social worker.

The third major element in living with vocation is making a commitment to act upon that vocation. Through listening and reflection, a leader with vocation determines what he or she truly stands for and commits to acting upon his or her values and beliefs. This process is never strictly linear. One can feel a calling without fully understanding it. One may even act on a calling and only then begin to reflect on its meaning and its implications. Life experiences can reinforce and build on personal commitments, but they may also be opportunities that lead to commitment.

Leading with vocation

There is a big difference between commitment—the intention to act based upon a sense of purpose—and action. Knowing how and when to express this intentionality is the mark of a good leader. Leading is essentially an interpersonal relationship between leaders and followers. Leading with vocation requires giving voice to others, building relationships, and recognizing—and rewarding—the contributions of others. It requires that leaders not only discover their own vocations but also “inspire others to find theirs” (Covey 2004, 5). One does not have to have a formal leadership position in order to be a leader. Rather, a leader has simply to find his or her “voice,” a compelling reason to step forward.

One of the most treasured images of academic community is that of a collegium whose members are collectively responsible for the good of the whole. With the growth of a “managerial culture” in the past several years, the need for individuals throughout the academic community to become “leaders in place” has become acute (Wergin 2007). The concept of leadership in place stands in contrast to other forms of leadership that seek only to influence or to protest. Leadership, whether someone is a formal leader or not, requires a commitment to helping others find their voices. One can speak from passion and experience, with the firm belief that motives are honorable and that the message needs to be heard, and still not be a leader. One can sound off at a faculty meeting about the latest administrative incursion into faculty autonomy, and then retire to the sanctity of a private office with the smug satisfaction that comes from being a voice in the wilderness. Or that same person can commit to something much riskier: helping others find their voices in a common cause. By helping others find their own voices, leaders play a special role in the lives of their colleagues.
Daniel Goleman, of “emotional intelligence” fame, recognizes the power and importance of relationships. He notes that the emotionally intelligent leader requires both “personal” and “social” competence, and that the leader’s “primal task” is building “resonance” with others. “By being attuned to how others feel in the moment,” Goleman writes, “a leader can say and do what’s appropriate, whether that means calming fears, assuaging anger, or joining in good spirits. This attunement also lets a leader sense the shared values and priorities that can guide the group” (2002, 30). Goleman’s sense of social competence is not based upon giving voice to others, but rather consists of reading others’ emotions in ways that are most likely to increase the leader’s influence. Our notion of relationship-building is quite different. By finding his or her own voice and then encouraging others to find theirs, the leader who leads with vocation negotiates a relationship that is built upon identifying mutual values and purposes—even, and especially, if not all those values and purposes are congruent.

Leaders of all kinds are keenly aware that the contributions of followers are a key determinant of their own success. They recognize the work of others. The first step necessary to turn ideals about relationships into reality is, simply, to respect people. [Respect] begins with an understanding of the diversity of their gifts. Understanding the diversity of these gifts enables us to begin taking the crucial step of trusting each other. It also enables us to begin to think in a new way about the strengths of others. Everyone comes with certain gifts—but not the same gifts. True participation and enlightened leadership allow these gifts to be expressed in different ways and at different times (DePree 2004, 25–6).

Given the press for scholarship—especially entrepreneurial scholarship—in the modern university, DePree’s advice is not often heeded. The differential contributions of faculty members, even if recognized in theory, are often not recognized in practice.

How does the leader with vocation draw out and maximize these different qualities? One way is by building on the concept of organizational motivation (Staw 1983; Wergin 2003). In order to enhance organizational motivation—that is, the desire to work on behalf of the group instead of individual self-interest—the leader needs to instill both identification with the institution and efficacy, or the sense that one’s efforts will have tangible positive impacts. An effective leader helps others identify with the organization by building a relationship based on shared values and goals, thus making the organization a source of community and emotional support. He or she also helps others find their organizational niche, that place where they feel they are using their gifts in ways that make a unique and visible contribution.

Finally, the leader with vocation recognizes the unique contributions of others by explicitly rewarding their uniqueness. In a vocation-driven organization, people are evaluated according to performance criteria that focus on their ability to bring their gifts and talents to bear upon the good of the whole.

Developing community with vocation

We began by focusing on the centrality of self-awareness because the “personhood” of the leader is vitally important. Yet leading from the inside out requires more than just knowing oneself and building relationships. Leaders need also to know what to stand for and why, and their motivation should always be directed toward the goal of making the institution better. Leaders with vocation lead from within, but they keep their leadership efforts focused on something outside of themselves—the institution, a program, or a cause. Simply stated, leading is inner-based and outer-focused, not outer-based and inner-focused. Accordingly, developing community with vocation, the third aspect of inside-out leadership, requires leadership practices that are focused on the organization as a whole. To that end, we recommend that leaders consider three practical steps: first, create a sense of shared purpose and hope for the future; second, develop a collective consciousness; and third, reflect critically on results. Creating a shared purpose, like creating good working relationships, is a matter of
careful negotiation of diverse voices. The inside-out leader balances individual and organizational needs, and does so “independent of consensus or popularity” (Collins 2005, 11). This may seem like a difficult or even impossible task.

If leaders are ambitious “first and foremost for the cause,” and if they must have “the will to do whatever it takes to make good on the ambition” (Collins 2005, 11), then leadership would seem to be a matter of rallying others around the cause rather than empowering them to make their own voices heard. But if the leader has built and nurtured relationships and given explicit and deliberate attention to organizational motivation, then the paradox dissolves. The group will have found its common cause, and the leader’s job will be to make that cause explicit.

Much has been written about the importance of a “shared vision” within an organization, but as Peter Senge (1990) has pointed out, a shared vision is not necessarily the sum total of the individual visions, and it is not necessarily shared by everyone completely. That’s fine. Conflict within an organization is natural, and it is essential to organizational growth. The key is to negotiate conflicts while maintaining a larger focus, to be conscious of organizational motivation at all times, and to develop a sense of both individual and collective responsibility. Both the successes and the failures of the organization belong to everyone; everyone has a stake.

Thirty years ago, James McGregor Burns published Leadership (1978), which has become a seminal work on the subject. Burns’s distinction between the “transformative” leader and the “transactional” leader has earned a permanent place in the leadership lexicon.

What has been lost in most quarters, however, is his definition of “transformative” activity as that which raises the consciousness of both leaders and followers. Because “consciousness” had long been dismissed as an unscientific concept unworthy of rational study, this was a revolutionary notion at the time. In a broad sense, “consciousness” reflects one’s way of being and one’s ethical and moral orientation. Thus, consciousness “reflects both the interiority of the self as well as the activity that one performs in the world” (Daryanani 2006, 4).

