Can Service-Learning Help Reduce the Achievement Gap?

New Research Points Toward the Potential of Service-Learning for Low-Income Students

By Peter C. Scales, Ph.D., and
Eugene C. Roehlkepartain,
Search Institute,
Minneapolis, Minnesota

Key Findings from New Research

#1: Involvement in service appears to contribute to lessening the achievement gap, with low-income students who serve doing better academically than students who do not serve.

#2: Service-learning quality matters: Students who participate in "deeper" service-learning experiences appear to do better than students with just brief (few hours to a few days) exposure to service-learning.

#3: Principals in low-income schools are more likely than other principals to believe service-learning has a positive impact on students' school success.

#4: Urban schools, majority nonwhite schools, and poor schools that offer service-learning appear to be just as likely as other schools to provide high-quality opportunities and comprehensive supports, such as service-learning policies and full-time coordinators.

#5: These initial findings suggest a promising field for future research to further explore the potential of service-learning in closing the achievement gap between low- and high-income students.

In a time when schools are forced to make difficult choices in their curriculum to respond to both budget cuts and high-stakes testing, new research challenges the assumption that service-learning is a useful, but not essential, educational strategy for low-income students and schools. Indeed, this new research offers correlational evidence that service-learning[1] may be *particularly* beneficial educationally for low-income students and schools, making it an important, though overlooked, strategy for closing the achievement gap in American schools.

As part of the *Growing to Greatness*™ initiative, several existing datasets were analyzed (see Display 1) to more deeply explore the relationship between service-learning and academic achievement, particularly in low-income schools and among low-income students.[2] Our intent is to shed a bright light on this question: Could service-learning play a role in improving achievement in schools that serve low-income students, thus helping to address a long-standing and pressing priority for equity in educational achievement?

The results reported here suggest service-learning may be an especially valuable pedagogy to principals of low-socioeconomic status schools, in part because it may be linked to higher achievement generally and to reduced achievement gaps among higher- and lower-income students. These findings are reinforced by a broad range of existing research on developmental approaches to student success as well as research on the academic effects of community service (i.e., service not intentionally connected to the curriculum) and service-learning, which we also review here.

This research builds on the *Growing to Greatness* 2004 survey of school principals. It also sets the stage for

Display 1. Samples Used in this Study

Three datasets with unique strengths were used to investigate the association of community service and service-learning to academic success outcomes, particularly in relation to school and student socioeconomic status.

National Study of Principals

This sample provides *principals' and other school officials' perspectives* on service and service-learning in their schools. Data were gathered from elementary, middle, and high school principals (or their designee). A nationally representative sample of public schools, stratified by instructional level, urbanicity, average class size, and minority status, was selected to participate a survey developed by Search Institute, Westat, and Brandeis University (based on a previous survey by the U.S. Department of Education; see Skinner & Chapman, 1999). Ninety-one percent of the schools selected responded to the survey, for a total of 1,799 responses. The sample was weighted to maintain stratification proportions while accounting for missing data. (For more information, see Scales & Roehlkepartain, 2004a, and Kielsmeier et al., 2004.)

Large Aggregate Sample of U.S. Middle and High School Students

This sample provides the *reports of students on how frequently they provide volunteer service* to others. It also provides analysis by *student level of poverty*. The major source of student data in this study is from a large, diverse sample of more than 217,000 6th- to 12th-grade students aggregated from more than 300 U.S. communities that administered the *Search Institute Profiles of Student Life: Attitudes and Behavior* survey (PSL-AB) in the 1999-2000 school year. Though not nationally representative, the sample was weighted by race/ethnicity and urbanicity proportions of the 2000 Census. (Further details on the survey and the sample are found in Leffert, Benson, Scales, Sharma, Drake, & Blyth, 1998, and Sesma & Roehlkepartain, 2003.)

Sample of Middle and High Students in Colorado Springs

This sample of 5,136 6th- to 12th-grade students from Colorado Springs, Colorado, enables analysis of *student-reported experience of service and duration of school-based service-learning*, as well as analysis by *student level of poverty*. These students also completed the PSL-AB survey and Search Institute's Youth Supplement Survey in February 1999. The Youth Supplement Survey provides more in-depth measures of service-learning. (Further details on this study and sample are found in Scales, Leffert, & Vraa, 2003.)

research being planned for 2005 that will examine these dynamics through an in-depth study of schools that engage in service-learning. When completed, this research will provide important new insights into the ways in which service-learning contributes to student success from a developmental, multi-dimensional perspective.

