

Identifying the Learning Outcomes of Service

I can honestly say that I've learned more in this last year in [service-learning] than I probably have learned in all four years of college. I have learned so much, maybe because I found something that I'm really passionate about, and it makes you care more to learn about it—and to get involved and do more. You're not just studying to take a test and forget about it. You're learning, and the experiences we have are staying with us. It's not cram for a test the night before. I know when I take a test that I just want to get it over with. That doesn't happen with service; it stays with you.

We learn these theories in school and ideas, but until we really apply them or see them in action, they're not real. And we come out of school, if we haven't done something like this, not understanding.

Students like service-learning. When we sit down with a group of students to discuss service-learning experiences, their enthusiasm is unmistakable. Although skeptics sometimes dismiss the programs that evoke this student excitement as “fluffy, feel-good stuff” without “one iota of scientific research that says that this has made

a difference in a student's education" (Markus, Howard, and King, 1993, p. 411), the students clearly do not agree. These discussions come back again and again to how much they learned through this experience. And when they talk about their learning, it is clear that they believe that what they gain from service-learning differs qualitatively from what they often derive from more traditional instruction. As the opening quotations reflect, these students value the connection of their passion to their learning; when the personal and intellectual are connected, they can go beyond cramming for tests to acquiring information that has meaning to them and stays with them. Because they are learning and applying information in complex real-world contexts, they believe that the quality of their understanding is increased.

Student enthusiasm and accompanying faculty belief in the power of service to enhance learning have helped to create a surge of interest in service-learning opportunities on campuses. Several factors have bolstered this interest. Recent findings about learning published by cognitive scientists call for practices remarkably similar to those embodied in service-learning (Bransford, 1993; Resnick, 1987b). The goals and practices of service-learning also address criticisms of the passive, compartmentalized nature of much of the instruction in higher education.

Although the goals and processes of service-learning have been a good fit for addressing current concerns about higher education, "some critics of 'service learning' question the quality of the service and rigor of the learning" (Gose, 1997, p. A45). For these programs to be integrated into the curricula in colleges and universities, key stakeholders, including academic deans and faculty, need to join students in being convinced of their academic worth. Indeed any academic innovation ultimately must face the test of its impact on the central academic mission of higher education (Zlotkowski, 1996). Before we can understand the academic value of service-learning programs, we need a clear idea of what learning might be expected from this approach and the extent to which these out-

comes are consistent with the service-learning model.

This chapter explores the fit between service-learning and traditional education, and the implications of this learning model for the relatively passive learners of the book. The rest of the book provides greater detail and examples of service-learning.

What Is Service-Learning?

A lot of energy has been put into service-learning since the late 1990s. Jane Kendra (1990) wrote about the literature, and the endeavor since then has been impressive. Schools that have been impressed with the community service component of extreme, there are universities where courses are linked to these one-shot experiences that include a service component. Commonly students are placed in lieu of another course. The service is incorporated into classroom courses may be a result of this experience.

Sigmon (1996) is playing with the idea of making up the te-

comes are consistent with the goals of higher education. This book responds to the concerns for evidence of the academic value of service-learning.

This chapter explores the growing popularity of service-learning, the fit between service-learning and the mission of higher education, and the nature of the learning in service-learning. Our view of this learning is broader than the notion of academic learning as a relatively passive acquisition of information. The remaining chapters of the book focus on exploring these learning outcomes in greater detail and examining the impact of different characteristics of service-learning on student outcomes.

What Is Service-Learning?

A lot of energy has been devoted to defining service-learning. In 1990 Jane Kendall wrote that there were 147 definitions in the literature, and there has been no falling away of interest in this endeavor since. We have observed dozens of programs and have been impressed by the diversity of what is labeled service-learning. Schools that have a fall orientation activity with an afternoon of community service may call it service-learning; at the other extreme, there are well-integrated programs within colleges and universities where students spend a year or two in a connected series of courses linked to service projects in the community. In between these one-shot efforts and intensive programs are individual courses that include a service component. These also vary dramatically. Commonly students may elect a service option as extra credit or in lieu of another assignment, and these options are often not incorporated into class discussion in any sustained way. Less often single courses may be built around community service, and reflection on this experience is central to the progress of the course.

