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Identifying Best Practices in Civic Education: Lessons From the **Student Voices Program**

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Identifying Best Practices in Civic Education: Lessons From the Student Voices Program

Abstract

School-based civic education is increasingly recognized as an effective means for increasing political awareness and participation in American youth. This study examines the Student Voices curriculum, implemented in 22 Philadelphia high schools, to assess program activities that mediate gains in outcomes linked to future political participation (following of politics, political knowledge, and political efficacy). The results indicate that class deliberative discussions, community projects, and informational use of the Internet produce favorable outcomes that build over the course of two semesters. Effects were comparable for both white and nonwhite students.

Disciplines

Communication | Education | Social and Behavioral Sciences

Identifying Best Practices in Civic Education: Lessons from the Student Voices Program

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School-based civic education is increasingly recognized as an effective means for increasing political awareness and participation in American youth. This study examines the Student Voices curriculum, implemented in 22 Philadelphia high schools, to assess program activities that mediate gains in outcomes linked to future political participation (following of politics, political knowledge, and political efficacy). The results indicate that class deliberative discussions, community projects, and informational use of the Internet produce favorable outcomes that build over the course of two semesters. Effects were comparable for both white and nonwhite students.

Introduction

Youth engagement in civic and political activities has declined over the past four decades (see Galston 2004; Putnam 2000). Today's young people exhibit less interest and involvement in politics than youth of earlier generations (Galston 2004). Whether in terms of political knowledge, electoral participation, or exposure to news about politics, our youngest citizens are consistently outperformed by their elders in both cross-sectional and generational analyses (Keeter et al. 2002; Miller 1992; Putnam 2000; Soule 2001b). Keeter et al. (2002), for example, reported that over half of Americans between the

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NOVEMBER 2007

ages of 15 and 25 are completely disengaged from civic life, with only about one-fourth attentive to government and public affairs and one-third following the news through television, radio, or newspapers. Despite an upturn in youth voting in 2004 (Lopez et al. 2005), maintaining and strengthening young people's engagement in politics remains a challenge.

School-based civic education has been proposed as one method for encouraging greater participation. Though early studies found civics courses ineffective (Langton and Jennings 1968), more recent research suggests that classroom civics instruction can provide significant benefits (see Galston 2001). In particular, the work of Niemi and Junn (1998) helped renew interest in civic education's potential to increase political knowledge and engagement and spawned a flurry of studies examining the effects of school-based programs (e.g., Avery et al. 2005; McDevitt and Chaffee 2000; Soule 2001a; Torney-Purta 2002). Although important in demonstrating the contribution school programs can make to young people's political socialization, these studies have not identified the precise mechanisms through which education increases engagement (Galston 2001; Torney-Purta 1997). Furthermore, Niemi and Junn (1998) found that participation in any more than one semester of civic education failed to translate into additional gains in civic or political outcomes. They suggested that, in order to produce incremental effects, civic education

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would need to provide additional learning experiences beyond the standard civics curriculum. Unfortunately, there has been little research on the effective components of such civic education, especially in urban schools.

The political socialization literature suggests that political engagement develops as young people gain an interest in issues of relevance to them, are given the opportunity to learn about these issues, and see a role for themselves as active citizens (Delli Carpini 2000). Central to this process is the development of internal political efficacy, or confidence in one's ability to understand and participate effectively in political life (Converse 1972; Niemi et al. 1991). Accordingly, the present research examines curricular practices that might influence young people's interest in and following of politics, their knowledge of local government, and their sense of political efficacy.

We investigated these outcomes in a study of the Philadelphia Student Voices program, a high school civic education initiative that has been implemented in 13 cities nationwide. Twenty-two public high schools in Philadelphia participated in an evaluation of the Student Voices curriculum during the 2002–3 school year (http://www.student-voices.org/philadelphia). Previous evaluations of the program have found that one semester of the curriculum is more effective than standard civics classes at heightening political interest, encouraging informational media use, increasing civic knowledge, and building political efficacy (Romer and Jamieson 2001; Stern et al. 2003). The program adopts a number of suggested best practices and innovative media-based strategies in its civic education curriculum. The current study examines the incremental effects of one versus two semesters of the program and identifies the curricular practices that improve civic engagement compared to standard civic education in urban classrooms.

Best Practices

A number of recent studies have explored the impact of individual civic education curricula. Curriculum assessments for "We the People" (Center for Civic Education 2005) and "Deliberating in a Democracy" (Avery et al. 2005) have found similar positive effects on political knowledge, awareness, and engagement over the course of a civics program. In 2003, a group of practitioners and scholars issued *The Civic Mission of the Schools*, a report that outlined the positive influence of civics curricula and encouraged schools to institute mandatory civic education (CIRCLE and Carnegie Corporation of New York 2003).

The thrust of *The Civic Mission of Schools* and of other, more specific, curricular evaluations was a focus on the importance of interactivity. The authors agreed that young people should acquire more than rote knowledge of the Consti-

tution and a basic understanding of how the institutions of democracy function. Effective political socialization occurs when students gain an appreciation for and an involvement in hands-on activities that encourage discussion and evaluation of political issues of relevance to them and to their communities (see Luskin and Fishkin 2002). Specifically, *The Civic Mission of Schools* outlined six general "promising approaches" as best practice techniques for the classroom:

- instruction in government with more than just rote learning
- · discussion of current events, particularly those important to youth
- opportunities to apply classroom lessons in a service learning framework
- extracurricular community involvement opportunities
- student participation in school governance
- · simulation of procedures and the democratic process

Beyond these general guidelines, however, there has been minimal research on the specific classroom practices that best facilitate future political involvement.

