Combining Service and Learning in Higher Education

SUMMARY REPORT

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Preface

This summary is based on a research report entitled *Combining Service and Learning in Higher Education: Evaluation of the Learn and Serve America, Higher Education Program* (RAND, MR-998-EDU, 1999) by Maryann J. Gray, Elizabeth H. Ondaatje, Ronald Fricker, Sandra Geschwind, Charles A. Goldman, Tessa Kaganoff, Abby Robyn, Melora Sundt, Lori Vogelgesang, and Stephen P. Klein. The research was sponsored by the Corporation for National and Community Service (CNS), a public corporation that operates AmeriCorps, the National Senior Service Corps, and Learn and Serve America.

The purpose of Learn and Serve America is to incorporate community service into academic learning in both K–12 and higher education. The National and Community Service Trust Act requires CNS to evaluate its programs and report the results to Congress (section 12651d). RAND's task was to focus on Learn and Serve America, Higher Education (LSAHE), evaluating the program's effects on service providers (i.e., students), service recipients, and higher education institutions, and assessing the nation's returns from investing in the program.

At a Glance

What work did Learn and Serve America, Higher Education (LSAHE) perform?

- LSAHE awarded approximately $10 million in direct grants to about 100 higher education institutions and community organizations for each of the three years from Fiscal Year 1995 through Fiscal Year 1997. Through subgranting, these funds reached close to 500 higher education institutions—nearly one of every eight colleges and universities nationwide.
- In FY 1997 alone, an average program involved over 60 students providing more than 2,500 hours of volunteer service. Most students served as part of academic courses; a smaller number served through extracurricular activities.
- More resources were devoted to building institutional capacity for community service than to offering direct service to the community. Over the three years, staff at LSAHE programs spent about half of their time on capacity building, compared to one-third of their time on training, supervising, and coordinating student volunteers.
- Education was the most common area of service. Seventy-five to 80 percent of students chose to work in education.

How did the program affect students?

- Results indicate a strong correlation between student participation in a service-learning course and increased civic responsibility.
- Analysis of a wide variety of college courses showed no association between participation in a service-learning course and improvement in a student's academic abilities or career preparation. Correlation did emerge, however, when certain "good practices" were employed—such as establishing strong links between the service experience and the course content, having

student volunteers serve for more than 20 hours per semester, and discussing service in class.

How did the program affect communities?

- Student volunteers helped community organizations reach more people and improve the quality of their services.
- Communities were extremely satisfied with the contributions of student volunteers, giving them high marks on all dimensions, particularly enthusiasm and interpersonal skills.

How did the program affect institutions?

- The program met three of its four institutional objectives: it expanded service opportunities for students, integrated service into courses, and strengthened community relations.
- It is still too early to determine the program's success in meeting its fourth institutional objective: promoting program sustainment. At the end of the study, nearly half the institutions lacked the resources they would need to sustain the service-learning programs once funding ran out.
- Four key factors led to program sustainment: an institutional tradition of service, leadership of a single individual, faculty support, and the presence of service centers.

What was the program's return on investment?

- The value of services increased sharply over the three years relative to resources expended. Although the programs did not repay their entire investment in the three years, there was a positive return on investment in the third year. Results suggest that the programs will more than repay the total investment if they sustain these returns past the third year.

Combining Service and Learning in Higher Education

Introduction

The Policy Debate

In the past decade, colleges and universities have made greater efforts to involve students in community service, particularly *service-learning*, a special form of community service designed to promote student learning and development. Proponents of service-learning believe that it stimulates academic performance, increases students' understanding of the responsibilities of living in a democratic society, and encourages students to become involved in the social problems facing their communities. Hundreds of college and university presidents, most of the major higher education associations, and a number of highly influential scholars actively support the development of service-learning programs on college campuses.

At the same time, service-learning has its critics, particularly among faculty, many of whom are skeptical of its benefits. Critics contend that service waters down the curriculum, further weakening the quality of higher education, and that the time students spend volunteering in community agencies as part of a course might be better spent in the library or laboratory.

This report summarizes the results of a RAND study designed to resolve some fundamental questions about service-learning. The study evaluated Learn and Serve America, Higher Education (LSAHE), a service-learning program administered by the Corporation for

National and Community Service (CNS).[1] Between Fiscal Year 1995 and Fiscal Year 1997, LSAHE awarded approximately $35 million to more than 500 higher education institutions and community organizations. These funds were used to enhance the links between community service and academic learning by developing service-learning programs as part of the regular college curriculum. This study evaluated the effects of the program on student volunteers, service recipients, and higher education institutions. It also assessed the returns on the nation's investment in LSAHE.

Study Objectives and Approach

We addressed five questions:

- What work did LSAHE perform?
- How did participation in the program affect students?
- How did the program affect communities?
- How did the program affect higher education institutions?
- What was the program's return on investment?

We used LSAHE-supported programs as the unit of analysis. Because institutions usually combine their LSAHE funds with other sources of support to initiate a range of service-learning activities on campus, the effects of these programs cannot be *wholly* attributed to LSAHE.

Our analysis was based on surveys, site visits, and data analysis. The surveys were as follows: (1) annual accomplishments surveys that questioned all LSAHE program directors each year, (2) two community impact surveys of a random sample of community organizations that were host sites for student volunteers from LSAHE institutions, and (3) a 1997 student survey, comparing students enrolled in LSAHE-supported courses with those enrolled in non-service-learning courses. Over 1,300 students from 28 institutions completed this survey.

