



Voice in the Classroom: How an Open Classroom Environment Facilitates Adolescents' Civic Development

David E. Campbell

University of Notre Dame

Dave_Campbell@nd.edu

CIRCLE WORKING PAPER 28

FEBRUARY 2005



CIRCLE

The Center for Information & Research
on Civic Learning & Engagement

America's schools have a mandate to prepare citizens who are equipped to engage in the political life of the nation. While often forgotten in the midst of the public attention paid to reading and math scores, our schools also have a civic dimension. Indeed, a number of states make this explicit in their constitutions, justifying public financing for public schools as the means to ensure a healthy democratic culture (Carnegie Corporation and CIRCLE 2003, 11). Historically, the very concept of a taxpayer-financed common school had civic education as its *raison d'être*. Nor is this the province solely of the public sector, as private schools have also sought to provide a civic education for their students (Campbell 2001).

Notwithstanding that our schools ostensibly play an integral role in sustaining the vibrancy of American democracy, with only a few notable exceptions social science has told us relatively little about the ways in which schools provide a civic education (or not); likewise, policymakers have generally not made the evaluation of civics a priority. There are few large-scale efforts to collect data on schools' civic efforts, resulting in limited sources of data for the study of civic education, meaning that there is little research to inform policymakers on civic education--which is perhaps a reason that civic education has a low priority on the policy agenda. However, a new source of data offers the opportunity to break this vicious circle. The IEA Civic Education Study (CES) represents a significant investment to evaluate systematically the civic education received by American adolescents, and has resulted in an unparalleled wealth of information about the civic outcomes achieved by the nation's schools. This paper draws on the CES to examine the ways in which schools equip their students for active citizenship.

In particular, the objective is to shed light on those factors shaping the political engagement of young people that are within the reach of a school's policies and practices. Thus, while it might be the case (and, in fact it is) that youth whose parents have graduate degrees are more politically engaged than children of high school drop-outs, there is not much a school can do to affect the educational background of students' parents. Similarly, past

research has shown that participation in extra-curricular activities during the high school years correlates with civic and political engagement later in life. But while schools can create opportunities for extra-curricular activity, whether to participate remains the individual's choice and so these studies really tell us more about individuals than their schools. The characteristic of a school on which this paper centers is the degree to which there is an open classroom environment—where social and political issues are discussed freely.

The paper proceeds as follows. It begins with a brief discussion of why the civic education received by America's youth compels our attention, and then moves on to a review of the previous literature on civic education, including an emphasis on the contributions offered by this analysis. Next, the paper describes the IEA Civic Education Study in detail, and discusses the civic outcomes to be analyzed. The analysis itself follows in two parts. First, we see how the classroom environment affects both civic proficiency and the degree to which adolescents anticipate being politically engaged when they reach adulthood. Second, we see what factors lead young people to report that their school has an open environment. The paper concludes with an overview of the results' significance and implications.

WHY CIVIC EDUCATION MATTERS

As noted already, civic education is at the root of the historical rationale for the massive investment made in the nation's schools. Presumably, that should be enough to justify the study of schools' civic performance, whether one thinks that current levels of engagement are too low, too high, or just right.

However, for those who have a normative concern about the overall level of engagement, there is perhaps a more urgent reason that civic education should compel our attention now more than ever. Recent years have seen a decline in the level of political engagement among America's young people. As just one of many indicators, Figure 1 displays the level of interest in current events among high school seniors across the U.S.,

from 1976 to 2001.¹ The figure displays two lines. The solid one represents the percentage of young people who report that they have “a lot” or “very great” interest, while the dotted line reflects those who indicate that their level of interest is “none” or “very little.” The most striking pattern is the shift in interest beginning in the mid-1990s. Prior to that time, more students said they were interested than were not. From that point on, more students report the absence of interest.

Table 1. Types of Anticipated Engagement

Results from factor analysis

	<i>Informed Voter</i>	<i>Electoral Engagement</i>	<i>Community Activism</i>	<i>Illegal Protest</i>
Will vote	0.737	-0.069	0.039	-0.007
Will be informed	0.710	0.057	0.046	-0.004
Will join a party	0.229	0.550	-0.126	-0.013
Will write letters	-0.020	0.669	0.107	-0.053
Will run for office	-0.094	0.649	0.050	0.014
Will volunteer	0.051	-0.061	0.635	-0.160
Will collect money	-0.004	0.015	0.670	-0.044
Will collect signatures	0.050	0.072	0.578	0.094
Will participate in rally	0.027	0.168	0.468	0.181
Will spray-paint	-0.007	-0.068	-0.025	0.796
Will block traffic	0.010	-0.018	-0.041	0.862
Will occupy buildings	-0.010	0.050	0.049	0.770

¹ These data are drawn from *Monitoring the Future: A Continuing Study of American Youth* (MTF). MTF is annually administered to a representative sample of high school seniors across the U.S., in their schools. Secondary schools, both public and private, are selected to produce a nationally representative sample of high school seniors (Johnston, O’Malley, and Bachman 2001).

The literature on political participation reveals a striking convergence among a number of researchers, each working independently, on the decline in voter turnout and other forms of political engagement among young people. In *Bowling Alone*, Putnam (2000) draws on measures much broader than voter turnout, and attributes roughly half of America's overall decline in civic engagement to the drop-off among young people. In *The New American Voter*, Miller and Shanks (1996) focus on voter turnout specifically, and similarly find declining rates among the youngest cohort of voters. More recently, Levine and Lopez (2002) have readjusted the turnout rates among 18-24 year olds to take into account the proportion of the voting age population who are not eligible to vote and still find that voting among young people has fallen since 1972. In other words, America's young people are less engaged in politics now than in the past, and at their current trajectory do not appear likely to catch up to their elders' level of engagement. Something needs to change if we are to reverse this trend. But knowing what that "something" is first requires a more complete understanding of how young people come to be engaged in politics. This paper takes a step toward that objective.