The inside-out leader helps others find this awareness. Jack Mezirow’s theory of transformative learning posits that the only way adults can learn deeply and change ingrained behavior is through “perspective transformation,” a significant shift in the way in which one views the world (Mezirow and Associates 2000). Psychologist Robert Kegan (1994) suggests that the most critical perspectival transformation in adults is the ability to cope with seemingly irreconcilable stresses. This requires a higher-order consciousness that displays an ability to look at life in terms of systems, and an awareness that value judgments have to be made in the face of competing tensions. A similar point is made by Ron Heifetz (1994), who suggests that the truly effective leader is able to manage “adaptive work”—that is, difficult situations in which neither the problem nor its solution is easily defined.

Thus, balancing individual and collective interests is not the only artful task facing the inside-out leader. Leadership also demands recognition of other tensions, all of which relate to a single common phenomenon: the balance between challenge and support. People have the greatest amount of intrinsic motivation when challenge and support are in balance—or more precisely, when the perceived challenge of a task is just barely beyond one’s own resources (Csikszentmihalyi 1997; Parks 2000; Braskamp, Trautvetter, and Ward 2006). The resulting dissonance generates aspiration and energy. This positive dissonance can take several organizational forms: framing problems in ways that challenge conventional thinking, taking reasonable risks, and exhibiting patience and persistence in the face of change that is neither predictable nor linear.
A group’s purpose and collective voice may be clear, its aspirations energizing, and its commitment to collective responsibility total, but unless the group cares about and reflects upon the quality of its work product, little organizational learning will result. The inside-out leader will also want the group to reflect critically on its work and to commit as a group to learning from what it is doing. As Steven Brookfield has observed, critical reflection occurs when we “identify and scrutinize the assumptions that undergird how we work” (1995, xii). In higher education, assessment is a major avenue for critical self-reflection. The leader must insist that the institutional contributions focusing on student learning and development are the focal point of all assessment endeavors. That is, the focus is on what and how students learn and develop, and not on how successful the teachers and leaders wish to be. The ultimate payoff is enhanced student learning and development, not increased power or status for the faculty or the administration.

Today, an increasing number of colleges and universities worry about students’ development of values and habits of mind. In building a culture of critical reflection, inside-out leaders at such institutions would facilitate discussion of the assumptions that underlie educational practice: What are we doing with our students, and why are we doing it that way? What do we think this will accomplish, and how will we know? Then, instead of developing a list of student competencies for which faculty will be held accountable, the inside-out leader asks: What will we do with the evidence about student learning and development we’ve collected? How will we talk about the data and make meaning of it? How can we learn from our experience?

The inside-out leader
At the beginning of this article, we called for a neo-collegial model of leadership that gives everyone an opportunity to take on significant leadership roles. The reader may have gained the impression from the preceding pages that “the leader” must occupy some position of formal authority. If so, we should emphasize that inside-out leaders by definition recognize a calling to exert leadership in a given situation or context, and then become leaders-in-place. Whether designated leaders or not, they engage in intrapersonal reflection, develop a sense of personal commitment, move beyond themselves to relationships with others in ways that galvanize their commitment to a common purpose. They then work to create a community of hope that reflects honestly on what it accomplishes. And then they step back so that others can lead in place as well.

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SAMUEL B. HUNTINGTON has famously (or infamously) argued that humanity’s future will be characterized more and more by civilizational wars. This is because different civilizations are guided by fundamental beliefs or values that are incompatible with the values of other civilizations, and there can be no compromise. In the shrinking space of the world today, frictions arise and ignite conflict among the different peoples of the world. Some believe the wars in the Middle East today are evidence of civilizational conflict between East and West and confirmation of the Huntington thesis. In other words, the differences between civilizations are “unbridgeable”—and hostility and war follow inevitably.

In fact, the Huntington thesis does considerable violence to history. The foundation for the Renaissance, the greatest flowering of Western civilization, can be traced to the discoveries of Muslim scholars centuries earlier and the advances they pioneered in mathematics, the physical sciences, astronomy, medicine, and engineering. Later, the science that grew out of the Renaissance transformed the Arab and Muslim world. So if we were to consult history, we would not see an unbridgeable divide between these two great civilizations but a considerable amount of interpenetration, if not cross-pollination.

The three faiths in the Middle East trace their origins to one common father, the prophet Abraham. In fact, the three religions pray to the same one and universal deity. It is also the case that the two great civilizations, East and West, owe their greatest achievements to common roots, not only in Jerusalem, but in Athens, and to the appreciation of reason as the most divine attribute of humanity.

A shared belief in God and reason unites our civilizations, and the modern university can help reestablish and maintain solid bonds between our civilizations by honoring the fundamental values we share. The American universities in the Middle East, which are strongly committed to the humanities and include civilizational studies among their core courses, are uniquely positioned to do this. A deepened understanding of the Other—that both unites and divides one people from another—is the path to greater self-awareness and mutual respect. The “dialogue of civilizations” that is practiced and preached in the universities is an important counterpoint to the “war of civilizations”—and one of its most effective antidotes.

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The cause of development

The cause of development is one of the most potent forces uniting peoples today across so-called civilizational divides, as well as one of the most effective tools for defusing conflict. The cause of development is a matter of urgent necessity for the Middle East, as it can bring palpable improvements to the societies...
in the region and the individuals that live there. At the same time, in the United States, development has come to be much more than a noble cause. The cause of development now has an unprecedented hold on the public consciousness in America. It is transforming curricula in universities, the languages that are being studied, what we see on television and in film, as well as what we read. It is the common discourse of rock stars. The cause of development has also become a mainstream concern of the United States government.

Undoubtedly, 9/11 played a huge role in pushing the cause of development into the headlines—well, at least onto page two—and the Situation Room at the White House. We Americans now know, from the painful experiences of that day, that our own peace and prosperity are tied to the fate of peoples far from our shores. We now know that deprivation and despair, when neglected and left to fester, threaten our civilization—and our lives, too. Accordingly, since that day, we have seen in this country an unparalleled commitment of resources to the cause of development. We also have seen a wholesale reform of government institutions and decision making about development programs to make them a more effective and accountable arm of American foreign policy.

While Huntington and others might argue that the forces of globalization in our shrinking world inevitably bring dislocation and violence among its many peoples, I would argue that it has also united men and women of good will, across civilizations, through a sense of common destiny and given them the tools to address some of our most pressing problems. The smaller world of today makes it much easier to share ideas and best practices. There is no longer any excuse for cookie-cutter approaches or ignorance.