The Pressing Need

Compared to the mid- to late-1980s, students in elementary, middle, and high school have shown improvement on a variety of performance and achievement measures. Students are taking more courses in English, math, and science, and they are taking more challenging courses (Center on Education Policy and American Youth Policy Forum, 2000). They do better on standardized tests, and more are going on to post-secondary education. There has been some narrowing of traditional educational inequities across socioeconomic and ethnic lines. But troubling and persistent challenges remain:

- African-American and white high school graduation rates are similar, but Hispanic youths lag significantly behind (U.S. Department of Education, 2000).
- African-American and low-income children's scores overall (i.e., generally regardless of socioeconomic status or ethnicity, respectively) on various reading and math tests have improved over the last 30 years, but their average achievement scores lag far behind whites. For example, one study in San Diego showed that the average reading achievement among tenth-grade students in the poorest 20 percent of schools was about the same as that of the most affluent 20 percent among fifth-graders (Betts, Zau, & Rice, 2003).
- Among third-graders, the achievement gaps in math and reading between children with higher numbers of risk factors, including poverty, and children with fewer risk factors, actually *widened* from 1998 to 2002 (U.S. Department of Education, 2004a).
- Though dropout rates have stabilized for all income groups since 1990, students from lower-income families (the lowest 20 percent) drop out of school at double the rate of middle-income students and six times the rate of students, in the upper 20 percent of income (U.S. Department of Education, 2004b).

Even the documented improvements often fall short of being meaningful or acceptable. For example, achievement test data show that only 31 percent of eighth-graders perform as proficient readers and only 24 percent as proficient writers (State Policy Updates, 2000). Having only one-third or fewer of young people reading or writing proficiently is, by no measure, a "success."

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These inequities are deeply entangled with poverty. Research repeatedly shows that socioeconomic status matters for a wide range of

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indicators of child and adolescent well-being, including student academic achievement (Beauvais & Jensen, 2003). Lower-income children have less stable families; greater exposure to environmental toxins and violence; more limited social support networks; and are cognitively stimulated less than higher-income children, from reading and being read to less, to experiencing less complex communications with parents involving more limited vocabulary (Evans, 2004). Poor children are also twice as likely to attend schools with less qualified and experienced teachers (Mayer, Mullens, Moore, & Ralph, 2000).

Consistent with these findings, new Search Institute research shows that, compared to other students, low-income students skip more school, have lower grades, and score lower on all of the five "Commitment to Learning" assets in Search Institute's framework (achievement motivation, school engagement, bonding to school, homework, and reading for pleasure). Table 1 shows that, as expected based on previous research, low-socioeconomic status students had significantly less experience with each of the five Commitment to Learning assets. Low-socioeconomic status students also skipped more days of school in the last month, and had lower grades than other students.

Poverty, however, does not seal destiny. Indeed, other factors have long been recognized as equally if not more important. For example, Wang (1990) conducted an extensive meta-analysis of the empirical literature, concluding that the community's socioeconomic status had a moderate relation to student achievement — about the same level as student participation in extracurricular activities and less than other variables. These other key achievement influences included peers' educational and occupational aspirations; parental involvement; cooperative, active student engagement in learning; student input into decisions; and teaching variables such as classroom management, quantity of instruction, and class climate, including such important factors as teacher expectations that all children can learn, regardless of poverty level. More recently, Wenglinsky (2002) has reported that, although socioeconomic status had a substantial impact on students' mathematics test scores (effect size of .76), teacher quality and classroom practices such as use of hands-on learning had comparable or greater effects.