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[1] The Clinton administration created the National and Community Service Trust Act in September 1993. This act established the Corporation for National and Community Service to operate three initiatives: Learn and Serve America, AmeriCorps, and the National Senior Service Corps. Learn and Serve America comprises two programs: Learn and Serve K–12, for elementary and secondary students, and Learn and Serve Higher Education, for undergraduate and graduate students.

Our study team made ten site visits per year, during which team members interviewed program staff, faculty, administrators, and community agency staff. Follow-up telephone interviews were conducted with 18 sites one to two years after the site visits to determine how the programs had developed.

Survey data were analyzed in two ways. First, results were aggregated across all respondents to provide an overview of LSAHE as a whole. Second, subgroups of respondents were compared to determine how LSAHE-supported programs differed as a function of various factors, such as geographic location, institutional type, grant type and size, and area of service.[2]

The following sections summarize the research findings for each of the five study questions and identify the factors most important to successful implementation of service-learning programs.

LSAHE Program Accomplishments

LSAHE has three primary objectives: (1) to engage students in addressing the needs of communities; (2) to enhance students' academic learning, sense of social responsibility, and civic skills through service-learning; and (3) to increase the number, quality, and sustainability of opportunities for students to serve.

To achieve these goals, CNS awards grants to higher education institutions and a small number of community organizations to develop or improve courses or programs that involve students in service as part of their education. These direct grantees have included some single institutions and some consortia, or groups of institutions linked to a central hub. The consortia used their LSAHE grants to award subgrants to member institutions, a small number of which then awarded sub-subgrants. Through subgranting, LSAHE funds reached between 365 and 458 higher education institutions nationwide each year.

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[2] The evaluation depended heavily, although not exclusively, on self-reports of respondents. For example, we relied on LSAHE program directors and community organization staff to provide the number of student volunteers, service hours, and service outputs, and made no effort to verify the accuracy of the information. Similarly, students were asked for their own evaluation of the effects of service-learning on their attitudes and behavior. Such self-evaluations may either over- or understate the actual effects of LSAHE participation.

Grant recipients generally used their funds to support two broad types of activities:

- Direct service, which engages students directly in volunteer service to the community. LSAHE-supported staff and faculty placed, trained, supervised, and monitored student volunteers; coordinated service programs; and taught service-learning courses in four areas: education, health and human needs, the environment, and public safety.
- Capacity building, which strengthens institutional support for service-learning and increases the number, variety, and quality of service opportunities for students. These activities included designing courses, establishing databases of service opportunities, providing workshops for faculty about service-learning, helping others develop service-learning programs, administering subgrants, recruiting students for service-learning opportunities, and producing brochures or manuals about service-learning.

Direct Service

Students offered direct service as volunteers either as part of an academic course or as an extracurricular activity. In FY 1997 alone, an average program involved over 60 students providing more than 2,500 hours of volunteer service. Survey results for both 1996 and 1997, compared in Table 1, show that the number of students in course-based service increased from one year to the next, as did hours of service per program.[3] Programs engaged fewer students in extracurricular service, although each of those students put in more hours of service.

Education was the most common area of service. Seventy-five to 80 percent of students who engaged in direct service chose to work in education. In particular, programs reported that students tutored, provided in-class support, or acted as role models or mentors. As Table 2 shows, health and human needs was the second most popular area of service, followed by neighborhood and natural environment. About a third of the students provided service in public safety activities.

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[3] Comparable data were not collected for FY 1995.

Table 1		
	FY 1996	FY 1997
Course-Based Service		
Median number of students per program	40	60
Median number of weeks students participated	12	12
Median hours of service per program	1,300	1,650
Extracurricular Service		
Median number of students per program	4	10
Median number of weeks students participated	12	11
Median hours of service per program	1,000	1,000

Numbers of students involved in direct service

Table 2			
	Percentage of LSAHE-Supported Programs		
Area of Service	FY 1995	FY 1996	FY 1997
Education	77	74	71
Health and human needs	60	63	55
Neighborhood and natural environment	46	50	47
Public safety	37	35	32
Other	12	12	12

Percentage of programs working in various areas of direct service

Capacity Building

More resources were devoted to developing institutional capacity for community service than to offering direct service to the community. The staff at LSAHE programs spent about 50 percent of their time on capacity building, compared to 33 to 37 percent of their time on train-

Table 3			
Activity	FY 1995	FY 1996	FY 1997
Creating service-learning courses	70	79	86
Providing technical assistance	69	54	66
Producing publications	50	56	62
Awarding and administering subgrants	12	15	14

Percentage of staff engaged in capacity building activities

ing, supervising, and coordinating student volunteers. Although capacity building activities were expected to taper off as programs matured, the division of staff time between direct service and capacity building remained constant over three years.

As Table 3 shows, the most common staff activity was creating service-learning courses, and the percentage of staff who were developing service-learning courses increased from 1995 to 1997. This increase reflects the program priorities CNS communicated to the grantees. Nearly 3,000 new service-learning courses were established with LSAHE support between FY 1995 and FY 1997.