The American universities in the Middle East
In the tradition of the universities of the Middle Ages, today’s universities bring together a diversity of peoples from many countries as scholars and students. Approximately twenty thousand students, representing more than seventy nationalities and most of the world’s confessional groups, are attending classes at the four American universities in the Middle East this year. Among the matriculated are
The cause of development now has an unprecedented hold on the public consciousness in America.

graduates from the Lebanese American University (LAU), the American University in Cairo (AUC), and the American University of Beirut (AUB) is impressive. Notable Americans include Zalmay Khalilzad, the former U.S. ambassador to Afghanistan and Iraq and the current U.S. permanent representative to the United Nations, as well as Thomas Friedman, author and columnist at the New York Times, among many others.

The American University of Sharjah also has graduated prominent leaders, including Sheikha Lubna Al Qassimi, who graduated with the first cohort of Sharjah’s Executive M.B.A. program and is now minister of economy and planning of the United Arab Emirates. She is the first woman in the history of that country to hold a federal ministerial position and she is a prominent figure at international gatherings such as the annual Davos Conference.

Lebanese American University
It is vitally important that the opening (or bridge) these universities provide to leadership positions in the Middle East not be reserved only for privileged students. For the 2006–7 academic year, the United States Agency for International Development (USAID) provided more than 1,250 students with scholarships to attend AUB and LAU. USAID also supports the Leadership for Education and Development program, which provides fifty-four full scholarships per year for young Egyptians from the public national schools to study at AUC. Two students (one male, one female) are chosen from each of Egypt’s twenty-seven governorates. This is the third year of the program, which means that a total of 162 students have received USAID support.

Moreover, a sizeable portion of the operating expenses of the American universities is dedicated to scholarships and financial aid. It is noteworthy that at AUC, for example, 75 percent of the students receive financial assistance. LAU allocated $14 million in financial aid for the 2006–7 academic year. Assistance is offered in the form of a work-study grant that can be complemented by loans, scholarships, and grants based on need and academic qualifications. Around 1,600 students received financial aid in 2005–6. During the same period, AUB provided almost $9 million in financial assistance.

The experience of the United States in this regard can be instructive. After the Second World War, when academia opened its doors to minorities and others formerly too poor to attend, the university became one of the most effective engines of social change. In the Middle East, the pace of such change is daunting.
to some, but it is critical to defusing the grievances that come from exclusion and answering the needs of a burgeoning young population.

As a measure of the commitment to inclusiveness and diversity, it is noteworthy that over 50 percent of the chairs in undergraduate classes at AUC are occupied by females. If that doesn’t spur change, I don’t know what will. Some 21,000 women have graduated from AUB since the policy of female admission was adopted in 1921. In 2003, there were 2,400 female undergraduates at AUB and 400 female graduate students. Forty-eight percent of all AUB students are women.

LAU was founded as the American School for Girls in 1835. Since 1973, LAU has grown from a college of 1,000 students on one campus in Beirut to a university with 5,900 students on campuses in Beirut and Byblos. Its student body today is 51 percent male and 49 percent female. In 1973, LAU founded the Institute for Women’s Studies in the Arab World.

At Sharjah last year, there were nearly 1,800 students in residence in the university’s dormitories. The undergraduate student body is 57 percent male and 43 percent female. Approximately 2,000 students receive some form of financial assistance either from university funds or from external sponsors.

As the United Nations Development Programme’s Arab Development Report (2002) forcefully argued, Arab countries will not advance when one half of their populations go uneducated. The American universities in the Middle East are showing the way forward with a commitment to gender equity and innovative programs.

Extension programs are one critically important way of bringing education to underserved populations. The Center for Adult and Continuing Education at AUC, for example, brings educational programs into the community by providing low-cost educational and training opportunities for over 33,000 people of all ages each year. The center also uses closed-circuit television to reach students in remote areas of Egypt.

It bears mention that these universities, while important centers of culture, are also an important part of the social and economic web of the cities in which they are located. They are a force for development as generators of employment in teaching, administration, and the support services that sustain modern universities. Drawing on a jointly programmed special account, the government of Egypt and the U.S. government have provided approximately 600 million Egyptian pounds to help AUC construct a new campus. The new campus is a mark of confidence in the future. It will also relieve the congestion of downtown Cairo and be an anchor for development of a “new face” of Cairo in Katamaya.

**Conclusion**

We need to find ways to get the word out about the continuing support of the United States for the American universities in the Middle East. A better understanding of American generosity toward these institutions may help give future leaders in the Middle East a more sophisticated understanding of the multifaceted engagement of the United States in this critical region, and provide a needed corrective to some of the most blatant propaganda spread against us. It should be made clear from all the years of support to these universities that the U.S. government has not, and will not, try to influence what is taught. The U.S. government and the American people are proud to support these students and to partner with these universities in bridging civilizations.

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**REFERENCE**

“IT’S GOING TO BE A BLOODBATH,” my colleague warned.

I had just become chair of a general education task force charged with reviewing and reforming our core curriculum. And the metaphors were running wild. We were about to awaken the core-war giant, and it was going to be every department for itself, a zero-sum game of winner takes all. We’d be carving up the pie, redrawing the boundaries, parceling out the credits, and protecting turf.

At about this time, my wife and I had some good friends over for dinner, and they told us a story about a couple they knew who had recently discovered evidence of rats in their basement. The wife, determined to find an alternative solution to traps and poison, decided to call an animal communicator. Upon her arrival, the communicator was asked to tell the rats that they should leave or an exterminator would have to be called. With these instructions, the animal communicator went down into the basement. After fifteen minutes or so, she appeared at the top of the stairs and said, “Well, I told them what you wanted, and they discussed their options.”

“And?” the husband replied, doubtful all along of her psychic calling.

“Like I said, I gave them the choices, and they talked it over for quite awhile. But the long and short of it is—the rats are still divided.”

I immediately thought of my new responsibilities in leading curricular reform and of the need to keep faculty more or less unified and on track.

Actually, I entered into this grand experiment in faculty collegiality with a great deal of hope. I wanted to promote a different way of thinking about curricular reform. I wanted to facilitate the broadest participation possible. I wanted to conduct patient and shared research into best practices in general education.

Lucky for me, I had an excellent faculty team on this project. And lucky for me, they were also keenly interested in ways that would make our work together collegial and productive. And lucky for us all, we were in agreement that the current core was not working.

Core problems
From a general education perspective, the core had been stinking up the place for some time. During our last accreditation visit, the evaluation team noted that our core curriculum was an underdeveloped resource to support the university mission. Ouch. The team also pointed out that the core was so open to choice within the disciplinary distribution requirements that it failed to guide students adequately through common experiences. True again. Beyond introductory courses in writing, math, communication, and philosophy, all other courses in the core had only to respond to broad disciplinary distribution requirements; thus, an upper-division history, literature, or biology course, while not designed with general education students in mind, could be used to fulfill core requirements. In other words, the core served majors and faculty interests quite well. The students? Not so much.