PREVIOUS RESEARCH

Previous research on how educational experiences affect the political engagement of adolescents has proceeded along different tracks. One well-worn track consists of research which has examined the impact of participation in extra-curricular activities, a literature that has consistently shown that belonging to clubs, groups, and associations in adolescence is a "pathway" to other forms of civic and political participation in adulthood (Beck and Jennings 1982; Hanks 1981; Smith, 1999; Youniss, McLellan, and Yates 1997; McFarland and Thomas 2004; Verba, Schlozman, and Brady 1995). More recently, a substantial body of research has also begun to examine whether service learning programs, in which adolescents perform community service as a class or graduation requirement, have an impact on the

political engagement of their participants (Youniss and Yates 1997; Walker 2002; Niemi, Hepburn, and Chapman 2000; Billig 2000; Galston 2003).

The literatures on extracurricular activities and service learning both provide good reason to think that experiences in adolescence shape behavior in adulthood. These two bodies of research, however, only skirt the edges of studying the impact of what happens in schools per se. After all, by definition extra-curricular activities happen outside of formal instructional hours and while service learning is typically embedded in a course of instruction, the service itself is done in the community--outside of the school.

Another, smaller body of research into the political engagement of adolescents has focused on what happens in the classroom. For roughly a generation the consensus was that high school civics courses had little or no effect on students' political knowledge, a conclusion based largely on the research of Langton and Jennings (1968) in the mid-1960s. Drawing on an array of measures, Langton and Jennings concluded that civics courses were an imperceptible signal amidst the noise of the myriad influences on adolescents' political development. That remained the conventional wisdom until 1998, when Niemi and Junn (1998) published convincing evidence to the contrary. Based on their analysis of the civics exam included in the 1988 National Assessment of Educational Progress (NAEP), a far more thorough evaluation than the broad but shallow set of civic measures used by Langton and Jennings a generation prior, Niemi and Junn concluded that taking civics courses does have a significant impact on adolescents' levels of political knowledge--a significant predictor of political engagement (Delli Carpini and Keeter 1996).

The work of Niemi and Junn represents an important turning point for the study of civic education, as it demonstrates that what happens in the classroom does have an impact on young people's preparation for active citizenship. However, their results really only demonstrate how much more we need to learn about civic education, as we have essentially missed a generation of research on the subject. Their main finding is that taking

a civics course leads, on average, to an increase on the NAEP Civics Evaluation of roughly four percentage points. But in a re-analysis of their data, Greene (2000) demonstrates that the effect is limited to students currently enrolled in a civics course, and is really only a gain of two percentage points. In other words, from the research of Niemi and Junn we know that taking a civics course matters—at least a little and for at least a little while. From their research, though, we can draw few conclusions about techniques for effective civics instruction.

This paper builds on the work of Niemi and Junn, by examining not only the quantity of civics instruction, but what we might call its quality. In particular, the focus is on the impact of how political and social issues are handled in the classroom. Niemi and Junn provide reason to think that adolescents' performance on a civics evaluation is linked positively to the discussion of political issues within their classes. However, they also note that "the mechanisms at work . . . remain hidden" (122), owing to the blunt measure contained in the NAEP data—a single question about the frequency of such discussions. Similarly, cross-national analysis of twenty-eight nations (including the United States) finds that discussion of political issues in the classroom enhances civic proficiency (Torney-Purta 2002; Torney-Purta and Richardson 2005; Torney-Purta 2001-2002), which is a replication of a similar conclusion drawn from a previous cross-national study of civic education (Torney, Oppenheim, and Farnen 1975). All of these studies are informative, but none digs deep into the impact of classroom discussion within the American context. The cross-national studies employ a rich source of data, but do not focus on American schools specifically; the Niemi and Junn study deals with American schools, but has only a single, thin measure of classroom discussion.

Why would we expect discussion of political and social issues in a school setting to enhance civic education? The answer lies in the virtues of deliberation as an educative process. In classrooms where students are exposed to the real world of political issues, they are introduced to the lifeblood of participatory democracy—discourse

and debate. Rather than dry, abstract lessons on the institutional mechanisms of the political system, students are provided with opportunities to wrestle with political and social issues. From such discussions, they glean knowledge about the political process. Furthermore, in classrooms where they feel welcome to venture their views, they gain experience in reasoning through positions on public policy issues, essential preparation for informed participation in the democratic process. Thus, it is not just that discussion is more interesting for students—although it almost certainly is—but also that it is more effective as a means to equip young people for informed political engagement. Experience with political discussion should be expected to improve students' civic proficiency, improving their scores on an evaluation of their ability to interpret and apply politically-relevant information, as well as increasing the likelihood that they will express an interest in being politically engaged.

IEA CIVIC EDUCATION STUDY

A primary reason for the "missing generation" in civic education research has been the scarcity of data. Unlike academic outcomes such as math and reading, there are few sources of data on civic education, and thus few rigorous studies of what works in civic education and what does not. The NAEP data, mentioned above, is a notable exception but still leaves many stones unturned. In particular, the design of the NAEP makes it impossible to generate school-level aggregate measures of the sort employed here.

This analysis will draw on the most extensive contemporary source of data on civic education available, the IEA Civic Education Study (CES). Conducted under the auspices of the International Association for the Evaluation of Educational Achievement (IEA), the same organization that produces cross-national comparisons of other academic outcomes like competence in math and science, the CES is a school-based survey administered in a representative sample of students in twenty-eight participating nations, of which the U.S. is one. In

the United States, the sample includes 124 public and private schools.² One ninth-grade class of students was surveyed in each school. Surveys were administered in the fall of 1999.³ The CES has considerable breadth and thus contains a wide array of civic measures, including both exam-like evaluations and attitudinal items. Importantly, it also asks students a series of questions about the methods used in their school for civic education. In order to account for the wide variety in America's educational system, I have also appended data about the respondents' schools and school districts to the public-release version of the CES.⁴

CIVIC OUTCOMES

This analysis will focus on two types of civic outcomes. The first follows from the existing literature on the impact of civics courses and thus consists of civics evaluations, similar in kind to the NAEP evaluation used by Niemi and Junn. Two civics evaluations from the CES instrument will be used. One is the general evaluation, included in the core CES questionnaire administered in all twenty-eight nations which participated in the IEA study. Consisting of thirty-eight questions, this component of the questionnaire was carefully designed to be applicable in a variety of nations and thus political cultures. The second civics

² Even though the dataset includes both public and private schools, the models reported here include only students in public schools. This is because the models include variables describing the school district, which does not apply to private schools. Note that in models which exclude the district-level variables and include the private schools, no statistically significant differences are found between the public and private sectors in the dependent variables that have been employed.

