Building Citizenship: How Student Voice in Service-Learning Develops Civic Values*

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Objectives. Though many decry the decline in political participation and interest, few academic studies present a clear approach to help reverse these trends. This paper examines the impact of service-learning programs on students’ self-concept, political engagement, and attitudes toward out-groups. Methods. The data come from a pre and post survey given to more than 200 high school students in 10 different schools. We use Huber regression to assess the impact of student voice in the service-learning project on six dependent variables. Results. We show that if students are involved in service-learning projects in which they have a high degree of voice and ownership, their self-concept and political engagement will improve, and they become more tolerant toward out-groups. Conclusion. In short, having a voice in service-learning programs builds citizenship.

In order for a democracy to remain strong, it is imperative that its citizens have trust in government, be politically engaged and connected to their community, and be tolerant. However, many studies note that Americans fall short on these aspects of citizenship. Americans seem cynical of their government and do not believe that they can effect change. The public’s level of political interest is low, and the rate of voting in elections is on the decline. And, as we are all too aware, many citizens remain intolerant of those who are different and hold false stereotypes.

However, it would be wrong to conclude that nothing will change this decline in civic engagement; it is not an inexorable process. Although many different efforts attempt to halt this civic atrophy, ranging from a focus on communitarian ideals (Etzioni, 1998) to MTV’s “Rock the Vote,” we examine whether service-learning projects, in which students play an active role, can help improve the quality of civic life and build better citizens.

In this paper, we do not document the problem of civic disengagement, we explore a possible solution. Many educators and academics have sug-
gested that the lack of student civic engagement can be addressed through civic education (Battistoni and Hudson, 1997; Boyer, 1990; Boyte and Kari, 1995; Center for Civic Education, 1994; Ehrlich, 1997; Mann, 1994; Sax and Astin, 1997; Wade, 1997, Zlotkowski, 1998). Using data gathered in a five-state survey of high school students involved in service-learning, we examine the effectiveness of service-learning programs in which students have ownership. We find that, when students have a voice (we use “voice,” “ownership,” and “leadership” interchangeably) in the project, service-learning provides a solution to some of the problems of civic disengagement.

First, we begin by discussing three aspects of citizenship that we believe are important for a robust democracy: positive self-concept, political engagement, and tolerance. Second, we acknowledge the importance of education in instilling democratic values in children. Next, we briefly address what service-learning is and why—when projects are implemented correctly—it is an extremely effective pedagogical tool. We then lay out the data and methods and discuss our results. Finally, we explain why these results are so important and explore future questions on this topic that must be addressed.

Civic Engagement in America

For a democracy to be vibrant and sound, the public must have a minimal level of trust in government, civic engagement, and tolerance. We believe that these qualities build better citizens (see also Galston, 1988). Though we may hope for reflective, knowledgeable citizens, the reality is often of a cynical, less engaged, and informed electorate.

**Self-Concept.** Educators—and parents—are often quite concerned with the development of positive self-concept in youth. They want young people to be confident that they can create change and that they can succeed. Educators attempt to nurture this positive self-concept in a variety of ways, including simply telling students that they are important in their own right. However, as John Dewey (1916) suggested, all genuine education comes about through experience. A much more effective approach is to allow students to learn that they can have a positive impact on their community by actually making a difference in the community through service-learning. If students are engaged in projects of their own design, the projects provide the students with a real opportunity to succeed in a task that has much greater significance than a quiz or a test. This also models democratic principles in the classroom and provides the students with concrete experiences where they are personally involved in social activism (albeit at a subdued level). It involves the students in specific experiences that should influence future behavior and attitudes.
From a political science perspective, positive self-concept manifests itself as increased political efficacy—students should believe that they can exert some influence over what happens in the social and political world around them. From an educational perspective, it would be seen as increased educational competence (Skinner, Wellborn, and Connell, 1990). Students should understand the importance of hard work in achieving academic success and that when they try, they can succeed.