The core was the ever-popular Chinese menu. Or better yet, it was a mix of train schedules. Students made choices based on...
We Gen-Ed By

LAURENCE MUSGROVE
when they happened to arrive at the station; they were not particularly concerned about where they would end up, as long as they could get their tickets punched enough times to be exchanged for that bigger ticket, the diploma.

Additionally, the evaluation team said that without a committee or administrative structure to oversee the curriculum, program assessment and improvement would be very difficult. While a core committee of the faculty senate had been established to respond to this charge, there really never was a “general education program” to bird-dog in the first place, just an incoherent flock of courses with responsibility for oversight nested within individual departments. The one exception, however, was our mixed-bag foreign language/foreign culture requirement, and the core committee did spend quite a bit of time sorting out the criteria for what could count as “foreign culture.” Still, that was pretty much it. No general education program, no real oversight, no real assessment, no real improvement, and most tragically, no real advocate.

Many faculty colleagues across campus were also unhappy with the current state of affairs, and a survey of opinion early in the process revealed similar concerns, including the lack of a clear connection to our institutional identity and mission, the offering of few common courses, and the “roll-your-own” nature of the curriculum. In addition, faculty were concerned about the absence of clear outcomes, the lack of sequential learning, the failure of upper-division courses to respond to general education needs, the lack of a universal foreign language requirement, and the absence of funding for faculty and curriculum development key to general education.

Beyond the accreditation team’s critique and the faculty survey, the task force—composed of twenty-five members of the faculty across the disciplines, including the dean of the business school and the vice president for university mission and heritage—had issues of their own. Primary among these was the desire to make general education a shared interest of all faculty—not only to promote collaborative
responsibility for the curriculum, but also to prompt serious dialogue concerning the central academic enterprise of the institution.

Our general education identity crisis was quite obvious to many. Not so obvious was the solution.

First defining metaphor
Another metaphor occurred to me one morning as I watched one of my neighbors walk her two dogs down the sidewalk past my house. A young Labrador retriever was out in front, chugging along full bore, intent on the path ahead; a beagle lagged behind, head down, sniffing and snuffling. Trying to keep her balance, my neighbor was caught between the tug and the drag along, one leash yanking her forward and the other pulling her back.

This is an apt metaphor for how our faculty task force lurched forward and then back again as we searched for a replacement model for our core curriculum. Early in the process, we divided into two teams. One group wanted to leap forward, dream big, work deductively. They drafted vision and mission statements, mapped out learning objectives, studied best practices. They were focused on future and grand designs. The other team wanted to move more slowly and carefully, inspecting the lay of the land, not wandering too far off course. They worked inductively, focusing on the present realities and concrete, smaller steps. In these two ways, we moved haltingly, patiently, and at times, unsure of our destination and schedule. Still, we were making progress. And eventually, we reached a compromise of sorts, a proposal that reached new heights but still accounted for our hesitant past and current circumstances.

There’s also another image at play that was particularly influential to me as chair. Raphael’s The School of Athens portrays two great philosophers walking forward in the center of a busy and bustling crowd. Locked in each other’s gaze and oblivious to those around them, each is clutching a treasured text. At left, Plato lifts his right hand with a gesture toward the heavens, pointing to ideal and eternal truths. Next to him, Aristotle extends his right hand flat out in front of him, reminding his teacher of the necessary realities of the world. This painting represented for me the intellectual spirit of our task force, understanding the need to account for both an ideal vision and the conditions on the ground.

Second defining metaphor
The most startling and inspirational change happened when we were developing our mission statement. Early on, we had agreed that establishing an institutional identity would require us to go beyond revising the categories of courses; we would need to create an actual curriculum with learning objectives that was supported by administrative leadership, by a faculty committee with real teeth, and by a real budget. So as we began to develop a mission statement, a new image emerged to replace “the core,” that sadly worn and threadbare metaphor that still controlled much of our thinking about the curriculum.

In academic circles, “core” refers to the set of common courses or requirements all students must take prior to moving on to their advanced coursework in the major. Of course, all sorts of harmful metaphors accompany this way of thinking about general education, such as general education as a waste of time or an obstacle to overcome. But our core was never really a core: students were still fulfilling requirements with first-year courses into their senior years—college algebra, for example, and communication. In our mission statement, we wrote:

The General Education Curriculum is at the heart of a student’s educational journey, conveys the values embedded with a rich Mercy heritage, and infuses personal and professional practice with the spirit of liberal learning. It provides a foundation for learning for life and livelihood by exploring a range of disciplines, their relationships, and how they contribute to human understanding and the common good.

These conceptual metaphors—heart, journey, convey, infuse, foundation, exploration—came closer to describing the active and developmental learning we desired. Even the word “curriculum” has its roots in the terms “current” and “to run.” These contribute to the notion that a curriculum is active and formative, that courses flow into the stream of the curriculum, moving students forward in their learning, progressing onward toward participation in a larger world of learning. Thus, maintaining “core” as the controlling metaphor would not only fail to adequately define a progressive curriculum but also limit our ability to consider its rich potential.

Even more powerful to me was the first metaphor in the statement, “heart.” Containing
We proposed a process whereby faculty and students filled each other in on what it means to be liberally educated

some of the attributes of the “core,” this rich metaphor suggests several beneficial and related concepts, such as vitality, life, bloodstream, infusion, pulsing, conditioning, connection, rhythm, time, and flow. But more importantly, it is reminiscent of the emotional requirements of teaching and learning. For example, there is “learning by heart,” or how we might describe the mindful embrace of a subject, or how we become “flush with knowledge”—that is, how our faces exhibit the thrill and joy in knowing.

Third defining metaphor
We soon decided that an off-campus summer retreat would help us accomplish more work than was possible in our periodic committee meetings. I arranged for two days and an overnight stay at a retreat center, and contracted with two facilitators to assist our progress. First, the bad news: it was a fairly slow-going, frustrating couple of days; the dog walker was everywhere, and I was worried that we would go away empty-handed. The good news is that, during the last hour of our time together, one of our task force members proposed a new curricular model that revolutionized our thinking about the role and reach of general education.

From that point on, we understood general education not as a distinct set of courses or requirements, but as a journey. Students would begin their general education experience with a first-semester transitions course, a time to get oriented to college learning and the character of our institution. They would also take common courses in writing, math, philosophy, and communication in the first year, as well as begin to take a range of disciplinary requirements as they moved into the second year. Next, as they began to acquire learning in their major, there would be a junior-level interdisciplinary course, an opportunity to integrate fields of learning to better understand a particular problem or issue. Finally, they would conclude with a senior transitions course, an opportunity to apply their general education to real-world occasions and to reflect upon its value beyond the university.