³ For more on the CES, see Torney-Purta, Lehmann, Oswald, and Schulz (2001). Information about the study is available at <http://www.wam.umd.edu/~iea>.

⁴ In order to append these data, it was necessary to know the geographic locations of the schools used in the study, which for reasons of confidentiality are not available in the public-release version of the data. They were made available through a restricted data license granted by the National Center for Education Statistics. I appreciate the assistance of Judith Torney-Purta in obtaining the license. Data regarding schools and school districts were taken from the Common Core of Data (U.S. Department of Education 2002).

evaluation is specific to the United States. It consists of eleven questions about the American context. Throughout the following discussion, the term civic proficiency refers to students' performance on either or both of these evaluations. The two scales themselves are referred to as the General Civics Scale and the U.S. Civics Scale, respectively.⁵

The civics evaluations were the subject of careful development by the IEA, and are not simply factual questions of the type usually seen in surveys designed to tap into political knowledge. Rather, they are questions about broad concepts and principles within a democratic society, and often ask the student to interpret material provided within the exam itself. Below are two examples, one from the general evaluation, the other from the set of U.S. questions, with the correct answer in italics.

In democratic countries, what is the function of having more than one political party?

- A. To represent different opinions in the national legislature (Congress)
- B. To limit political corruption
- C. To prevent political demonstrations
- D. To encourage economic competition

[This question is] based on the article below about those who fought to help women gain the right to vote. Women got that right in 1920.

On November 1, 1872, Susan B. Anthony

⁵ Readers familiar with IEA publications regarding the CES should note that these are not the labels used by the IEA itself to describe these measures. What I call the General Civics Scale combines the "knowledge of content" (Type 1) and "skills in interpretation" (Type 2) items. Also, note that while the CES dataset contains a variable (TOTCGMLE) measuring performance on the Type 1 and Type 2 questions, I have opted not to use it. This is because the scale was generated using item-response theory (IRT), and a comparable scale is not included for the U.S.-specific questions. To ensure comparability between the general and U.S. scales, I use the same method of calculation for both—the percentage of correct responses, with each scale standardized to have a standard deviation of 1. Note that the results are virtually identical when TOTCGMLE is substituted for the General Civics Scale I have generated.

and her sisters . . . calmly walked into . . . the polling place in their election district. . . “We are here to register for the vote,” said Miss Anthony to the [surprised] election inspector.

“Impossible!” he said. “It is not legal for women to vote. We cannot accept your registration.”

From her handbag, Miss Anthony whipped out a copy of the Constitution of the United States. All three election inspectors gathered around as she slowly read aloud the Fourteenth and Fifteenth Amendments. Then she challenged the inspectors to show where it said women were specifically left out. The men sputtered and argued in vain. At last they reluctantly registered the four women.

Why did Susan B. Anthony think a copy of the Constitution would help her?

- A. She knew the Constitution did not say it was illegal for women to vote.
- B. She knew the election inspectors would see that the Constitution was wrong.
- C. She thought the election inspectors would like the words in the Constitution.
- D. She thought the election inspectors would agree that the Constitution needed to be changed.

The general and U.S. civics evaluations shed light on adolescents’ preparation for political engagement, but they are silent on the question of whether they will actually become politically involved. To this end, the analysis also examines the degree to which these adolescents indicate they will become politically engaged in the future.⁶ For

⁶ For the first five items—voting through running for office—respondents were asked whether they expect to do them “when you are an adult.” For the remaining activities, they were asked whether they expect to participate in them “during the next few years.”

each item, respondents indicated whether they certainly will not do it, probably not do it, probably do it, or certainly do it. The complete list of items follows:

- Vote in national elections
- Get information about candidates before voting in an election
- Join a political party
- Write letters to a newspaper about social or political concerns
- Be a candidate for a local or city office
- Volunteer time to help poor or elderly people in the community
- Collect money for a social cause
- Collect signatures for a petition
- Participation in a peaceful protest march or rally
- Spray-paint protest slogans on walls
- Block traffic as a form of protest
- Occupy public buildings as a form of protest

These twelve items compress neatly into four intuitive factors, as indicated in Table 1.⁷ I have labeled the four factors: Informed Voter, Electoral Engagement, Community Activism, and Illegal Protest. Note that owing to the fact that the CES is a cross-national study, some of these items are not an ideal fit for the American context. For example, in the United States few people, even among those who are highly engaged politically, have formal membership in a political party. Of the four factors, the one that is of the greatest interest for the analysis at hand is the Informed Voter Index, since it represents an adolescent’s expectation of engaging in the fundamental democratic act of casting an informed vote. It combines the expectation of voting, and of gathering information in order to make an informed choice at the polls.

One of the difficulties in studying civic education is widespread disagreement over what should be taught and thus encouraged by the schools (Murphy 2003). For example, reasonable

⁷ Factor analysis with promax rotation. Other methods of factor analysis produce essentially identical results.

people may disagree on whether schools should be in the business of encouraging adolescents to engage in political protest, whether legal or illegal. Presumably, however, it is not controversial that young people should be encouraged to cast an informed vote. Indeed, having a knowledgeable electorate is a justification for public schools in many state constitutions.