One study of the Kids Voting USA program did attempt to identify the curricular components that directly impact civic engagement (McDevitt and Kiousis 2004; McDevitt et al. 2003). McDevitt et al. (2003) found that engaging students in classroom political discussion and having students encourage others to vote were the most effective at promoting involvement in politics. Classroom political discussions also appeared to correlate with increased civic knowledge.

Although this study is suggestive, it was conducted in primarily higher socioeconomic status (SES) schools. Other analyses of Kids Voting USA have noted that the program may help reduce the SES gap in civic engagement, but researchers have reported difficulty implementing the program in low SES communities (Jordan 2003; McDevitt and Chaffee 2000). The need for research with these populations is particularly compelling given that urban and minority youth demonstrate especially low levels of political knowledge and engagement (Hart and Atkins 2002; Lopez 2002). To correct these imbalances, it is critical that educational efforts designed to promote civic engagement be targeted at America's underserved youth. Unlike with the wealthier suburban communities examined by McDevitt et al. (2003), however, we have little evidence for what constitutes an effective intervention program in urban schools (Christman and Rhodes 2002; CIRCLE and Carnegie Corporation of New York 2003).

Student Voices Educational Strategies

One possible strategy advanced by scholars for building engagement among youth is through the use of media and technology, particularly the Internet. As it relates to the political socialization of young people more generally, it

has been argued that media play an essential role (Chaffee and Yang 1990). Early studies indicated that media content is a more important source of public affairs information for high school students than their parents, teachers, or peers (Chaffee et al. 1970). Garramone and Atkin (1986) demonstrated the ability of media to close knowledge gaps between more and less advantaged adolescents. Other research has found that media use is related to civic activity in adolescents (Pasek, Kenski, et al. 2006), and that young people's use of the Internet for exchange of information is associated with higher levels of interpersonal trust and civic participation (Shah et al. 2001).

While the Internet—with its inherent interactive potential—has perhaps emerged as the premier medium for encouraging participation in politics, there is still little formal research that speaks to its effects on youth civic engagement or to its implications for classroom civic education. Scholars and educators nonetheless see a strong connection between the three components that are thought to comprise effective citizenship—civic literacy, civic skills, and civic attachment (Flanagan and Faison 2001)—and the interactive opportunities offered online (Montgomery et al. 2004). Flanagan and Gallay (2001) suggest that the Internet might be particularly effective at nurturing democratic character among underserved youth. These authors envision the Web as a "free space . . . a safe place where young people can explore identities, test out and debate ideas and find common ground that stretches the boundaries of their geographical or social backgrounds" (Flanagan and Gallay 2001, 2).

The Internet may also be an effective medium for acquiring information about government and politics. Computer terminals with Internet access are provided to participating Student Voices classrooms so that students can engage with local policy makers and political campaigns by logging onto the Student Voices Web site. Here, students can read daily news coverage of their city and state, locate their state officials and their district's city council member, and research their positions on issues of relevance to them. The Web site also promotes interaction with other Student Voices participants by providing the opportunity to vote in "click polls" on current issues and communicate with students from other classrooms by posting their own opinions on controversial topics.

Classroom discussion is another central component of the Student Voices curriculum. A classroom environment that supports the open discussion of political and social issues has been demonstrated to enhance the positive effects of civic education (Campbell 2005; Niemi and Junn 1998; Torney-Purta 2002). Through deliberative interactions with their peers and teachers, students are able to glean knowledge about the political process, engage in careful reasoning about policy issues, and practice skills in debate and argumentation (Hess and Posselt 2002). These conversations are also likely to foster increased motivation

NOVEMBER 2007

79

to follow politics and find out more about important issues (Atkin 1981; Drew and Reeves 1980).

Student Voices also demonstrates to students how their views can be effectively communicated to lawmakers and to the broader community. Teachers are encouraged to invite elected officials, candidates, policy makers, and journalists to meet with their students to hear their concerns and respond to their questions. Class projects have also included voter registration drives, voter education initiatives, roundtable discussions with policy makers, and attendance at city council candidate forums. Through these and other activities, the Student Voices curriculum addresses all but one of the six practices recommended by *The Civic Mission of Schools.*¹

The Current Test of the Program

Student Voices is a 10-session program designed to be taught over the course of 10 weeks as a one-semester supplement to existing civic education curricula. The curriculum is tailored to focus on an election that occurs during the semester. During the course of the period evaluated in the present study (2002–3 school year), students participated in one or both of two different versions of the program.

In the fall of 2002, the "State Government Curriculum" was framed around the Pennsylvania governor's race. During this semester, students learned about how state government works and examined current state issues. The spring 2003 "City Government Curriculum" taught students how their local executive and legislative branches (city and/or state) work to address issues facing their community and focused on areas of concern in the upcoming city council and mayoral primaries.