This four-year developmental framework simplified our thinking about the overall structure and path of general education, and it also helped us integrate other desired requirements. For example, while we wanted to add courses in diversity studies, global studies, and service learning, we had already agreed that we would not increase the already substantial number of hours required by the current core. But given the transitional and formative nature of the framework—and the large number of transfers coming from nearby community colleges—we decided that integrating these requirements across the entire undergraduate curriculum was the best approach.

Because we were better positioned to understand the significance of students’ transition into college life and learning, we instituted a first-year cohort experience. This three-course model would include a newly redesigned first-semester transitions course matched with a first-year philosophy course and a first-year disciplinary seminar. The latter two courses would contribute to students’ introduction to university learning by focusing on close reading of primary texts, analytical writing, and concentrated discussion. And of course, this proposed scheme would prompt faculty and curriculum development on issues related to first-year learning—another opportunity to dissolve disciplinary boundaries and create the shared conversations about general education.

It soon became clear to me that this journey had a particular shape. That is, as I imagined students’ transitions in and out, their growth in knowledge, the breadth of their learning, the integration of disciplines, their turn toward more concentrated effort in their majors, plus the reflection available to them in the interdisciplinary seminar and senior transitions, I began to see an image that graphically expressed our general education curriculum and students’ experience in it. This was the “loop-the-loop” metaphor, or as I sometimes pictured it, the roller coaster 360-degree flip. This metaphor worked for me for a couple of
reasons. First, it clearly demonstrated the coming in and going out of the college experience for students. Second, it offered a way to visualize growth and reflection. But what I like most was the inversion. The university should play a countercultural role in society, and overturning students’ misconceptions about the role and value of a college education, particularly general education, is one of the major challenges we all face.

**Fourth defining metaphor**
A major challenge we currently face concerns the need to overturn the faculty’s attitude of neglect toward general education. Because our core is primarily an “anything-counts” curriculum, and because almost all major courses can also fulfill general education requirements, faculty have no incentive to attend to general education as a distinct enterprise. Students have no incentive either. Thus, silence prevails.

Further, because what counts as a general education course is defined by whatever departments decide to offer in any particular semester, no real criteria exist for course inclusion, except that the course must fit within the range of distribution requirements. This “up-for-grabs” attitude toward students’ general education is big on choice and freedom but thin on critical analysis and judgment. And that is why core wars tend to be bloodbaths. Lack of communication often leads to screaming and yelling.

As I said before, our task force heard this silence loud and clear and proposed a process of continual dialogue and improvement led by a general education program committee that would be responsible for the integrity and vitality of the curriculum. It would also have the power to propose changes to the framework if necessary, without starting from scratch and claw. Therefore, faculty and curriculum development often leads to screaming and yelling.

So instead of a process whereby faculty and students filled in blanks on core curriculum checklists, we proposed a process whereby faculty and students filled each other in on what it means to be liberally educated. The task force created both a framework of requirements and a process for promoting dialogue about what should be included in the framework. In other words, we proposed a collaborative course of action designed to challenge faculty to decide together, on an ongoing basis, what general education students should learn and demonstrate in a particular course or collection of related courses. Faculty would embark upon a shared path of common purpose rather than trailing off into divergent routes of individual and departmental concern.

**Getting along**
To be clear, faculty have just recently approved our program proposal. The real tests are ahead of us as we move the process of faculty and curriculum development along. It will require quite a bit of getting to know folks from other disciplines. It will require quite a bit of talk; quite a bit of listening; quite a bit of give and take; quite a bit of study, research, debate, and agreement; quite a bit of humility, level-headedness, courage, and hope. That is, it will require quite a bit of what we expect our students to gain from a general education. We should expect to practice what we teach, and become students of general education ourselves.

The dog walker, the heart, the loop-the-loop journey, the shared path, the faculty as student: these defining metaphors present useful ways of conceptualizing general education reform and the collegiality required of us all as we strive to sustain our agreements and commitments. There will be more defining metaphors ahead; the trick is to know which to live and work by.

And by the way, the rats did finally agree to get along and out of there.

To respond to this article, e-mail liberaled@aacu.org, with the author’s name on the subject line.
Downtown
A Community-Campus Collaborative Course to Prepare Students for Community-Based Research

The Trenton Youth Community-Based Research Corps (TYCRC) at the College of New Jersey engages undergraduate students in research that helps make a difference in the lives of children—particularly those living in poverty. The students and I partner with nonprofit social service agencies that lack the resources to hire external researchers to conduct community needs and assets assessments or to study the effectiveness of their programs. Such research is increasingly necessary for the economic survival of nonprofit community-based organizations, not to mention for developing effective programs and services.

Initially, TYCRC was a one-semester course in community-based research (CBR) methods in which students completed a small “demonstration” project. This was a familiar pedagogical model that comfortably allowed me to experiment with engaging undergraduates in CBR. Yet after attempting CBR within the constraints of a single course, I quickly realized the necessity of extending the length of the program beyond one semester. The periodicity of a semester constrains learning to particular times (and typically to particular contexts) and is mismatched with the real-time and real-world nature of CBR.

TYCRC is now a three-semester program, achieved in partnership with the Bonner Foundation’s initiative for creating multi-semester civic engagement certificates, minors, or concentrations. Students first enroll in a course that grew out of lessons learned about the preparation needed to support students in engaging meaningfully in intense urban CBR projects. The majority of students involved in TYCRC have had little or no exposure to the realities of inner-city children and families living in poverty. While many have had well-intentioned community service experiences, the students were frequently sheltered from up-close exposure to the hard realities of social injustice and rarely engaged in meaningful reflection to deepen their understanding. Thus, initial exposure to these realities and awareness of the mission and strategies of community organizations is necessary for preparing students for the CBR partnership. My challenge was to prepare TYCRC students for yearlong CBR partnerships in which they accomplish major research projects with and on behalf of their community partners.

Three students work on each CBR project; this small-team approach allows for collaboration and support among students as well as manageability in terms of project organization and communication. Students are assigned to CBR teams based on their interests and work habits. I establish the initial partnership with the community organizations and have preliminary conversations about their research needs. Students then join the partnership, and the mutual work of defining and executing the CBR project begins with a discussion of the agency’s research needs. The students and faculty spend time getting to know the agency by holding all meetings at the agency, and students volunteer time in helping roles at the agency. The students, with input from other partners, conduct professional literature searches to further inform the research questions.