These statements of adolescents' expected level of political engagement are not assumed to be an iron-clad indicator of their future involvement, for only with longitudinal data is it possible to determine definitively how adolescents' expectations correspond to their actual behavior in adulthood. Rather, these are taken to be a window into an adolescent's current state of mind regarding political involvement. Nonetheless, it seems reasonable to conclude that adolescents who indicate that they expect to be politically active as adults are more likely to turn out that way than are young people who say they are unlikely to be politically engaged.⁸

The extensive political science literature on voter turnout suggests why it is important to understand how young people develop the expectation that they will be a voter. It has long been shown that a purely rational calculus based on a voter's stake in a current election does not explain why people bother to turn out at the polls—since the probability of casting the deciding vote is infinitesimal, there is no rational reason to incur the costs associated with voting. People instead vote for reasons beyond their immediate interests. In the language of economics, an important reason is that they have acquired a “taste” for political involvement, and a common means of developing that taste is through childhood socialization—of which a stated expectation that one will vote is an indicator. Further underscoring the relevance of adolescents' expected intention to be a voter,

⁸ Empirical evidence for this claim comes from the author's analysis of data from Monitoring the Future, which has a panel component. High school seniors are asked whether they expect to engage in a set of activities comparable to those on the CES questionnaire. Follow-up surveys are administered at two-year intervals after high school. Anticipated participation in high school correlates highly with expected participation later on (Campbell 2004).

longitudinal research has shown that voting is a habitual activity (Plutzer 2002). Voting once dramatically boosts the likelihood of voting again, and thus voting as a young adult means an increased probability of voting all through adulthood. Again, a fourteen year-old's statement that she expects to vote does not mean that she will necessarily cast a ballot in early adulthood, but it would seem to increase the odds of doing so.

The analysis thus proceeds with the twin hypotheses that an open classroom environment leads both to greater civic proficiency and a greater level of anticipated engagement as an informed voter.

CLASSROOM ENVIRONMENT

The facet of a student's experience in school that lies at the center of this analysis is what I have called the openness of the classroom environment, by which is meant the discussion of contemporary social and political issues by teachers and students alike. The CES contains a number of related items that ask students about their experience with the discussion of political issues, which have been combined in an additive index.⁹ For each statement, they could select that the degree to which that statement applies to their classes: never, rarely, sometimes, or often.

The next part of the questionnaire includes some statements about things that happen in your school. When answering these questions think especially about classes in history, civics/citizenship, or social studies.

Students feel free to disagree openly with their teachers about political and social issues during class

Students are encouraged to make up their own minds about issues

Teachers respect our opinions and encourage us

⁹ The index was constructed by simply adding the values of each item in the index. Cronbach's alpha for the index is 0.82. Note that this scale is slightly different than the “Classroom Climate Score” (variable CCLIMMLE) included in the CES dataset, which does not include the final item in this list (“Students bring up current events.”)

to express them during class
Students feel free to express opinions in class even when their opinions are different from most of the other students

Teachers encourage us to discuss political or social issues about which people have different opinions

Teachers present several sides of an issue when explaining it in class

Students bring up current political events for discussion in class

The challenge of employing a measure like this is the strong likelihood that students who are already the most politically engaged will also be the most likely to initiate political discussions in class, the most attuned to them when they occur, and perhaps the most likely to seek out classes and teachers where social and political issues come up at all. Needed, therefore, is a means to gauge the general environment within the classroom, rather than just an individual's own perception of that environment. To guard against confounding the impact of a student's own proclivity toward politics with the general perception of the classroom environment, I calculate the mean value for the classroom environment index for all of the respondent students within a given school omitting the value of each respondent's own index score from the mean.¹⁰ I will refer to it as the aggregate mean of the classroom environment index.

While the aggregate measure is of central interest, an individual student's own perception of the openness of the classroom environment within a school is nonetheless relevant also. Some students are going to perceive a different level

¹⁰ Students in one class of a civics or social studies course were sampled in each school. The number of students per school averaged 25, varying from 2 to 63.

¹¹ I use the term perception carefully here. Some students may see the same teachers differently than their peers, but in other cases two students in the same school may very well have different experiences.

of openness than others, which is expected to affect their preparation for political engagement.¹¹ However, interpreting the impact of an individual's own perception is difficult, given that it naturally has a high correlation with the aggregate mean. To separate an individual's own perception from the aggregate value, I have "purged" the two of any correlation. This has been done by regressing the individual's own classroom environment score on the class mean, and saving the residuals. Since the residuals reflect the degree to which an individual's own score deviates from the aggregate value, the two are by definition uncorrelated.¹² In the models that follow, therefore, the individual-level classroom environment score represents the impact of individuals' perceptions over and above what their fellow students indicate the classroom environment is like.

OTHER VARIABLES

In addition to the classroom environment, the models also test the impact of being enrolled in a civics or social studies course, with a measure that is comparable to the one used by Niemi and Junn. The CES includes a measure of the frequency with which the respondents "study social studies in school." Responses include almost every day, once or twice a week, once or twice a month, never or hardly ever. It also includes a measure of how much homework they have in the subject each week: None (or "I have homework but I don't usually do it), Less than 1 hour, 1 -2 hours, 3-4 hours, or 5 hours or more. These two questions have been combined into an additive scale, Social Studies Instruction. By incorporating Social Studies Instruction into the same model as Classroom Environment, we can compare the separate effects

¹² The correlation between the individual and aggregate (that is, the residuals) classroom environment scores is 0.01 ($p=0.534$).

of quantity versus quality in civics instruction.

The model also includes an array of individual-level variables to control for factors that are plausibly related to political engagement and/or performance on the civics evaluations. When modeling adults' political engagement it is critical to control for their level of education, since more education leads to greater involvement. Because all of these respondents are in ninth-grade their level of education is a constant, however, so in its place the model accounts for the amount of education the student expects to achieve. Expected Education is a proxy for socioeconomic status, which is a consistent correlate of both political engagement and test performance. The models also control for the student's self-reported level of political interest. Greater interest in politics likely corresponds to stronger performance on the evaluations, as well as a greater likelihood of anticipating engagement in political activity later in life.¹³

The model also controls for gender and race/ethnicity. Among the adult population, women generally fall slightly behind men in measures of political engagement (Burns, Schlozman, and Verba 2001), although among adolescents the pattern is not as consistent—for some measures females score ahead of males while for others they are behind. Either way, gender matters. Race and ethnicity also matter, as racial and ethnic minorities generally score lower than whites on measures of political involvement. Race/ethnicity is thus included in the model, coded as White (non-Hispanic), Black (non-Hispanic), Hispanic, and Other Minority (a residual category that consists primarily but not exclusively of Asian Americans).