Programs provided about 100 hours of technical assistance in FY 1996 and FY 1997, compared with 72 hours in FY 1995. Consortia were much more likely to provide technical assistance, while the single institutions tended to receive technical assistance. Subgrantees were the least likely both to provide and to receive such assistance. Most technical assistance was devoted to linking higher education institutions and community organizations, designing courses or integrating service-learning into curricula, supervising students involved in community service, and designing community service programs.

Program's Effects on Students

We focused on the effects of student participation in course-based service-learning. Three questions were addressed:

- What factors differentiate service-learning courses from traditional, nonservice courses?
- Is student development affected differently by service-learning courses than by traditional, nonservice courses?
- What types of service-learning courses have the strongest effects on student development?

To obtain answers to these questions, surveys were administered to two groups of students from 28 different colleges and universities: (1) those who had recently completed a service-learning course and (2) those who had recently completed a similar course (e.g., matched by subject, class size, and level) that did not involve service. In all, 1,322 students completed the questionnaire (a 41 percent response rate), which asked students to describe their experiences in the designated service-learning or traditional course. The findings, described below, must be considered preliminary since they are based on self-reported information from a relatively small sample of students.

What Distinguishes Service-Learning Courses?
Service-learning courses differed from traditional, nonservice courses in four ways. First, the service-learning courses enrolled a higher percentage of women. Second, students devoted more time to service-learning courses than to nonservice courses. Third, service-learning courses involved more writing. Fourth, students were more satisfied with service-learning courses than with nonservice courses. When asked, "Overall, how would you characterize the course?" students in service-learning courses reported higher levels of satisfaction (see Figure 1). Over 72 percent of students enrolled in service-learning courses at comprehensive universities and liberal arts colleges rated their courses above average, compared to 47 percent of the comparison group.

No differences between service-learning and traditional courses emerged on such dimensions as course difficulty, overall amount of work, overall value of the course, amount of reading or library work, and contact with faculty and classmates. In addition, there were no differences in the average course grades for service-learning versus

Figure 1
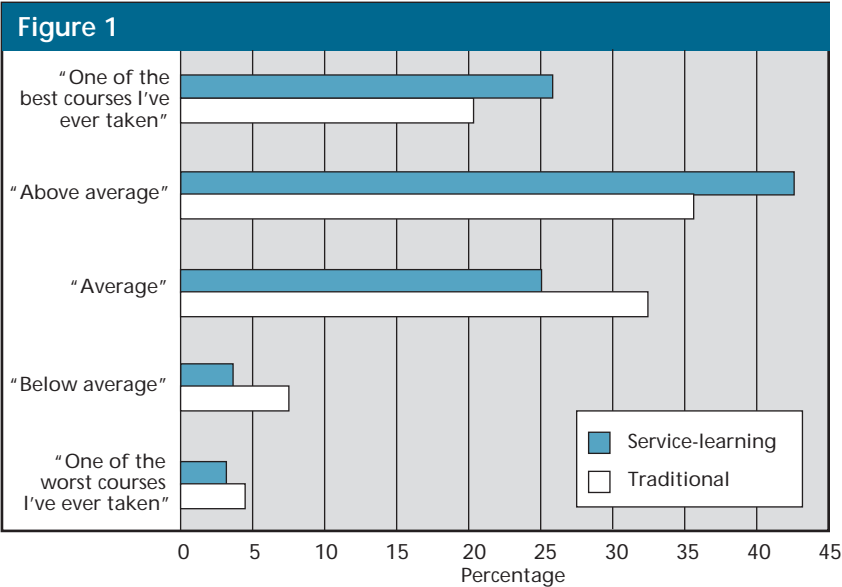
Comparison of student ratings of service-learning and traditional, nonservice courses

traditional courses. These findings indicate that students in the service-learning group found their courses no less demanding than did students in other courses.

Effects on Student Development

RAND's survey examined students' beliefs about the influence of a service-learning or traditional, nonservice course on their development in four areas: civic responsibility, life skills, academic development, and professional development. Results indicated a strong correlation between student participation in a service-learning course and civic responsibility, especially the self-reported likelihood that students will continue to do volunteer work and will take an active role in helping address societal problems. A statistically significant but slightly weaker correlation emerged between student participation in a service-learning course and life skills, including interpersonal skills and an under-

standing of people with a background different from one's own. These findings are generally consistent with prior research on service-learning.[4]