**Political Engagement.** Although it is important for citizens to be attentive to and active in their government, most research has indicated that Americans fall short on both accounts. There is a large body of research that shows that the American public’s interest in government is disappointing (Hyman and Sheatsley, 1947; Erskine, 1963; Delli, Carpini and Keeter, 1996). And although political parties are becoming more scientific and precise in their efforts to bring supporters to the election booth, fewer Americans are showing up to cast their ballots (Abramson and Aldrich, 1982; Miller, 1992; Teixeira, 1987, 1992). Whereas about 63 percent of the electorate voted in the presidential election of 1960, the voting rate declined to about 50 percent in the 1996 presidential election.

A number of studies have provided evidence that if students participate in activities when they are young, they are more likely to participate in organizations and in the political process when they are older (Beck and Jennings, 1991; Almond and Verba, 1963; Verba et al., 1995; Rosenstone and Hansen, 1993). Lindsay (1984) finds that participation in extracurricular activities in high school is even more important than educational attainment as a predictor of participation in voluntary activities as an adult. Put another way, if young people do not become involved in their community in their youth, they are more likely to remain detached when they are adults. These trends are of particular interest because young people learn about politics and develop the civic attitudes and behaviors that structure their future actions (Searing, Schwartz, and Lind, 1973).

**Tolerance.** One other aspect of citizenship that is important for a sound democracy is tolerance. The United States, while promoting equal rights, has not been immune from prejudice and discrimination. People are especially likely to hold negative stereotypes about groups of people with whom they do not interact. Studies have shown that students hold misperceptions about the elderly (Stout, 1990; Aday, 1993, 1996). They feel uncomfortable around older people and do not understand how much can be learned from the elderly. Students hold stereotypes about the disabled as well (Hendrickson, 1996; Kishi and Meyer, 1994). They feel that the disabled cannot contribute to society or hold jobs. If students have the opportunity to interact with people from a different background in an appropriately structured environment, prejudice and stereotypes can be reduced. For example, in a
service-learning project in which students in a computer class teach the elderly how to “surf” the web, each group gains a better understanding of the other.

Now that we have discussed the three aspects of citizenship that we feel are essential for a robust democracy, we turn to the importance of instilling these values in people when they are young.

Political Learning

The Importance of the Political Attitudes of Youth. “Political learning” is a broad term that describes anything political learned throughout a person’s life. Why is political learning that occurs at a younger age so important? Why should we be concerned with the political attitudes of youth? Two different theoretical models shed light on these questions by connecting the attitudes of youth with the political attitudes and behavior of adults: the primacy principle and the structuring principle (Searing, Wright, and Rabinowitz, 1976; Searing, Schwartz, and Lind, 1973; Easton and Dennis, 1969).

The primacy principle holds that political attitudes are learned early in life and that these attitudes are relatively lasting throughout life (Hess and Torney, 1967; Easton and Dennis, 1969). Though research in political science suggests that these early political predispositions are less likely to be fixed (Jennings and Niemi, 1981; Searing, Schwartz, and Lind, 1973), the importance of these early attitudes is generally accepted within education (Hamilton and Zeldin, 1987). With service-learning, there are also intentional efforts to make the attitudes more persistent and relevant through the attempts to create one-on-one interactions with other people as well as to anchor these experiences through reflection.

The structuring principle also assumes that the orientations that are developed early will persist. These political attitudes will structure the information that we receive later on in life (Searing, Schwartz, and Lind, 1973). In other words, new information will be processed and filtered through the political schema that was established as a young adult. Further, a large body of literature from social psychology suggests that current attitudes do influence how individuals process new information (Conover and Feldman, 1984; Lau, 1986; Lodge, McGraw, and Stroh, 1989; Lodge, Steenbergen, and Brau, 1995; Zaller, 1992).

Both of these models suggest that we should be concerned with the political attitudes of youth. Further, where there is youth leadership, service-

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1 We do not mean to overstate the importance of these specific models or the relationship between micro-level attitudes and macro-level political systems and adolescent and adult orientations. However, much research on civic education is concerned with the macro-level effects of student education (Niemi and Junn, 1998; Niemi, Hepburn, and Chapman, 1999).
learning may be a particularly effective method to develop the civic attitudes of youth. First, because the students are involved in making positive change and working with the system in a productive manner, they should have an increase in efficacy and competence. Second, because of their greater social involvement, participants should have an increase in political interest and participation. Finally, because these projects often intentionally provide opportunities for young people to interact on a personal level with people from different backgrounds, we should anticipate that they would improve students’ attitudes toward other groups like the elderly or the disabled.