In addition to these individual-level controls, the model also accounts for characteristics of a student's school. These begin with the per-pupil

¹³Expected Education: "How many years of further education do you expect to complete after this year?" 0 years, 1 or 2 years, 3 or 4 years, 5 or 6 years, 7 or 8 years, 9 or 10 years, more than 10 years.

Political interest: "I am interested in politics" Strongly disagree, Disagree, Agree, Strongly Agree.

expenditures within the school's district. While it is overly simplistic to assume that more spending automatically leads to better schools, it is generally the case that when all else is equal schools with more resources outperform those with fewer resources. The model further controls for the level of education within a school's district, as a measure of relative affluence.¹⁴ Because it may be that schools in different types of communities vary in the civic education that they provide their students, the model also differentiates between schools that are in urban, suburban, small town, and rural settings. Finally, the model accounts for the level of ethnic-racial heterogeneity within the school, because of the challenges faced by educators in a heterogeneous environment, and because other research has found civic involvement to be lower in heterogeneous communities (Alesina and Ferrara 2000; Costa and Kahn 2003). Heterogeneity is measured with a Herfindahl Index, which indicates the probability that two randomly-selected students within the school will have different ethnic-racial backgrounds. The higher the index, the more heterogeneous the school.

In all of the models that follow, two important statistical adjustments have been made. The first is that the data have been weighted so that they are fully representative of the U.S. population.¹⁵ The second corrects for a violation of a standard assumption in linear regression, namely that students within a school are not independent of one another. Consequently, all of the models that follow have robust standard errors (Huber/White correction), with clustering at the school level. Intuitively this means that cases (students) are assumed to be independent across schools, but

¹⁴ There are a variety of ways to measure the relative affluence of a school or school district, including the median income within the district and the percentage of students who received free or reduced price lunch. As should be expected, they are all highly correlated with one another. The results change little when other measures of affluence are used, although the percentage of college graduates is the only one to achieve statistical significance.

¹⁵ The models employ the weights calculated by the IEA and included in the public-release version of the dataset.

not within them.

To aid in the interpretation of the results, the dependent variables all have a standard deviation of 1, while the independent variables are standardized to have a range of 0-1. As a result, a coefficient of 1.0 would mean that as an independent variable increases from its minimum to maximum value, the dependent variable increases by one standard deviation.

social studies instruction leads to a gain in the General Civics Scale of roughly 0.28 of a standard deviation.¹⁶

RESULTS

We begin with a model of the general civics evaluation. The first step is to replicate the Niemi and Junn results, by regressing the General Civics Scale on Social Studies Instruction, as well as the individual and school-level control variables described above, but not the two measures of the classroom environment (since these were not part of Niemi and Junn's models). Results are displayed in column 1 of Table 2. For the most part, the control variables operate as expected. At the individual level, Expected Education and Political Interest are both positive and statistically significant, while all three minority groups score lower on the general civics evaluation than whites (the baseline category). Females score higher than males, but the coefficient only has a p value of 0.196, putting just beyond the standard cut-off for statistical significance. At the school-level, per-pupil spending has no statistically discernible effect, while the percentage of college grads in the district has a positive, highly significant impact. Community type has no effect (urban schools is the baseline). Note that racial heterogeneity has a negative coefficient, but is not statistically significant. Most importantly, we also see results that confirm the conclusion of Niemi and Junn-- courses with civics content affect performance on a civics evaluation. The quantity of social studies instruction has a positive, statistically significant impact on the general civics evaluation. Moving from the minimum to the maximum degree of

¹⁶ In percentage terms, this translates into a gain of 5 percentage points (2 more questions correct out of 38).

Table 2. Civic Proficiency
Results from linear regression

	<i>General Civics Scale (1)</i>	<i>General Civics Scale (2)</i>	<i>U.S. Civics Scale (3)</i>	<i>U.S. Civics Scale (4)</i>
Social Studies Instruction	0.277** (0.128)	0.032 (0.151)	0.258* (0.134)	-0.056 (0.134)
Classroom Environment, Aggregate		0.668*** (0.242)		0.754*** (0.253)
Classroom Environment, Individual		0.447*** (0.151)		0.636*** (0.161)
Expected Education	1.540*** (0.123)	1.411*** (0.143)	1.369*** (0.118)	1.248*** (0.131)
Political Interest	0.243*** (0.074)	0.236** (0.094)	0.208*** (0.075)	0.185** (0.092)
Female	0.060 (0.046)	0.014 (0.052)	0.131*** (0.048)	0.063 (0.052)
Hispanic	-0.458*** (0.083)	-0.404*** (0.086)	-0.411*** (0.095)	-0.381*** (0.095)
Black, Non-Hispanic	-0.681*** (0.089)	-0.559*** (0.091)	-0.612*** (0.096)	-0.456*** (0.097)
Other Minority	-0.360** (0.170)	-0.261 (0.170)	-0.275** (0.123)	-0.185 (0.138)
Exp/student, District	-0.279 (0.298)	-0.174 (0.262)	-0.251 (0.239)	-0.107 (0.255)
% College educated, District	0.771*** (0.180)	0.627*** (0.161)	0.404* (0.217)	0.225 (0.227)
Racial heterogeneity, School	-0.108 (0.131)	-0.133 (0.135)	-0.096 (0.132)	-0.115 (0.141)
Suburban	0.072 (0.100)	0.061 (0.101)	0.096 (0.094)	0.101 (0.100)

