# Longitudinal Gains in Civic Development through School-Based Required Service

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*Despite recent figures indicating that 26% of public high schools in the United States require student involvement in community service or service learning, there is little empirical evidence to support such policies. In the present study, successive cohorts of high school students, one without (n = 174) and two with a community service requirement (n = 312), were compared longitudinally on measures of civic attitudes and behaviors. Each cohort was divided according to individual students' inclinations to serve voluntarily. Students already inclined to serve scored high on all measures throughout and showed no advantage after meeting the requirement. However, students who were less inclined to serve showed marked gains on three of four civic measures after completing their requirement. Whereas they scored as low as their less-inclined counterparts who had no requirement during grade 11, they differed from their counterparts after serving the mandated 40 hours during grade 12. This quasi-natural experiment provides support for the argument that a well-designed service program can have a clear benefit in civic development for nonself-selected youth.*

**KEY WORDS:** required service, civic development, civic education, youth development

In a previous paper, we reported data showing that high school students who were required to do community service maintained enthusiasm for, instead of becoming less favorable or opposed to, service (Metz & Youniss, 2003). After completing a school-mandated 40 hours of service, over 80% of the students went on to do voluntary service for which they received no school credit. These findings are relevant to theories regarding the role of service in the development of civic responsibility (e.g., Andersen, 1998; Youniss & Yates, 1997) and pertinent

to the ongoing policy debate about the efficacy of school-mandated versus voluntary service (e.g., Billig, 2000). On the face of these findings, it appears that service, even when required, may heighten rather than deter volunteering to help others and to solve civic problems.

In the present paper, the project from which these data were drawn is revisited in order to address further theoretical and policy questions regarding required community service. Does the experience of doing mandatory service promote civic development as defined by attitudes and behavior, in high school students? And, does mandatory service add civic value to individual students beyond that which they bring already to the service experience? The first question is an old chestnut that was raised early in the twentieth century by James (1909/1971), Dewey (1938), and Dunn (1929), who viewed service to the community as a means for instilling social responsibility and promoting civic cohesion among diverse persons within our democratic society. The second question is methodological and pertains to the issue of self-selection insofar as researchers have been pressed to show that service itself, and not the characteristics which individuals bring to service, is responsible for promoting civic development.

The James-Dewey-Dunn thesis was never put to serious empirical test for practical reasons. For one thing, World War I, the Great Depression, and World War II intervened to transform the meaning of service in the context of national unemployment and military involvement (Moskos, 1988). Subsequent thinking about school-based community service paled again after 1957 when the Soviet Union launched Sputnik and schools in the United States were pressed to tighten curricula by redoubling efforts in math and science. In this transformation, goals regarding education for citizenship were shunted aside as vague and lacking in behavioral specificity, compared with preparing the nation for scientific and technical competition demanded by the Cold War.

Community service took on a controversial caste in the next two decades when it became associated with activism for social change and protest. Attempting to make schooling more relevant to constructing a better society, many youth participated in movements to win civil rights for blacks, to protest the nation's military involvement in Southeast Asia, to accord equality to women, and to conserve the environment (Stewart, Settles, & Winter, 1998; Tarrow, 1998). This burst of activism on the part of youth brought forth praise but also provoked concern, the former in the hope that the young were interested in matters of justice more than in self-gain (e.g., Erikson, 1968; Flacks, 1988), and the latter because so much of the activism threatened American traditions and the governmental and educational institutions which supported them (e.g., Adelson, 1986; Aldridge, 1970).

Then came a noticeable lull in activism which continued through the early 1980s, provoking commentators to worry that youth had given up their historical role as seekers after social justice (Cohen, 1994; Flacks, 1988). This concern was heightened by institutional endorsement of an ethos of self-interest in the context of free-market competition during the Reagan presidency. Some observers of

youth began to wonder what had happened to the spirit of activism for social causes and whether the promised material rewards of renewed capitalism had suppressed the youthful spirit of reform (Flacks, 1988). This may explain the return of interest in youth service and the call for schools to renew their historical role of citizenship training (Conrad & Hedin, 1981; Schachter, 1998). That charge took on further weight during the decade as the United States began to feel the consequences of a steady flow of immigrants, on the one hand, and pressures from the collapse of the socialist bloc, on the other hand. Immigration had brought a large number of foreign-born students without a tradition of democracy into the schools (Fussell & Greene, 2002), whereas the end of the Cold War had created the need for a new order on which citizenship would be based (Youniss et al., 2002).

## The Evidence on School-Based Required Service

For two decades, a number of scholars, educators, and policy makers have called for schools to modernize the civics curriculum (Niemi & Junn, 1998; Torney-Purta, 1995) with some of these advocates proposing to strengthen this curriculum by requiring students to participate actively in society via service (e.g., Barber, 1994; Boyte, 1991; Kahne & Westheimer, 1997). The logic for this is clear whether one refers to the heterogeneity of the student population, relatively low scores on measures of civic knowledge, flagging rates of voting in the youth cohort, or the potential efficacy of service for instilling a sense of community membership (The Civic Mission of Schools, 2003). Despite the reasonableness of this proposal, and the fact that 24% of public high schools in the U.S. require community service or service learning as a prerequisite for graduation (Scales & Rochlkepartain, 2004), empirical evidence that school-based service enhances civic interest or engagement is inconsistent, on the one hand, and confounded with self-selection, on the other hand.

Already in the early 1980s when Conrad and Hedin were making a case for service, Newmann and Rutter (1983) reported mixed findings in their evaluation of data from several schools or service programs. They found inconsistency in pre- to post-service gain across a variety of measures of academic, social, and civic development. Roughly two decades later, Melchior (1998) evaluated students from several service programs and also found little consistency in pre- to post-service gain on similar measures. These two reports are important if only because they were undertaken carefully with fair procedures that would have allowed positive gains to appear if they were substantial. Moreover, the gist of these two reports agrees with reviews of the literature by Andersen (1998), Yates and Youniss (1996), Walker, (2002), and others which point to a wide range of variation in gains from study to study.

Nevertheless, it may still be that school-based service can be a valuable tool for promoting civic development. This is possible because developmental gains are dependent on several factors that are not controlled when evaluations are done on a potpourri of schools or service programs. The term service stands for a variety

of activities that are not simply commensurable. There is an apple-and-oranges problem in that for some students, service consists in the Saturday car wash for charity, for others it involves tutoring classmates, and for still others it entails weekly stints at soup kitchens or environmental conservation projects. It is not hard to see that an outcome measure such as likelihood of voting could hardly be uniform when appraised against such varied activities. A further complication to the term is that some service is done within well-framed programs that are managed by teacher-coordinators and are designed to provoke reflection on political processes, whereas other service is done sporadically and independently according to individual students' desires. A purposefully designed program might send students to sites which are likely to promote specific perspectives on social issues, say, bearing on environmental conservation. Such a program seems more likely to generate reflection on political processes than is free-form service in which an individual does charitable work without an explicit urging for reflection on possible causes of poverty (Eyler & Giles, 1999).

A third possible source of inconsistency is due to the context in which service is done. Some service is done at sites that are managed by value-bearing organizations such as the Salvation Army or Habitat for Humanity. These organizations provide service as part of their mission which they espouse explicitly to volunteers as well as recipients of service (Allahyari, 2000). Raskoff and Sundeen (2000) have called these organizations and their sites *ports of entry* in that youth who volunteer at them are given opportunities to experience what it is like to provide service in the name of a specific value system. This may be contrasted with service such as visiting a residence for the elderly with a school chorus that offers entertainment ostensibly to cheer up older adults whose lives might be narrow and isolated. In the latter case, the cause is worthy but somewhat distant from concerted political engagement.