Sigmon (1996) described this diversity in service-learning by playing with the graphic presentation of the two concepts that make up the term (see Table 1.1). A course like the community

service lab we observed where students hear a bit about community agencies but that is primarily focused on getting them into the field to provide service fits his description of "SERVICE-learning," as do volunteer service programs with occasional opportunities for reflection. The course where students studying juvenile justice primarily observed community groups looks more like "service-LEARNING"; there are many courses with limited service, which adds a dimension to an academic experience without being a significant part of the course. Volunteer programs within colleges and universities that may have no link to particular academic pursuits but exist alongside the curriculum fit the "service learning" model; service projects may capture student enthusiasm and interest, but the students are left to make academic connections themselves. The class in which students learn to develop program evaluation skills by assisting a local agency with their evaluation fits Sigmon's "SERVICE-LEARNING" category; this term applies to programs where the two foci are in balance, and study and action are explicitly integrated.

In our own practice, we have embraced the position that service-learning should include a balance between service to the community and academic learning and that the hyphen in the phrase symbolizes the central role of reflection in the process of learning through community experience. And indeed there is a considerable best-practices literature of practitioner wisdom that stresses the importance of reflection as the vital link between service and learning (Honnet and Poulsen, 1989). Many programs do not fit this balanced model; instead the service may dwarf the learning, or the academic focus dominates. Complicating matters is the evidence that the quality and quantity of reflection in program descriptions may not reflect the actual experiences of students; it is not uncommon to find students reporting far less systematic reflection and integration of their service and learning than program directors or brochures detail.

Given the diversity and complexity of practice, we were not inclined to use a tight definition to exclude programs that view

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Table 1.1. A Service and Learning Typology.

service-LEARNING	Learning goals primary; service outcomes secondary
SERVICE-learning	Service outcomes primary; learning goals secondary
service learning	Service and learning goals separate
SERVICE-LEARNING	Service and learning goals of equal weight; each enhances the other for all participants

Source: Sigmon (1996).

themselves as service-learning efforts from our research studies. It is quite reasonable to suppose that programs with different structures might be effective in their own way at meeting particular academic goals. Although we are interested in an optimal mix of the service and learning, we were not interested in using definitions to drive our understanding. Part of the focus of our research was to explore the various academic outcomes of service-learning and try to identify the types of experience most likely to lead to particular outcomes. Thus we accept that any program that attempts to link academic study with service can be characterized as service-learning; non-course-based programs that include a reflective component and learning goals may also be included under this broad umbrella. Not all service-learning efforts may help students attain all the goals practitioners hope for, but discovering which practices are important to particular outcomes is central to our efforts here.

The Popularity of Service-Learning

All evidence points to a rapid increase in service-learning courses and programs on college and university campuses over the past decade. This pedagogy is now advocated by "students, faculty,

presidents of colleges and universities, and even by Congress and the President of the United States" (Stanton, Giles, and Cruz, 1999).

Two major national organizations encourage and support service-learning. Campus Compact, a coalition of college and university presidents, and the Corporation for National Service, a federal government agency, report data that give some indicators of the popularity of service-learning. There are now 575 member campuses participating in Campus Compact, with estimates that about 10,800 faculty members were involved in teaching 11,800 service-learning courses in the most recent survey of members (Campus Compact, 1998). Ninety-six percent of responding institutions reported some faculty involvement, with an average of 8 percent per campus. About 14 percent of schools have what Campus Compact considers advanced levels of faculty involvement—30 percent or more. The average number of courses per campus for member schools is sixteen. In 1994 only 50 percent of campuses reported some form of support for faculty using service-learning; by 1998 fully 85 percent reported one or more forms of support for faculty involvement.

The Rand evaluation of the Corporation for National Service's Learn and Serve Higher Education (LASHE) programs studied the 458 colleges and universities that received LASHE grants. During the three-year period of the evaluation, fiscal years 1995–1997, these schools developed about three thousand new service-learning courses (Gray and others, 1998). In fiscal 1997 these courses served a median number of sixty students per program.