Teachers received 10 hours of instruction in the Student Voices curriculum prior to implementing the program; however, the curriculum is more suggestive than directive. Teachers were encouraged to shape classroom activities and projects to reflect student interests. Likewise, teachers were urged to gear classroom discussion to political and community issues identified as relevant by their students. Thus, while, within each semester, the broad focus of the curriculum was consistent across classrooms, there was also likely some variance in instructional content in order to accommodate different student concerns. (For more detailed information about Student Voices in Philadelphia, please visit the program's Web site, http://www.student-voices.org/philadelphia/.)

Given its student-centered, interactive approach to civic education, Student Voices is hypothesized to produce larger increases in political engagement than a traditional civics course. Specifically, we expect students using the Student Voices curriculum to exhibit more knowledge about local and state

government than students experiencing only standard civic education. In addition, we expect them to report greater following and discussing of politics and a stronger sense of political efficacy.

The current study also investigates whether participation in the two-semester Student Voices sequence provides additional gains over the previously tested one-semester program (Romer and Jamieson 2001; Stern et al. 2003). Niemi and Junn (1998) found no evidence of added benefits for classroom civic education beyond a single semester; however, because the Student Voices program focuses on different issues over the course of the year, it seems more likely to produce cumulative effects. We thus predict that the different experiences offered in the second semester of the program will produce incremental gains beyond those observable among students who took only one semester of the program.

We further expect that the effects of the Student Voices curriculum will be mediated by participation in specific program activities, such as classroom discussion and projects; use of the Internet to communicate with other students and the candidates, as well as to acquire information about political issues; and personal interaction with candidates and officials. While the aim of the current research is to identify those practices that are most effective for use in an urban civic education setting, given prior evidence for the critical role of classroom discussion in civic education programs more generally (Campbell 2005; Keeter et al. 2002; McDevitt and Kiousis 2004; McDevitt et al. 2003; Niemi and Junn 1998; Torney-Purta 2002), we anticipate that discussion-based activities, in particular, will be associated with improvements in interest, knowledge, and efficacy. In addition, informational uses of the Internet, which have been linked to youth civic engagement in previous research (Shah et al. 2001), are also expected to foster interest, knowledge, and efficacy among Student Voices participants.

A final prediction concerns the performance of students from different racial-ethnic backgrounds. We expect that the program will be equally appealing and motivating to students from different backgrounds within the Philadelphia public schools.

Method

Students in 26 public and charter high schools throughout Philadelphia participated in the Student Voices program during the 2002–3 school year. The evaluation of the Philadelphia Student Voices Project used a quasi-experimental design, in which assignment to treatment and control conditions is not randomized but determined either via self-selection or by administrator selection (Shadish et al. 2002). Prior to the start of the year, researchers worked

with social studies department heads in the Philadelphia schools to recruit social studies teachers (e.g., U.S. history, U.S. government, current events) to implement the Student Voices program with one or more of their classes. Students in these classrooms would serve as the "treatment" group. Within each school, efforts were then made to identify teachers who taught courses and grade levels comparable to those in the treatment condition. Rather than delivering the Student Voices curriculum, these teachers would use their regular civics curriculum, thus providing a "control" condition. Each school was assigned only one control classroom but often two or more classrooms received the Student Voices treatment; this created an approximate 70:30 ratio of treatment to control students.

At each participating high school, paper and pencil surveys were distributed by their teachers to all students in treatment and control classrooms at the beginning and end of the fall and spring semesters. The purpose of these surveys was to determine whether any observed changes in key indicators of civic and political engagement—either during an individual semester or across the entire year—could be attributed to program exposure. Nearly 3,000 students spent some time in an assessed classroom during the 2002–3 school year. However, many students changed classes or transferred schools both within and between semesters, a significant number were absent on any given day, and several teachers failed to administer some of the assessments. As a result, we did not have posttest data for approximately 35 percent of the students who completed pretest assessments; attrition, however, was comparable across program and control conditions.

Some students also could not be included in our analysis because they failed to answer survey questions across the two study waves ($\mathcal{N}=15$ –80 students, depending on the outcome). In addition, in order to strengthen the comparison between treatment and control students, if pretest and posttest data were not available from a school's control classroom, data for all students from that school were dropped from the analysis. As a result, 1,314 students (922 test, 392 control) from 21 schools were included in the analysis of the fall 2002 semester, and 865 students (603 test, 262 control) from 17 schools were analyzed in the spring 2003 semester. The performance of students from schools excluded from the spring analysis did not differ from students from schools that were retained. In all, students from 22 schools were represented across the two analyses.

We also examined the effects of the program for those students who participated in both semesters. There were a total of 838 students who were present for both the initial pretest (at the beginning of fall 2002) and the final posttest (at the end of the spring semester in 2003). After removing students who switched between control and test classrooms, were present in multiple assessed classrooms, or were present in schools without control students, a

Feldman et al.

total of 731 students (515 test, 216 control) from 14 schools were retained for final analysis for the full 2002–3 year.

Outcome Measures

Three outcome variables are examined in our analyses. These variables include the extent to which students follow and discuss politics, their sense of personal political efficacy, and their knowledge of the political events and issues that were topical during each semester. Following and discussing politics was assessed by averaging five items tapping political interest, discussion, and attention. Each of these items was measured on a four-point scale, where higher scores correspond to greater engagement. A scale for efficacy was created by averaging four items. Students were asked to rate each item on a scale from 1 = strongly agree to 5 = strongly disagree, where disagreement corresponds to greater efficaciousness. Finally, a knowledge index was created by counting the total number of questions answered correctly out of a battery of six items. The questions varied slightly between semesters to reflect the current campaign under study. See table 1 for the components and internal reliabilities of each of the outcome measures.