Before proceeding with our results, it is essential to discuss what service-learning is and why it can be an effective pedagogical tool.

**Service-Learning.** Service-learning is a method of experiential education in which students apply what they learn in class to a real-world situation by performing needed community service. Its purpose is to promote civic education and citizenship as well as to provide a concrete learning experience for the topic studied in class. Service-learning can be incorporated into many courses. In the high schools examined in this study, the courses ranged from English to biology and government to home economics. For example, in the home economics course, the students worked with new mothers to help with both basic organizational issues as well as to establish family literacy. Participation in service-learning programs by itself, however, is not enough to accomplish its goals of increased civic education and community involvement.

In order for the service experience to be effective in boosting civic involvement among the participants, service-learning programs must have the students involved in leadership positions, directing the project themselves rather than having the teacher administering the project; students must have a voice in the process. Previous work (Morgan, 1995; Melchior, 1998) suggests that this factor is significant in making service-learning a long-lasting, successful experience for the students. This argument is consistent with the views of such educational luminaries as John Dewey (1916), who thought that it was through such experiential learning that students would develop the skills needed to participate in a democracy.

What would a service-learning program look like if it was low in student leadership or voice? A project with a low level of student voice would be one where the teacher selects the specific service project, plans the logistics, and then has the students involved only in the actual performance of the service. For example, a project where the teacher decided that there was a need to clean up a park, made arrangements with the park staff, and then had the students involved only to do the cleanup would be considered a low-voice project. An example of a project with high levels of student involvement would be a project where middle school students in a home economics class began by doing some simple community needs assessment and picking their service project (a homeless shelter) based on their appraisal. Next, the stu-
dents would work with staff and clients to develop the project and then plan the project (with appropriate support) and arranged funding. Then they would begin an ongoing tutoring program (literacy and life skills). It is clear that these two projects are profoundly different. Unfortunately, although student voice is a required element of true service-learning, it is often not included in all courses where teachers claim they are practicing service-learning.

The Study

One common critique of research that examines the political attitudes of young people is that the data are not gathered in an age-appropriate manner—for example, having children complete surveys designed for adults (see Cook, 1985). For this reason, only high school service-learning programs were examined in our study. The participants were almost evenly split between each year of high school (ranging from 23 percent to 26 percent), with a handful of eighth-grade students. The survey was given both before and after the service-learning project, so it could capture the changes in attitudes caused by participation in service-learning.

The study was conducted during the 1997–1998 school year. The Indiana Department of Education surveyed students in classrooms in 10 different schools. These 10 sites had all received funding to support their service-learning projects, and each was required to complete the surveys as a part of the evaluation process of their programs. Schools were selected to participate in the service-learning program (and, as a result, the evaluation) by submitting an application that described their plan to implement a service-learning project. The purpose of the overall program was to introduce new schools to service-learning and to help educators with previous experience improve their projects. Thus, the schools involved were not highly experienced in service-learning, though they all had projects that included at least some basic elements of service-learning.

The survey was given in a pre/post format, with one survey administered prior to participation in service-learning and one administered after the students completed the service. Attrition is always a concern with panel studies, and about 31 percent of the sample was lost over the course of the study. The attrition occurred almost entirely because a few classes did not have the students complete the second survey, though a small number of the students simply were not at school when the follow-up survey was given. The primary reason that a few classes did not complete the post survey was because the service project occurred at the end of the year and in the final rush of the last week of school, the surveys were not finished. In two cases, the service project was not completed, therefore the second survey was never given. Thus, the attrition rate should not necessarily produce any significant amount of bias.
The demographic characteristics of the participants are disproportionately female (75 percent). This skew was caused primarily by three of the largest classes, which consisted almost entirely of women. A few of the service projects were conducted through home economics courses that attract primarily women—although our data do not allow us to determine which students participated in certain classes. However, the racial composition of the sample is more closely aligned with the racial makeup of the school-aged youth. Seventeen percent of the respondents were African American, compared to 16 percent of the school-aged youth nationally. Similarly, about 3 percent were Asian or Pacific Islanders, compared to 5 percent nationally (Indiana Youth Institute, 1999). Given that there were slightly more than 200 respondents, this sample is more representative than we would have expected.

