Widespread use of the term urban laboratory as a metaphor for the relationship between the metropolitan university and its surrounding communities has led to overemphasizing the university's impact on its surroundings and undervaluing the impact that urban settings may have upon the university as an institution. This paper focuses on one potential impact of metropolitan settings: their influence on curriculum, particularly on undergraduate general education. The author argues that learning from the city through field experiences and assignments of various kinds can contribute significantly to reforming the general education component of the curriculum, a component that has received pointed criticism during the 1980s. Specifically, the author shows the capacity of field studies to promote greater examination of values, greater intellectual integration among the disciplines, more critical thinking, and more collaborative work styles among undergraduates.

# Urban Regions as Educational Laboratories

The *urban laboratory* is an image invoked frequently to portray the relationship of metropolitan universities to their communities. This metaphor confers powerful roles on faculty as scholars and practitioners functioning as expert consultants who solve problems for cities. The term emphasizes the positive contributions that metropolitan universities make to their environment and helps the community appreciate the university's presence and its need for resources from governments, corporations, and foundations. The concept evokes an image of scholars wielding influence over the urban institutions and problems that faculty study. Social scientists, mindful of the enviable status of laboratory scientists, find this image especially appealing.

Interpreted boldly, the phrase *urban laboratory* depicts metropolitan regions as arenas where scholars test their theories as laboratory scientists do. They engage in experimentation, and even in social engineering. The best example of such activism is chronicled in Steven Diner's book, The City and Its University, in which he recounts the contributions of academic experts at the University of Chicago to the reform of education, sanitation, criminal justice, and social welfare in a great midwestern metropolis at the turn of the century. The widespread faith in science at the turn of the century was expanded generally to a consensus on the value of scholarship in solving practical problems, and led scientists, social scientists, and philosophers at the university to an unparalleled level of civic activism.

More recent definitions of the university's relationship to its urban laboratory appear less ambitious, stressing the scholar's role as adviser rather than civic reformer. For example, in the early 1970s the federal government engaged university faculty to assist local governments in ten U.S. cities through *urban observatories*. Designed to analyze major social problems, the program's title reflects the modest expectation that researchers would *observe* communities but not *intervene* to promote change. At the state level, Ohio used an agricultural extension model in 1979 to establish the Urban Universities Program, which funded eight Ohio urban universities to apply faculty expertise in analyzing social and economic problems in Ohio's cities. Peter Szanton's comprehensive evaluation of the experiences of metropolitan universities as advisers on urban problems, *Not Well Advised*, presents mixed findings. The many documented failures could be explained either by the characteristics of the academic world, such as its calendar, reward structures, and issues of academic freedom, or by the limited capacity of municipal decision makers to act upon advice furnished by academic analysts.

The attachment to the laboratory metaphor has led us to stress the university's impact on its surroundings while we neglect the profound impact that the urban setting may have on the institution, including important effects upon curriculum. Technical and professional faculty often solicit curricular advice from counterparts outside the university. Curriculum planners in law, medicine, public health, social welfare, management, and administration typically are open to external influences. Precisely because of their proximity to practitioners in the community, professional schools within metropolitan universities enjoy a comparative advantage over rival programs in other universities with more remote locations.

## The Urban Laboratory and the Liberal Arts

These forms of practitioner training are discussed in other papers in this issue. This article concentrates on the ways in which the urban laboratory can influence instruction in the liberal arts, particularly at the level of general education. Learning from the city can contribute fundamentally to reforming the general education component of a student's experience.

Many commentators from the liberal arts have argued against allowing the urban locale to influence curriculum. Early in the twentieth century the economist Thorstein Veblen warned against the ties that often bind universities to their urban settings and that tempt scholars to abandon the "disinterested pursuit of idle knowledge," which he saw as the heart of scholarly activity. Sociologist Edward Shils more recently argued that urban residents and institutions may contribute to the university by giving money or moral support, but not by influencing curriculum. The truths of science and scholarship, he asserted, aspire to universal validity.