Because item content varied across the two semesters, we calculated Pearson's correlations both within and across semesters to assess the extent to which each scale or index measured the same underlying constructs. Reliabilities across semesters were comparable to those within despite the changes in some items. Following and discussing politics correlated at .593 and .634 within the fall and spring semesters, respectively (i.e., between pretest and posttest), and between .572 and .679 across the semesters (p's < .001). Efficacy correlated at .304 and .333 within the semesters and between .294 and .430 across them (p's < .001). The knowledge measures also exhibited comparable levels of reliability both within each semester (.284 fall, .394 spring, p's < .001) and across the semesters, where they ranged from .130 to .304 (p's < .001). These significant test-retest reliabilities indicate that the changes in measurement across semesters did not prevent us from comparing program effects from fall to spring.

Participation Measures

Students who were members of treatment classrooms at the time of assessment were coded as one; students in control classrooms were coded as zero. Students who changed classrooms during the course of a semester were included as long as their status as either treatment or control remained constant. This

TABLE 1

Components and Reliabilities of Outcome Measures

	Number of Items	Internal Reliability (Pretest α)	Internal Reliability (Posttest α)
Fall 2002: Follow and discuss politics: interest in governor's race; follow government and public affairs: attention to newspaper stories about election for gov-			
ernor; discuss problems affecting Philadelphia with family and friends; discuss problems affecting Philadelphia with others outside of class	Ŋ	.681	.738
Efficacy: city politics too difficult to understand; city officials don't care what people like me think: people like me have no say in what the state	1		
government does	33	.538	.535
Knowledge: know governor; know that state legislature can override veto; know state senate term; know highest state court; know state representa-			
tive; know state senator Spring 2003:	9	.288	.488
Follow and discuss politics: interest in mayor's race; follow government and public affairs; attention to newspaper stories about election for mayor; discuss problems affecting Philadelphia with family and friends: discuss			
problems affecting Philadelphia with others outside of class	2	.711	.772
Efficacy: city politics too complicated to understand; city officials don't care what people like me think; people like me have no say in what the city			
government does	33	.573	.567
Knowledge: know governor; know that city council can override veto; know city council representative; know city council at-large member;	Ç		i.
know mayor; know term of mayor	0	.462	.585

allowed us to retain a more accurate sample but precluded aggregated analysis by classroom. Students whose status changed between semesters were evaluated within individual semesters but were removed from the full-year analysis.

To evaluate best practices, each semester's posttest included measures of students' participation in specific program activities. Participation in four broad areas of classroom activities was assessed: candidate interaction, political discussion, use of the Internet for information acquisition, and use of the Internet for communication with candidates and other students. A factor analysis revealed that the activity items formed three distinct clusters that were consistent across semesters. Candidate interaction included candidate visits to students' classrooms, other opportunities to talk to candidates (spring only), visits to students' classroom by campaign representatives, visits to students' classrooms by speakers from the media or government, and class appearances on TV or other media (fall $\alpha = 0.62$, spring $\alpha = 0.68$). Political discussion and informational Internet use tended to cluster together and included use of the Internet to explore issues or learn about candidates, publishing content on the Student Voices Web site or elsewhere in media (fall only), discussion of issues facing Philadelphia (spring only), discussion of the campaign in class, and completion of a class project on Philadelphia issues or the election (fall $\alpha = 0.67$, spring $\alpha = 0.70$). Internet communication included the use of the Internet to communicate with candidates, use of the Student Voices Web site to communicate with other students, and use of the Student Voices Web site to vote in "click polls" (fall $\alpha = 0.62$, spring $\alpha = 0.69$). Students failing to answer classroom activity items were imputed with classroom mean factor scores where possible ($\mathcal{N} = \text{approximately } 80$).

Table 2 reports the frequency of student participation in all activities by program and control conditions. Political discussion and searching the Internet for information were the most frequently reported activities. While control students did report participating in some activities supported by the Student Voices curriculum, participation in all activities was significantly greater for program students than for students in control classrooms.

Control Measures

For all analyses, demographic variables were included for racial-ethnic identity, gender, year in high school, college plans, maternal education, and student and parent immigrant status. Four dummy variables controlled for black (non-Hispanic), Hispanic, Asian/Pacific Islander, and other students; white non-Hispanic students served as the reference category. A dummy variable was also created for females. Year in high school was scored on a scale from one to four, where one represented freshmen and four represented seniors. A