In another extensive literature review, Henderson and Mapp (2002)

Table 1
Students' Reported Academic Outcomes by Socioeconomic Status

Outcome*	Definition	Low SES**	Higher SES
Achievement motivation	Young person is motivated to do well in school.	60 percent	69 percent
School engagement	Young person is actively engaged in learning.	53 percent	63 percent
Homework	Young person reports doing at least one hour of homework every school day.	43 percent	54 percent
Bonding to school	Young person cares about her or his school.	46 percent	55 percent
Reading for pleasure	Young person reads for pleasure three or more hours per week.	19 percent	24 percent
Consistent attendance	Students who report that they did not skip or "ditch" any days of school in the past 30 days.	68 percent	77 percent
High grades	Student reports getting mostly A's on her or his report card.	10 percent	25 percent

N=217,277
* The first five outcomes listed here are the Commitment to Learning assets in Search Institute's framework of 40 Developmental Assets.
** A composite socioeconomic status proxy was created from student self-reports on two items, level of mother's education and whether the student lives in a single-parent family. Students living in a single-parent family and whose mother completed only high school or less were considered low-socioeconomic status. About 11 percent of the large aggregate 1999-2000 school year sample, or 21,883 students, met the definition of being in a low-socioeconomic status family.

also concluded that significant parent and community involvement is one of the key influences that can affect student success in otherwise resource-poor urban schools. Thus, while poverty remains a difficult social problem that negatively impacts student learning, the achievement gap is not unsolvable. There is clear evidence that practices inside the classroom and out in the community can play major roles in closing that gap.

Efforts to Close the Achievement Gap

Over the last 20 years, policy makers and practitioners have worked to raise achievement levels and reduce achievement gaps through several broad school reform approaches. Most recently, the curriculum standards movement and its associated yardstick, the standardized test, have become the dominant force organizing American education (Olson, 2000). With the passing of the No Child Left Behind Act, there has been considerable debate regarding whether the emphasis on standardized achievement tests is undermining providing educational strategies that meet comprehensive developmental needs (see, for example, Oakes, Quartz, Ryan, & Lipton, 2000). For example, the press to prepare children for later school success can result in an over-emphasis in preschool children on structured learning versus play as the best developmental vehicle for growth in learning orientations and abilities (Hirsh-Pasek & Golinkoff, 2003).

A complementary approach to meeting the challenges of improving achievement for all young people focuses on emphasizing human development, or developmental attentiveness, as a core strategy. Most visibly exemplified in the middle school reform movement and in the growth of "full-service schools," the developmental attentiveness approach links school reform with the developmental needs of children and adolescents, and the broader community environment. The central premise of this approach is twofold:

1) Restructuring the school experience to provide a better "fit" with the developmental needs of children and adolescents will lead to greater achievement for all (Eccles et al., 1993); and
2) All elements of the young person's environment (family, peers, and community) play both independent and intertwined roles in contributing to positive development (Benson, Leffert, Scales, & Blyth, 1998; Greenberg, Weissberg, O'Brien, Zins, Fredericks, Resnik, & Elias, 2003).

Certain kinds of school restructuring practices do appear to make a difference in boosting achievement and in narrowing achievement gaps (e.g., Felner, et al., 1997; Lee & Smith, 1993; Newmann, Lopez, & Bryk, 1998). In an examination of a subsample of more than 8,800 eighth graders from the 1988 National Education Longitudinal Study, Lee & Smith (1993), found that reduced or eliminated departmentalization, team-teaching, heterogeneously grouped instruction (i.e., no tracking), and a general restructuring composite (e.g., exploratory classes, use of cooperative learning) had a significant positive impact on school engagement and achievement. Felner et al. (1997) found similar results for developmentally responsive practices such as cooperative learning in a major study of middle schools.

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Benson and colleagues have reported that building students' Developmental Assets™ is a promising approach for promoting school

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success. Developmental Assets are 40 "building blocks" for positive child and youth development arrayed into eight categories of Support, Empowerment, Boundaries and Expectations, Constructive Use of Time, Commitment to Learning, Positive Values, Social Competencies, and Positive Identity. One of the 40 assets is "service to others," the frequency with which students contribute volunteer service in their communities.

The number of Developmental Assets students experience is positively related to greater school attendance and higher *self-reported* grades[3], with the findings consistent in majority middle-class and white samples (Benson, Scales, Leffert, & Roehlkepartain, 1999) and majority poor, urban samples of youth of color (Scales et al., in press), and across racial/ethnic groups of students (Scales, Benson, Leffert, & Blyth, 2000). In a longitudinal study, Scales, Benson, Roehlkepartain, Sesma, and van Dulmen also report that students with a greater numbers of assets in the middle grades have higher *actual* GPA's three years later in high school (in press).