In addition, the concern with academic freedom leads many academics to argue that universities must maintain a distance from outside influences over curriculum. Many faculty members of urban universities are fearful of being subverted by contact with more "worldly" would-be partners such as businesses and government agencies. As a result of these various concerns, only a small part of what is studied, taught, and investigated in a university, especially in its liberal arts courses and curricula, refers to its locality. Instead, scholars and teachers seek universality in imparting knowledge.

By worrying so much about protecting academic pursuits from outside influences, we may fail to take advantage of our rich and complex setting to shape the character of our curriculum. The reluctance among arts and sciences faculty to respond to outside influences exists partially because of the distinction between the educational goals in the liberal arts and those of professional schools. Arts and science faculty see technical and professional schools as training for skills that contribute to economic productivity and social management, while the liberal arts are designed to help students reach their maximum potential as individuals.

Too often this difference pits the advocates of economic and social utility in education against critics of "merely" useful knowledge. This persistent dichotomy prevents us from recognizing the pedagogical benefits that could flow from incorporating into the general education curriculum more direct exposure to the community beyond the university. The urban laboratory can be used to help overcome some of the most fundamental problems faced by undergraduate general education at the close of the twentieth century.

What are those problems? The litany is familiar to every reader of *The Chronicle of Higher Education*. The 1980s was a decade marked by unceasing criticism of undergraduate education, leveled by both insiders and outsiders, and the debate continues. In part it focuses on the place of the "canon" of Western culture versus the inclusion of works by non-Western authors, women, and minorities. Even more troubling than these quarrels about curricular content are charges that the structure of undergraduate education is flawed and that conventional forms of pedagogy simply do not work for large numbers of students.

Curricular incoherence, say critics, is a pervasive feature of modern universities. A 1985 report by the Association of American Colleges (AAC) charged that the average graduating senior is unlikely to have "any integrated sense of his major discipline and its links to other fields of inquiry." There is little confidence that students graduate with welldeveloped values. Increasingly focused on materialism and power, they do not gain from their general education any counterbalancing values such as tolerance and respect for others, nonviolence, and citizenship. The most common pedagogical methods, particularly the lecture, seem unsuited to our most important educational goals, including teaching students to think critically and solve problems. The Carnegie Foundation for the Advancement of Teaching, the Association of American Colleges, and a host of other panels, task forces, commissions, and associations are concerned about the effectiveness of undergraduate general education.

In response, many institutions expanded their core requirements, beefed up majors, and reintroduced classical texts into undergraduate courses. Because faculties blame the gradual dilution of requirements over three decades on the insidious influence of market forces, they have aggressively reasserted their traditional authority over curriculum. Yet the haste to reestablish standards should not insulate programs from external influences. Metropolitan universities have unique opportunities to shape curricular reforms using surrounding communities as learning laboratories.

# **Benefits to General Education**

What are the special contributions that urban environments can make to undergraduate general education? By identifying several major themes in the recent critiques of undergraduate education, I hope to show the advantages of incorporating the wider urban community into the curriculum.

#### Greater Emphasis on Values

Universities should be marketplaces of ideas that prepare students to make informed and responsible moral choices. Yet too often we encourage students to look for the "right answer," defined in technical terms, rather than inviting them to consider the value dilemmas that are inherent in so many important questions that they will confront.

When students venture outside the classroom to investigate issues and problems in the community, they cannot fail to be confronted by multiple interests and values. Metropolitan regions are naturally complex, diverse systems in which the functions of each group and institution affect the interests of others in the community.

In recent years I have sent students out to analyze such dilemmas as how to deal with the growing homeless populations in suburban communities; whether public schools should group students by their performance on standardized skills tests; how municipal authorities should decide where to locate incinerators in order to minimize both environmental damages and the cost of trash disposal; and whether foundations and corporations that fund the arts should allocate their limited dollars to mainstream cultural institutions like art museums and orchestras or to smaller ethnic and neighborhood arts organizations. Students returned from their investigations asking themselves why their views on certain problems or situations were so different from others who participated in the same study. They learned that one's conclusions often stem directly from one's starting assumptions. And they were prompted to examine their own assumptions and values.