On the other hand, no association emerged between participation in course-based service-learning and the development of academic or professional skills. Service-learning students did not report stronger gains than the comparison group did in writing, quantitative reasoning, or analytic thinking. They were also no more likely to report that the course helped them clarify their major or make career plans. This is an important finding, because most LSAHE program directors and CNS staff emphasize that academic and professional development is of central importance to higher education and is an important component of the rationale for integrating service into for-credit courses.
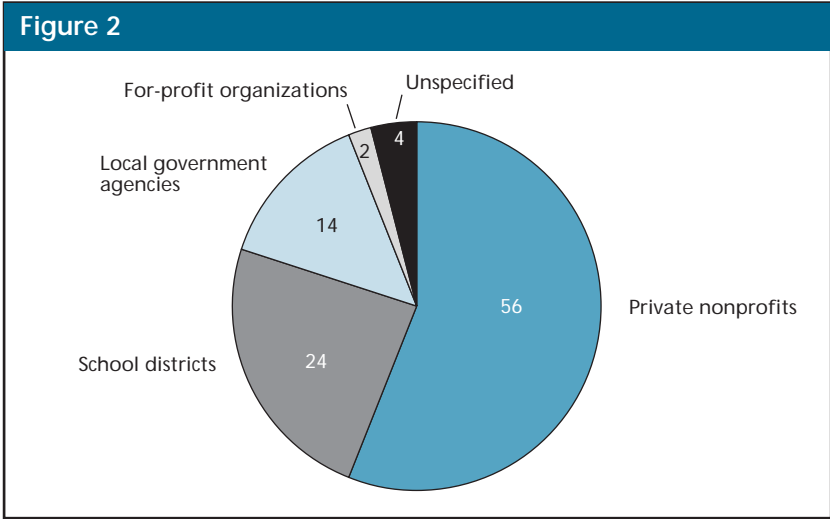
Because these studies are based on student's self-reports—the effects students believe the course has had—rather than changes in actual behavior, further research is needed, particularly randomized, longitudinal surveys that capture behavioral in addition to attitudinal change.

Effective Courses Use "Good Practices"

In addition to comparing students in service-learning courses to those in nonservice courses, we also looked within the service-learning group itself to identify factors that differentiate courses with stronger effects from those with weaker effects. Among the factors that produced stronger perceived effects on student development were the following "good practices":

- Strong connections between course content and students' service experiences.
- Volunteering for more than 20 hours within the academic quarter or semester.
- Discussing service experiences in class.
- Receiving training.
- Receiving supervision.

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[4] See, for example, L. J. Sax, A. W. Astin, and H. S. Astin in M. J. Gray et al., *Evaluation of Learn and Serve America, Higher Education: First Year Report*, Vols. I and II, RAND, Santa Monica, CA, 1996.
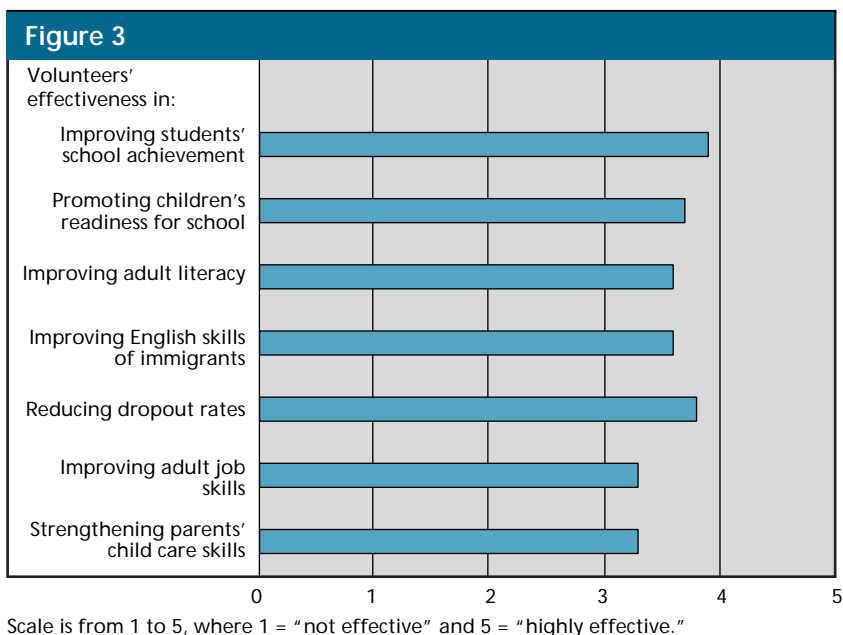
Figure 2

For-profit organizations

Unspecified

Local government agencies

2

4

14

Private nonprofits

56

School districts

24

Percentage of respondents by type of organization

Program's Effects on Communities

How well did LSAHE meet the needs of communities? We asked the staff in community-based agencies, government agencies, schools, and health care facilities where student volunteers provided service to evaluate the work of those volunteers.[5] These organizations consisted largely of private nonprofits and school districts (see Figure 2) with ten or fewer full-time employees. They engaged an average of ten student volunteers per year from their partner college or university. Taken together, these students provided each organization with about 300 service hours per year. They helped an average of 30 people every month, most of whom were economically and educationally disadvantaged students in elementary and secondary schools.

Respondents reported that they were extremely satisfied with the contributions of student volunteers. In fact, they gave student volun-

[5] The survey was not conducted in FY 1997, so the data are for FY 1995 and FY 1996 only. Because results for both years were very similar, only FY 1996 results are described here.

Figure 3

Volunteers' effectiveness in:

Improving students' school achievement

Promoting children's readiness for school

Improving adult literacy

Improving English skills of immigrants

Reducing dropout rates

Improving adult job skills

Strengthening parents' child care skills

0   1   2   3   4   5

Scale is from 1 to 5, where 1 = "not effective" and 5 = "highly effective."

Ratings of student volunteers by staff of community organizations providing educational services

teers high marks on all the dimensions addressed in the survey, particularly in enthusiasm and interpersonal skills. Figure 3 shows staff ratings of student volunteers in education for FY 1996. Respondents reported that student volunteers helped community organizations reach more people and improve the quality of services.