In addition to these suggestive campus statistics, there are many national indicators of the popularity of these programs. Recently a colleague called us with some information that surprised her. She discovered that a recent conference on accounting education had a whole section of sessions in service-learning. The number of publications in the field, both articles and books, has risen from almost none a decade ago to hundreds. The field now has a journal with the inception in 1994 of the *Michigan Journal of Community Service Learning*, and a number of professional associations have begun to

incorporate service-learning. For example, the American Association of Higher Education (AAHE) has sponsored conferences and, more recently, monographs that provide a laboratory for service-learning.

With all this growth, service-learning is marginal (Koski, 1996). Historians have had a rough time of it for the emphasis on service-learning by presidents, deans, and other leaders of an effective process of higher education.

The Importance

The recent popularity of service-learning with current views of education is needed to make higher education the clearest and easiest path to learning. Service-learning is to highlight the field: "Service, community, and learning transforms both" (Holt, 1998). For research such as service-learning, how do we form, and how do we learn? Service-learning literature has a breadth of the learning process to improved community service.

Learning from Experience

Service-learning is a process that rests on principles of learning. Service-learning theorists emphasize that learning occurs through a cycle of

incorporate service-learning into annual conferences and publications. For example, the American Association for Higher Education (AAHE) has made service-learning a major focus of conferences and, most important, has issued a series of eighteen monographs that presents models, research, theory, and actual syllabi for service-learning in particular disciplines.

With all this growth there is still the concern that service-learning is marginal to the academic core of the academy (Zlotkowski, 1996). Historically service-oriented instructional programs have had a rough time maintaining institutional support. In order for the emphasis on service-learning to be sustained on college campuses, presidents, deans, and faculty need to be convinced that it is an effective process for achieving the most valued academic goals of higher education.

The Importance of Service-Learning

The recent popularity of service-learning stems partly from its fit with current views of the way people learn best and the changes needed to make higher education more effective. We believe that the clearest and easiest way to understand the nature of service-learning is to highlight what we like to call the central claim of the field: "Service, combined with learning, adds value to each and transforms both" (Honnet and Poulsen, 1989, p. 1). The question for research such as ours is this: exactly what is enhanced and transformed, and how does that occur? Even a cursory review of the service-learning literature reveals some key themes that suggest the breadth of the learning that occurs and the importance of this learning to improved community participation.

Learning from Experience

Service-learning is a form of experiential education whose pedagogy rests on principles established by Dewey and other experiential learning theorists early in this century (Furco, 1996). Learning occurs through a cycle of action and reflection, not simply through

being able to recount what has been learned through reading and lecture. Dewey would have agreed with the students whose words begin the chapter that memorizing material from the classroom for reproduction on tests is static and unlikely to be of much use. Knowing and doing cannot be severed. And like these students, Dewey was convinced that learning is a wholehearted affair, linking emotions and intellect; an educative experience is one that fosters student development by capturing student interest—indeed their passion—because it is intrinsically worthwhile and deals with problems that awaken student curiosity and a need to know that extends over a considerable period of time (Giles and Eyer, 1994b). Experience enhances understanding; understanding leads to more effective action. Both learning and service gain value and are transformed when combined in the specific types of activities we call service-learning.

Recently cognitive scientists have come to a series of conclusions about students' learning that are remarkably similar to those long endorsed by scholars and practitioners in the experiential learning tradition. Their focus has been on what Whitehead (1929) first characterized as the inert knowledge problem: the tendency of students to acquire stores of knowledge that are quite useless to them when they are in new situations. Cognitive scientists found that students rarely transferred knowledge and principles learned in classroom instruction to new problems; even students who had been presented with information about solving a problem directly analogous to a new problem often failed to apply it (Bransford, 1993). Only repeated attempts to solve similar problems and support and encouragement to apply what was learned seemed to lead to application. Cognitive scientists, like experiential educators, recognize the barriers presented to developing "knowledge in use" (Schön, 1995) by the decontextualized nature of much classroom instruction and stress the importance of learning in complex contexts and the "active construction of knowledge" (Bransford and Vye, 1989, p. 169).