TABLE 2

Percentages of Students Participating in Student Voices Program Activities

	FAL	L 2002	SPRIN	NG 2003
	Test	Control	Test	Control
Candidate interaction:				
Candidate visit	39.5	7.4	58.0	5.6
Other opportunities to talk to candi-				
dates (spring)			38.6	8.4
Campaign visit other than candidate	17.3	6.2	27.2	6.0
Other media/government speakers	35.2	10.2	43.7	9.8
Class media coverage	33.4	13.0	38.5	6.7
Political discussion-informational Inter-				
net use:				
Used Internet to explore issues/				
candidates	80.2	24.3	74.6	29.7
Published on SV Web site or else-				
where (fall)	32.4	4.9		
Discussed issues facing Philadelphia				
(spring)			92.8	58.8
Discussed campaign in class	82.6	39.1	86.5	41.5
Class project on Philadelphia issues	57.5	30.3	68.3	17.7
Internet communication:				
Used Internet to communicate with				
candidates	24.6	8.4	22.2	6.1
Used SV Web site to communicate				
with students	33.4	8.0	35.3	7.3
Used SV Web site click polls	42.4	7.4	39.8	5.5
Total $\mathcal N$	922	392	603	262

NOTE.—All test vs. control differences significant at p < .05. SV = Student Voices.

dummy variable was used to represent students who planned to attend college in the year following high school. Maternal education was coded on a five-point scale: (1) less than high school, (2) high school diploma, (3) some college, (4) college degree, and (5) postcollegiate education. Finally, dummy variables were created to represent students born in the United States and those with both parents born in the United States.

Frequencies for all demographic variables are presented in table 3, which also notes any significant differences between test and control students. Significant differences were primarily related to racial-ethnic identity and grade in school; nonetheless, the full array of demographic variables was included in all analyses to ensure the most stringent level of control. Additional control variables were also included to hold constant effects of each of the 22 schools

TABLE 3 Percentages of Test and Control Students by Various Demographic Characteristics

	20	002-3	FAL	L 2002	SPRII	NG 2003
	Test	Control	Test	Control	Test	Control
Total $\mathcal N$	515	216	922	392	603	262
Female	55	56	54	58	56	52
Race:						
Black (non-Hispanic)	34*	42	44*	48	38*	46
White (non-Hispanic)	27	25	17	17	16*	9
Asian/Pacific Islander	17*	10	13*	8	9*	4
Latino	10	13	9	14	12*	15
Other/no answer	13	11	17	13	25	26
Grade in school:						
Freshman	5 *	2	2*	4	4*	1
Sophomore	3 *	9	9*	13	8*	25
Junior	21*	59	22*	39	27*	43
Senior	71*	31	64*	44	60*	31
Mother's education:						
No high school						
diploma	11	8	13	10	14	15
High school graduate	31	29	33	30	37	32
Some college	18	18	18	20	16	21
College degree	23	25	19	22	20	16
Postcollege	18	20	17	17	13	15
Born in United States	85	90	89	88	87*	92
Parents born in United						
States	71	75	76	78	75	77
Plan on attending college	81	80	76	78	80	76

NOTE.—Because fewer students provided their race in spring 2003, the fall 2002 race was used for the full-year analysis. Cases with missing data are excluded from this table though they were mean substituted in regression analyses. * p < .05.

participating in the 2002-3 assessment; in this case, the high school with the greatest number of students served as the reference category.

Analysis

Mean levels of following and discussing politics, efficacy, and knowledge were first examined across conditions at both pretest and posttest. We then further explored the impact of Student Voices on our three outcome measures using hierarchical multivariate regression models that allowed us to control for pre-

NOVEMBER 2007

87

test levels of the dependent variable as well as demographic and school differences.³ In the first regression step, we tested for the effects of overall program exposure, and thus only the treatment variable and relevant controls were entered into the model. In the second step, the three program activity components (e.g., candidate interaction, political discussion/Internet information use, and Internet communication) were added to the model to test for mediating effects. All analyses were conducted separately for each semester; however, because students participated in different Student Voices activities across semesters, only the effects of overall program exposure—and not those of specific program components—could be tested for the full year.

A separate analysis using the full-year dataset assessed incremental improvements in the spring semester for those students who had participated in a fall test or control classroom. We compared improvements among students during their second semester of Student Voices with those of comparable control students during the same semester. If Student Voices students continued to show greater improvement than control students, this would demonstrate that a second semester of Student Voices had supplementary effects.

To assess the impact of student ethnic-racial background, we examined the independent effects of these background factors on changes from pretest to posttest. Absence of main effects would indicate that students from different backgrounds experienced similar levels of change between assessment points. We also tested for any interactions between Student Voices' exposure and the ethnic-racial indicators to determine whether the effects of the program were equal across groups.

Results

Program Effects by Semester and Full Year

Table 4 presents means and standard deviations for pretest and posttest levels of following and discussing politics, efficacy, and knowledge, separately for treatment and control groups in fall 2002 and spring 2003. Students in both treatment and control classrooms demonstrated improvement in each of the outcome measures over the course of the fall and spring semesters. To determine whether these increases are, as hypothesized, significantly greater for those exposed to the Student Voices program than those in the control condition, we turn to regression analyses with multivariate controls.