When asked about the greatest benefits of student volunteers (see Table 4), nearly one-third of community organization respondents emphasized students as good role models, and about another third felt they enabled the community organization to provide more services or serve more people than would have been possible otherwise. Community organization staff interviewed during RAND site visits reiterated these opinions.

Table 4	
Benefits	Percentage of Respondents
Volunteers are role models or provide intergenerational benefits	29
Organization can provide more services or reach more people	28
Volunteers increase awareness of and support for the community organization	22
Volunteers provide a high-quality service	21
Volunteers bring energy and enthusiasm	11

Note: Percentages sum to over 100 because many respondents listed more than one benefit.

Most significant benefits community organizations derived from working with student volunteers

Table 5	
Concerns and Suggestions for Improvement	Percentage of Respondents
Increase number of students	21
Improve scheduling and transportation	19
Improve communication with partner college	17
Greater institutionalization of whole program	12
Improve students' sense of commitment	9
Improve communication with the students	8
Increase awareness of the program within the community/institution	7
Hire students with specific expertise	4
Other	22

Note: Percentages sum to over 100 because many respondents listed more than one concern.

Concerns about working with student volunteers

In response to questions about aspects of the program that needed improvement, respondents frequently mentioned scheduling and transportation (see Table 5). Unfortunately, these problems may be inherent to the relationship. Academic calendars place constraints on student availability, and many colleges are located far from the service sites. Other concerns, however, such as a desire for improved communication with the partner college or greater institutionalization of the service program, may be easier to address.

The most frequently cited problem—expressed by 21 percent of respondents—was actually one of the strongest endorsements of the value of LSAHE programs. It was that more students should be given a role in the program.

## Program's Effects on Colleges and Universities

Besides serving communities and promoting student development, LSAHE has four objectives for higher education:

- Expand service opportunities for students.
- Integrate service into course work.
- Foster mutually beneficial relationships with community organizations.
- Promote program sustainment.

We assessed these institutional effects and found that LSAHE made substantial progress in achieving three of the four objectives: it expanded service opportunities for students, integrated service into courses, and forged strong community relations. Our evidence suggests, however, that nearly half the institutions lacked the resources needed to sustain the service-learning programs once LSAHE funding ran out. A follow-up study is needed to determine whether institutions were successful in continuing their service-learning programs in the absence of LSAHE grants.

Expanding Service Opportunities and Integrating Service into Course Work

Almost all institutions (95 percent in FY 1997) offered students op-

Figure 4

Number of new service-learning courses
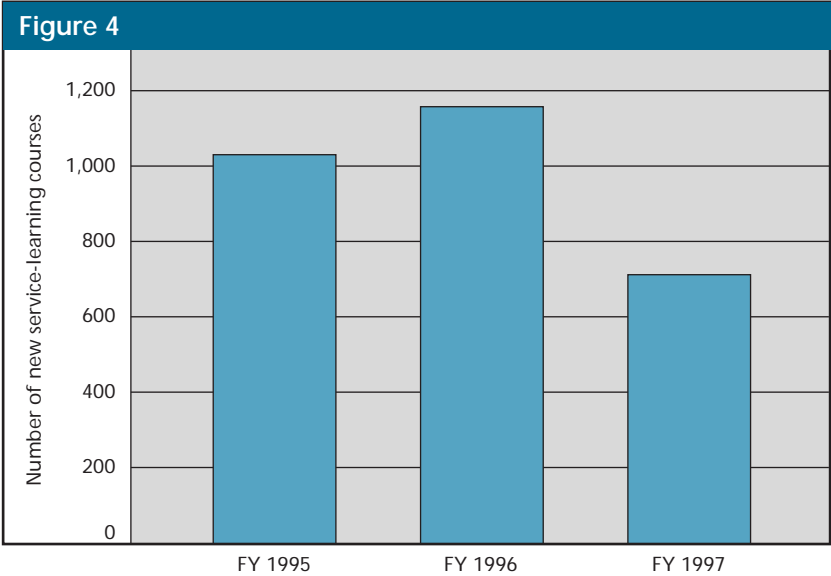
Number of new service-learning courses

portunities to participate in service through both academic courses and extracurricular activities. Most (86 percent) used their grant funds to increase course-based service and to integrate service into the curriculum. Other common strategies included offering recognition for service (66 percent), creating a service center on campus (66 percent), and providing information about service during orientation (51 percent).

Some differences emerged as a function of institutional type. Only 52 percent of community colleges, compared to 75 percent of all others, housed service centers. Liberal arts institutions were most likely to require service as a condition of graduation, whereas community colleges were least likely to do so (18 percent of liberal arts institutions and no community colleges, FY 1997).

CNS encouraged LSAHE-participating institutions to develop service-learning courses either by developing new courses or adding service to existing courses. Most grantees offered some service-learning courses before LSAHE began; the grants were used to expand the number of such courses. Respondents developed an average of three

new service-learning courses each year, summing to almost 3,000 new courses between FY 1995 and FY 1997 (see Figure 4).

LSAHE institutions also sought ways to integrate service into the curriculum. Data for FY 1997 indicate they used different approaches, such as offering service-learning courses in three or more departments (76 percent), sponsoring a faculty committee on service-learning (63 percent), offering course development funds to faculty (54 percent), and including service-learning in the core curriculum (43 percent).