Lauren Resnick (1991) argues that classroom learning clearly is not the nature of learning in the real world. Learning will be applied in real-world learning, not individualistic thought, is accomplished in complex settings rather than specific contextualized rat. College learning that is not applied, which students will use less likely to be useless.

A colleague of ours who works to help find housing and community for those students in economics, sociology, and anthropology struggled with the real world firsthand the difficulties of transportation and job opportunities faced by and present in facing real difficulties at a level of understanding that is not read and glibly summarized social issue. Service-learning experience the type of work with others through which to achieve real objectives and skills for themselves.

A Connected View of Learning
Another central element of experiential development is interpersonal development. This linking

Lauren Resnick (1987b) described the defects of much classroom learning clearly in her 1987 presidential address before the American Educational Research Association. She contrasted the nature of learning in school and in the community where this learning will be applied, noting that unlike typical classroom learning, real-world learning tends to be more cooperative or communal than individualistic, involves using tools rather than pure thought, is accomplished by addressing genuine problems in complex settings rather than problems in isolation, and involves specific contextualized rather than abstract or generalized knowledge. College learning that more closely approximates the situation in which students will use their knowledge and continue to learn is less likely to be useless or inert.

A colleague of ours worked with a team of students in her class to help find housing and a job for a homeless man in the community. For those students, potentially abstract concepts about economics, sociology, and psychology became vividly concrete as they struggled with the realities of working with social agencies, learned firsthand the difficulties of locating affordable housing near transportation and job opportunities, and dealt with the complex problems faced by and presented by a homeless person. A real person facing real difficulties in an authentic context forces students to a level of understanding that is sometimes not obtained when they read and glibly summarize what they have read about a complex social issue. Service-learning offers students the opportunity to experience the type of learning Resnick described where they can work with others through a process of acting and reflecting to achieve real objectives for the community and deeper understanding and skills for themselves.

A Connected View of Learning

Another central element of service-learning is to link personal and interpersonal development with academic and cognitive development. This linking of head and heart is a holistic approach

involving values as well as ideas. One of the goals of service-learning is to connect the multiple dimensions of human development that are often separated on college and university campuses. As Perry (1970) has demonstrated, personal and intellectual development are integral to each other; the development of personal identity and the ability to make committed decisions are connected to advanced levels of thinking. These connections occur within both the learner and the institution. Few efforts in higher education involve the chaplain's office, student affairs, and members of the faculty as service-learning often does. Cognitive as well as personal development occurs through a process of challenge that touches feelings as well as thought (Fischer and Bidell, 1997). Service-learning is also about leadership development as well as traditional information and skill acquisition or "learning to be effective while learning what to be effective about" (Stanton, 1990, p. 336).

When we interviewed students about the reflection practices most useful to them in service-learning, the importance of this connection between the affective and cognitive was apparent. Many of the reflection techniques that students reported clearly combined the personal and the intellectual. These reflection exercises often asked students to reflect on their values and suggest what implications the learning had for action as well as for illuminating the subject matter being studied. For example, a student working with incarcerated juveniles talked about the reflection process used to structure class discussion: "There's three stages to it. The first one was the person's observations...not your feelings about it... It was difficult, but I think it was necessary to just split that apart because so commonly people put those two together—what they observed and their feelings and come up with something in the middle. And to separate them is difficult, but it aids in introspection and understanding...the last step was an analysis of the experience and how it applied to something" (Eyler, Giles, and Schmiede, 1996).