Rather than conducting a series of case studies, we have pooled the responses from all the students in all of the different service-learning classes, regardless of the type of project in which they were involved. Thus, in one class, the focus may be helping students learn about biology by testing the quality of the drinking water after hard rains; in another class, the students may hone their foreign language skills by tutoring younger students involved in an English as a Second Language program. This point should not be underestimated: if service-learning can help students become better citizens through all classes regardless of content, it has the potential to have a much broader impact on public attitudes and civic dispositions.

The Models. Previous research (Melchior, 1998) suggests that there is an enormous range in the quality of these federally funded service-learning programs. We specifically examine whether the service-learning project provides ample opportunities for student ownership, leadership, and voice in the project. Student voice and ownership should make the learning authentic and significant to the student (Dewey, 1938; Beyer, 1996). The student voice variable is based on four different indicators (Conrad and Heden, 1985; Melchior, 1998). The students were asked to rate on a 4-point scale how strongly they agreed or disagreed with the following statements:

- "I had real responsibilities."
- "I had challenging tasks."
- "I helped plan the project."
- "I made important decisions."

The variable was created by summing the responses to the four questions and then dividing by the number of questions. Thus, a one-unit change is equal to moving one unit on the original 4-point scale (e.g., from agree to strongly agree), though the variable has 16 possible values (1, 1.25, 1.5, 1.75, 2, ..., 3.75, 4). The mean voice response was 2.93 (slightly above average), and the modal response was 3.

For each of the six outcomes examined in this paper, the students were asked to respond to the questions using a 5-point Likert scale ranging from
disagree strongly (1) to agree strongly (5). As with the student voice variable, for each index, questions were simply added together and then divided by the number of questions in the index. In other words, each index is coded in its original metric, so that a one-point change is equal to the student’s opinion moving from neutral to agree, for example, or from agree to strongly agree. In all cases, as suggested by Finkel (1995), we examine the attitude of the person after having completed the service-learning experience, while controlling for the person’s previous attitude. Because all dependent variables have more than 10 categories, regression analysis is used.

There are many possible areas where we would expect that service-learning might have an impact. First, insofar as a student’s service-learning experience provides her with an authentic learning experience where she can make a difference through service, we should expect that there would be a positive effect on self-concept. Thus, using a series of questions drawn primarily from the National Election Studies, we examine whether students’ ownership in service-learning makes them more efficacious. Students were asked to rate on the 5-point scale how much they agreed or disagreed with the following statements:

“People like me don’t have any say about what the government does.”
“There is nothing I can do to stop bad things from happening.”
“Government is too complicated for me to understand.”
“I believe that I can personally make a difference in my community.”

We also analyze whether students feel more competent because of their involvement. The competence questions are drawn from Skinner, Wellborn, and Connell (1990) and include the following:

“I try to do the job the right way, even if I don’t like doing it.”
“When good things happen, they happen due to hard work.”
“I find it hard to stick to anything that takes a long time to do.”

Second, working on projects that address real needs should influence the participants’ levels of political engagement. We examined the students’ levels of political attentiveness using a series of four questions that were based on questions in the National Election Studies as well as in the Abt Report (Melchior, 1998) on service-learning, including:

“Local politics aren’t important enough to bother with.”
“It is important to be concerned about what is going on in my community.”
“I follow what is going on in my community most of the time.”
“Outside of class, I discuss community issues or local politics most days.”

In addition, we also studied the respondents’ interest in social action, using two questions:

“Every student should do something about school-wide problems.”
“I am committed to helping my community, both now and in the future.”
Finally, because many of the projects bring together people from different backgrounds, we should expect that service-learning would break down negative attitudes about out-groups. To gauge whether students became more tolerant through their involvement in service-learning, we used questions that were slightly modified from the Abt Report (Melchior, 1998):

“We can learn a lot from elderly people.”
“I like working with elderly people.”
“People with disabilities can hold jobs and contribute to society.”
“I dislike being with people who have disabilities.”