Table 5 presents the results of ordinary least squares regressions predicting posttest levels of following and discussing politics, efficacy, and knowledge in fall 2002 and spring 2003. Each outcome was regressed on participation in

TABLE 4

Means (Standard Deviations) for Outcome Variables at Pretest and Posttest in 2002 and 2003

	TE	ST	CON	TROL
OUTCOME	Pretest	Posttest	Pretest	Posttest
Fall 2002:				
Follow and discuss	2.03 (.58)	2.24 (.64)	1.97 (.58)	2.08 (.62)
Efficacy	2.81 (.94)	2.92 (.87)	2.64 (.85)	2.76 (.89)
Knowledge	1.18 (1.04)	2.59 (1.36)	1.13 (.98)	1.75 (1.09)
Total $\mathcal N$	`	03	3!	90 ` ´
Spring 2003:				
Follow and discuss	2.19 (.60)	2.27 (.66)	2.05 (.56)	2.10 (.63)
Efficacy	2.86 (.96)	2.95 (.96)	2.61 (.93)	2.75 (.89)
Knowledge	2.64 (1.13)	3.14 (1.43)	2.54 (1.23)	2.71 (1.28)
Total $\mathcal N$	` ´ 58	34	20	61

Student Voices, controlling for pretest measures of the dependent variable, demographics, and school differences.⁴

By controlling for pretest levels of each respective outcome, as well as demographics and school effects, we can estimate the change in each outcome measure that results from participation in Student Voices. In both the fall and spring semesters, participation in the Student Voices program had a significant, positive effect on the tendency to follow and discuss politics and on political knowledge.⁵ The program's effect on efficacy, though positive across both semesters, was significant only in the fall.

Table 6 presents regression results for the full-year sample. Here, we regressed each spring posttest outcome measure on its corresponding fall pretest measure, participation in Student Voices, demographics, and school differences. The effects of Student Voices were positive and significant for all three outcome measures. In a second analysis for full-year students, we controlled for both the pretest and posttest scores obtained in the fall semester. This analysis (table 6, model 2) indicates that full-year students still exhibited significant gains in the second semester despite holding constant their gains from the fall.

To further assess the performance of full-year students, we examined their scores in the spring in comparison to control students during that semester (results not shown in tables). Students participating in the program for the full year and completing both assessments in the spring semester (N=397) performed significantly better than control students in knowledge ($\beta=.173$,

NOVEMBER 2007

89

TABLE 5

Regression Results for Fall 2002 and Spring 2003

	FOLLOW A	FOLLOW AND DISCUSS	EFFI	EFFICACY	POLITICAL B	POLITICAL KNOWLEDGE
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
11 2002:						
Student Voices participation	**490	062*	.065*	.022	.260***	.168***
Dependent variable in fall 2002 pretest	.561***	.543***	.272***	.271***	.253***	.249***
Candidate interaction		.081**		900.		060+
Political discussion/Internet use		.126***		.035		.223***
Internet communication		*890.		.049	:	023
R^2	.394	.421***	.142	.146	.227	.251***
\sim	1,	1,288	1,5	1,260	1,5	1,292
ring 2003:	•		•		•	
Student Voices participation	.072*	023	.031	002	.148***	.059
Dependent variable in spring 2003 pretest	***809	.588***	.310***	.307***	.382***	.370***
Candidate interaction		920.		.044	:	023
Political discussion/Internet use		.103**		.135**		.145***
Internet communication		.042		133**	:	.063
R^2	.451	.464***	.157	.174**	.278	.296***
$\mathcal N$	8	843	7	755	Ď	844

NOTE.—Cell entries are standardized regression coefficients. All analyses include controls for race, grade in school, gender, mother's education, college plans, student and parent immigrant status, and school differences. $^+$ ρ < .10. * ρ < .05. ** ρ < .01. *** ρ < .001.

TABLE 6

Regression Results for Full Year 2002-3

	FOLLOW AND DISCUSS	D DISCUSS	EFFICACY	ACY	POLITICAL KNOWLEDGE	NOWLEDGE
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Student Voices participation	.117***	**980.	.117**	.121**	.192***	**601.
Variable in fall pretest	.556***	.252***	.262***	.143**	.234***	.192***
Variable in fall posttest	:	.483***	:	.335***		.251***
Black, non-Hispanic	.0001	.022	038	042	015	014
Hispanic	0004	.015	.028	.018	030	005
Asian/Pacific Islander	017	.027	.016	600.—	048	047
Other/mixed/no answer	.058	.052	021	023	.039	.024
Female	.019	.023	052	012	033	041
Grade in school	.103*	.070	.046	.010	+760.	.134*
Mother's education	016	022	.057	.036	.013	007
Born in United States	011	.017	039	.004	.040	.029
Parents born in United States	.051	.038	.038	.002	036	033
Plan to attend college	.033	.032	033	024	.044	.019
R^2	.399	.536	.136	.223	.246	.322
$\mathcal N$	700	632	653	588	702	634

NOTE.—Cell entries are standardized regression coefficients. For all analyses, white, male, born outside the United States, and no plan to attend college serve as reference categories. All analyses include controls for school differences. Second models controlled for both fall pretests and posttests.

* p < .10.

* p < .05.

** p < .01.

91

p < .001) and in following and discussing politics ($\beta = .097$, p < .01), though not in efficacy.

Tests of effects for racial-ethnic identity and of interactions with program exposure produced nonsignificant results in both the fall and spring analyses, as well as for the entire year (results not shown in tables). Hence, there was no evidence of differential performance by students of varying racial-ethnic identity.