Fostering Mutually Beneficial Relationships with Community Organizations

While community organizations hosted student volunteers, they were also called upon to help develop and implement service programs. Higher education institutions sought the involvement of these organizations in two ways: by including community organization staff in the planning of service programs and by asking community organization staff to visit service-learning classes and discuss the work of their agencies. In the survey of institutions, between 80 and 83 percent of respondents reported involving community agencies in both these ways. The data also indicate that roughly half of those institutions began such interaction after the LSAHE program's inception in 1994.

Community agency staff responded that the LSAHE program had improved their relations with their partner academic institutions. As shown in Table 6, close to half the responding organizations reported increased contact and collaboration with their partner institution from the inception of the LSAHE program to FY 1996. (Most others primarily reported no change in the relationship, and no more than 5 percent reported any deterioration in the relationship.)

Promoting Program Sustainment

Because the data were collected before the grants ended, we were not able to directly address whether programs were sustained. We did, however, explore some *indicators* of sustainability. Specifically, we determined the percentage of programs with dedicated staff and permanent budget allocations from their institutions, both sound indicators of institutional commitment to the programs.

Table 6	
Type of Contact	**Percentage Indicating Increased Contact**
Use of faculty and staff as consultants to community organizations	49
Participation on committees with both community and campus representation	45
Number of joint service projects with community organizations	56
Use of community organization staff as instructors or consultants on campus	44

Contacts between institutions and community organizations

Table 7 shows that roughly half the survey respondents worked in institutions with a sustainable service infrastructure. Beyond the aggregate results shown, our analyses revealed significant differences between direct grantees and subgrantees. For example, results for 1997 indicate that 73 percent of direct grantees had at least one full-time staff person for service-learning programs, and 61 percent had permanent funding. In contrast, only 40 percent of subgrantees and subsubgrantees had full-time staff, and only 38 percent had permanent funding. Similar results emerged from the 1996 Accomplishments Survey.

In addition, research and comprehensive universities were more likely than liberal arts or community colleges to have full-time staff and permanent funding. In 1997, 70 percent of research universities, 52 percent of comprehensive universities, 27 percent of community colleges, and 26 percent of liberal arts colleges in the sample had one or more full-time staff for service programs. Similarly, 55 percent of research universities, 45 percent of comprehensive universities, 35 percent of liberal arts colleges, and only 30 percent of community colleges had permanent funding for service-learning. The 1996 Accomplishments Survey revealed similar findings.

Although many grantees expressed confidence that their institutions would sustain service-learning courses over a longer period of time—for example, 71 percent of respondents in FY 1997 reported that their in-

Table 7		
		FY 1997
Type of Support	Percentage of Institutions With Support	Percentage of Those That Began in 1994 or Later
At least one full-time staff or faculty member coordinating service programs	49	59
Permanent funding for service programs	45	57

Presence of sustainable service infrastructure

Table 8	
Source of Support	FY 1997
Other grants	63
Regular yearly budget allocation	55
One-time or occasional budget allocation	28
Revenue-generating activities	15
Fees or dues	13
Endowments	7

Percentage of programs with other sources of funds for community service activities

stitutions would offer some or all of their newly developed service-learning courses the following year—service-learning offerings may erode. Many institutions simply lack the resources to support and assist faculty in implementing service-learning.

Table 8 shows that about two-thirds of institutions rely on temporary funding, such as grants and occasional budget allocations from their institutions. About half of the programs had a regular yearly budget allocation, and no more than 10 percent had endowment support.

A review of 27 institutions that were studied in depth for the analysis of returns on investment indicated that about 15 percent of the average direct grant was replaced by other types of funding between the

second and third grant years. More time is needed to determine whether institutions will be able to fully replace their LSAHE grants with other funds and to examine whether they can sustain their programs on reduced funding.

The site visits offered a more optimistic forecast. Almost all program directors interviewed reported that their programs would continue beyond the funding period, although they might diminish in size or scope. Program directors generally hoped to obtain either new grants or increased institutional support. In some cases, LSAHE-supported programs had arranged to share space and other resources with complementary programs after the grant terminated. In other cases, programs expected to eliminate some activities, such as incentive grants for faculty, while maintaining a core set of service activities. These optimistic forecasts may be a reflection of the deep commitment to service-learning among many of the program directors. Many had run service programs on a shoestring prior to LSAHE and were prepared to do so again if necessary.

Factors That Promote Success

Interviews conducted during 30 site visits over the three years helped identify factors most likely to lead to successful, long-term service-learning programs: the presence of a tradition of service at an institution, the strong support of an institutional leader, faculty involvement, and the establishment of a service center offering centralized administrative support.

Tradition of Service. We found the most important of these factors to be a tradition of service at the college or university. Many historically black colleges and universities have a strong tradition of service, and some have incorporated service to community into their missions. Church-affiliated institutions are also more likely than secular institutions to place a high value on service. Campuses with a strong social action imperative view service as a natural channel for ameliorating social problems. Institutions with a tradition of service are most likely to have established both the infrastructure and the value system needed for curricular integration of service.

Leadership of a Single Individual. Another key factor in promoting successful programs is the support of an institutional leader who is in

a position to bring about organizational change. In some cases, this was a high-level administrator, such as the president, provost, or chief student affairs officer. In other cases, it was the campus minister, a faculty member, or an LSAHE program director. These individuals were able to garner resources and stimulate faculty interest because of their position of authority and the personal relationships they had cultivated over the years. All the institutions that had successful programs had the strong support of a single leader. If that leadership changed, however, the programs became vulnerable to budget cuts, particularly if they had not already become formalized as part of the institutional structure.