Social Problem Sol

One of the major focusings has focused not on addressing them ton, Giles, and Cru classroom are connected these action research members take a complete data that the correlation, 1994, 1997). Since conducting a needs assessment an after-school competency group helping helping a community. Because the learning problems, this action disciplinary approach to skills and knowledge providing needed research enhanced service to

One of the arguments social inquiry is that function as contributing acquiring skills and knowledge participation (Giles and inception earlier in the being advocated today ic citizenship by those for an elite few but as community action. Since "researching for democracy and Gaventa, 1997, 1

Social Problem Solving

One of the major forms of service-learning practice from its beginnings has focused not only on learning about social problems, but on addressing them in the community through social action (Stanton, Giles, and Cruz, 1999). One way in which community and classroom are connected is through community action research. In these action research projects students, faculty, and community members take a community problem or issue and attempt to generate data that the community can use (Giles and Freed, 1985; Reardon, 1994, 1997). Students we interviewed gave such examples as conducting a needs assessment for a community attempting to create an after-school care program, providing research for an advocacy group helping legislators draft a bill on homelessness, and helping a community partner research and write a funding proposal. Because the learning was organized around genuine community problems, this action research process has also fostered an interdisciplinary approach to learning. Students developed their inquiry skills and knowledge about the issues under study while also providing needed research support for community groups; learning thus enhanced service to community.

One of the arguments for action research projects as a form of social inquiry is that they link education to citizenship; students function as contributing citizens during the process of study while acquiring skills and knowledge that equip them for later civic participation (Giles and Eyler, 1994b). This approach, which had its inception earlier in the century as part of progressive education, is being advocated today as a way to link the university to democratic citizenship by those who see inquiry not as an arcane occupation for an elite few but as integral to both intellectual development and community action. Service-learning offers the chance of both "researching for democracy and democratizing research" (Ansley and Gaventa, 1997, p. 46). Problem-based learning linked with

service-learning and cooperative learning forms an effective set of methods to educate for civic responsibility (Ehrlich, 1997).

Education for Citizenship

Citizenship is often cited as the purpose of education in general and service-learning in particular, and the focus on citizenship as an outcome is closely tied to the process of social problem solving (Ehrlich, 1997). It is in discussions of the role of higher education in preparing students for citizenship that the fit between the concerns of service-learning leaders and those concerned with higher education reform is most obvious. Service-learning advocates like Stanton have noted that "service-based learning is the means for linking the initiative to develop students' social responsibility with the efforts to improve undergraduate education" (1990, p. 186). Higher education reform advocates have come to a similar conclusion, often singling out service or service-learning as examples of how to cultivate civic and social responsibility as part of education for citizenship (Gabelnick, 1997). One of the key proponents of this linkage has been Benjamin Barber, director of the Walt Whitman Center for the Culture and Politics of Democracy at Rutgers University, who has called for civic education that is mandatory and is linked to a community service component (Barber, 1990, 1992; Barber and Battistoni, 1994).

Service-Learning and the Critique of Higher Education

The nature of experiential education in general and service-learning in particular makes it a good fit in addressing some of the concerns raised about higher education in a series of critiques that appeared in the 1980s and 1990s (Boyer, 1987; Association of American Colleges, 1991). These critiques noted a gap between traditional curricular content and society's needs for new competencies for workers

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and citizens. A common observation was the lack of connectedness in higher education and the related lack of application of what is learned. Lack of connectedness resulted in the compartmentalization of knowledge by discipline, preventing students from experiencing the relationships among various modes of knowledge; subject matter was walled off behind disciplinary borders and not applied in any integrated way in academic study or to social issues. Students also experienced a lack of connection between classroom learning and their personal lives and between classroom learning and public issues and involvement in the wider world. Critics faulted the lack of intellectual links between institutions, noting barriers to connection between secondary and postsecondary education, between college study and the workplace, and between campus and community (Boyer, 1987; Association of American Colleges, 1991).

Service-learning is an obvious response to the reform critics of higher education. The emphasis in service-learning on applying knowledge to community problems and the reciprocal application of community experience to the development of knowledge meets many of the concerns about the lack of connectedness in higher education. Partly in response to these concerns, service-learning programs sprang up without the benefit of a research base or systematic attempts at evaluation. Founded and developed by bright and passionate students, enthusiastic faculty, and community-oriented student services staffs, these programs have flourished but have not become well connected to the academic core of most institutions that house them.

