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Support for K-12 Service-Learning Practice: A Brief Review of the Research

Shelley Billig

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By Shelley H. Billig

Each year, more K–12 schools and districts are adopting service-learning as an educational reform strategy to help students achieve important educational goals. The National Center for Education Statistics estimates that service-learning is being practiced in more than one-third of all public schools in the United States and in about half of all public high schools.[1] The 1999 National Student Service-Learning and Community Service Survey found that rates of participation in service-learning progressively increase across grade levels.[2] Passion for the practice of service-learning sometimes reaches evangelical proportions. However, by its nature, the practice of service-learning varies widely, and even ardent practitioners are not always clear about the essence of the pedagogy or even whether they are implementing service-learning or community service.[3]

In this article, research will be presented that clarifies the meaning of service-learning, why practitioners participate in service-learning, the student and school impacts reported as a result of participating in high-quality service-learning programs, and potential ways to maximize impacts.

What Is Service-Learning?

Service-learning is typically defined as a teaching method that involves students performing community service in order to learn knowledge and skills connected to curricular objectives. Service-learning usually involves meeting authentic community needs, student involvement in planning and implementing service activities, reflection to gain greater insight and learning from the service experience, and celebration or recognition of accomplishments.

The content of service activities can vary widely. The National Household Education

Shelley H. Billig, Ph.D., is vice president of RMC Research Corporation in Denver.

Survey of 1999 shows that the most common types of service activities reported by students include teaching and tutoring (19.8 percent); creating outdoor public areas (13.1 percent); visiting and talking with individuals (11.5 percent); preparing food, clothing, toys, and the like for distribution (10.5 percent); and administrative work (10.4 percent).[4] Descriptions of service-learning leader schools—that is, schools recognized as implementing effective service-learning programs—show that within service-learning sites, students have worked with the elderly, the environment, younger children, community agencies, or a host of other service partners. As part of their service-learning experiences, they have built nature trails, established museum displays, created friendly hospital environments, worked on the census, obtained oral histories of the community, created anti-drug campaigns, established philanthropic organizations, built Web sites for community organizations, and participated in many other different types of service activities.

The degree to which service-learning is integrated with curriculum and standards also differs widely across the United States, as do the types of reflection activities in which students engage, the amount of responsibility and choice students are given, the length of the experience, and the ways that teachers help students to understand the larger world context in light of their experiences. In some instances, for example, service-learning is driven by curriculum, highly linked to standards, and assessed using traditional measures of academic achievement. Reflection activities are strongly academic in nature, and students are given more responsibility for tying their learning to important curricular objectives. In other cases, service-learning is tangentially related to curriculum, is used as an enhancement or enrichment activity, and emphasizes service more than learning. Reflection may emphasize how students felt about their experiences and what they learned

about interpersonal relationships and themselves. In short, because service-learning is not a model and does not have specific steps, content, duration, frequency, or goals, service-learning is not easily explained and is often misunderstood. On the other hand, because of its flexibility, service-learning can easily be customized to the classroom or school, serve many purposes, and achieve multiple outcomes.

Why Educators Participate in Service-Learning

In its Fast Response Survey System, the National Center for Education Statistics asked random samples of public school administrators whose schools participated in service-learning why their schools chose to implement service-learning.[5] Administrators were asked to select reasons from among ten options. Responses mentioned most often included "to help students become more active members of the community" (53 percent); "to increase student knowledge and understanding of the community" (51 percent); "to meet real community needs or foster relationships between the school and surrounding community" (48 percent); "to encourage student altruism and caring for others" (46 percent); and "to improve student personal or social development" (26 percent). Nearly 20 percent said that they participated in service-learning to teach critical-thinking skills or increase career awareness. About 10 percent to 15 percent said that they adopted service-learning to improve attitudes toward school, improve student achievement in core subject areas, and reduce student involvement in risk behaviors.