Academic Effects of Service-Learning

Because it represents an "authentic" approach to teaching and learning, the use of service-learning as a pedagogical practice appears to have the potential to help meet both the academic and broader developmental goals of education reform. Why might service-learning "work" to promote school success?

Newmann, Wehlage, and Lamborn (1992) noted the impact on student engagement and achievement when curriculum engages students in the construction of knowledge, ownership of the cognitive work, and authentic connection to the "real world" and community. Service-learning is a primary example of engaging students in such "shared inquiry," meaningful decision-making, and integration of classwork and community life (Zeldin, 2004), all of which work to support disadvantaged students in both their academic and community involvements. In recognition of such relations, the Center for the Study of Social Policy (2003) recommended that states make voluntary service-learning programs available statewide, one of only three data-supported recommendations made for promoting youths' community connections. Billig's (2004) extensive review of the literature found consistent positive relations between service-learning and academic success, though the number of studies is limited.

In an analysis of a longitudinal sample followed from middle school (6th-8th grades) through high school (10th-12th grades), Scales,

Benson, Roehlkepartain, Sesma, and van Dulmen found that students who in middle school reported experiencing a cluster of six particular Developmental Assets, including service to others, were more likely than students with less experience of those assets to report high grades in high school (in press). Specifically, for every point higher students scored on this "connection to community" asset factor in middle school, they were three times more likely in high school to have a B+ or higher GPA. Additional analysis by Scales & Roehlkepartain (2004b) found that service to others during middle school was significantly related to the number of Developmental Assets students reported three years later.

Service-learning — partly through its effects on students' sense of community and positive school climate — may especially help to increase the engagement and motivation of disadvantaged students. Brandeis University researchers found that service-learning's academic and civic impact was greater for lower-income, minority, and more at-risk youths (Center for Human Resources, 1999). Additionally, a Search Institute evaluation of the National Service-Learning Initiative and the Generator Schools Project[4] concluded that students who were most at risk or more disengaged from school when they got involved in service-learning saw positive changes during the time of their involvement. By the end, they were more likely to:

- Believe they were contributing to the community;
- Be less bored than in traditional classrooms;
- Be engaged in academic tasks and general learning; and
- Be more accepting of diversity (Blyth, Saito, & Berkas, 1997).

Despite the apparent enhanced value of service-learning to disadvantaged students, low-income students tend to have fewer service opportunities. Kielsmeier, Scales, Roehlkepartain, and Neal (2004) found that only 29 percent of high-poverty schools in the United States offered service-learning in 2004, versus 36 percent of other schools; and only 26 percent of students participated in low-income schools, versus 32 percent in high-income schools. Thus, it appears that an important resource for reducing the achievement gap — service-learning — is greatly underutilized in schools serving low-income students.

New Findings Suggest the Academic Value of Service-Learning

The existing research in school reform, positive youth development, and service-learning all point toward the potential of service-learning to be an important pedagogical strategy for increasing school success, particularly among students from low-income families and those in predominantly low-income schools.

This existing research set the stage for a series of new analyses that focus specifically on these relationships. We present the key findings here, which, in turn, set the stage for future research. None of these new analyses show cause and effect relationships. It is possible that, regardless of their poverty status, students who are *already* more academically motivated are more likely to participate in service-learning. But the consistency of the new findings across different datasets is interesting and promising.

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Finding #1: Involvement in service appears to contribute to lessening the achievement gap, with low-income students who serve doing better academically than students who do not serve.

Involvement in service to others is related to a number of academic achievement variables, according to new analyses of Search Institute's aggregate database of 217,000 6th through 12th graders in public schools across the United States who were surveyed during the 1999-2000 school year. (Service-*learning* participation was not measured in this survey.)

Furthermore, though low-income students generally struggle more in school than higher-income students, those low-income students who serve others on a regular basis appear to do as well as or *better than* higher income students who do not serve on many measures. In other words, *service of only one hour per week among lower-income students was related to significant reduction of the gap in achievement-related assets* between higher and lower-income students.

To reach this conclusion, we divided the aggregate student sample into four groups: low-income students (defined in the note in Table 1) who serve others (at least one hour per week) (11,231 students); low-income students who do not serve others (12,740 students); higher-income students who serve others (99,369 students); and higher-income students who do not serve others (89,309 students). We then compared the four groups on several indicators of school success (Table 2). Higher-income students who serve do best on all the outcomes. Low-income students who serve do as well or better than the higher-income students who do not serve on all but two measures, however. Thus, the gap between low- and higher-income students is greatly reduced.