Another advantage of field investigations using the urban laboratory is that students can see the influence of the investigator's choice of research method. If students choose to tackle a question by interviewing the main actors involved in a community dispute, for example, then their work is likely to reflect the interests and values held by their respondents. If they use a more deductive method (i.e., devising in advance the hypotheses they want to test and imposing their own definitions and classification systems), their own values are more likely to come into play. This rather sophisticated point—that one's method of inquiry itself carries value implications—is far easier for students to grasp in concrete instances than in the abstract.

#### **Overcoming Intellectual Fragmentation**

Closely related to the call for more attention to values is the theme in many recent reports that universities must combat overspecialization. The AAC critique of undergraduate education in 1985 (see Suggested Readings) highlighted the connection between these two problems and lamented that too few teachers take the opportunity to examine value dilemmas because they are "so far gone into specialization and into the scientific understanding of their specialties that the challenges of bringing students into humanistic relationship with their subjects, into the arena of values and choice and judgment, are beyond their interest and capacity." Nor do undergraduate curricula dominated by departments and by the menu approach to fulfilling requirements help students to integrate the knowledge they acquire in separate courses.

The problems of specialization and curricular fragmentation seem especially acute in metropolitan universities. As faculty, we act to reinforce disciplinary boundaries in order to justify ourselves in disciplinary terms; we advance our careers by publishing in the right disciplinary journals and by attending disciplinary meetings. My impression is that this impulse is especially pronounced among the faculties of urban

public institutions, where we often feel we are in competition with faculties at the flagship campuses. As scholars, we are determined to be as successful in conventional academic terms as our peers at higher-prestige institutions. We are therefore especially susceptible to the temptation, described in the AAC report, to develop

While communities have problems, universities have departments.

an "allegiance to academic disciplines stronger than the commitment to teaching or to the life of the institution."

This overspecialization creates a need to help students integrate knowledge from disparate disciplines and courses. Assignments that take students into the urban field can be excellent integrative mechanisms. Few problems encountered in the real world can be addressed by one discipline alone. This is one reason why universities have difficulty helping businesses, governments, and other outside organizations to resolve their most urgent problems. The asymmetry is obvious: While communities have problems, universities have departments. Working on problems in the field often forces students to look beyond the course textbook for help. They find themselves pulling out notes from previous courses, consulting faculty experts other than the course instructor, and discovering unfamiliar parts of the library collection. At their best, field assignments call upon students to forge for themselves some of the interdisciplinary connections that we ignore when building the curriculum.

#### Encouraging Critical Thinking

One report after another has faulted American undergraduate education for failing to develop our students' capacity for critical thinking and problem solving. A 1985 report of the Carnegie Foundation on federal policy and higher education linked this fault to classroom practices that stress rote learning rather than higher order integrative thinking. Students, too often treated as the object of education, cannot learn to reason by listening to lectures. They must become more actively involved in their own education.

Encouraging students to undertake investigations of real-world problems and issues forces them to move beyond the lower-order cognitive skills. Rarely are real-world problems addressed by purely descriptive work or rote memorization. This is especially true when students are working with those segments of the community directly affected by the issue or problem they are studying, such as neighborhood organizations, advocacy groups, service organizations, governmental agencies, and the like. Coming into contact with constituencies that have real interests at stake typically pushes student investigators to develop a point of view they can defend. Outside constituencies have far less tolerance for the "on the one hand…on the other hand" style of analysis that instructors encourage in classroom exercises.

Moreover, analyzing real-world problems is an exercise that dissuades students from thinking that there are permanent solutions to problems. It demonstrates that problem solving is a continuous process in which conclusions are reached, adjustments made, and problems redefined as the situation changes and as constituents reorder their priorities.

## Promoting Collaborative Work

The urban laboratory can enhance the development of *learning communities,* an idea that can be traced to the early 1960s when M. L. J. Abercrombie, a British researcher studying medical education, demonstrated that students learned the art of medical diagnosis and judgment far better by working in small groups to arrive at collaborative diagnoses than by working individually. Collaborative learning usually involves students in peer teaching, mutual criticism of written work, and group work on assigned problems. After being popularized largely on political grounds in the 1960s, collaborative methods waned in the 1970s but resurfaced in the 1980s, principally in the fields of writing and mathematics. So far, the literature on collaborative learning reflects more experimentation going on in community colleges and small liberal arts colleges than at comprehensive urban universities. Yet, collaborative learning can be especially valuable when students find themselves in heterogeneous working groups, a much greater likelihood in urban universities than in other settings.