Column 2 of Table 2 then displays a model which adds the two gauges of the classroom environment within a school. When classroom discussion is accounted for in this way, the coefficient for social studies instruction is no longer statistically significant.¹⁷ In other words, once we account for the discussion of political and social issues within the classroom, Social Studies Instruction ceases to have an impact. Both the aggregate and individual-level measures of classroom environment are positive and statistically significant, with the impact for the school-level mean being moderately larger in magnitude. An increase of the aggregate classroom environment index from its minimum to maximum results in an increase of 0.67 of a standard deviation in the General Civics Scale, while the increase in the individual-level index increases the score on the general civics evaluation by 0.45 of a standard deviation. Columns 3 and 4 of Table 2 repeat identical models for the U.S. Civics Scale, with essentially the same results. Social Studies Instruction has a positive and significant coefficient when classroom environment is not included in the model, but fades away to statistical insignificance when it is accounted for. In this case, the coefficient for Social Studies Instruction drops to almost nil (-0.056) in addition to being nowhere near statistical significance (p value of 0.676). The bottom line is that results for both the general and U.S. civics evaluations show that quality trumps quantity—the degree to which political and issues are discussed openly and respectfully has a greater impact on civic proficiency than the frequency and intensity with which social studies is a subject of study.

These results lend support to the argument that civics is best taught by modeling democratic discourse. In both cases, we see that the aggregate mean and the individual's own perception of the classroom environment (over and above the aggregate score, remember) each have an impact on civic proficiency. Of greatest interest is the aggregate index, for while the individual's own perception could be a reflection of the fact that adolescents with greater political awareness are more likely to experience an open classroom environment, the classroom mean gauges the

overall degree of openness within the class.

These models demonstrate that the classroom environment has an impact on civic proficiency, as measured by the two evaluations in the CES. But does it also have an impact on adolescents' anticipated level of engagement? To test whether it does, I have regressed the Informed Voter Index on the same set of variables as in the previous models. The results are presented in the first column of Table 3. As with the models of the two civics evaluations, again both measures of the classroom environment have a positive and statistically significant effect, although in this case the impact of the individual's own perception of the classroom environment is larger (1.376) than that of the aggregate mean (0.751). Also, Social Studies Instruction is positive and significant, even when classroom environment is included in the model. However, its magnitude, 0.501, is smaller than either measure of classroom environment.

¹⁷ For the sake of space, both classroom environment variables are added to the models at once, rather than sequentially. Either one separately wipes out the statistical significance of *Social Studies Instruction*.

Table 3. Anticipated Engagement
Results from linear regression

	<i>Informed Voter</i> (1)	<i>Electoral Engagement</i> (2)	<i>Community Activism</i> (3)	<i>Illegal Protest</i> (4)
Social Studies Instruction	0.501*** (0.126)	0.273** (0.129)	0.470*** (0.134)	-0.178 (0.130)
Classroom Environment, Aggregate	0.751*** (0.186)	0.083 (0.184)	0.027 (0.187)	-0.775*** (0.199)
Classroom Environment, Individual	1.376*** (0.148)	0.701*** (0.168)	1.135*** (0.197)	-0.664*** (0.168)
Expected Education	0.937*** (0.129)	0.502*** (0.145)	0.673*** (0.158)	-0.630*** (0.134)
Political Interest	0.884*** (0.102)	1.380*** (0.112)	0.794*** (0.111)	0.280*** (0.090)
Female	0.297*** (0.049)	0.147*** (0.052)	0.464*** (0.060)	-0.275*** (0.058)
Hispanic	-0.123* (0.072)	0.077 (0.083)	0.160* (0.083)	0.144 (0.096)
Black, Non-Hispanic	-0.254*** (0.080)	0.115 (0.113)	0.206** (0.090)	0.130 (0.087)
Other Minority	-0.108 (0.093)	0.279*** (0.071)	0.306*** (0.092)	0.283*** (0.097)
Exp/student, District	-0.333** (0.144)	-0.115 (0.147)	-0.100 (0.203)	0.078 (0.236)
% College educated, District	0.173 (0.129)	-0.262** (0.125)	-0.162 (0.174)	-0.068 (0.147)
Racial heterogeneity, School	-0.159* (0.094)	-0.029 (0.098)	-0.076 (0.121)	-0.002 (0.113)
Suburban	-0.078 (0.053)	-0.039 (0.072)	-0.011 (0.080)	0.027 (0.066)

The results for the other variables are similar to those in the previous model, with a few exceptions. For example, compared to their peers in urban centers, students in small towns and cities have a slightly lower score on the Informed Voter Index (although the coefficients are on the cusp of statistical significance, at $p=0.149$ and $p=0.10$ respectively). Of particular interest is that a school's degree of racial heterogeneity has a negative and statistically significant impact ($p < 0.10$) on the anticipation of being an informed voter. This finding is consistent with the growing literature suggesting that ethnic and racial heterogeneity impede civic involvement. As we will see, the story for racial diversity is more complex than implied by this negative coefficient, however.

Both classroom environment and being enrolled in a social studies class increase an adolescent's expectation of being an informed voter upon reaching adulthood. But while voting unquestionably represents an important facet of active citizenship, it is only one potential type of political engagement. The remaining models in Table 3, therefore, test whether classroom environment and social studies instruction have an impact on the other dimensions of political engagement: electoral engagement, community activism, and illegal protest. Since these are more intensive forms of engagement than voting and extend beyond what most people probably consider to be the basic responsibilities of responsible citizenship, it is not clear that they are, or even ought to be, encouraged by schools. In the case of illegal protest, if these tactics are mentioned at all it is likely that they are discouraged by teachers.

The results reveal that the aggregate mean for classroom environment has no statistically significant impact on electoral engagement and community activism, while Social Studies Instruction has a positive effect on both. The individual's perception of classroom environment, however, is positive and significant in the models of both electoral engagement and community activism, indicating that students who score highly on this measure are inclined toward political engagement generally. Notably, the two measures of classroom environment and quantity of social

studies instruction all have a negative impact on illegal protest (although Social Studies Instruction is only at the margins of statistical significance, with a p value of 0.172).