Furthermore, though both groups of low-income students skipped more days of school and had lower grades than either set of higher-socioeco-

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Table 2
Academic Outcomes by Service Involvement and by Socioeconomic Groups

	Students Involved in Community Service*		Students Not Involved in Community Service	
Outcomes**	Higher SES	Low SES	Higher SES	Low SES
Achievement motivation	75 percent	66 percent	63 percent	54 percent
School engagement	67 percent	58 percent	58 percent	49 percent
Homework	59 percent	49 percent	49 percent	37 percent
Bonding to school	62 percent	55 percent	48 percent	39 percent
Reading for pleasure	28 percent	25 percent	18 percent	14 percent
Consistent attendance	80 percent	70 percent	75 percent	64 percent
High grades	29 percent	11 percent	22 percent	8 percent

* Community service involvement is measured by single item asking students how in an average week they do formal volunteering without pay to help others ("such as helping out at a hospital, day care center, food shelf, youth program..."). Response choices were 0, 1, 2, 3-5, 6-10, or 11 or more hours per average week. Students are considered to be "involved" in community service if they serve at least one hour per week.

** For definitions, see Table 1.

nomic status students, low-income students who serve others reported significantly fewer missed school days and significantly higher self-reported grades than low-income students who did not participate in service. For example, only eight percent of low-socioeconomic status students without service reported getting "mostly A's", whereas 11 percent of low-socioeconomic status students who did service had high grades, a considerable 38 percent difference among low-socioeconomic status students by whether or not they served.

That community service alone, without necessarily being connected to service-learning, has these positive relations to academic variables is quite promising. If service is embedded within a genuine and comprehensive program of service-*learning* that intentionally connects and integrates curriculum and real world contributions, it seems reasonable to suspect at least comparable, if not greater, impact.

Finding #2: Service-learning quality matters: Students who participate in "deeper" service-learning experiences appear to do better than students with just brief (few hours to a few days) exposure to service-learning.

A community-level study of Developmental Assets included self-reported exposure to service-learning programs during the past school year. Of the more than 5,000 students surveyed in Colorado Springs, only 18 percent had *at least a few weeks* of service-learning (what we defined as having "deeper" service-learning), compared with 21 percent who had a few hours to a few days. The majority of the sample (61 percent) reported no service-learning at all.

In this sample, results were more mixed, potentially due to the small sample size in some analysis cells, so results should be interpreted as preliminary (Table 3). Service-learning exposure appeared to be associated with smaller gaps between low- and higher-income students for regular attendance, achievement motivation, school engagement, reading for pleasure, and, especially, for bonding to school. Indeed, low-income students with service-learning were at comparable levels with higher-income students, with or without service-learning, on these measures. Thus, *service seems to have a positive relation to reducing the school success gap* between students from lower and higher-income backgrounds.

Furthermore, low-income students who did *not* report service-learning involvement were generally lower in these academic success outcomes than both higher- and low-income students who participated in service-learning. For example, low-income students who also had deeper exposure to service-learning had the second-highest percentage of any group on the "bonding to school" outcome (63 percent), bested only by higher-income students with deep

Table 3
Relation of Service-Learning Exposure to Academic Success Outcomes in One Community Sample, by Socioeconomic Status

	Students Involved in Service-Learning*		Students Not Involved in Service-Learning	
Outcomes**	Higher SES	Low SES	Higher SES	Low SES
Achievement motivation	81 percent	73 percent	67 percent	59 percent
School engagement	72 percent	59 percent	63 percent	53 percent
Homework	70 percent	37 percent	51 percent	46 percent
Bonding to school	71 percent	63 percent	53 percent	48 percent
Reading for pleasure	35 percent	26 percent	27 percent	24 percent
Consistent attendance	78 percent	66 percent	74 percent	62 percent
High grades	45 percent	22 percent	31 percent	11 percent
Total Sample: 4,352	**740**	**51**	**3,243**	**318**

* Based on students' report of how often they participated in "community service or service-learning" during the past school year. They are coded as being involved at a high level if they report participating at least "a few weeks." They were not coded as being involved if they selected not at all, a few hours, or a few days.
** For definitions of each of these outcomes, see Table 1.