Programs that lacked institutional leadership, by contrast, often struggled to survive. External fund-raising became a necessity, but the programs were at a disadvantage if they did not have a high-level advocate to influence the priorities of development officers. These programs were sometimes relegated to tiny offices in inconvenient locations without adequate computer equipment or office support, and their directors were often excluded from institutional planning and decision-making processes.

Faculty Support. The support of a few dedicated faculty members was also a critical factor for success. According to one administrator, "There is no widespread faculty interest in service-learning, but there is a core of faculty committed to it." We found that programs with strong support from a few faculty members offered the highest number of service-learning courses. Some faculty were able to link service experience to their research, generate publications, and give conference papers. LSAHE-supported programs offered stipends to boost faculty participation, as well as support staff to help faculty identify service sites and place and monitor students.

The vast majority of faculty—particularly tenured faculty—showed no interest in service-learning, however. As a result, only two of the 18 institutions we visited made service-learning a requirement for certain majors. Some faculty resisted participating in service-learning because they believe it to be less rigorous than other pedagogical approaches. The fact that most programs are housed in Student Affairs rather than Academic Affairs reinforces that perception.

Service Centers. Finally, institutions that provide administrative support for one or more service programs in a single location—a ser-

vice center—are better able to expand and sustain their programs and have stronger quality controls. Service centers performed a wide variety of functions:

- Identifying community agencies interested in student volunteers and assisting them in recruiting and managing volunteers.
- Encouraging faculty to integrate service into their courses, providing technical assistance in course development, and helping to place, train, and monitor students.
- Encouraging students to participate in service and providing information about volunteer opportunities.
- Providing students with leadership training and experience by involving them in running the center or in developing new service programs.
- Coordinating service activities throughout the campus.
- Maintaining databases of volunteer service opportunities.

Thirteen of the 18 sites included in this analysis had service centers. Eight of these were comprehensive centers that administered both extracurricular and curricular service activities in one office; the other five had dual centers, one for each type of service. The comprehensive centers served as a focal point for students and faculty interested in volunteer activities. At several institutions, the centers were located in small houses, contributing a strong identity to the centers and providing students with comfortable gathering places. A physical presence established in a well-known location gives a center a life of its own and makes it less vulnerable to budget cuts and political maneuvering.

Because extracurricular student placements tended to dominate the work of the service centers, six of the eight comprehensive centers reported to Student Affairs and only two reported to Academic Affairs. The five dual centers, in contrast, housed the service-learning activities within Academic Affairs and the extracurricular service activities within Student Affairs. The purpose of this bifurcation was to achieve credibility for course-based service-learning among faculty. In most cases, faculty directed the academic centers while staff directed the extracurricular centers. In some cases, the academic service-learning centers were formal entities with permanent staff and budgets. In other cases, they operated informally, as a special project of a faculty member.

Splitting the service center may be necessary to earn legitimacy for course-based service-learning and to promote faculty involvement and leadership. Comprehensive centers, however, offer the benefits of simplicity, since all service-related activities are coordinated by a single organization. Comprehensive centers can also take on a campus identity that helps attract participation and financial support. All the directors of comprehensive service centers expressed confidence that their programs would be sustained.

In contrast to institutions with centers, those without centers were hindered in their efforts to develop service-learning, since a larger burden fell to faculty. Without the support of a center, faculty teaching service-learning courses had to locate sites, place students, coordinate scheduling and transportation, manage site relations, and monitor student attendance and performance on site. Few faculty have these skills, and even fewer have the time or motivation to take on these tasks.

Return on Investment

We also estimated the value of the services provided by LSAHE relative to the resources they consumed. Ideally, the value of services would have been computed by estimating their impact on the communities served. But it would have been prohibitively expensive to evaluate the direct impact of each volunteer's effort. Instead, we took the approach of estimating the cost community organizations would have incurred to hire hourly workers to perform the same functions as the students.[6] To calculate the value of the resources consumed, we relied on survey data, including grant funds, matching funds, and in-kind resources such as space costs. If the cost of services was found to be higher than the resources expended by LSAHE programs, then LSAHE was said to have provided a positive return on investment.