These are but a few of the factors that plague large-scale evaluations of schools or programs. It should not be surprising, therefore, that such reviews have reported mixed and inconsistent findings regarding the impact of school-generated service on students. This insight takes on even more relevance when it is understood that the kind of service and variations in sponsorship in fact make for differences in outcomes on students' volunteer service that is not done for school credit (e.g., Metz, McLellan, & Youniss, 2003). It follows, then, that the case for or against mandatory service as a means for promoting civic development is still an open question.

Even if the above factors were taken into account, however, a further problem has persisted with regard to service effects. Because only a few studies of service have employed random assignment techniques (e.g., Allen & Philliber, 2001; Philliber, Kaye, & Herrling, 2001), critics argue that outcomes may have been predetermined by individual characteristics rather than service as such. Youth who come into service already prepared to gain something from it, differ from their counterparts who are averse to service. These youth may differ in altruism, for

instance (Stukas, Clary, & Snyder, 1999), so consequently, one can not legitimately attribute gains made by the former to service. Technically, school-mandated service should nullify this problem as it puts all students on equal footing with regard to the factual experience of service. Unfortunately, this presumed equalizing of opportunity is still confounded with other factors as will be shown in the present study.

## The Present Study

We used the methodological framework of our previous study (Metz & Youniss, 2003) to address several of the issues laid out in the foregoing review of the literature with major focus on the question of whether school-mandated service promotes civic development beyond that which students already differentially bring to the service experience. To provide a clear answer to this question we made use of a quasi-natural experiment, clear differential proclivities for service among students, and a longitudinal research design. The natural experiment occurred because a public high school which was about to introduce a 40-hour service requirement allowed us to study one class (cohort) of students who had no requirement and two classes that succeeded them who had to meet the requirement. Proclivities for service were defined behaviorally as some students within all these classes were deeply involved in voluntary service whereas others of their classmates did either sporadic or no service. The longitudinal design occurred as we tracked students in these classes on a variety of measures that indexed their intended civic engagement and current attention and understanding of politics. By plotting changes on these measures over the final two grades of high school, we were able to pinpoint whether school-mandated service contributed to civic development beyond that which students brought to the service experience.

Four basic groups of students were of primary focus. Two of the groups were drawn from the graduating class of 2000 which had proceeded through this high school before the required service policy was enacted. Some of these students reported that they had regularly done voluntary service, whereas others had not. Behaviorally, then, these students differentiated themselves into one group that was *more inclined* to perform service and another group that was *less inclined* to perform service.

The two other groups were drawn from the graduating classes of 2001 and 2002, both of which had proceeded through this same high school, but having to fulfill a mandated 40 hours of community service. One of these groups showed itself to be more inclined to service in two ways. First these students fulfilled the 40-hour requirement quickly, by their sophomore or junior year, and after they did this, they went on to do voluntary service which was not reported to the school and for which they received no school credit. This group seems equivalent to the more-inclined-to-serve group in the class 2000, the only difference being that the

latter did not have to fulfill the 40-hour service requirement. As will be shown, when we compared these students on a host of background factors, they proved to be quite similar to one another but different from their classmates who showed no spontaneous proclivity for service (see Metz & Youniss, 2003).

For purposes of the present study, further comparisons of these 2000 and 2001/2002 more-inclined-to-serve groups allow us to address the self-selection issue from a fresh angle. Given that both groups demonstrate readiness to do service, we can ask whether students in the 2001 and 2002 classes gained on our measures by having to do 40 hours of service. Did having to meet the requirement add civic value for these students who were already inclined to do service in the first place?

The other group of major interest was comprised of the 2001 and 2002 students who showed less inclination for service. This group did not do voluntary service and waited until their senior year to fulfill the 40-hour service requirement. This group was then compared with the less-inclined-to-serve students in the class of 2000. Comparison of these two groups allows a fresh question to be asked regarding the efficacy of required service: do students who are not inclined toward service and might otherwise not do it show positive gains after they have fulfilled their service requirement? This question assumes that the 2001/2002 students would probably not have done service without the requirement. But because they were forced to do service by the end of their senior year in order to graduate, we can ask whether that service had an impact on them that was not evident in their 2000 counterparts who were neither required to do service nor regularly did voluntary service.

## Method

Data come from a project that was designed to assess the effectiveness of a service requirement in a public high school located in a middle- to upper-middle class community outside Boston, MA. In the fall of 1997, the school district administrators established a 40-hour service requirement whose main purpose was to prepare students for citizenship within the community. As noted, the focus of the present study was to compare the classes of 2001 and 2002, which were the first classes with the requirement, to the class of 2000, the last class not under the requirement. For purposes of comparison, students in the required classes of 2001 and 2002 were combined into one cohort after we found few significant differences between them on pertinent independent and outcome measures. As well, the classes of 2000 and 2001/2002 were similar across almost all study measures, thereby justifying their comparison.

### School Characteristics

The public high school in this study placed a strong focus on academic performance, as indicated by a well-rounded, college preparatory curriculum. The

school also provided a range of extracurricular activities offering students the opportunity to become involved in interest-oriented clubs, artistic activities, and sports programs. The school's mission statement specified goals of enhancing students' self-concept and sense of citizenship through experiences during the high school years. The student handbook added: "We believe in the pursuit of excellence. We seek to develop in each individual the self-confidence, skills, and knowledge characteristic of informed citizens who appreciate cultural diversity and contribute creatively and positively to our democratic society. We believe that schools are an integral part of the community and that education is a shared responsibility."[1] Administrators estimated that about 90% of the graduates of this school went on to enroll in college. In keeping with this figure, according to the 2000 U.S. census, 63% of the town's residents over age 25 had a Bachelor's or Graduate degree. Median household income was about $80,000, and per capita income was about $42,000.

## Sample Characteristics

Of 645 students, 486 (75%) were included in this study because these students had all of the necessary data at three points in time; the beginning of 11th grade, the end of 11th grade, and the end of 12th grade, for a longitudinal design. Seventy-eight percent of the students in the sample were white, and the remaining students were distributed almost equally among Asian, African American, and Latino descent. In terms of religious affiliation, about one-half of the students said that they were Catholic, about one-quarter were Protestant, 10% had no affiliation, and the remainder were distributed among other faiths.

## Independent Study Measures Background Characteristics

A number of variables were included as controls for background and demographic factors that have been shown to relate to whether adolescents are involved in service (Smith, 1999). These included: gender, mother's education (college degree or not), parents' volunteerism during grades 11 or 12 (yes or no), final cumulative grade point average (GPA) out of 4.0, and religiousness ("How important is religion in your life?" on a 4-point scale from 1 = "not at all" to 4 = "very important"). The mean composite score of religiousness during grades 11 and 12 was utilized for analyses.