It is no surprise that such programs often come under fire from skeptics who question their educational value. Perhaps because there have been no systematic efforts to establish conditions under which service-learning is most effective and because most of the assessment of academic outcomes has been limited to course grades or student self-report, the research that has focused on academic benefits of service-learning has had mixed results; although students

do not learn less by these measures in service-learning classrooms, it is not clear that they learn more (Markus, Howard, and King, 1993; Miller, 1994; Kendrick, 1996; Gray and others, 1998).

Clearly the theories of experiential education on which service-learning rests and the problems identified in recent criticisms of higher education suggest learning outcomes that are far more complex and important than simple acquisition of information to be displayed on end-of-semester tests. Thus the answer to the question, "Where is the learning in service-learning?" may depend to some extent on what it means to learn more. Is the "learning" celebrated by service-learning students important to adequate mastery of the academic goals of a liberal education? In our research studies, we have been concerned with this need to work within a broader conception of academic learning, to identify the range of outcomes important to academic achievement and the conditions under which service-learning may contribute to these diverse outcomes.

What is the Learning in Service-Learning?

As we have explored the impact of service-learning, we have tried to identify the academic benefits that could be reasonably expected from an emphasis on active, connected learning. Service-learning aims to connect the personal and intellectual, to help students acquire knowledge that is useful in understanding the world, build critical thinking capacities, and perhaps lead to fundamental questions about learning and about society and to a commitment to improve both. Service-learning aims to prepare students who are lifelong learners and participants in the world. It is this broader conception of learning outcomes that has driven our studies of the impact of service-learning.

Learning Begins with Personal Connections

The emphasis on helping students become self-directed lifelong learners has become more pronounced in higher education as the-

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One of our concerns measuring personal and commitment contribute to personal academic learning.

Learning Is Useful

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ories of development have taken on more importance since the pioneering work of William Perry (1970). Although personal development and interpersonal skills are often viewed as secondary to the academic goals of the academy and segregated institutionally into student services and activities, they are where learning begins for service-learning advocates. Passion is personal, and learning begins with passionate interest (Fischer and Bidell, 1997). For many students their first strong interest in service-learning projects develops when they get to know someone whose life differs dramatically from their own. This early constructive engagement with others is commonly found in those who go on to incorporate community service into their lives (Daloz Parks, Keen, Keen, and Parks Daloz, 1996). And the interpersonal skills developed during service are learning outcomes that will be integral to the learning they are likely to do in their future work and community settings. As Lee Shulman (1998), president of the Carnegie Foundation for the Advancement of Teaching, noted in his keynote speech at the American Association for Higher Education, "Learning is the least useful when it is private; it is most useful when it is public and communal."

One of our concerns with the learning in service-learning is in measuring personal attitudes and values, feelings of connectedness and commitment to the community and interpersonal skills. These contribute to personal growth, but they are also tied to further academic learning.

Learning Is Useful

Academic learning is often assessed through test performance or course grades, but understanding is more than the ability to recall information when prompted by a test; understanding is the ability to call it up when it is relevant to a new situation and use it in that situation. Material that is understood has meaning for learners; it helps them make sense of the world. Learning in context and appreciating what the learner brings to the situation are fundamental to

experiential education; attention to these two elements helps students master content and skills and makes it possible to use the information effectively. Building a more adequate view of the world does not happen automatically with exposure to new information; it is the product of continuous challenge to old conceptions and reflection on new ways to organize information and use the new material (Bransford and Vye, 1989; Bransford, 1993). Service-learning can provide the rich context in which to resolve challenges to old conceptions and apply new information and skills. Understanding cannot be severed from active use of information; reflective instruction that encourages students to question preconceptions and adjust the way they think about the subject should facilitate more complex understanding.

The purpose of learning is to use what is learned. In order to test adequately for understanding, we need to see how students identify and describe complex problems and how they marshal skills and knowledge in offering tentative solutions to those problems. We are also interested in their practical strategies for addressing those problems within the community—understanding that will be deepened by their interpersonal skills as well as their knowledge of the issues and the community.