In an essay published in 1981 (see Suggested Readings) Kenneth Bruffee pointed out that collaborative learning better reflects our changing understanding of the nature of knowledge than does traditional pedagogy. Twentieth-century developments in the sciences, social sciences, and philosophy have revised our conception of knowledge. No longer do we see knowledge, even scientific knowledge, as determinate and hierarchical, but rather as fundamentally indeterminate—the product of social consensus at any given historical point. What we must teach our students, then, is "how human beings continually negotiate and renegotiate the frames of reference which fence in and make meaningful what, for the time being, we agree to call knowledge." (Bruffee, p. 183) Collaborative learning models this process by which knowledge is created and used in a social context.

Among the most fruitful applications of collaborative learning techniques are group projects that take students into the urban field. With appropriate structuring of the assignment beforehand by their instructor, students can jointly negotiate their methods of inquiry, allocate assignments, hold one another accountable for assigned tasks, criticize one another's work, and finally frame the presentation of results to either academic or community audiences. Although students socialized into individual and competitive modes of learning may resist having their grade tied to a team project, the benefits of the experience can be significant. In my experience, students learn important positive and negative lessons from watching their peers operate. What is more, creating a shared interpretation of a particular set of events, personalities, and issues gives students a glimpse of the process by which knowledge is produced in our society.

## Demonstrating the Utility of Lifelong Learning

One goal that undergraduate educators must have is to give students a lasting ability to adapt successfully to rapidly changing condi-

tions in their world. This means instilling in undergraduates a favorable disposition toward lifelong learning, which will be a continuous necessity in the twenty-first century.

Until the twentieth century, the traditional view of university education in Europe and America assumed that young adults were sent off to a cloistered, bucolic setting to receive their education away from the larger social context.

The British idea of the university, for example, was that of an insulated, self-contained milieu. In his book, *The University and the City* (see Suggested Readings), Thomas Bender mentions that when the new urban universities were established in England in the late nineteenth century, Tory observers lamented that a "metropolitan university, whose students live at home or in lodgings, cannot under any conceivable arrangements offer an exact equivalent of the camaraderie, studious cloister pale, and the elms which shaded Newton or Milton." (Bender, p. 142) College education was a once-in-a-lifetime event, largely because nine-teenth-century graduates assumed that their world would not change

We need a vision that reintroduces the importance of collective goals, values, and welfare to balance individualism. much during their lifetimes. Twenty-first century graduates will not have this luxury. Life for them will be a continuous process of learning and retraining.

Few college experiences are as likely to inculcate a favorable disposition toward lifelong learning as a field study project that calls upon students to find out what they need to know in order to respond to a community problem or research question. Field experiences motivate students in ways that even the most inspiring and charismatic classroom teachers cannot, because students see the utility of learning in order to solve problems, as opposed to learning for the sake of satisfying an instructor's demands. Field projects discourage undergraduates from prejudging the solutions to problems based on the formulas, techniques, or bodies of information they happen to possess. Instead, they teach the lesson that one picks a method to suit the problem, which may mean enlarging one's repertoire of skills and knowledge. In Howard Mitchell's book, The University and the Urban Crisis, John Coleman, then president of Haverford College, quotes a student who had participated in urban fieldwork as reporting that "the experience was very enriching for me. I read a great deal on my own, learned how to observe what I saw around me, and fit it into what I was learning in books. A sort of self-education thing." (Mitchell, p. 114)

## How to Use the Urban Laboratory

Having attempted to show that greater use of the urban laboratory can help arts and science faculty to meet many contemporary criticisms of undergraduate education, I want to offer a few suggestions as to how this can be done. One way to bring the outside world into the curriculum is to build instruction around problems or research topics solicited from organizations and individuals outside the university.