Because personality characteristics may have influenced involvement in service or other activities (Hart, Atkins, & Donnelly, in press), measures adopted from Penner, Fritzsche, Craigner, and Freifeld's (1995) research on pro-social personality were employed to control for Helping and Empathy dispositions. For the Helping measure, students indicated how often they had done activities relating to helping (e.g., held the elevator for someone or helped another student with

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[1] This quote was paraphrased to assure that the high school in the study remained anonymous.

homework, etc.). Students responded on a 5-point scale (from 1 = "never" to 5 = "very often"), and reliability for the seven items yielded a Cronbach alpha of .80. For the Empathy measure, students agreed or disagreed on a statement about how they feel in situations involving others' welfare (e.g., "I often have heartfelt concern for others," or "others' misfortunes disturb me," etc.). Students responded on a 5-point scale (from 1 = "totally disagree" to 5 = "agree completely"), and reliability for the four items yielded a Cronbach alpha of .84. Overall, students in the class of 2000 had higher scores on the helping measure than students in the classes of 2001/2002, $t = (486) = 3.19$, $p < .05$. There were no differences between classes on the empathy measure.

Prior work has shown that extracurricular involvement in school activities was associated with voluntary service (e.g., Smith, 1999; Youniss, McLellan, Su, & Yates, 1999). In the present study, we assessed school involvement by asking about students' participation in school government, school sports, and school clubs or organizations. For each, responses were measured on a 5-point scale (from 1 = "never" to 5 = "daily"). The mean composite score for grades 11 and 12 was utilized for analyses. There were no differences between the classes of 2000 and 2001/2002 in extracurricular involvement.

## Program Characteristics and Service Participation

The service requirement was introduced in 1997 through the initiative of school administrators with the endorsement of the School Board. The goal of the 40-hour requirement was to help students gain a sense of participatory citizenship through service within the local community. Administrators provided opportunities for service through several sponsored programs and had a service club in which students participated in projects aimed at helping others. To advertise service opportunities, the school used bulletin boards and a web site. Most importantly, a full-time staff member was hired to act as the service coordinator who was responsible to make contacts with community organizations, guide a service-learning class and the service club, assist students who were having difficulty meeting the requirement, and keep track of student records regarding service. Lastly, organizations in the community were cooperative in making slots available for students to serve.

Students were informed of the requirement by reading the school handbook and by attending a forum prior to the school year. To complete the 40-hour requirement, students could perform a single or several activities in a concentrated or extended period of time. Several types of activities qualified for credit, the major criterion being that at least one unrelated person was helped by the service. While the service coordinator provided access to service sites in the community, students were free to choose their own placements.

We found that typical types of service were tutoring, coaching, assisting at shelters or nursing homes, organizing food or clothing drives, and assisting value-

centered service organizations or churches. Service was done mainly through the auspice of the school, community-based organizations, or churches. To gain credit for required service, students needed to provide a written reflection that described the nature of the service and their thoughts on how the service benefited the recipients and themselves. Students also had to provide an adult's or supervisor's signature as proof that the service had been performed.

We collected detailed self-reported records of students' service involvement from grades 10, 11, and 12. We asked students to describe the number of service hours that counted toward their requirement, what they did, and under whose sponsorship they had done the service. In addition, students were asked the same questions about any voluntary service they had done during the same period. This category applied to any service students might have done apart from meeting the 40-hour requirement and which was not reported to the school. We asked about voluntary service because in previous work we observed that many students did service in addition to their requirement and for which they did not seek school credit (McLellan & Youniss, 2003). In the present study, voluntary service was sometimes done in addition to required service and other times in lieu of required service. Rates of voluntary (and required) service participation from grades 10, 11, and 12, for the class of 2000 and the required classes of 2001/2002 are reported in Table 1.

## *Service Groups*

Service groups were created in each class to separate students on the basis of their inclinations to perform or not perform service. The purpose of the groups was to control for the effect of self-selection on the assessment of outcome measures. The four primary groups and an additional fifth group were self-defined according to patterns of required and voluntary service which students reported. Groups were validated by differences in students' background and baseline civic engagement scores.

**Table 1.** Rates of Service Participation Over Time by Cohort

|  | Gr. 10 | Gr. 11 | Gr. 12 |
|---|---|---|---|
| % of students who did voluntary community service |  |  |  |
| Class of 2000 (n = 174) | 56% | 69% | 67% |
| Classes of 2001/02 (n = 312) | 37% | 50% | 67% |
| % of students who did required community service |  |  |  |
| Classes of 2001/02 | 64% | 56% | 39% |
| % of students who did either service (voluntary or required) |  |  |  |
| Classes of 2001/02 | 76% | 78% | 88% |

Since students in the class of 2000 had no school requirement to fulfill, all of their service was voluntary. On the basis of these students' reports of volunteerism during grades 10–12, two groups were defined. The *inclined-to-serve* group of students (n = 114; 66% of the class of 2000) reported volunteering in either two or all three of the high school years in study. The *less-inclined-to-serve* group of students (n = 58; 34% of the class of 2000) reported volunteering only during one grade or not at all during the last three high school years. These groups were found to differ from one another on several of the background variables, as reported in the Results and shown in Table 2.

Students in the classes of 2001/2002 were also divided into more- and less-inclined-to-serve groups. Two criteria were used to make the division. The *more-inclined group* of students (n = 164; 53% of the classes of 2001/2002) completed their 40-hour service by the end of grade 10 or 11, and more than 90% of these students volunteered during grade 12. *The less-inclined* group of students (n = 71; 23% of the classes of 2001/02) waited until grade 12 to complete the requirement and had not volunteered prior to completing the 40 hours. As with the 2000 students, these groups were found to differ on a number of characteristics as is reported in the Results and Table 2.

Because of the dual criteria applicable in the 2001/2002 students, a fifth group of students (n = 77; 25% of the classes of 2001/2002) was defined. These students reported having done volunteer service during grades 10 or 11, but waited until

Table 2. Percentages and Means of the Study Variables by Cohort and Service Groups

|  | 2000 | | 2001/02 | | |
|---|---|---|---|---|---|
|  | More-Inclined n = 114 | Less-Inclined n = 58 | More-Inclined n = 164 | Volunteered First n = 77 | Less-Inclined n = 71 |
| % male | 31% | 47%[a] | 37% | 42% | 62%[a1] |
| % of parents vol. | 61%[a] | 32% | 62%[a] | 68%[a] | 49%[1] |
| % mothers w/degree | 71% | 64% | 76% | 80% | 66% |
| Helping | 3.35[a] | 3.10[1] | 3.11[a] | 3.10[a] | 2.86 |
| Empathy | 3.86[a] | 3.53 | 3.69[a] | 3.83[a] | 3.48 |
| Religiousness | 2.68[a] | 2.34 | 2.66[a] | 2.73[a] | 2.40 |
| GPA | 3.19[a] | 2.92 | 3.24[a] | 3.20[a] | 2.79 |
| School Sports | 3.45[a] | 3.02 | 3.47[a] | 3.29 | 3.07 |
| School Clubs | 3.00[a] | 2.28 | 2.91[a] | 3.22[a] | 2.54 |
| School Govt. | 1.57 | 1.37 | 1.69 | 1.79 | 1.59 |

*Note*[a]. Superscript letters represent significant differences in the within-cohort group comparisons (2000: More-Inclined vs. Less-inclined; 2001/02: More-Inclined and Volunteer 1st vs. Less-inclined).