Billig and Klute, in their retrospective study of service-learning programs in the 1990s funded by the W. K. Kellogg Foundation, found that service-learning was more likely to be adopted when practitioners had a clear picture of the practice of service-learning, when service-learning was framed within the context of educational reform or youth development, and when service-learning was linked with strongly held local values.[6] Service-learning was also more often adopted when the service-learning sponsor, project leaders, or project partners were perceived to have strong credibility and cachet; when there were on-site champions from a variety of stakeholder groups; and when some form of incentive was provided. Finally, when individuals expressed initial interest, service-learning was more likely to be adopted if there was a rapid response in the form of presentations, materials, answers to questions, and examples of quality practice.

Finally, in a study of eleven New Hampshire schools, Billig showed that adoption of service-learning was most likely when service-learning was used as a key educational reform strategy for increasing student achievement; when community values were incorporated within the service-learning approach; when administrators were supportive; and when there were sufficient human and fiscal resources to support professional development.[7]

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Impacts of Service-Learning on Participating Students

Conrad and Hedin as well as Billig published research summaries of the impacts of service-learning on participating K–12 students and schools for the decade of the 1980s and the 1990s, respectively.[8] These summaries contain cumulative evidence that high-quality service-learning programs affect students in multiple positive ways, primarily in the areas of personal-social development, academic achievement, citizenship, and career awareness. High quality generally was defined as service-learning approaches that featured service hours over the year in excess of forty hours, integration of service with curricular objectives, presence of reflection activities, and students engaged in meeting an authentic community need.

The research in service-learning should be read with caution. Many of the studies were performed as program evaluations rather than as "pure" research; thus their general applicability to the field is limited. Few of the studies used control groups and none used random assignment of participants. However, as a body of evidence, these studies begin to make the case that service-learning is indeed a promising practice for schools that seek to raise achievement scores, help develop more responsible students and citizens, and raise awareness of career options.

Personal/Social Development

The greatest number of studies shows that participating students gain in measures of per-

sonal and social development. Students gain more self-confidence, self-efficacy, resilience, sensitivity to multiple cultures, and ability to avoid "risk" behaviors such as engaging in unprotected sexual relations, smoking, and alcohol use. Most of these studies involved middle and high school students responding to surveys that reported changes in behaviors and attitudes before and after engaging in service-learning activities. Weiler et al., for example, found that California middle and high school students showed increases in measures of communication, competence, and personal and social responsibility.[9] Loesch-Griffin, Petrides, and Pratt, in their evaluation of a service-learning program in California, found that students who participated in service-learning became more dependable for others and felt more comfortable communicating with ethnically diverse groups.[10]

Recent studies confirm these findings. Furco, for example, provides evidence that participation in service-learning helped students "feel empowered as they take on leadership and adult-like roles."[11] Melchior and Bailis show statistically significant positive impact on scales that measure personal and social responsibility connected to social welfare, community involvement, acceptance of diversity, and acquisition of communication skills.[12] Scales et al. found that middle school

students who participated in service-learning showed greater concern for others' welfare, compared with a control group, and retained this level of concern over the course of the school year while control students declined over time.[13] Johnson and Notah, in their study of eighth-grade students, showed that service-learning participants scored higher on measures of self-esteem and responsibility than their nonparticipating peers.[14] Finally, Kirby compared multiple-prevention approaches and found that "service-learning programs may have the strongest evidence of any intervention in that they reduce actual teen pregnancy rates while the youth are participating in the program."[15]

Academic Achievement

Service-learning has also been found to have a positive impact on academic achievement. Santmire, Giraud, and Grosskopf, for example, studied seventh-grade students randomly assigned to participate in service-learning or in another approach to learning during a summer program.[16] Those who participated in service-learning achieved statistically significant higher scores on the Metropolitan Achievement Test (a norm-referenced standardized achievement test) relative to their control group peers, particularly in math. Melchior and Bailis showed that students who

participated in service-learning were less likely to be absent from school, increased the number of hours spent doing homework, became more engaged in schoolwork, and showed modest increases in math and science grades and overall grade point averages.[17] Middle school participants also improved their social studies grades, and high school students' course failures lessened. Morgan, in his study of Indiana high school service-learning participants, revealed that participation was linked to an improvement in grade point average, an increase in political knowledge, improved attendance, and increased confidence in public speaking.[18]