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[6] Because communities served by volunteers felt that the volunteers performed at about the same level as paid service providers, we sought out market-equivalent wages to reflect what those organizations would have had to pay for the same services. To estimate the cost of hiring hourly workers, we defined job titles equivalent to each task and researched average wages for those jobs, using America's Job Bank as a reference. In keeping with standard economic practices, we added a 20 percent allowance to the base wage for legally required employer-paid fringe benefits (Worker's Compensation, Social Security Tax, Medicare Tax, State and Federal Unemployment Tax, State Disability Insurance) and another 20 percent on the base wage plus fringe amount to represent the premium that a temporary service firm would charge to fill these positions.
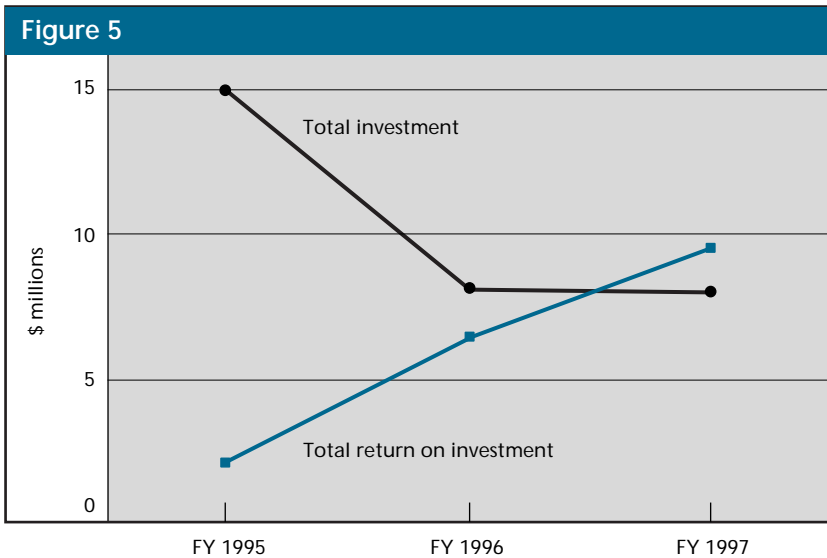
Figure 5

Relationship of investment to return for direct grantees

We found that the value of services increased sharply over the three years compared to resources expended. Figure 5 shows results based on detailed data collected from 27 direct grantee programs between FY 1995 and FY 1997. Although the programs did not repay their entire investment over the three-year time horizon, they will more than repay it if they sustain these returns past the third year. The total value of $18 million amounts to about 60 percent of the total $31 million in resources invested.[7]

Table 9 compares the value of services and resources for all the institutions studied. The results, shown for FY 1996 and FY 1997, are consistent with the findings for the 27 direct grantees. The 1997 data show a higher return on investment than do the 1996 data. These increasing returns on investment are probably a result of the fact that more-established programs have a higher return than do start-up programs, which expend more resources. Furthermore, new starts in FY

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[7] These numbers are subject to a great deal of uncertainty, especially in the valuing of the benefits. Therefore, interpretation of small differences is inappropriate.

Table 9				
Programs	FY 1996 Value of Services ($ million)	FY1996 Value of Resources ($ million)	FY 1997 Value of Services ($ million)	FY 1997 Value of Resources ($ million)
All programs combined	16.0	23.4	22.3	17.5
Direct grantees	11.4	16.6	17.3	12.5

Return on investment for FY 1996 and FY 1997

1997 may have benefited from the capacity building investment made in the two earlier years, allowing them to achieve a faster return on investment than their counterparts did in FY 1996.

A related finding is that programs could improve their efficiency as service providers if they shifted more resources to direct service. Capacity building was a consistently large activity over the three years studied. To track this possible shift and to see whether programs sustain themselves after federal grants end, at least some of these programs should be followed up after the third year of the grant. The resulting longer-term indicators are particularly important for assessing the ultimate return on the large start-up investment in these programs.

Whether these programs will continue to generate substantial value after their grants end is an open question. We did find modest replacement of grant funds by local matching funds over the three years, suggesting that programs are moving toward sustainability. A reduction in the average direct grant of 15 percent was compensated by increased matching funds between the second and the third grant years. This evidence is encouraging, but the pattern may not continue in the future, when 100 percent of grant funds is withdrawn.[8]

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[8] In its relations with individual institutions, CNS now promotes sustainability in two ways: (a) grant amounts decline over successive years, providing institutions with opportunities to decrease their financial dependence on LSAHE gradually; and (b) institutions are required to match grant funds. Often, however, the matching funds are "in-kind" contributions that represent, at best, lukewarm commitments to service programs on the part of institutions. A stronger matching-fund requirement might improve the prospects for program continuance after LSAHE funds expire.

Conclusion

LSAHE provided seed money for service-learning at a time when higher education as a whole was experiencing severe financial constraints. With a stronger economy, most higher education institutions are faring better and hence may be better able to support new initiatives such as service-learning. The benefit of LSAHE for service-learning, however, is not only financial but symbolic as well. LSAHE increased the visibility of service-learning within higher education, provided an incentive for institutions to develop service programs, and sent a message about the perceived responsibilities that students and institutions have to the community.

In summary, LSAHE achieved several important outcomes in its first three years, especially:

1. Community organizations were strongly positive about the contributions of student volunteers.
2. Institutional support for service-learning grew, and, in particular, the number of service-learning courses increased substantially.
3. Students were highly satisfied with their service-learning courses.

On the other hand, the program continues to face some challenges. We found evidence of only modest gains in student development. We hope that future research will demonstrate stronger effects, particularly with regard to academic skills, as programs increase their use of "good practices." In addition, program costs exceeded benefits to communities, although the returns to the community on the LSAHE investment were moving in a positive direction. Furthermore, it is not clear that service-learning programs will be capable of sustaining themselves after the LSAHE grants end.

Future research on LSAHE specifically and service-learning generally will help to improve practice and indicate how policymakers can target their funds to best promote the development of students and communities alike. That research should have three priorities: (1) continuing the study of student outcomes, including efforts to identify and measure the outcomes of "good practices," (2) examining how many grantees were able to sustain their programs after LSAHE funding expired, and (3) assessing the value and effects of institutional investments in capacity building.