*Note*[1]. Superscript numbers represent significant differences in the between-cohort group comparisons (More-Inclined 2000 vs. More-Inclined 2001/02 vs. Volunteer 1st 2001/02; Less-inclined 2000 vs. Less-inclined 2001/02).

grade 12 to complete the school mandated 40 hours of required service. These students were inclined to volunteer but did not rush to fulfill their required service. It is not clear whether these students put off completion of the requirement because they were too busy with other activities to complete the verification form after performing service, or held off completing the requirement because of principle, or both. Henceforth, this group is called *volunteer-first*. According to the data in Table 2, the volunteer-first students were similar to their more-inclined classmates and different from their less-inclined classmates on several characteristics.[2]

*Measures of Civic Engagement*

The civic-political engagement measures in the present study represent fundamental elements of active and participatory citizenship (Schudson, 1998). Current behaviors include interest in and understanding of politics, and attitudes include intended participation in political life through voting and intended conventional and unconventional involvement in civic activities. Four measures were used, three were scales, and one was a single-item measure. Despite the fact that three of the study measures assessed students' future intentions, research has demonstrated that intentions to engage in a future behavior are predictive of subsequent behavior (Azjen, 2001). Table 3 lists means and standard deviations for the four outcome measures by cohort and service groups over time.

*Future voting.* Several studies of high school students have asked about the likelihood that they will vote when they reach 18; e.g., Monitoring the Future (Bachman, Johnston, & O'Malley, 1993). At the beginning and end of grade 11 and the end of grade 12, students were asked to indicate the likelihood that they would vote after graduating from high school. Students responded on a 5-point scale from 1 = "no chance" to 5 = "definitely." While highly correlated with several of the other civic engagement items, voting was included as a single item measure because of its unidimensional nature.

*Future conventional civic involvement.* At the beginning and end of grade 11 and the end of grade 12, students were asked to indicate the likelihood they would "volunteer" or "join a civic organization" after graduating high school. Students responded to these items on a 5-point scale (from 1 = "no chance" to 5 = "definitely"). Students' ratings on the two items were combined and averaged to yield a score for engagement for that time. Correlation analyses revealed that the two items were significantly related at the start of grade 11 ($r = .37$, $p < .001$), the end of grade 11, ($r = .36$, $p < .001$), and the end of grade 12 ($r = .34$, $p < .001$). The future conventional civic involvement measure sought to assess the likelihood that

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[2] These groups were the same as reported by Metz and Youniss (2003). For a more complete description of the service participation please refer to this article.

**Table 3.** Mean Scores and SDs for the Civic Engagement Measures by
Cohort and Service Groups Over Time

|  |  | Gr. 11 Start | Gr. 11 End | Gr. 12 End | Change |
|---|---|---|---|---|---|
| **Intended Future Voting** |  |  |  |  |  |
| 2000 | More-inclined | 4.73 (.70) | 4.66 (.87) | 4.76 (.70) | +.03 |
|  | Less-inclined | 4.27 (.92) | 4.25 (1.04) | 4.06 (1.19) | −.14 |
| 2001/02 | More-inclined | 4.58 (.84) | 4.61 (.85) | 4.71 (.69) | +.13 |
|  | Volunteered-1st | 4.60 (.81) | 4.65 (.65) | 4.82 (.42) | +.22 |
|  | Less-Inclined | 4.29 (1.18) | 4.36 (1.03) | 4.61 (.69) | +.32 |
| **Intended Future Conventional Civic Involvement** |  |  |  |  |  |
| 2000 | More-inclined | 3.24 (.79) | 3.52 (.72) | 3.56 (.65) | +.22 |
|  | Less-inclined | 2.75 (.85) | 2.86 (.88) | 2.70 (.88) | −.05 |
| 2001/02 | More-inclined | 3.28 (1.19) | 3.35 (.82) | 3.48 (.77) | +.15 |
|  | Volunteered-1st | 3.15 (.97) | 3.33 (.84) | 3.30 (.80) | +.15 |
|  | Less-Inclined | 2.81 (.98) | 2.73 (.76) | 3.05 (.84) | +.23 |
| **Intended Future Unconventional Civic Involvement** |  |  |  |  |  |
| 2000 | More-inclined | 2.61 (.71) | 2.90 (.74) | 2.97 (.75) | +.36 |
|  | Less-inclined | 2.38 (.62) | 2.54 (.75) | 2.66 (.71) | +.28 |
| 2001/02 | More-inclined | 2.87 (.80) | 3.01 (.74) | 3.07 (.74) | +.24 |
|  | Volunteered-1st | 2.98 (.97) | 3.32 (.80) | 3.26 (.85) | +.28 |
|  | Less-Inclined | 2.75 (.89) | 2.90 (.78) | 2.84 (.74) | +.09 |
| **Interest in and Understanding of Politics** |  |  |  |  |  |
| 2000 | More-inclined |  | 3.60 (.67) | 3.66 (.75) | +.06 |
|  | Less-inclined |  | 3.31 (.61) | 3.17 (.66) | −.14 |
| 2001/02 | More-inclined |  | 3.56 (.72) | 3.64 (.64) | +.08 |
|  | Volunteered-1st |  | 3.77 (.67) | 3.89 (.66) | +.12 |
|  | Less-Inclined |  | 3.38 (.85) | 3.53 (.68) | +.15 |

students would participate in normal forms of activities within community organ-
izations (Verba, Schlozman, & Brady, 1995).

*Future unconventional civic involvement.* At the beginning and end of grade
11 and the end of grade 12, students were asked the likelihood that they would
"boycott a product," "demonstrate for a cause," or "work on a political campaign"
after graduating high school. Students responded to each item on a 5-point scale
(from 1 = "not very likely" to 5 = "definitely will"). Cronbach alphas were .69 at
the beginning of grade 11, .65 at the end of grade 11, and .70 at the end of grade
12. The unconventional items aimed to assess students' intentions for involvement
in more activist forms of civic participation.

*Interest and understanding.* At the end of grades 11 and 12, students were
asked how often they "discussed politics with parents and friends" or "read about
national politics in the newspaper or magazines or watch the news on TV."
Students responded to these items on a 5-point scale from 1 = "never" to 5 =

"daily." At the same time, students were also asked if "politics is too confusing to understand" and whether "teens should try to understand politics even though they are too young to vote." Students responded on a 5-point scale from 1 = "don't agree" to 5 = "agree very much." The "politics is too confusing to understand" was reverse coded, and the reliability for the scale yielded Cronbach alphas of .75 at the end of grade 11 and .71 at the end of grade 12. These items are common indices in the civic engagement literature (Niemi & Chapman, 1999).

## Results

### *Group Differences*

Descriptive percentages and mean scores for the background characteristics for the five groups of students are reported in Table 2. The chi-square statistic ($X^2$) was used to test group differences on the categorical variables, and the independent t-tests were used to assess differences in the scaleable variables. The more-inclined-to-serve groups were first compared to the less-inclined-to-serve groups in each cohort. Next, the more-inclined groups from each cohort were compared and then the less-inclined groups were compared. Clear patterns of similarities and differences resulted from these comparisons; the more-inclined-to-serve groups of 2000 and 2001/2002 were alike and differed from their less-inclined classmates. More-inclined-to-serve students were significantly more likely to be female, have mothers with a college degree, have parents who volunteered, have higher GPAs, and considered religion to be more important in their lives. The more-inclined students also scored higher on the helping and empathy measures. In addition, the more-inclined students were significantly more involved in school clubs and sports.