Again, the independent variable that we are most concerned with is the level of leadership or voice that the students had in the project. We also control for a number of factors that might explain student voice or student attitudes about school to ensure that the impact is not spurious: student grade point average (GPA), how much the student likes school, and whether she is prepared for class. A student’s grades are simply her GPA on a 4-point scale. The likes school and prepared for school variables are both on the same 5-point scale as the dependent variables. The questions asked in the survey are “I like school” and “I come to class prepared to do the day’s work.” We also control for the student’s grade in school (eighth through twelfth grade), gender, and race (whether she is white). Since we are examining the students’ attitudes on a series of questions after participation in service-learning, we also control for their attitude on the same issues prior to being involved in service-learning. Both pre and post service attitudes are measured on the same scales. Because we are concerned only with the impact voice has on the project, we will not provide much discussion about the effects of the control variables. To control for the effects of student involvement in a variety of different classes, we use a robust variance estimator (a first-order Taylor-series linearization method also known as Huber or White standard errors) that corrects the standard errors in the presence of heteroskedasticity and allows us to relax the assumption of independence within classes.

Results

In all cases, there is strong support for the positive effect of service-learning with youth leadership in each of the three domains of civic attitudes and orientations when students had voice in the project. The results were substantively large and were statistically significant—in all six cases at the .01 level.

Self-Concept. Working on service-learning projects should make students feel that they can cause change. The opportunity to interact with others while having a positive impact on someone’s life should teach students that by working hard together, people can make a difference. Indeed, students’
levels of efficacy and belief in their own competence both showed positive increases because of the level of voice in service-learning programs (see Table 1). In the case of efficacy, for each one-unit increase in level of student voice in the project, the students’ efficacy increased .34 points on the 5-point Likert scale, and personal competence increased by almost one half of a point. These results can be best summed up by the comment of a 15-year-old high school student. “I learned to work hard, read a lot, and help others” said the student. “My parents said I changed because of this project.” Involvement in strong service-learning programs certainly appears to make students feel more empowered.

**TABLE 1**

*Impact of Service-Learning on Students’ Self-Concept: Efficacy and Personal Competence*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Efficacy (t^2)</th>
<th></th>
<th>Personal Competence (t^2)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coeff.</td>
<td>SE</td>
<td>Coeff.</td>
<td>SE</td>
</tr>
<tr>
<td>Student voice</td>
<td>0.34***</td>
<td>0.09</td>
<td>0.49***</td>
<td>0.08</td>
</tr>
<tr>
<td>Dependent variable at (t^1)</td>
<td>0.29***</td>
<td>0.08</td>
<td>0.17*</td>
<td>0.08</td>
</tr>
<tr>
<td>Gender (female)</td>
<td>0.15</td>
<td>0.14</td>
<td>-0.003</td>
<td>0.07</td>
</tr>
<tr>
<td>Likes school</td>
<td>-0.11*</td>
<td>0.05</td>
<td>-0.03</td>
<td>0.05</td>
</tr>
<tr>
<td>Prepared for school</td>
<td>-0.12*</td>
<td>0.07</td>
<td>0.02</td>
<td>0.05</td>
</tr>
<tr>
<td>GPA</td>
<td>0.12</td>
<td>0.07</td>
<td>0.04</td>
<td>0.06</td>
</tr>
<tr>
<td>School grade</td>
<td>0.08</td>
<td>0.05</td>
<td>-0.05</td>
<td>0.04</td>
</tr>
<tr>
<td>Race (white)</td>
<td>0.12</td>
<td>0.11</td>
<td>0.04</td>
<td>0.09</td>
</tr>
<tr>
<td>Constant</td>
<td>0.86</td>
<td>0.61</td>
<td>1.89***</td>
<td>0.52</td>
</tr>
<tr>
<td>(R^2)</td>
<td>0.22</td>
<td></td>
<td>0.28</td>
<td></td>
</tr>
</tbody>
</table>


NOTE: \(N = 210\). Estimates obtained using robust regression.