Analysis of Mediating Program Effects

Step 2 in each of the regression models reported in table 5 includes the three classroom activity factors as additional predictors. In both the fall and spring samples, participation in program activities appears to fully account for the positive effects of Student Voices on following and discussing politics. Indeed, when adding the three activity factors to the model, the effect of Student Voices is no longer significant in the spring semester and, though still significant in the fall, is now negative in sign. This is mostly due to the strong positive contribution of political discussion/informational Internet use, seen in both semesters. In the fall semester, candidate interaction and Internet communication were also positively related to following and discussing politics. With efficacy, none of the program activities manifested significant effects in the fall semester analysis. However, in the spring, political discussion/informational Internet use was positively related to efficacy, whereas Internet communication was negatively related. The counteractive influence of these two program components likely explains why program exposure as a whole did not have significant effects on efficacy in the spring. Finally, there was evidence that program activities also mediated the effect of the Student Voices curriculum on political knowledge, partially in the fall semester and fully in the spring. Again, political discussion/informational Internet use was a significant, positive predictor of knowledge in both semesters. Candidate interaction was negatively related to knowledge in the fall semester, though only weakly.

Discussion

This study confirms the positive impact of the Student Voices curriculum—above and beyond that of the traditional civic education curriculum in the Philadelphia schools—on important indicators of civic and political engagement. Students participating in the program in either fall 2002 or spring 2003 demonstrated significant improvements in their knowledge and proclivity to follow and discuss politics relative to those in a control condition. Student

Voices was also found to have a significant effect on political efficacy, though only in the fall semester. Furthermore, students who participated in a full year of the program showed markedly stronger effects than control students on all three outcomes. Indeed, students who had experienced the full-year program showed continued gains even after controlling for their gains in the first semester. In addition, students who participated in a second semester of the program showed greater improvements in knowledge and in following and discussing politics than control students in the spring semester.

The finding that two semesters of civics training has incremental effects differs from Niemi and Junn (1998), who found that civic education beyond the first semester had no additional impact. The two-semester cumulative effects of Student Voices on all three outcomes suggest that the program provides sufficiently novel material and experiences to spur additional benefits. Furthermore, these effects are incremental to what is typically observed in the standard civics classes that served as the controls in this study. Hence, the conclusion from Niemi and Junn may only apply to the effects of traditional civics curricula that focus on procedural knowledge and history of government without engaging students in actual deliberative discussions and projects surrounding political issues affecting their community.

Classroom Activities as Best Practices

Several program activities emerged as significant predictors of the outcome variables. Strongest among these was the effect of classroom political discussion, echoing the findings from studies of Kids Voting (McDevitt et al. 2003). Indeed, talking about political and community issues appears to motivate interest in politics, bolster efficacy, and contribute to factual knowledge. Classroom discussion was also highly related to other program activities, including the completion of a class project and use of the Internet for gathering political information. These results suggest that classroom discussion informed by information available on the Internet can have beneficial effects on political outcomes. This has important consequences for civic educators and political actors seeking to employ the innovative qualities of the new media environment to better engage young people in civic and political life.

We also found that use of the Internet to communicate with other students as well as candidates and to participate in online polls showed promising effects on following and discussing politics in the fall semester. However, this effect was not replicated in the spring, and this program component was negatively related to efficacy in the spring. The latter result is not all that surprising. Shah et al. (2001) found that while the use of the Internet for the exchange of information had positive consequences for young people's inter-

NOVEMBER 2007

93

personal trust—an important indicator of civic involvement—the opposite was true of participation in a chat room or an online forum, which is similar to students' use of the Student Voices Web site to communicate with other students. In addition, it is likely that political candidates and public officials receive substantially more constituent e-mail than they could ever feasibly attend to personally. It is possible that students who e-mailed candidates received either a formulaic response or none at all. This may have created or increased feelings of disillusionment toward politics and the political process and consequently reduced feelings of political efficacy. In sum, then, it appears that while the Internet may be valuable for promoting civic education among urban youth, its benefits may be limited to particular patterns of use. On the basis of the present study, the Internet's primary strength appears to be as an informational tool.

The effects of candidate interaction were also somewhat mixed. On the one hand, candidate interaction had a significant, positive effect on following and discussing politics, though only in the fall semester. On the other hand, this activity was negatively related to political knowledge. This effect also only occurred in the fall semester and, even then, was just marginally significant. This finding, then, may not be a reliable indicator of this program component's effects. Nevertheless, the generally weak relations between this component and the outcome measures suggest that it is not a strong feature of the program and could be omitted without serious implications for the program's success. Because candidate visits may be somewhat superficial and fleeting in nature, they are much less crucial than more genuine, sustained classroom discussion for promoting political knowledge, as well as other outcomes.

The classroom activities we assessed mediated the effects of the Student Voices curriculum on political knowledge and on discussing and following politics. In both cases, political discussion/informational Internet use seemed to best account for the effects of the program. Despite evidence for our mediation hypothesis, the persistent presence of program effects for the knowledge outcome in the fall semester suggests that the activities measured represent less than the complete range of Student Voices effects. Knowledge gain, for example, may have resulted, in part, from information seeking that was motivated by Student Voices participation but that took place outside of class—or from other nonclassroom activities, such as voter registration drives or candidate forums.