Further analyses assessed the fifth group of students who were more-inclined-to-serve but put off meeting the requirement until their senior year. Analyses compared these students to the more- and less-inclined groups in the required classes. It can be seen in Table 2 that this group of students was consistently similar to the more-inclined students and different from their less-inclined-to-serve classmates.

### *Future Voting*

Mean scores for this measure are plotted in Figure 1 for the five service groups at the start and end of grade 11 and the end of grade 12. First, the more-inclined-to-serve students in the 2000 and 2001/2002 cohorts scored near ceiling at all three times. It follows that on this measure, having the service requirement added no advantage for students who were already prone to do service as the 2000 and 2001/2002 cohorts were consistently alike. Second, students in the volunteer-first group were not different from students in the more-inclined groups. Again,
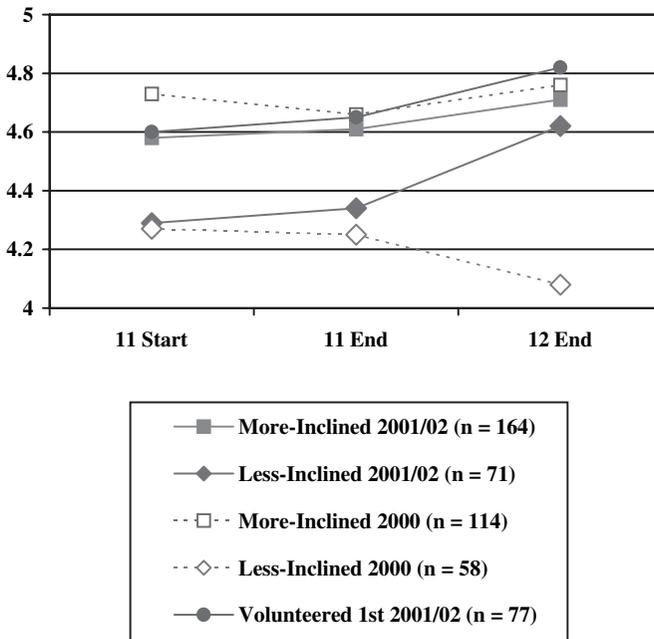
**Figure 1.** Mean Scores out of 5 on Intended Future Voting by Cohorts and Service
Groups Over time.

having to meet the service requirement seems to have provided no advantage over
going through school without a requirement for these students. Third, the more-
inclined students scored much higher than their less-inclined-to-serve classmates
at all three times. Fourth, the less-inclined students of 2000 and 2001/2002 were
alike during their junior year, before the latter took up their service requirement.
They differed, however, at the end of the senior year, after the 2001/2002 students
completed their service requirement. The less-inclined students with the require-
ment showed a sharp increase from the end of their junior year to the end of their
senior year, whereas the 2000 students remained low on this measure.

Multiple regression was employed next to determine if gains shown by the
less-inclined-to-serve 2001/2002 students were statistically attributable to having
met the service requirement or were better assigned to some other factor. The
grade 12 intended voting score was the dependent variable. Prior-year scores and
background factors were entered in the model first and second, respectively. The
remaining factor, then, was group, which differed primarily in that less-inclined
2001/2002 students met the 40-hour requirement, whereas the 2000 group did not
regularly perform service in the intervening period. The critical question was
whether group was a significant predictor in the model after accounting for other

**Table 4.** Total Adjusted $R^2$ and Unstandardized beta Coefficients (β) for the Multiple Regression Models Predicting Changes in Civic Engagement among the Less-inclined-to-serve Groups in Each Cohort

| | Future Voting | Future Con. | Future Uncon. | Interest and Understanding |
|---|---|---|---|---|
| Total $R^2$ | .30 | .28 | .45 | .25 |
| | Unstandardized Beta (β) Coefficients | | | |
| Outcome 11th Start | .40*** | .21* | .12 | — |
| Outcome 11th End | .17 | .30** | .48*** | .39*** |
| Gender (male = high) | .02 | .10 | .31* | .10 |
| Parents Vol. | .23 | −.05 | .05 | .00 |
| Educ. Mother | .27 | .28 | .18 | −.12 |
| GPA | −.04 | −.02 | .07 | −.12 |
| Religiousness | .05 | .18* | .03 | −.02 |
| Helping | −.15 | −.09 | −.03 | .09 |
| Empathy | −.19 | .18 | .15 | −.05 |
| School government | .03 | −.12 | .10 | .08 |
| School sports | .00 | .03 | .01 | .03 |
| School clubs | .10 | .02 | .05 | .08 |
| Contrast of the less-inclined-to-serve groups (2001/02 = high) | | | | |
| | .18* | .19* | −.07 | .15* |

Levels of significance (***p < .001, **p < .01, *p < .05).

factors. For the less-inclined-to-serve students, results revealed two significant predictors of voting intentions at the end of grade 12. One was the prior-year scores (start of grade 11 score, b = .40, p < .001). The other was group, as the 2001/2002 students' intentions to vote increased significantly when compared to the less-inclined students without a requirement (b = .18, *p* < .05). Although junior-year scores accounted for a large share of the variance, the group factor still accounted for a significant share, after other factors were controlled for. Total $R^2$ and individual coefficients for all regression models contrasting the less-inclined groups in both cohorts are listed in Table 4.[3]

### *Future Conventional Civic Involvement*

Mean scores are plotted in Figure 2. Patterns of group differences and similarities appear the same as for the previous measure. The more-inclined-to-serve students in the 2000 and 2001/2002 classes scored high and were undifferenti-

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[3] In separate multiple regression analyses not shown, group was not a significant predictor for any of the models contrasting the more-inclined-to serve students from each cohort, or for any of the models contrasting the more-inclined-to serve and the volunteer-first cohort from the required cohort.
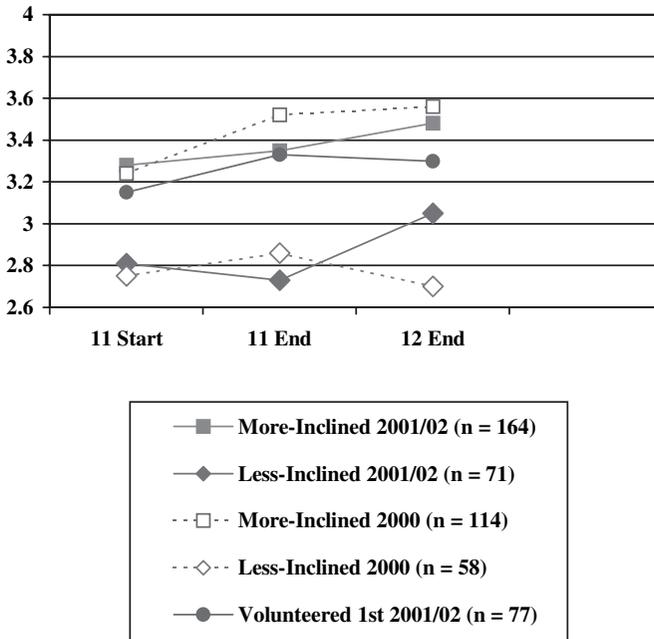
**Figure 2.** Mean Scores out of 5 on Intended Future Conventional Civic Involvement by Cohorts and Service Groups Over Time.

ated. The volunteer-first students scored similarly to these two groups. The less-inclined students scored much lower at all three times. When only the less-inclined groups were considered, the 2000 and 2001/2002 were alike until the latter students completed their service experience. The latter students showed a marked increase on this measure from their junior to senior year, whereas the 2000 students remained low.