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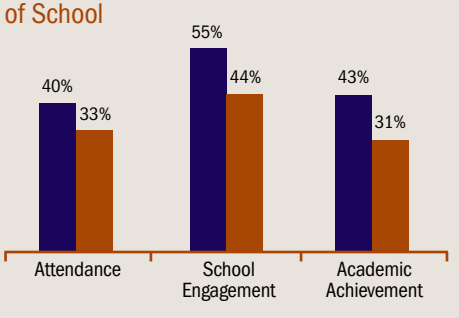
service-learning exposure (71 percent). In contrast, among students *without* deep exposure to service-learning, just 53 percent even of higher-income students, and only 48 percent of low-income students indicated that they were bonded to school. It is important to note that this analysis did not find a reduced gap for homework or self-reported high grades based on service-learning participation.

Finding #3: Principals in low-income schools are more likely than other principals to believe service-learning has a positive impact on students' school success.

Principals of urban, high poverty, or majority non-white schools[5] appear to believe that service-learning can have academic power in students' lives. They are significantly more likely than other principals to judge service-learning's impact on attendance, school engagement, and academic achievement to be "very positive," as shown in Figure 1. Moreover, principals of schools that have all three characteristics — urban, high poverty, and majority non-white student population — also are more likely than all other principals to consider service-learning to have a very positive impact on attendance, school engagement, and academic achievement. Most of the difference in these results is that principals of majority African-American schools that are also low-socioeconomic status are the *most* likely to see such positive effects from service-learning.

Figure 1
Principals' Perceived Academic Impacts of Service-Learning, by Poverty Level of School



Weighted N= 21,640

* Difference in means are significant at p ≤ .0001

Finding #4: Urban schools, majority nonwhite schools, and poor schools that offer service-learning appear to be as likely as other schools to provide high-quality opportunities and comprehensive supports.

As noted, the 2004 survey of principals found that urban, majority non-white, and poor schools are less likely to provide service-learning opportunities than schools in other types of communities. Those schools that do offer service-learning, however, appear as likely as other schools to offer elements of high-quality programs.[6]

As shown in Table 4, high-poverty schools generally are not markedly different from other schools on several indirect indicators of service-learning quality, such as providing financial support for service-learning costs and having written policies supporting service-learning. In some cases, high-poverty schools actually appear to offer *higher* quality service-learning opportunities. For example, high-poverty schools — the poorest third — are somewhat more likely to offer semester-long service-learning projects and as likely to offer whole school year projects as the most affluent third of schools.

Given their more limited resources, one might expect that schools serving low-income students would have fewer supports in place for service-learning. In reality, though, the opposite may be true. Although there are no significant differences by poverty level for six of the supports, high-poverty schools are more likely than schools with more affluent student populations to:

- Have a written policy encouraging or requiring service-learning;
- Have full-time coordinators;
- Provide support for teachers to attend training; and,
- Provide extra planning time for service-learning teachers.

The differences on these specific supports are considerable enough

Table 4
Percentage of Schools Providing Service-Learning Supports, by Poverty Level of School

	School Poverty Level		
Type of Support	**0-24 percent**	**25-54 percent**	**55 percent+**
Support for teachers attending training or conferences outside of the school	62 percent[b]	64 percent[b]	75 percent*[a]
Other financial support for costs associated with service-learning	59 percent	58 percent	55 percent
Mini-grants for service-learning program or curriculum development	55 percent	53 percent	58 percent
In-service training for teachers on service-learning (past 3 years)	31 percent	34 percent	40 percent
Written school or district policy encouraging or requiring service-learning	28 percent[b]	27 percent[b]	39 percent*[a]
Special recognition or awards for teachers using service-learning	36 percent	33 percent	44 percent
Extra planning time for service-learning activities	15 percent[b]	16 percent[b]	29 percent***[a]
Part-time service-learning coordinator	17 percent	13 percent	23 percent
Reduction in course load to allow time for service-learning	13 percent	16 percent	17 percent
Full-time service-learning coordinator	9 percent	6 percent[b]	15 percent**[a]

a, b = Percentages with differing superscripts are significantly different from each other at the level indicated by the asterisks.
* $p \leq .05$
** $p \leq .01$
*** $p \leq .0001$

that, across all 10 of these supports, high-poverty schools also have a higher *average* level of supports (3.75 out of 10) for service-learning than do other schools (3.04 and 2.89 for low-poverty and medium-poverty schools, respectively). Another sign of stronger support for service-learning in high-poverty schools may be evident in the finding that the schools also appear to be more likely to provide school-wide service-learning. Among high-poverty schools, 35 percent provide school-wide service-learning, compared to 20 percent for medium-poverty schools and 21 percent for medium-poverty schools.