Success in Urban Schools

One of the more promising effects of Student Voices concerns its equal impact across ethnic and racial groups. While minority youth have historically lagged

behind their white peers in civic and political knowledge and interest, the results indicate that program gains were equivalent among both white and nonwhite urban youth, suggesting that civic education programs like Student Voices can help to narrow traditional citizenship gaps. Also, given that urban schools have not previously been the focus of civic education interventions, it is encouraging to know that Student Voices can be used with success among an urban and predominantly minority high school population. This suggests that the program's districtwide adoption by the Philadelphia public schools will lead to increases in student interest and achievement in political and civic arenas.

Limitations

Despite the many useful findings, the study had several limitations. Because students and classrooms participated in different activities in each semester, we were not able to assess the impact of specific curricular components across the entire year. In controlling for school differences, we likely also eliminated some of the variance due to program exposure. Further, as measures of program activities do not account for the full effects of the program on knowledge and appear unrelated to efficacy in the fall semester, other untested aspects of program involvement may also be relevant. It would have been especially informative to look in more detail at nonclassroom activities across program and control groups, such as voter registration drives, voter education initiatives, roundtable discussions, and other community-based initiatives.

There were also limitations in the sensitivity of our data. Participation in program activities was assessed dichotomously. Hence, we were unable to assess how much or often students engaged in the various activities. Students' Internet use or participation in classroom discussion about the election likely occurred more frequently over the course of a semester than did candidate visits to the classroom. Nevertheless, a single candidate visit received the same score as daily Internet use in our measurement system. In the same vein, it is unclear from our data how much participation in a given activity is required before its benefits are felt. The extent to which students were graded on the basis of their participation in Student Voices activities is also unclear; some teachers, for example, may have made Internet use a requirement, whereas in other classrooms it may have been more voluntary.

While perhaps an inevitable consequence of collecting panel data in a large, urban school district, student attrition imposes limitations on the ability to generalize our findings. It is not evident whether the students who were lost due to absences, transfers, or dropout were those that were least likely to be influenced by the Student Voices program. Although attrition appeared to be

comparable across treatment and control conditions, thereby increasing confidence in our inferences about the overall effects of Student Voices' exposure when compared to the traditional civics curriculum, one should proceed cautiously when generalizing these effects to a broader student population. Moreover, our efforts to reduce attrition led to a few difficult methodological decisions. Attempts to follow students who transferred between assessed classrooms, for instance, prevented us from conducting analyses at the classroom level.

An additional limitation involves the quasi-experimental nature of the study design. That is, classrooms were not randomly assigned to condition; instead, teachers were selected by school administrators to implement the Student Voices program, introducing the potential for selection bias. For example, it is possible that teachers assigned to the treatment group were more motivated to engage students' political interests than teachers assigned to the control condition. Thus, this differential teacher enthusiasm for the program or for politics more generally might have helped to produce the observed outcomes. Some of this concern is alleviated by evidence for the mediating effects of specific curricular components; nonetheless, not all of the variance in the outcome measures is explained by the Student Voices activities, suggesting that some of the program's influence may be attributable to teacher differences across the treatment and control groups. In any event, the possibility of selection bias precludes an exact estimation of the magnitude of Student Voices' impact, and this should be kept in mind when interpreting the study's results.

Finally, we only examined the short-term outcomes concurrent with each semester. The outcomes we assessed, however, should serve as important indicators of future engagement, particularly as students become old enough to vote (Beck and Jennings 1982; Niemi and Junn 1998; Smith 1999). In fact, a study of Student Voices' participants one to two years after graduating from high school indicates that the program has enduring effects (Pasek, Feldman, et al. 2006).

Conclusion

By using several best practices for engaging students in civic education, the Student Voices curriculum appears to increase students' tendency to follow and discuss politics, their knowledge about state and local politics, and their political efficacy, compared to those in standard civic education classes. Further, Student Voices' participants reap incremental benefits with more than one semester of exposure. These improvements can be attributed to specific classroom practices that mediate program results. Among these practices, engaging in deliberative discussions about a current campaign in class, completing a

Feldman et al.

class project regarding the campaign, and using the Internet to explore issues and learn about candidates were most strongly related to favorable outcomes. Encouraging the use of these interactive and discursive methods can contribute to the political socialization of young people even within the challenging environment of the urban classroom.

Notes

- 1. The one recommended practice not included in the Student Voices curriculum concerns involving students in school governance.
- 2. In several of the high schools participating in the study, students in the spring of their senior year (twelfth grade) were exempted from classes in order to begin jobs or work on senior projects. This helps to explain why there were substantially more students available for the fall analysis than for the spring and full-year analyses.
- 3. In order to preserve sample size, mean substitution was used to handle any missing demographic data.
- 4. Because the demographic controls did not exhibit any appreciable effects on our outcomes, we have omitted them from table 5 for the sake of parsimony.
- 5. We recognize that the results for "following politics" might be more indicative of the program's effective implementation than its success in fostering engagement. Hence, we examined those items that reflected more of the program's effects on outcomes that extend beyond curricular requirements, such as general interest in the election and discussion of politics outside of class. Across both semesters, the effects of Student Voices on generating interest in the election were positive and significant (fall $\beta=0.38$, p<.001; spring $\beta=0.07$, p<.05). The results for discussing politics with friends and family and with others outside of class were weaker but also positive. In the spring of 2003, discussion outside of class just missed statistical significance ($\beta=0.07$, p<.06). These findings suggest that the effects of Student Voices go beyond that which was required of students as part of the program's curriculum.

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