Multiple regression was again employed to test which factors explained the increase in intended conventional civic involvement among the less-inclined but required group. Results revealed that when holding all else constant, prior-year scores (start of grade 11 score, $b = .20$, $p < .05$, and end of grade 11 score, $b = .30$, $p < .001$), religiousness ($b = .18$, $p < .05$), and group ($b = .19$, $p < .05$) were the only significant predictors. The intentions to volunteer and join civic organizations in the future increased significantly for the students who had higher religiousness scores, and for the less-inclined students with the requirement compared to their peers who did not have a requirement.

*Future Unconventional Civic Involvement*

Mean scores are plotted in Figure 3. The patterns of means over time for these data differ from the plots in the previous two figures. More-inclined groups scored
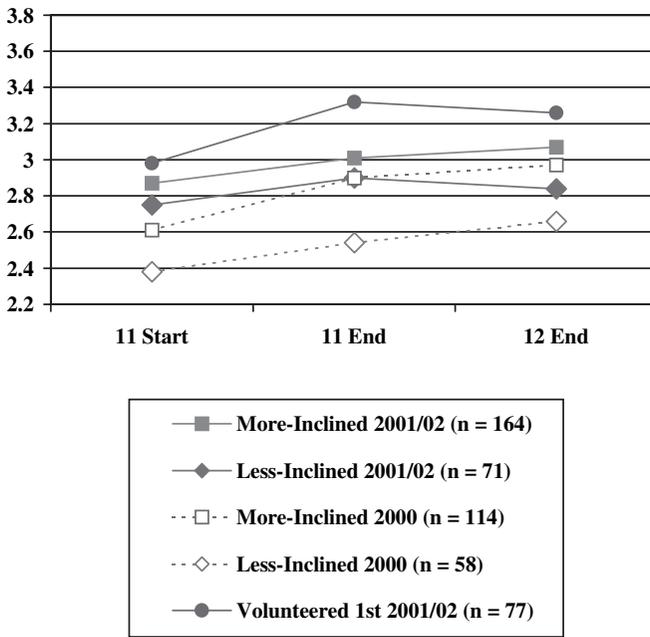
**Figure 3.** Mean Scores out of 5 on Intended Future Unconventional Civic Involvement by Cohorts and Service Groups Over Time.

higher than less-inclined groups, but volunteer-first students scored even higher. In addition, in the less-inclined groups, whose scores are low, there is no gain made by the 2001/2002 students after having completed their service requirement. The scores at the end of the senior year remain as low as they were at the end of the junior year.

Regression analyses revealed no differences between the less-inclined groups in intended future unconventional involvement. There were two predictors. Prior-year score from the end of grade 11 ($b = .48$, $p < .001$) predicted the grade 12 unconventional civic score. Further, males were significantly more likely to have an increase in intended unconventional civic involvement when compared to females ($b = .31$, $p < .05$).

*Interest and Understanding*

Scores on this scale, which are plotted in Figure 4, replicate the patterns described for the first two measures. More-inclined students scored higher than less-inclined students, with the former being much like the volunteer-first group. The less-inclined groups, however, scored alike in their junior year, but differed
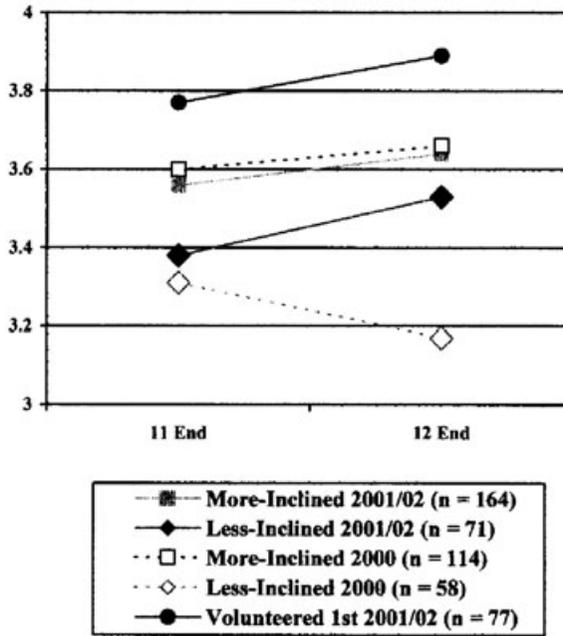
**Figure 4.** Mean scores out of 5 on Interest and Understanding of Politics cohorts and service groups over time.

at the end of the senior year after having performed experienced service. This group showed a marked increase whereas the 2000 group continued to score low on this measure.

Once again, multiple regression analyses tested whether or not the effect among the less-inclined group was due to the requirement or some other factor. As in two of the previous three analyses, the only significant predictors were prior score ($b = .39$, $p < .05$) and group ($b = .15$, $p < .05$), as the less-inclined but required students had significantly increased civic interest and understanding when contrasted with less-inclined students who were not required.

## Discussion

The major finding of this study is that students who were less-inclined-to-serve during their high school years benefited once they fulfilled their require-ment and experienced community service first-hand. This result and the accompanying findings offer a novel way around the self-selection critique regard-ing school-based required service. It is true that some students enter school already inclined to perform service and oriented toward political involvement. For these students, required service does not seem to be advantageous or harmful. But for

students who might otherwise not do service, the requirement had a positive impact, suggesting that the requirement operates as a form of recruitment that affords these students a novel opportunity to experience themselves as responsible civic actors.

This study took direct account of those students who entered high school already favorably disposed to service and to civic-political involvement. In terms of prior critiques, these students were the self-selectors who inflate post-service scores because of their preservice inclination. Indeed, as these students progressed through school, they continually added to their service experiences by fulfilling the mandate and doing voluntary service, thus further embedding themselves in a pro-civic orientation. These students scored at high levels on the four indicators of civic involvement at all three measurement times. This was as true for the class of 2000 which had no service requirement as for the 2001/2002 classes with the requirement. Both cohorts showed neither substantial gains nor even minor losses from the start of their junior year to the end of their senior year. They were at the outset civically involved and the service requirement neither abetted nor detracted from their high level of civic functioning.

In terms of background, these self-selectors and favorably inclined students appear quite similar to the highly resourced adults in Verba et al.'s (1995) sample. Their parents were more highly educated, had volunteer experience, and were religious. At least two of these characteristics have direct bearing on students' proclivity toward service. With parents who participate in volunteer service, these students have been provided with indirect as well as direct service experiences, the latter insofar as parents are known to provide adolescents with opportunities for voluntary service (e.g., Hodgkinson & Weitzman, 1990) and frequently volunteer alongside their children (McLellan & Youniss, 2003).

Religious salience is the second resource that helps to explain the behavior of the favorably inclined students. Verba et al. (1995) identify religion as a potent force in promoting civic involvement in that religious membership gives individuals opportunities to practice civic skills, such as cooperating in committee work, as well as opportunities for volunteering in community projects. It is likely that religious and civically active parents cultivate civic interest into their homes and express it through interactions with their children, for example, in discussions of topics such as elections or current political topics.