***\(p < .001\). **\(p < .01\). *\(p < .05\). ′\(p < .10\).

**Political Engagement.** Convincing results are also found in the students’ levels of political attentiveness and social action as well. Ideally, participation in service-learning programs should stimulate students’ interests in the political process and make them want to become more involved. For example, students who volunteered at a homeless shelter may believe that government programs should be developed to help these people; therefore they become politically active. As Table 2 illustrates, students’ political engagement did increase the more voice they had. Regarding political attentiveness, as the level of student voice in the service project increased one point, the average response improved by .37 points. In other words, as students moved from agreeing to strongly agreeing that they had a voice, their responses increased almost half of the way between agreeing and strongly agreeing on the politi-
cal attentiveness scale. Of greater importance, students understood how involvement in service could create positive change; as their voice increased, they reported wanting to be more politically active (coefficient = 0.39). As a 16-year-old student put it, “I learned that by volunteering just a few hours can make a big difference for other people.”

**TABLE 2**

Impact of Service-Learning on Students’ Political Engagement: Political Attentiveness and Social Action

<table>
<thead>
<tr>
<th>Variable</th>
<th>Political Attentiveness($t^2$)</th>
<th>Social Action($t^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coeff.</td>
<td>SE</td>
</tr>
<tr>
<td>Student voice</td>
<td>0.37***</td>
<td>0.07</td>
</tr>
<tr>
<td>Dependent variable at $t^1$</td>
<td>0.37***</td>
<td>0.07</td>
</tr>
<tr>
<td>Gender (female)</td>
<td>0.05</td>
<td>0.10</td>
</tr>
<tr>
<td>Likes school</td>
<td>-0.03</td>
<td>0.04</td>
</tr>
<tr>
<td>Prepared for school</td>
<td>-0.12*</td>
<td>0.06</td>
</tr>
<tr>
<td>GPA</td>
<td>0.12*</td>
<td>0.06</td>
</tr>
<tr>
<td>School grade</td>
<td>0.01</td>
<td>0.04</td>
</tr>
<tr>
<td>Race (white)</td>
<td>0.17†</td>
<td>0.10</td>
</tr>
<tr>
<td>Constant</td>
<td>1.03*</td>
<td>0.46</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.35</td>
<td></td>
</tr>
</tbody>
</table>

**SOURCE:** 1998 High School Service-Learning Survey.

**NOTE:** $N = 210$. Estimates obtained using robust regression.

***$p < .001$. **$p < .01$. *$p < .05$. †$p < .10$. 

**Attitudes toward Out-Groups.** Because many service-learning projects allow students to interact with people who are different, we expect this involvement to break down stereotypes and produce more positive feelings toward these groups. Students who have real responsibilities and have a voice in the service-learning project in which they participate have more of an opportunity for authentic interactions with people on a project about which they care. Table 3 indicates that as student voice increased, respondents were more likely to agree that they can learn from and work with the elderly as well as believe those with disabilities can hold jobs (coefficients equal to .17 and .25, respectively). “This project helped broaden my understanding of people and places,” reported one student. He was not alone. Service-learning programs in which students have a voice teach students to respect those who are different and give them the opportunity to learn about others as well.
TABLE 3

Impact of Service-Learning on Students’ Attitudes toward Out-Groups: The Elderly and the Disabled

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coeff.</th>
<th>SE</th>
<th>Coeff.</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student voice</td>
<td>0.17**</td>
<td>0.06</td>
<td>0.25**</td>
<td>0.10</td>
</tr>
<tr>
<td>Dependent variable at t1</td>
<td>0.63***</td>
<td>0.05</td>
<td>0.31***</td>
<td>0.10</td>
</tr>
<tr>
<td>Gender (female)</td>
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<td>0.08</td>
<td>0.25</td>
<td>0.16</td>
</tr>
<tr>
<td>Likes school</td>
<td>0.04</td>
<td>0.04</td>
<td>-0.04</td>
<td>0.06</td>
</tr>
<tr>
<td>Prepared for school</td>
<td>-0.01</td>
<td>0.04</td>
<td>0.09</td>
<td>0.07</td>
</tr>
<tr>
<td>GPA</td>
<td>-0.05</td>
<td>0.05</td>
<td>0.31***</td>
<td>0.08</td>
</tr>
<tr>
<td>School grade</td>
<td>-0.04</td>
<td>0.03</td>
<td>0.16</td>
<td>0.05</td>
</tr>
<tr>
<td>Race (white)</td>
<td>-0.07</td>
<td>0.07</td>
<td>0.14</td>
<td>0.11</td>
</tr>
<tr>
<td>Constant</td>
<td>1.48***</td>
<td>0.41</td>
<td>1.95</td>
<td>0.71</td>
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<tr>
<td>$R^2$</td>
<td>0.63</td>
<td></td>
<td>0.28</td>
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</tr>
</tbody>
</table>