In Weiler et al.'s 1998 California study of high-quality service-learning programs, students in more than half the participating schools showed increased test scores on language arts or reading achievement tests. Students were also found to have greater engagement in school, an increased sense of educational accomplishment, and more completed homework.[19] Anderson et al. found that participation in service-learning was associated with higher scores on state tests in Massachusetts.[20] Akujobi and Simmons also found that elementary school students who participated in service-learning scored higher on state assessments of math and of reading for information than a control group that did not participate in service-learning.[21] Melchior's national study of service-learning participants also showed gains in several measures of achievement.[22] Billig (2000) provides a summary of other studies that show similar results.[23]

Citizenship

Service-learning also has been found by many researchers to have a positive impact on citizenship and civic responsibility. Yates showed that high school students who participated in a year-long course on social justice and who worked in a soup kitchen were more engaged in political-moral issues and displayed higher degrees of civic knowledge and cognitive complexity when discussing social issues.[24] Stephens found that elementary and middle school students who participated in service-learning activities showed increases in civic responsibility and service ethic measures.[25] Tolo demonstrated that students who participated in service-learning became more "civic minded" and were more knowledgeable about sociohistorical contexts and the role of politics and morality in society.[26]

High-quality service-learning approaches have positive impacts on students' social-personal development, academic achievement, citizenship, and career awareness.

Career Awareness

Several studies showed that service-learning participation led students to become more aware of their career options. Weiler and colleagues, for example, showed that California service-learning students developed positive work-orientation attitudes and skills. Melchior also reported increases in career knowledge in his national evaluation of service-learning participants.[27]

Impact of Service-Learning on Participating Schools

Toole as well as Billig and Conrad also show that implementing service-learning has positive impacts on schools. Toole's in-depth study of two schools revealed that teachers who infused service-learning into instructional practice were likely to use more cooperative group work, more student self-assessment, more projects that required data collection, and more access to the Internet, all of which the research literature finds connected to greater student engagement in learning.[28] Billig and Conrad found schools that used service-learning likely to be characterized as having more dialogue about teaching and learning and more mutual respect among teachers and students.[29]

Understanding and Maximizing Impacts

As noted previously, impacts for students and schools typically are found only for high-quality service-learning programs. Those programs not of sufficient quality do not often yield the same types of effects.

Billig reviewed dozens of studies from the 1990s and concluded that impacts are likely to be maximized if service-learning contained the following elements:

* Students assuming a high degree of responsibility for program planning and implementation and for their behavior while working in the community;

- Students having a high degree of autonomy to perform their service tasks;
- Students having more direct contact with community members;
- Programs containing high-quality reflection activities that go well beyond summarizing the service experience or capturing feelings;
- Teachers playing a strong mediating role in helping students to understand the meaning of their experiences and making explicit connections to curriculum;
- Schools explicitly tying service-learning to academic areas in which students are expected to become proficient; and
- Teachers regularly assessing the academic outcomes of the service-learning experiences and using the results of the assessments for improvement.[30]

In addition, Billig and Klute, in their retrospective study discussed previously, found that implementation was eased and results were more likely to be maximized when there was an organization-wide culture of support, when there was sufficient professional development responsive to student needs, and when service-learning projects started small and grew slowly, paying attention to quality.[31]

Summary

The research on service-learning shows that service-learning has become increasingly prevalent within K–12 schools, that educators adopt service-learning for a variety of reasons, and that high-quality service-learning approaches have positive impacts on students' social-personal development, academic achievement, citizenship, and career awareness. Schools were also found to have benefited in multiple ways. Putting particular practices into place, such as greater program duration, linkage to curriculum, and more student responsibility and choice, can heighten the impact of service-learning. The body of research thus shows that service-learning, when understood and implemented well, is a promising teaching methodology that can assist teachers and schools to reach important educational goals.

Notes

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