Either or both of these factors can account for the near ceiling scores achieved by the favorably inclined students on the likelihood of voting scale or the attention-understanding measure. For these students, the 40 hours of service that the school required fit their predisposition toward civic involvement; they entered their junior year highly involved and remained involved through the end of their senior year. They started the study with experience in volunteer service, completed the 40-hour requirement by their junior year, and continued to do volunteer service thereafter (Metz & Youniss, 2003). Thus, it would not be possible to discern precisely what contribution the requirement made apart from reinforcing

their ongoing civic orientation. By all appearances these students were on a developmental path toward civic involvement for which the school requirement was complementary, but not decisive in itself.

The picture for the less-inclined students is quite different. They came to school with backgrounds that were not so rich in the kinds of resources that promote civic involvement. Among other things, they and their parents had relatively restricted experience in voluntary service which may indicate a tepid home orientation toward civic involvement. And it was likely their parents were relatively distanced from active religious membership. Thus, at the start of the junior year, the less-inclined students scored relatively low on all of our civic indicators as would be expected from the Verba et al. (1995) model. In keeping with lack of resources and minimal service experience, these students scored lowest on the engagement measures.

These low scores were maintained throughout the junior year in both the 2000 and 2001/2002 cohorts. It is significant, then, that these groups became differentiated at the end of the senior year, after the 2001/2002 cohort had completed the 40-hour requirement. The experience of service was associated with increases on three of the four civic indicators and, according to regression analyses, was a contributor to the differentiation between the two groups, even when junior-year scores on the measures were taken into account. These results apply in reverse to the self-selection critique. If students who scored high on the dependent measures were already civically oriented, then the less-inclined-to-serve students were selective in the opposite direction. Hence, their increases on the civic measures from the end of junior to the end of senior year are reasonably attributed, not to individual proclivities, but to having experienced the 40-hour requirement, all other things being equal for the 2000 and 2001/2002 classes.

It is worth mentioning that one possible factor that might have affected the 2001/2002 group was the terrorist attacks of September 11, 2001, which might have made an impact on the graduating seniors of 2002. We checked this out in another analysis (Metz & Youniss, 2003a) and found that this group did react initially to September 11 with enhanced scores on the civic measures. However, by May 2002, the increase was reduced so that their scores matched those of the graduating seniors in 2001. Hence, a potential special effect of 9–11 seems not to have been operative in heightening the 2001/2002 civic scores.

Many schools have recently added a service requirement in an effort to heighten students' recognition of their citizenship responsibilities as members of communities (Flanagan & Faison, 2001). Since schools are the common institution that reaches all youth, as Dewey and Dunn noted decades ago, a service requirement can function realistically as a device for political and civic socialization. It could, in principle, compensate for background differences in resources and, thereby, help to equalize opportunity for students. In this regard, the requirement operates much like Verba et al.'s (1995) concept of *recruitment*, or being invited to

become civically involved. The present demonstration is important for showing that a service requirement can, in fact, have a positive effect on students who have fewer resources and little service experience. Once given the opportunity to serve in a program with an explicit civic purpose, these students make strides in thinking of themselves as voters and future members of communities, with current interest in news along with the ability to understand political processes.

The main weakness in this demonstration is that we cannot say what precisely in the 40 hours of service was most responsible for improved scores on the civic indicators. We looked for but could not find patterns in types of service that might have differentiated within the less-inclined groups between students whose scores increased from those whose scores did not increase. At present we are left with the conclusion that a consciously designed service program which espouses civic responsibility in the community and offers students opportunities to do service at worthwhile sites at the very least gets students to take their requirement seriously and stimulates their interest in various aspects of the civic domain. Reasoning by analogy to Verba et al.'s (1995) findings regarding religion, being invited to participate by the school can compensate for individual differences in background by affording all of the students the experience of contributing to the community whether it is through tutoring younger children, assisting elderly adults in physical exercise, helping the homeless at soup kitchens, or raising awareness of an issue in the community.

The group of students who were more-inclined-to-serve but held off on completing the requirement until the senior year provide still another perspective on the school-based service requirement. These students were much like their inclined-to-serve classmates who rapidly performed their required 40 hours by the junior year. In descriptive terms, the students who held off on the requirement scored the highest of all groups on three of the four indicators, future likelihood of voting, attention-understanding of news, and demonstrating-boycotting. Interestingly, they scored lower than the other inclined students on future volunteering and joining civic organizations. A coupling of the latter two indicators might suggest that the holding off on the requirement partly expressed rebellion in the sense of displaying autonomy regarding the school policy. These students were most likely to act unconventionally, on the one hand, and least likely to be joiners, on the other hand. Whatever the case, they showed no obvious benefit from having to meet the 40-hour requirement as their scores on all four measures were as high before as after they fulfilled the mandate. As their more inclined classmates, these students entered the junior year already experienced in service and with backgrounds that enhanced their civic orientation. The added 40 hours of service did little to change any of that.

It seems fair to conclude from these findings that a school-based service requirement can have its desired impact on students who enter school without a strong civic orientation. In the same sense that the requirement added little advan-

tage to students who are already steeped in political life and experienced in service, their less-inclined counterparts can gain much when they partake of service that is presented to them as a serious step toward citizenship in the local community. We did not use random assignment to rule out potential positive effects that would have been confounded with pre- to post-service gains on civic measures. But we showed that students who were uninvolved politically and probably would not have done service increased on three of four indicators when those increases signify a clear step in civic development.

These findings support the general views of Dewey, Dunn, and others (Schachter, 1998) who propose that schools have an important function to play in the development of citizenship. Some of the conditions that prevailed in the first quarter of the last century, such as diversity via immigration, have returned as a challenge for democracy (Fussel & Greene, 2002). In addition, many youth today are somewhat distanced from the economic workings of society and decidedly alienated from political processes, putting them at risk for understanding society and how they might contribute to its well-being (Larson, 2000). Given this context, debates about school-mandated service have serious implications for the role of schools in contributing to the health of democratic society. This concern is expressed clearly in proposals to strengthen the civics curriculum (e.g., Niemi & Junn, 1998; The Civic Mission of Schools, 2003).

We cannot say for certain whether the results in this study would be generalizable across the disparate and complex landscape of high schools in the United States today. What we do know from our previous qualitative (e.g., Yates & Youniss, 1996; Youniss & Yates, 1997) and quantitative (McLellan & Younisss, 2003; Youniss & Reinders, under review) studies of high schools is that well-designed service programs can make a difference in determining outcomes. Programs which seem most effective have a service coordinator who provides students with concrete opportunities and entrée into a meaningful array of service activities through local organizations and agencies. Effective programs also provide students with a clear and compelling rationale for service, put students in new circumstances different from their usual routine, challenge students to draw on and develop the skills they did not know they had, and provide opportunities for reflection. The present results may be seen as an example of what can be accomplished toward civic development with a well-constructed, school-initiated service requirement that is focused on participation within one's community.

## ACKNOWLEDGEMENTS

# REFERENCES

Adelson, J. (1986). *Inventing adolescence: The political psychology of everyday schooling.* New Brunswick: Transaction.

Aldridge, J. W. (1970). *In the country of the young.* New York: Harper's Magazine Press.

Allahyari, R. A. (2000). *Visions of charity: Volunteer workers and moral community.* Berkeley: University of California Press.

Allen, J. P., & Philliber, S. (2001). Who benefits most from a broadly targeted prevention program? Differential efficacy across populations in the teen outreach program. *Journal of Community Psychology, 29*, 637–655.