Once the objectives of the research are clearly defined, a realistic research design is defined, measures and data collection methods are designed, and study implementation logistics are planned. Research ethics are reviewed by the institutional review board of either the community organization (if available) or the college. Students are instrumental in
The Downtown course takes a wide-eyed look at the harsh realities of inner-city poverty, while also appreciating the assets and strengths of inner-city residents.
administering the data collection process, and they take the lead in statistical analysis and the presentation of results. The full partnership participates in discussing and interpreting results, and in developing recommendations for the agency based on the results. When appropriate, focus groups are held with clients of the agency to gain their perspectives. The agency defines the most useful format for reporting study results. Typically, agencies request a formal research report as well as a presentation for agency staff, the board of directors, and sometimes clientele. Students are the primary authors of the research report, with substantial input on multiple drafts from all partners.

“Downtown . . . everything’s waiting for you”

To prepare TYCRC students for rigorous CBR projects, I developed a course entitled Downtown: Inner-City Youth and Families. The name of this course was inspired in part by Petula Clark's classic rendition of “Downtown” in which she croons, “and you may find somebody kind to help and understand you. Someone who is just like you and needs a gentle hand to guide them along . . . So go downtown, things'll be great when you're downtown—don't wait a minute more, downtown—everything's waiting for you.” This classic 1960s tune celebrates the wonders of urban life. The Downtown course takes a wide-eyed look at the harsh realities of inner-city poverty, while also appreciating the assets and strengths of inner-city residents.

The learning objectives for the Downtown course include (1) providing exposure to and stimulating awareness of the complex lives of inner-city youth and families, particularly those who live in poverty; (2) viewing real-life urban complexities—needs and assets—through multiple lenses, including both disciplinary and community-based perspectives; (3) building the cultural competency skills necessary for working with and on behalf of inner-city youth and families; (4) developing understanding of social services, and gaining comfort interacting with community professionals; and (5) gaining familiarity with and comfort in traveling around Trenton. It is expected that, upon completion of this course, students are poised to engage fully in a collaborative CBR partnership.

Downtown is a “course within a course”; it is a community course within a college course. Students enrolled in Downtown also partake as citizen participants in the Trenton Community Orientation Course (TCOC), an eight-session program designed to foster youth advocacy skills in concerned citizens. TCOC is a collaboration of the Association for Children of New Jersey, Millhill Child and Family Development Corporation, the City of Trenton, and TYCRC. Other participants are typically adult social service professionals, retired citizens interested in finding volunteer opportunities, or philanthropists wanting to learn more about Trenton's needs and assets. Each session focuses on a different issue (e.g., child abuse and neglect, education) and meets at a local social service agency. TYCRC students learn in situ about pressing inner-city issues; they get to know many Trenton citizens; they learn through observation, interaction, and testimonials about Trenton youth and families; they learn about numerous social service agencies—including their economic pressures; and they develop familiarity with and comfort in traveling to Trenton. These community sessions are complemented by class sessions at the college that include reflection, relevant social science readings, and discussion with area professionals about urban youth issues and the role of research in social service agencies.

Each TCOC session includes continuing team-building activities and interactive exercises that challenge stereotypes and build awareness of privilege and prejudice. But the primary focus is on a particular social issue: What is the challenge? How does the community respond to the challenge (services, resources)?
Perhaps the best outcome of Downtown is the “fire” it sparks in the students.

What can we do to help (both in terms of direct service and youth advocacy)?

Sessions also include lunch, providing opportunities for more informal conversation among TCOC participants and facilitators. TYCRC students are encouraged to sit with non-student TCOC participants—a tall challenge at first. At an early campus session of Downtown, we brainstorm about conversation starters to facilitate their interaction. I encourage honest discussion of the stereotypes we hold of various sectors of TCOC participants, and I prompt conversation about the stereotypes we presume non-student TCOC participants hold of us. This evolves into discussion of the dynamics of privilege and social status, town-gown relations, and ways in which stereotypes sometimes seem to hold a “kernel of truth” but can be challenged and eroded. Making an effort to get to know individuals—identifying common interests, but also appreciating individuality—is a powerful strategy for weakening the prejudicial power of stereotypes.

Students’ major assignment in the Downtown course is to complete a community agency-sponsored “Issue Investigation”—an in-depth analysis of an issue in which a community agency is interested. Examples of Issue Investigations include a study of feelings of hopelessness among contemporary urban youth, curriculum development for a new life skills and mentoring program for urban teenage girls, and brainstorming about ways to stimulate healthy peer relationship development among urban youth.

Issue Investigations require students to work with community partners to define an issue of interest and to articulate the community agency’s need or potential uses for the information. Students must have a series of conversations with community partners, learn about the mission and goals of the organization, and think strategically about the organization’s work. The projects require students to search and consult various sources of information, including scholarly research, demographic and other public data, information on relevant programs in other parts of the country, policy positions and research, and information gleaned through interviews or focus groups with native informants. The Issue Investigations also give the students something purposeful to talk about with adult TCOC participants. Finally, Issue Investigations give students a taste for doing something “real”—with real importance, real relevance, and real impact.
Learning outcomes and the impact of the TCOC course

Assessment of the Downtown course includes surveys of civic attitudes and behaviors administered to all TCOC participants before and after the course; written reflections of all TCOC participants about the course experience, including the experience of interactions between campus and community participants; and more extensive written reflections of all TYCRC participants throughout the course.

Comparisons of participants’ survey responses before and after the TCOC reveal several significant differences. (Student and non-student participants did not differ in these results). Most participants gained greater self-efficacy—particularly a sense of being effective in the community. Participants showed greater understanding of social problems and reported engaging more often in civic activities. Participants reported participating less frequently in fundraising events, but they more often performed volunteer work, participated in activities that help to improve their community, and encouraged others to participate in community service. Participants also reported that TCOC inspired them to work on behalf of children and gave them a specific idea about how they can work on behalf of children. Participants’ written reflections brought these findings to life.

Exposure

All TYCRC students reflected on how widely their eyes had been opened by their participation in TCOC and Downtown. An important function of the on-campus Downtown class sessions was debriefing on the realities to which the students had been exposed in the TCOC sessions. This created a critical supportive space in which to share observations, express surprise and even shock, and begin to fold this awareness into their widening sense of reality. For many of the students, reflections on the realities to which they were exposed led to deepening understanding of life experiences and communities different from their own. I have also come to appreciate the transformative power of Downtown for students who have grown up in urban environments and who are very familiar with the challenging realities of inner-city life.