***p < .001. **p < .01. *p < .05. t p < .10.

Discussion

The analysis above uses self-reported voice as the key independent variable. One might not be convinced by our conclusions simply because students who feel as though they had more of a voice in their service-learning project may report greater changes in the dependent variables. Although we do control for the effects of student academic performance and how much students like school, we feel this is an issue that deserves further attention. To control for this, we examined the changes in students’ attitudes depending on the average level of student voice in each class. In this case, we are interested in the level of student voice that the teacher allows in the service project (average for the class), not the different level that each student reports. In all but one case (efficacy), the results hold. Even when examining the class average voice instead of the self-reported voice, service-learning projects with student leadership make students better citizens.

An alternative argument might be presented that there were other characteristics of the program that would explain the results we obtained. One recurring factor in the service-learning literature is the amount of reflection the students are engaged in regarding the project or the total hours that the students spend on their service-learning project (Melchior, 1998; Wade, 1997). However, when these additional variables were included, the results did not change appreciably, though the number of respondents in the analysis was reduced somewhat.
One note should be made about the control variables as well. Few of the control variables were significant, and none were consistently significant in a majority of the models. Although these results are not a central focus of this paper, we are interested in seeing if service-learning had more of an impact on certain students than on others. One area of concern would be that the service-learning approach does not help everyone equally; perhaps it increases the gaps in citizenship that may exist already based on race, gender, academic performance, or engagement in school. In an analysis not presented here, we included interaction terms between each of these variables and the level of student voice. In none of the models were any of the interaction variables significant. These findings indicate that having a voice in service-learning affects different kinds of people in similar ways; one group does not benefit from the service experience more than another.

**Conclusion**

When students have real responsibilities, challenging tasks, helped to plan the project, and made important decisions, involvement in service-learning projects had significant and substantive impacts on students’ increases in self-concept, political engagement, and attitudes toward out-groups. As mentioned earlier, the goals of the different service-learning projects were quite diverse. For example, not every project involved interacting with disabled people, therefore when we look at the impact on all participants in the service-learning projects we studied, regardless of whether they worked specifically with the disabled in their project, we should expect at best a modest effect on attitudes toward the disabled. The fact that such a large and significant increase in positive attitudes about the disabled occurred suggests that these service-learning projects have an even greater impact on tolerance in general.² From a purely policy-oriented perspective, the impact of the service projects on the participants, the direct support of the service projects, and the modest cost make service-learning a very effective approach (Melchior, 1998).

One especially interesting result emerged from our data. Although service-learning has many positive effects on children, it is imperative that service-learning projects involve activities where the students are given a real level of control over the project. If the students do not have a voice in the activities, they apparently do not connect with them. It could easily be argued that programs that do not give students a voice are not really service-learning, since this variable is consistently identified as one of the key elements of service-learning (Wade, 1997). Conversations with students

²The data gathered on the individual programs complied with the categorization schemes used by the Corporation for National Service, and the categories were very broad. As a result, we were not able to test fully whether programs that are focused on developing tolerance were more effective in achieving tolerance than other projects.
suggest that they see programs in which they do not have voice and ownership as a waste of time—they actually resent having to be involved. This resentment may trickle down and influence beliefs on many related attitudes. Service-learning is a great tool to develop better citizens, but it is imperative that it is done correctly.

Although our results are quite positive, additional research is needed. Future work should focus more on the causal mechanisms whereby student service-learning affects attitudes in youth. For example, why do attitudes toward out-groups change as a result of involvement in service-learning? Conversations with service-learning participants suggest that it is because they have authentic experiences that can break down barriers as opposed to artificial experiences that are often brief in duration and lack intensity and personal contact. Although much work is left to be done, these initial findings are very strong; by having a voice in service-learning projects, students are becoming more educated, more tolerant, and more active. Service-learning can indeed build better citizens.

REFERENCES