Strengthening the Case for Service-Learning

In the midst of current budget constraints and emphases on high-stakes testing, one might argue that service-learning is "on trial." Is it worthy of investment? Does it make a difference in improving the educational outcomes for students, particularly those who struggle the most?

Mounting evidence, though incomplete, suggests that, yes, it is and it does. But the evidence is still limited and less than ideal. For example, all of the results presented here are correlational, not longitudinal. Thus, cause-and-effect relations among the variables cannot be established (though this article makes rational inferences, based on theory and the accumulating research). Nevertheless, the "circumstantial evidence" from our three different datasets (along with the previous research cited) suggests the promising conclusion that service-learning programs may contribute to the key achievement goals of American education today: higher achievement and equity of achievement across student groups.

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Photo: Dan DiPrinzio

In the short term, these findings could be useful in making the case to school administrators and policy leaders to continue — or strengthen — their commitment to and investment in service-learning, particularly as a strategy to contribute to closing the achievement gap between low- and higher-income students.

We are still in the "discovery phase." Through the *Growing to Greatness* initiative, additional research is underway. Current plans involve conducting focused studies that bring together the perspectives of students and staff about service-learning, and its relationship to academic success and prosocial development. If successful, the study will allow for much more in-depth analysis of the relationships between service-learning scope and quality (from both student and staff perspectives), the school environment, young people's Developmental Assets, and various measures of school success for students in various socioeconomic situations. Thus, it will provide the opportunity to explore further the potential of service-learning in closing the achievement gap.

At the same time, it is important to recognize that school-based service-learning programs, like any other educational reform, cannot, by themselves, close the achievement gap for all students. Though important, these efforts cannot consistently touch and influence all of the many factors that shape young people's attitudes, capacities, and commitments to learning. Other strategies (e.g., improving school climate, increasing student access to advanced coursework, and strengthening teachers' collective belief in their ability to help all students learn), dynamics, and community systems also play important roles in young people's growth and development. The opportunity, then, is to link with other positive strategies, approaches, and partners that share a mutual goal of improving educational — and life — outcomes for young people. Joined together, the efforts can add up to our having stronger families, schools, communities, states, and a nation committed to the success of all young people, including those who now struggle with the fewest opportunities that provide the foundation for success. **G2G**

1. For definition, see glossary.
2. An expanded research analysis, including technical information on the findings presented here, is available in Scales, P. C., Roehlkepartain, E. C., Neal, M., Kielsmeier, J. C., & Benson, P. L. (2005) "The contribution of community service and service-learning to academic achievement among socio-economically disadvantaged students." Minneapolis: Search Institute. Manuscript submitted for publication.
3. Self-report grades have a high (approximately .75) correlation with actual grades (Leffert, Benson, Scales, Sharma, Drake, & Blyth, 1998).
4. The Generator Schools Project was a four-year

project of National Youth Leadership Council in the early 1990s. It sought to equip 40 K-8 schools across the United States to integrate service-learning throughout their curriculum.

5. In analyses using the national principals' study, the three school-level poverty groups were created by dividing the sample of schools into thirds on the basis of the proportion of students eligible for the free or reduced-price federal lunch program. The top third was considered "high-poverty" schools, etc. This division resulted in schools with 56 percent or more students being eligible for free or reduced-price lunches being "high-poverty" schools; those with 27 percent to 55 percent being "medium-poverty" schools; and those with 0 percent to 26 percent of student eligible being "low-poverty" schools.
6. This analysis utilized levels of supports available in the school for service-learning (such as teacher training, a service-learning coordinator, and supportive school or district policies) as indicators that the school is more likely to have high-quality service-learning programs. More in-depth measures within schools (with teachers and students) would be necessary to ascertain actual service-learning quality. Such research is being initiated as part of the *Growing to Greatness* initiative.

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