We spend considerable time in Downtown sessions discussing the many factors that conspire to create the complex issues for youth in the inner-city—child neglect and abuse, early substance use and abuse, gang involvement and violence. My goal is to complicate students’ often simplistic or “pat” theories or answers to these problems. We consider many different sources of information and different perspectives. Another shift I try to engineer is from individual attributions for the cause of these problems (“they are just lazy”) to consideration of external factors such as poverty, prejudice, privilege, and power. We also discuss the tendency toward simplified and homogeneous beliefs about “outgroups,” people we see as different or removed from ourselves, as well as the societal function of simplistic, external stereotypes and assumptions.

Some of the most powerful and insightful experiences come when TYCRC students interact personally with Trenton youth. I collaborate with Trenton leaders to plan and implement Trenton Teens Talk youth forums on pressing issues. One of these biannual forums coincides with Downtown, and so I involve TYCRC students in the event. Nearly one hundred Trenton youth from the local public high school, alternative high school, YouthBuild site, and youth detention center come together and participate in guided discussion. The event starts with a brief motivational presentation, typically delivered by a Trenton native in his or her twenties or thirties, emphasizing the power of youth voices in shaping the promise of the future.

The forum is comprised of four or five twenty- to thirty-minute sessions, each posing a thought-provoking question to stimulate small-group conversation. A facilitator gently keeps the conversation on track and documents...
the youths' feedback. At the close of each ses-
sion, the youths' responses are sent to a
“theme team” that compiles all responses and
creates a report in real-time during the forum.
Each participant leaves with a copy of the re-
port, and the report is distributed widely to
community leaders. The youth feedback, in-
sights, and ideas included in these reports
have led to specific school and community
changes and initiatives.

Each TYCRC student joins one of the small
groups at the forum. They not only observe
the youths’ discussions, but they also eat lunch
side by side with the youths and get to know
them as real people. Participation in the youth
forum is a turning point in Downtown, stimu-
lat ing movement from exposure to growing
understanding.

Deepening understanding brings new chal-
lenges for the students. They realize that once
their eyes have been opened to complex and
sometimes painful realities, it is impossible to
close them again. As they shed protective ig-
norance, they come face-to-face with civic
responsibility—no longer as an externally im-
posed “should,” but instead as a personal man-
date. This is the most difficult time during the
entire three-semester TYCRC program. When
I sense that some of the students are nearing
this point, I discuss my own experience of
going to this realization and encourage them
to reflect and talk. I also invite individuals
from the Trenton community to join us for
personal reflection about their own paths to
 civic engagement and responsibility. This is
the time to talk about building “citizenship”
into identity.

Community building
Downtown ends with a TCOC graduation cer-
emony held in May at City Hall, where the
mayor of Trenton and other community lead-
ers address the graduates. All TCOC graduates
receive a certificate and a collection of local
resource guides and memorabilia. This is a day
of pride, accomplishment, and inspiration.
TCOC participants reunite in June at the
statehouse for a state advocacy day sponsored
by the Association for Children of New Jersey
(ACNJ). This is a warm reunion, reflecting the
camaraderie developed among all participants.
Most student participants return to Trenton
to attend the day’s events. Participants observe
an ACNJ press conference on a recent policy
issue regarding children, attend a committee
meeting, and interact with policy makers,
lobbyists, and other community leaders.

As TYCRC students move from this first-
semester experience into their yearlong CBR
project, their TCOC experience helps make
Trenton feel like a “small world.” Having traveled to many different parts of the city, walked the streets with other citizens, learned about the real-life experiences of residents, and met inspirational social service providers, TYCRC students begin to feel like part of the community.

**Action**

A key aim of TCOC is to stimulate advocacy efforts on behalf of children. A very broad sense of advocacy is promoted, including such actions as interacting one-on-one with youth, registering concern about a youth issue with a local leader or state politician, serving as a youth advocate, or committing to advance a cause through activism or community leadership. Students’ issue investigation is an advocacy effort, of course, but students are also encouraged to participate in other advocacy actions with TCOC participants. Through these targeted service efforts, TCOC participants are drawn into the community, working side by side with diverse residents.

Perhaps the best outcome of Downtown is the “fire” it sparks in the students. Students emerge from Downtown burning to start their CBR project! They approach the yearlong partnership with enthusiasm, a sense of purpose and belief in their efficacy, an openness to and respect for their community partners, and pride in working in Trenton.

**Conclusion: Implementing a developmental program**

In TYCRC, students learn to be partners, citizens, and public scholars. They internalize a civic identity, recognizing both that they are part of social systems and dynamics of power and privilege, and that they can be agents of social change. And they learn that research can be a tool for strengthening community agencies and for prompting social change. Developing these identities takes time and gradually deepening experiences, support and challenge, and reflection and discussion—far more than can be accomplished in a single course in a single semester.

Implementing a developmental program poses challenges, including cost and role definition issues. While the course objectives of Downtown may enable a larger class size, I need to be sensitive to the balance of students and non-students in the TCOC course, which involves about thirty participants each year. The primary facilitator of this course and I decided that the majority of participants (ideally about two-thirds) should be non-students. Consistent with this limit, I have found that twelve students—four teams of three students—is a manageable class size in the yearlong CBR phase, based on our efficacy in meeting community needs and in facilitating productive work team dynamics.

Carrying a course with a relatively small class size across three semesters can challenge the economics of course scheduling. On the surface, the cost-benefit ratio may not seem to warrant support of the effort. I also strive for an interdisciplinary group of students. Addressing real-life issues benefits from multiple perspectives and skill sets. Thus, recruitment efforts are campus-wide, and every cohort has included students majoring in highly disparate areas.

All individuals involved in TYCRC face challenges to the traditional definitions of their roles. Students accustomed to passive learning in a classroom are stretched to embrace active learning in the community. Faculty too must step outside of the contained classroom to collaborate with many other “teachers” and to join as learners. The experience is demanding, and it becomes intense and even all-consuming at certain phases of the developmental process. All must broaden the scope of their learning goals to include personal development.

To respond to this article, e-mail liberaled@aacu.org, with the author’s name on the subject line.
My university invests a lot of time and energy in branding itself as Pennsylvania's public liberal arts institution. Much of the inspiration, it seems, comes from *College Learning for the New Global Century* (AAC&U 2007), the report from the National Leadership Council for Liberal Education and America's Promise (LEAP) that clarifies the definition of and the need for liberal education. The new liberal education, the report argues, should focus on “Essential Learning Outcomes,” which teach students “knowledge of human cultures and the physical and natural world”; “intellectual and practical skills”; a sense of “personal and social responsibility”; and the ability to learn collaboratively and interdisciplinarily through “general and specialized studies.” I agree because these are crucial skills for dealing with one of the major issues of our time: global warming.