Learning Is Developmental

The very nature of the ill-structured problems we face routinely in a complex information-based postindustrial society requires critical thinking capacities above those normally attained by American college students (King, 1992). Ill-structured problems are complex and open ended; their solution creates new conditions and new problems. Such problems require, first and foremost, the ability to recognize that the problems are complicated and are embedded in a complex social context, the ability to evaluate conflicting information and expert views, and the understanding that there is no simple or definitive solution. Critical thinking and problem solving are

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not simply skills to be acquired through practice; rather they rest on attaining advanced levels of cognitive development (King, 1992). Traditional academic programs, however, have not resulted in moving most college students to the levels necessary to cope with complex issues and information (King and Kitchener, 1994).

Service-learning programs that place students in contexts where their prejudices, previous experiences, and assumptions about the world are challenged may create the circumstances necessary for growth. Service-learning programs that create this cognitive dissonance and also provide the structure in which to confront the challenge and seek further information and experience to help students sort it out provide conditions consistent with what is known about improved cognitive development and problem solving (King and Kitchener, 1994; Lynch, 1996; Perry, 1970). Critical thinking ability is another important academic outcome of higher education that may be affected by service-learning.

Learning Is Transforming

Understanding and application might be likened to coloring within the lines; critical thinking helps students question assumptions—to color outside the lines; transformative learning is about thinking about things in a new way and moving in new directions—creating a new picture without relying on the old lines. Community experiences that challenge student assumptions coupled with thoughtful reflection may lead to fundamental changes in the way the student views service or society. David Lempert (1995) in his book *Escape from the Ivory Tower* gives a powerful example of such a transformative moment in his own experience with community service. While working on a project in the Philippines, he came to see that even doing a good job in the community project was helping to prop up a regime that he deemed responsible for the conditions his work was designed to ameliorate. More fundamental changes in the system were needed to achieve social justice.

Others have suggested that this movement from immediate service to a desire to create broader systemic change is also a characteristic of individual student development. As students mature in their service experience, they tend to move from a focus on charitable activities to a concern for social justice (Delve, Mintz, and Stewart, 1990). With their first exposure to poverty, students may tend to see the issues in terms of individual failings or misfortunes—to blame the victim. With more experience, information, and thought, some begin to see the complexity of factors surrounding these problems. We would not expect all, or even most, students to have experiences powerful enough to transform, but where programs engage students in important work in the community and provide continuous opportunities for reflection, service-learning may be a catalyst for a dramatic redirection of their lives.

Citizenship Rests on Learning

While citizenship, like personal development, is often considered to be an affective or behavioral rather than cognitive goal of higher education, we are persuaded that effective citizenship rests on the learning we have touched on. Thus we have focused our empirical inquiry on understanding the cognitive dimensions of citizenship. Students are unlikely to be effective community participants without the ability to understand complex social issues, apply what they learn, and have the critical thinking ability to make adequate judgments about the information they receive. The linkage between academic outcomes necessary for good citizenship and experiential pedagogies like service-learning was noted recently by Zelda Gamson (1997), editor of a special issue of *Change* titled "Higher Education and Rebuilding Civic Life." She identifies some of the ways to "devise ways of teaching and learning for civic life" as learning communities, collaborative learning, respect for different learning styles, reflective projects, and cooperation among students and between students and faculty. She argues that education for citizenship is basically good undergraduate education that follows the

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Finding the Learning in Service-Learning

Our journey of inquiry has spanned six years and is best described by Donald Schön's characterization of the process of discovery where reflection occurs both in and on action and "proceeds from doubt to the resolution of doubt to the generation of new doubt" (1995, p. 31). At each stage we made discoveries about the learning in service-learning, and with each of these discoveries came doubts and new problems to solve. Indeed only publication deadlines have temporarily interrupted this journey. We take comfort that this is the process we and other practitioners of service-learning go through with our students when we confront the messy and ill-structured problems that exist in our communities. We hope that we have followed a model of inquiry for service-learning that respects the values of the field and generates the kind of useful knowledge that our service-learning students reported in their own journeys of inquiry.