To summarize these results, a school environment which promotes thoughtful, respectful discussion of political and social issues equips students for active citizenship by developing their proficiency in civics. As well, it leads them to the expectation that they will be informed voters in adulthood. In addition, an individual's own perception of the classroom environment—over and above what their peers report—also has an impact on both civic proficiency and the anticipation of being an informed voter. The aggregate estimate of the classroom environment's openness does not increase the likelihood that an adolescent expects to be involved in more intensive forms of political participation, namely electoral engagement and community activism, although individual perceptions do have a positive impact on both. Both measures of classroom environment are negatively related to illegal protest.

WHAT LEADS TO AN OPEN CLASSROOM ENVIRONMENT?

The importance of the classroom environment compels a closer look at the factors which lead to a school culture that promotes the open exchange of ideas and opinions on political and social issues. To this end, the analysis now moves classroom environment to the other side of the equation, and models individuals' perception that their teachers encourage political discussion. Where do we find students who report that their school has an open classroom environment?

There are two competing hypotheses for the conditions under which teachers encourage the discussion of politics. One is that they are more common in school environments where students hold conflicting views. It could be that in schools whose students have divergent political opinions, teachers find more opportunities to hold class discussions of public issues. On the other hand, it could also be that teachers are reluctant to broach public issues in settings where conflict is likely, out

of fear that students, their parents, or the school's administrators will frown on divisiveness in the classroom. In a complementary analysis, Gimpel et al (2003) find that minority adolescents are less likely to discuss politics with their peers—related to, but distinct from, discussing political issues in the classroom—in communities with a large proportion of students with a similar ethnic background.

Evaluating these hypotheses requires identifying schools where students hold divergent views on political and social issues. Ideally, we would have a means to measure students' political opinions within each school, which is unfortunately not possible with the CES. In the absence of the ideal, an alternative is to identify a demographic measure that is a proxy for opinions on political and social issues. In the contemporary political environment, race reflects a salient political divide; this is particularly true for differences between blacks and whites (Kinder and Sanders 1996). While it is an oversimplification to suggest that blacks and whites differ on every issue, it is nonetheless the case that race shapes opinions on many issues. One measure of a potential racial divide within a school is the degree to which its student body is ethnically and racially heterogeneous. Therefore, the model includes ethnic-racial heterogeneity, measured as before with a Herfindahl Index. Since a higher value of the index indicates greater heterogeneity, a positive coefficient would mean that teachers become more likely to encourage an open classroom environment in heterogeneous schools, while a negative coefficient would mean they become less likely to do so.

While potentially informative, an overall measure of racial heterogeneity does not fully test our two hypotheses. It could also be that students' experiences interact with the racial environment in their schools. If an open classroom environment is more likely in potentially conflictual settings, we should expect to see that black students in predominantly white schools report more political discussion in their classrooms, and the same for white students in predominantly black schools. On the other hand, if teachers shy away from political discussions in schools with a high potential

for conflict, black students should report more discussion in schools with a larger percentage of fellow black students (and the same for white students in schools with more whites).

These possibilities are tested with interaction terms. Black has been interacted with the percentage of white students (% White) in the school (Black X % White), and White has been interacted with % Black (White X % Black). Similar interactions have been also been calculated for Hispanic students and their ethnic-racial environment, but have been omitted from the models that are displayed because they exhibit no statistically significant effects.

In addition to the variables testing the contingent impact of the school's ethnic-racial environment according to ethnic-racial group, the models also include a series of other variables at both the individual and school level. At the individual level, the model controls for the same characteristics as earlier: educational expectations, political interest, gender, and instruction in social studies. At the school level, controls again consist of per-pupil spending in the district and the percentage of college graduates in the district.

Results can be found in Table 4. In order to keep the interpretation of the interaction terms as clear as possible, four models are presented. In the first, Black is interacted with % White, while the second includes White X % Black.¹⁸ The next two columns round things out, with Black X % Black in column 3 and White X % White in column 4.

18. Since % White and % Black are highly correlated with one another, including them both in the same model so inflates the standard errors of each that neither is statistically significant.

All four models tell a common story. Educational expectations, political interest, and gender are all positive and statistically significant. Per-pupil spending is not significant, while the percentage of college graduates in the district has a positive, and significant, impact. Racial heterogeneity is not statistically significant in any of the models.¹⁹

The real story, however, is told by the racial interactions. In the first two models, Black X % White and White X % Black are both negative (and statistically significant). That is, as the percentage of white students increases, black students are less likely to report that their teachers encourage political discussion in class, and as the percentage of black students increases, white students report less discussion in schools with a larger black population. In other words, the second hypothesis is supported—teachers appear to shy away from the discussion of political and social issues in schools where students have divergent views. As further evidence, the model in column 3 shows that black students are more likely to experience an open classroom environment as the percentage of black students rises. White students appear to say the same about schools where whites have a larger share of the population, but the coefficient misses the conventional threshold for statistical significance (0.215).

¹⁹ *Racial Heterogeneity* and % *Black* are only correlated at 0.12 (p=0.000). *Racial Heterogeneity* and %*White* have a stronger correlation: -0.44 (p=0.000). In spite of these correlations, however, the results do not change substantively when *Racial Heterogeneity* is omitted from the model. Neither *Black* nor *White* interact with *Racial Heterogeneity*.