To address global warming requires complex solutions that draw on scientific expertise and a sense of community, local and global. It's not enough to understand the science; we must be willing to make social, cultural, religious, and economic changes as well. Learning to look at the world from the perspective of liberal education should enable students to understand that complex problems require complex solutions, to learn to care for themselves by caring for others, and to share those concerns in the public sphere. At least, that's what the LEAP outcomes suggest. To illustrate, I turn to the example of Rachel Carson and *Silent Spring* (1962). Carson's actions represent what's best about a liberal education put into practice.

**Rachel Carson**

Trained as a scientist, Carson used her expertise to help the public understand the seriousness of environmental degradation stemming from the indiscriminate use of pesticides. The behavior Carson modeled relied more than her scientific know-how; it also drew heavily on her sense of complexity and the ubiquity of processes, her attachment to others, including nature, and her ability to turn a phrase while questioning behavior she saw as suspect—all attributes of a liberal education.

This perspective asks that we engage others from different disciplines, learn from them, and then make their knowledge useful in our own lives. It's not just the learning of the different disciplines per se, but the process of learning how to learn from each and assimilating that learning into our daily lives. If students come to understand that...
biology, physics, English, and history can each shed light on the other, they are better prepared to engage in the complex thinking needed to help us deal with the problem of global warming on a day-to-day basis. What Carson told us about pesticides sparked a national reaction that led to the banning of DDT in the United States (though it’s still produced in great quantities for use in other countries). Global warming has trumped concerns about pesticides, and it appears that the public is ready to listen.

We usually ask that students specialize, but in order to understand and begin to solve environmental problems, we need to learn how to think ecologically—that is, about systems and individuals and how each relates to the other. We’ve got to figure out ways to talk to each other across our disciplines, to value each other’s knowledge and potential for contributions in understanding our environmental problems. The emphasis on broad knowledge and collaboration is where liberal education plays a crucial role.

This is not to say that we don’t need specialists, because we do. Carson understood that, but saw the dangers. She writes (1962, 13), “this is an era of specialists, each of whom sees his own problem and is unaware of or intolerant of the larger frame into which it fits.” Approaching education from a liberal perspective can develop students with specialized knowledge who also understand the larger context of global warming and are willing to talk about it with neighbors, to take action at home and work, and to pressure politicians to create large-scale change.

Carson was also committed absolutely to what she thought was right. According to biographer Linda Lear (1997), Carson had a long history of concern about pesticide use, beginning around 1938 and stemming from her reading as editor in chief at the Fish and Wildlife Service. Over time, she cultivated a
network of friends from across a variety of disciplines that helped her understand the problems of pesticide use. Lear (1997, 313) describes Carson’s method thus: “In the process of her research, [Carson] established a remarkable network of scholars in many fields all over the world and created an alliance of scientists, naturalists, journalists, and activists committed to helping her document a spectrum of environmental abuses.” Carson knew that she could not simply rely on her training as a biologist and a zoologist to help her understand the scope of the problem. She needed a wider range of expertise, of specialized knowledges, to help her fully articulate the extent of the problem and to provide alternative solutions.

But before hitting the lab, Carson believed it was necessary for students to get to know science the old-fashioned way—outside, in context. As a result of her own experiences and learning, Carson came to understand the dependence of all things, including humans, on complex processes. Taught well, a liberal education helps students understand their reliance on natural resources and processes.

Interdisciplinarity
Carson realized that it wasn’t enough to talk about the problems of pesticide use in the language of science, often inaccessible to the layperson (but necessary for specialists, I believe). In seeking to charge her subject with emotion, Carson used literary devices. Silent Spring’s first chapter, “A Fable for Tomorrow,” is a famous example of apocalyptic rhetoric, designed in part to make Carson’s argument hit her readers in the gut. Things go from bad to worse once we discover the agent of destruction: “no enemy action had silenced the rebirth of new life in this stricken world. The people had done it themselves” (Carson 1962, 3).

Such a fable is, to say the least, disconcerting. There’s the tension between the title—“A Fable for Tomorrow”—and the fable itself, which is written in the past tense, as if it’s a done deal. Carson’s word choices and phrases evoke fear and uncertainty. But, in Carson’s view, it was necessary that the public tap into their emotions as much as their reason if they were to understand the potential problems of pesticide use and react meaningfully.

Carson herself was aghast at the tendency of people in her own time to view science and literature as somehow separate, as Lear points out (1997, 218), even going so far in her National Book Award acceptance speech for The Sea Around Us to “[talk] about the culture of science in America and [attack] the prevailing notion of science and literature as separate and exclusive methods of investigating the world and discovering truth.” In other words, Carson saw knowledge viewed only from a disciplinary perspective to be potentially as harmful as pesticides. In her view, that meant there was no integration of knowledge and public life.

Carson was not solely responsible for informing and changing the public’s views on pesticide use, but her example is instructive. She understood that, as members of a community, we have an obligation to learn about disciplines
other than our own and to think about the contributions each discipline makes to our collective understanding of environmental and social problems. This is the only way we'll ever come close to what she calls the “full possession of the facts” (Carson 1962, 13).

“All education is environmental education,” David Orr claims (1994, 12), and a liberal education enacts Orr’s assertion metaphorically and physically, presenting a model of learning that is ecological. If students come to understand learning as rippling out through the academic community and beyond, they begin to understand the ethics of connection and caring. This could lead them to invent what writing-across-the-curriculum scholar Mark Waldo (2004, 163), referring to conversations among specialists, calls a “common language.” Waldo contends this language is needed in order to approach complex environmental problems from something other than the partial perspectives provided by insular disciplines. Perhaps the most vital component of this common language will be the concern shared as graduates examine collectively the ecotones created by mingling disciplinary boundaries. In nature, life is most diverse where land meets water or field meets forest; maybe the same will occur where English meets biology, physics, business.

My first-year composition classes often revolve around defining words such as “nature,” “culture,” “wilderness,” “place,” and “space.” These words are rich with multiple meanings, and my students enjoy (mostly, anyway) wrestling with them. Inevitably the question of whether we humans should take better care of our environment arises. I am always struck by two things when this happens: (1) the overwhelming sense, held by my students, that there are serious problems that need to be addressed, and (2) the underwhelming interest most of my students show in doing anything productive about the problems. The common refrain? “Nobody else is doing anything. Why should I?”

The LEAP report is a step in the right direction, but now we need to act. Educators and administrators need to talk to each other, to invent the “common language” that crosses disciplinary boundaries. We need to model the methods of liberal education through collaboration and class projects that reach into our communities, simultaneously teaching our students about social responsibility and sustainability. We owe it to our students. We can’t prepare them for a future we can’t wholly predict. So we must prepare them to communicate, adapt, and care.

To respond to this article, e-mail liberaled@aacu.org, with the author’s name on the subject line.

REFERENCES
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