Andersen, S. (1998). Service learning: a national strategy for youth development. Available at http://www.gwu.edu~ccps/pop_svc.html.

Azjen, I. (2001). Nature and operation of attitudes. *Annual Review of Psychology, 52*, 27–58.

Bachman, G. C., Johnston, L. D., & O'Malley, P. M. (1993). *Monitoring the Future: A continuing study of lifestyles and values of youth.* Ann Arbor: Survey Research Center.

Barber, B. (1994). *An aristocracy of everyone: The politics of education and the future of America.* New York: Oxford University Press.

Billig, S. H. (2000). Research on K-12 school-based service learning: The evidence builds. *Phi Delta Kappan, 5*, 658–664.

Boyte, H. (1991). Community service and civic education. *Phi Delta Kappan, 72*, 765–767.

*The Civic Mission of Schools* (2003). Report from the Carnegie Corporation of New York and the Center for Information and Research on Civic Learning and Engagement. New York: Carnegie Corporation of New York.

Cohen, R. (1993). *When the old left was young: Student radicals and America's first mass student movement.* New York: Oxford University Press.

Conrad, D., & Hedin, D. (1981). *Executive summary: Experiential education evaluation project.* St. Paul: Center for Youth Development and Research, University of Minnesota.

Dewey, J. (1938). *Experience and education.* New York: Collier.

Dunn, A. (1929). *Community civics.* Boston: D.C. Heath.

Erikson, E. (1968). *Identity youth and crisis.* New York: Norton.

Eyler, J., & Giles, D. (1999). *Where's the learning in service learning?* San Francisco: Jossey-Bass.

Flacks, R. (1988). *Making history: The American left and the American mind.* New York: Columbia University Press.

Flanagan, C., & Faison, N. (2001). Youth civic development: Implications of research for social policy and implementation of programs. *Social Policy Report*, *15*.

Fussell, E., & Greene, M. E. (2002). Demographic trends affecting youth around the world. In B. B. Brown, R. W. Larson, & T. S. Saraswathi (Eds.), *The world's youth: Adolescence in eight regions of the globe* (pp. 21–60). Cambridge: Cambridge University Press.

Hart, D., Atkins, R., & Donnelly, T. (in press). Community service and moral development. In M. Killen and J. Smetana (Eds.), *Handbook of moral development*. Hillsdale: Erlbaum.

Hodgkinson, V. A., & Weitzman, M. S. (1990). *Volunteering and giving among American teenagers from 14 to 17 years of age.* Washington: Independent Sector.

James, W. (1909/1971). *The moral equivalent of war and other essays*. New York: Harper and Row.

Kahne, J., & Westheimer, J. (1996). In service of what? The politics of service learning. *Phi Delta Kappan, 74*, 593–599.

Larson, R. (2000). Toward a psychology of positive youth development. *American Psychologist, 55*, 170–183.

McLellan, J. A., & Youniss, J. (2003). Two systems of service: Determinants of voluntary and required service youth service. *Journal of Youth and Adolescence, 32*, 47–58.

Melchior, A. (1998). *Final report: National evaluation of Learn and Serve America and community-based programs*. Center for Human Resources, Brandeis University.

Metz, E., & Youniss, J. (2003). A demonstration that school-based required service does not deter—but heightens—volunteerism. *PS-Political Science and Politics, 36*, 281–286.

Metz, E. & Youniss, J. (2003a). September 11 and service: A longitudinal study of students' views and reactions. *Applied Developmental Science, 7*, 148–155.

Metz, E., McLellan, J. A., & Youniss, J. (2003). Types of voluntary service and adolescents' civic development. *Journal of Adolescent Research, 18*, 188–203.

Moskos, C. C. (1988). *A call to service: National service for country and community*. New York: Free Press.

Niemi, R., & Chapman, C. (1999). *The Civic development of 9th—through 12th-grade students in the United States: 1996.* Washington: National Center for Education Statistics: NCES 1999-131.

Niemi, R. G., & Junn, J. (1998). *Civic education: What makes students learn.* New Haven: Yale University Press.

Newmann, F., & Rutter, R. (1983). *The effects of high school community service programs on students' social development: Final report*. Madison: University of Wisconsin Center for Educational Research.

Penner, L. A. (2002). Dispositional and organizational influences on sustained volunteerism: An interactionist perspective. *Journal of Social Issues, 58*, 447–467.

Penner, L. A., Fritzsche, B. A., Craigner, J. P., & Freifeld, T. S. (1995). Measuring prosocial personality. In J. N. Butcher & C. D. Spielberg (Eds.), *Advances in Personality Assessment*, Hillsdale, NJ: Erlbaum*, 12*, 147–163.

Philliber, S., Kaye, J., & Herrling, S. (2001). *The national evaluation of the Children's Aid Society Carrera-Model Program to prevent teenage pregnancy*. Accord, NY: Philliber Associates.

Raskoff, S., & Sundeen, R. (1999). Community service programs in high schools. *Law and Contemporary Problems, 64*, 73–111.

Scales, P., & Rochlkepartain, E. (2004). *Community service and service-learning in U.S public school: Findings from a national survey*. Minneapolis, MN: Search Institute. Available at http://www.search-institute.org/whatsnow/2004G2GCompleteSurvey.pdf.

Schachter, H. L. (1998). Civic education: Three early political science association committees and their relevance for our times. *PS-Political Science and Politics, 74*, 631–635.

Schudson, M. (1998). *Good citizen: A history of American civic life*. New York: Martin Kessler Books.

Smith, E. S. (1999). The effects of investments in social capital of youth on political and civic behavior in young adulthood: A longitudinal analysis. *Political Psychology, 20*, 553–580.

Stewart, A., Settles, I. H., & Winter, N. (1998). Women and the social movements of the 1960s: Activists, engaged observers, and nonparticipants. *Political Psychology, 19*, 63–94.

Stukas, A. A., Clary, G., & Snyder, M. (1999). The effects of mandatory volunteerism on intentions to volunteer. *Psychological Science, 10*, 59–64.

Tarrow, S. (1998). *Power in movements: Social movements and contentious politics*. New York: Cambridge University Press.

Torney-Purta, J. (1995). Psychological theory as a basis for political socialization research: Individuals' construction of knowledge. *Perspectives in Political Science, 24*, 23–33.

U.S. Census (2000). Available at http://censtats.census.gov/data.

Verba, S., Schlozman, K. L., & Brady, H. E. (1995). *Voice and equality: Civic volunteerism in American politics*. Cambridge: Harvard University Press.

Walker, T. (2002). Service as a pathway to political participation. What research tells us. *Applied Developmental Science, 6*, 183–188.

Yates, M., & Youniss, J. (1996). A developmental perspective on community service. *Social Development, 5*, 85–111.

Youniss, J., & Reinders, H. (under review). School-based required service and adolescents' civic development.

Youniss, J., & Yates, J. (1997). *Community service and social responsibility in youth*. Chicago: University of Chicago Press.

Youniss, J., Bales, S., Christmas-Best, V., Diversi, M., McLaughlin, M., & Silbereisen, R. (2002). Youth civic engagement in the twenty-first century. *Journal of Research on Adolescence, 12*, 121–148.

Youniss, J., McLellan, J. A., Su, Y., & Yates, M. (1999). The role of community service in identity development: Normative, unconventional, and deviant orientations. *Journal of Adolescent Research, 14*, 248–261.