Within the metropolitan region of greater Philadelphia, several good models of this approach exist. The first is the University of Pennsylvania's Office of Community-Oriented Policy Studies, established within the School of Arts and Sciences. The office identifies outside agencies and organizations with problems that can serve as the basis for a series of interdisciplinary courses. One such course was successful in spawning the West Philadelphia Improvement Corps, a permanent partnership of Penn students with neighborhood schools. Another greater-Philadelphia initiative is the Weston Institute, a consortium of regional universities formed to promote teaching and research on environmental problems. The staff of the consortium takes responsibility for soliciting suggestions from businesses and government agencies for research projects that can be done by undergraduate teams. The consortium matches faculty supervisors from the region's universities with the research problems, and arranges for each external agency submitting a problem to contribute small amounts of money and employee time to student teams working on their problem.

A similar strategy asks student teams to work on case studies written by instructors with help from business people, professionals,

and other individuals who can periodically attend classes to interact with students, critique their analysis, and offer alternative interpretations. It may be especially appropriate to solicit participation from the university's own trustees and alumni in creating these case studies and working with students, since these groups constitute a naturally sympathetic constituency and often inspire students by the roles they play in the community.

Instructors might consider incorporating role playing into case studies. Ideally, each student is asked to take several different roles and thus to interpret the case from several different vantage points. I recently constructed a case study in cooperation with the executive of a local nonprofit organization. The agency's dilemma was how much of its total resources should be devoted to children and youth programs, and how much to programs for the elderly. Students analyzed the dilemma differently, depending upon whether their role was that of a children's advocate, an agency budget head, a community member seeking services for her own child or elderly parent, and so on. Colleagues have occasionally asked me whether I believe that assigning students multiple roles in a real-world situation encourages moral relativism. I do not think so. The ultimate goal of the exercise is to demonstrate the importance of taking an independent perspective rather than accepting that of others who may have different interests and values. In my experience, the kind of instruction that is more likely to encourage moral relativism is practitioner education in which students are trained to act as "hired guns," taking only one side of a conflict.

Another promising strategy for using the urban laboratory in undergraduate instruction is to ask students to use their job experiences as material for analysis. Large numbers of undergraduates at urban institutions are employed part time, yet we rarely encourage them to reflect on their work experiences. More often we either ignore the fact that they have a job, or we chide them for spending too much time on their employment, encouraging them to compartmentalize their lives. As Zelda Gamson has pointed out in *Liberating Education*, for our students to lead "examined" lives, they must come to terms with their work. An assignment involving the structure of the retail or fast-food industry, the hospital industry, or others that employ part-time workers, might give our students a broader understanding of urban labor markets.

Universities can promote greater involvement in the urban laboratory by granting sabbaticals to faculty who take positions in institutions throughout the metropolitan region, developing familiarity with issues and actors, and prospecting for research and instructional projects. Academic departments often have visiting professionals in residence; they need to send more professors to work in residence in other metropolitan institutions.

To foster more learning about urban issues, greater flexibility in delivering instruction is required. For example, interactions with external constituencies often are short-lived, intense projects instead of being defined by the standard fifteen-week semester. Many urban universities do not have the one-month winter term or full-scale summer programs of nonurban universities because so many of the urban students work full time between academic semesters. Schools might experiment with scheduling academic terms in flexible blocks allowing, for example, a community research project to be done in five weeks, to be followed by two more courses taught in five-week modules to fill out the traditional semester.

In conclusion, I submit that we need a vision of liberal learning that reintroduces the importance of collective goals, values, and welfare to balance the extreme individualism of American political culture at present. Learning that takes place in urban settings can contribute significantly to this goal. By providing a collective perspective, an undergraduate's exposure to the wider community tempers the emphasis on individual development that we have built into the undergraduate curriculum, especially in the liberal arts. It enhances students' sensitivity to the environmental and social impacts of their decisions and behavior. Studying problems within their community context reveals the complexity of social systems and the extent of the interdependence among members of the community. Students are likely to see the need for institutions, for tolerance of diversity, for civility in a society of limits, and for tempering one's focus on self-development with a concern for community development and community institutions.

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