In our work with students in the community, we have been continuously struck by the way in which the emotional power of service-learning helps students connect intellectually with what we were doing in the classroom. Indeed our own understanding, like that of our students, has been transformed by community involvement. For many years before we began the two major studies that provide much of the data for this book, we conducted small research studies with internship and service-learning classes in an effort to understand and improve our instruction. The results of these small studies with our own students were encouraging, but we felt that the questions being asked of this field—by both skeptics and believers—demanded a national study reflecting diverse institutions and communities. In 1993 we sought funding from the Fund for the Improvement of Postsecondary Education (FIPSE) for the

Comparing Models of Service-Learning project, which would eventually fund a survey of fifteen hundred college students from over twenty institutions across the United States, as well as a later round of intensive problem-solving interviews with sixty-six students from seven institutions. In both the survey and the interviews, students responded at the start and again at the end of a semester of service-learning. In a second project for the Corporation for National Service (CNS), we conducted single interviews with sixty-seven students from six colleges and universities who were active in service-learning and community service. These students shared their perceptions of the benefits of service and discussed the types of reflective activity that worked best for them. In many of these efforts we were inspired by the pioneering work of Conrad and Hedin (1980), who attempted to measure the impact of varied experiential programs on high school students across the country. No similar national study had been attempted with college students prior to the studies reported here.

Before beginning our larger efforts, we conducted a series of focus groups with a benchmark group of very active service-oriented students at several institutions to help us identify learning outcomes that should be pursued. The views of these students were consistent with our own earlier experience that in addition to personal and social development, service-learning enhanced student learning. These students also made clear the different quality of the learning that resulted from service-learning compared to more traditional methods. With this set of outcomes in mind, we conducted a series of pilot surveys in 1994 to select and develop measurement instruments, attempting to build on efforts underway in the field. During the spring of 1995, we surveyed fifteen hundred students at the beginning and end of a semester where eleven hundred of them were involved in service-learning.

We recognized the limits of a survey for assessing cognitive development and academic learning and attempted to measure problem solving through an essay as well. Expecting students to

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draft thoughtful essays twice in a semester in the context of completing a somewhat extensive survey questionnaire proved unrealistic, however. This was particularly a problem at the end of the semester, when faculty were rushed for time too; thus we had a high number of incomplete or unscorable essays. As a response to this problem, we developed an intensive problem-solving interview where students spoke with us for about an hour about how they would address a social problem related to their service. Each of the sixty-six students completed two of these interviews, once at the beginning and then at the end of the semester. These interviews were designed to explore their service experience, how they analyze a problem, and, in the context of that problem, how they justify a position and use information. Because we talked with them twice, before and after their service, we could trace the impact of service-learning on changes in their reasoning process. Material from these interviews provided us with insights into issue understanding, application of information, perspective transformation, and critical thinking ability. It also provided insights into whether the outcomes identified earlier in this chapter were influenced by service-learning or the reflective quality of particular service-learning experiences. During the same period as the original survey, we also conducted the reflection interviews for the CNS project. As we heard students describe their views of effective service-learning, we were able to shape some of the questions for the subsequent problem-solving interviews. Thus the inquiry process explored these questions about learning using both quantitative and qualitative methodologies.

In this book we have combined the quantitative pre- and postsemester survey data, the analysis of problem solving and critical thinking from the pre- and postsemester interviews, and the views expressed in our reflection interviews, which were based on a single session with different students. When we talk about these different sets of student responses, we will refer to them as the survey, the problem-solving interviews, and the reflection interviews. A number of our statistical findings are also illustrated with quotations

from the students in our two sets of interviews. We believe that this combination of statistical data and student voice provides some useful insights into this complex and wonderful business of service-learning. In the following chapters we share the questions we raised at different stages of this journey of inquiry and the answers we found. All findings presented are statistically significant at at least the .05 level; the statistical material is located in regression tables in the resource sections at the back of the book. A list of the schools that participated in the studies can be found in Resource A, and a more complete discussion of the methodology of the studies is available in Resource B.

We are convinced that learning begins with the impact of service-learning on the personal and interpersonal development of the students who participated in the study, the subject of Chapter Two. Subsequent chapters detail the nature of the different learning outcomes briefly introduced in this chapter and present data about the impact of service-learning on those outcomes. Finally we examine the program characteristics that seemed to make a difference on these important outcomes and discuss implications for practice.

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