Table 4. Classroom Environment
Results from linear regression

	<i>Classroom Environment Index</i>	<i>Classroom Environment Index</i>	<i>Classroom Environment Index</i>	<i>Classroom Environment Index</i>
	(1)	(2)	(3)	(4)
Black, Non-Hispanic	0.268 (0.183)		-0.587*** (0.186)	
White, Non-Hispanic		0.416*** (0.156)		-0.026 (0.202)
% Black		0.377* (0.215)	-0.300 (0.256)	
% White	0.188 (0.124)			-0.169 (0.175)
Black X % White	-1.096*** (0.382)			
White X % Black		-0.688* (0.414)		
Black X % Black			0.994** (0.406)	
White X % White				0.373 (0.299)
Hispanic	-0.011 (0.097)	0.262* (0.136)	-0.063 (0.084)	0.135 (0.121)
Other Minority	-0.080 (0.124)	0.210 (0.164)	-0.129 (0.113)	0.081 (0.141)
Social Studies Instruction	0.644*** (0.149)	0.618*** (0.153)	0.632*** (0.151)	0.622*** (0.152)
Expected Education	0.426*** (0.138)	0.432*** (0.138)	0.430*** (0.138)	0.428*** (0.139)
Political Interest	0.427*** (0.086)	0.421*** (0.086)	0.431*** (0.085)	0.415*** (0.087)

All four models tell a common story. Educational expectations, political interest, and gender are all positive and statistically significant. Per-pupil spending is not significant, while the percentage of college graduates in the district has a positive, and significant, impact. Racial heterogeneity is not statistically significant in any of the models.¹⁹

The real story, however, is told by the racial interactions. In the first two models, Black X % White and White X % Black are both negative (and statistically significant). That is, as the percentage of white students increases, black students are less likely to report that their teachers encourage political discussion in class, and as the percentage of black students increases, white students report less discussion in schools with a larger black population. In other words, the second hypothesis is supported—teachers appear to shy away from the discussion of political and social issues in schools where students have divergent views. As further evidence, the model in column 3 shows that black students are more likely to experience an open classroom environment as the percentage of black students rises. White students appear to say the same about schools where whites have a larger share of the population, but the coefficient misses the conventional threshold for statistical significance (0.215).

¹⁹ Racial Heterogeneity and % Black are only correlated at 0.12 (p=0.000). Racial Heterogeneity and %White have a stronger correlation: -0.44 (p=0.000). In spite of these correlations, however, the results do not change substantively when Racial Heterogeneity is omitted from the model. Neither Black nor White interact with Racial Heterogeneity.

BIBLIOGRAPHY

- Alesina, Alberto, and Eliana La Ferrara. 2000. Participation in Heterogeneous Communities. *Quarterly Journal of Economics* (August):847-904.
- Beck, Paul Allen, and M. Kent Jennings. 1982. Pathways to Participation. *American Political Science Review* 76 (1):94-108.
- Billig, Shelly. 2000. Research on K-12 School Based Service Learning: The Evidence Builds. *Phi Delta Kappan* 81 (9):658-64.
- Burns, Nancy, Kay Lehman Schlozman, and Sidney Verba. 2001. *The Private Roots of Public Action: Gender, Equality, and Political Participation*. Cambridge, MA: Harvard University Press.
- Campbell, David E. 2001. Making Democratic Education Work. In *Charters, Vouchers, and Public Education*, edited by P. E. Peterson and D. E. Campbell. Washington, DC: Brookings Institution.
- . 2004. *Doing Your Duty: How Communities Shape Public Engagement*. [unpublished manuscript].
- Carnegie Corporation and CIRCLE. 2003. *The Civic Mission of Schools*: Available at www.civicmissionofschoools.org.
- Costa, Dora L., and Matthew E. Kahn. 2003. Civic Engagement and Community Heterogeneity: An Economist's Perspective. *Perspectives on Politics* 1 (1):103-111.
- Delli Carpini, Michael X., and Scott Keeter. 1996. *What Americans Know About Politics and Why It Matters*. New Haven, CT: Yale University Press.
- Galston, William A. 2003. Civic Education and Political Participation. *Phi Delta Kappan* 85 (1):29-33.
- Gimpel, James G., J. Celeste Lay, and Jason E. Schuknecht. 2003. *Cultivating Democracy: Civic Environments and Political Socialization in America*. Washington, DC: Brookings Institution.
- Greene, Jay P. 2000. Review of Civic Education: What Makes Students Learn. *Social Science Quarterly* 81: 696-97.
- Hanks, Michael. 1981. Youth, Voluntary Associations, and Political Socialization. *Social Forces* 60 (1):211-223.
- Johnston, Lloyd D., Patrick M. O'Malley, and Jerald G. Bachman. 2001. *Monitoring the Future: National Survey Results on Drug Use, 1975-2000*. Bethesda, MD: The University of Michigan, Institute for Social Research and the National Institute on Drug Abuse.
- Kinder, Donald R., and Lynn M. Sanders. 1996. *Divided by Color: Racial Politics and Democratic Ideals*. Chicago: University of Chicago Press.
- Langton, Kenneth P., and M. Kent Jennings. 1968. Political Socialization and the High School Civics Curriculum in the United States. *American Political Science Review* 62 (3):852-867.
- Levine, Peter, and Mark Hugo Lopez. 2002. *Youth Voting Has Declined, By Any Measure*. College Park: Center for Information and Research on Civic Learning and Engagement.
- McFarland, Daniel A., and Reuben J. Thomas. 2004. *How Youth Voluntary Associations Influence Adult*

- Political Participation. Stanford University: unpublished manuscript.
- Miller, Warren E., and J. Merrill Shanks. 1996. *The New American Voter*. Cambridge, MA: Harvard University Press.
- Murphy, James B. 2003. Tug of War: The Left, the Right, and the Struggle Over Civic Education. *Education Next* 3 (4):70-76.
- Niemi, Richard G., Mary A. Hepburn, and Chris Chapman. 2000. Community Service by High School Students: A Cure for Civic Ills? *Political Behavior* 22 (1):45-69.
- Niemi, Richard G., and Jane Junn. 1998. *Civic Education: What Makes Students Learn*. New Haven, CT: Yale University Press.
- Plutzer, Eric. 2002. Becoming a Habitual Voter: Inertia, Resources and Growth in Young Adulthood. *American Political Science Review* 96 (1):41-56.
- Putnam, Robert D. 2000. *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon and Schuster.
- Smith, Elizabeth S. 1999. The Effects of Investments in the Social Capital of Youth on Political and Civic Behavior in Young Adulthood: A Longitudinal Analysis. *Political Psychology* 20 (3):553-580.
- Torney, Judith V., A.N. Oppenheim, and Russell F. Farnen. 1975. *Civic Education in Ten Countries*. New York: John Wiley and Sons.
- Torney-Purta, Judith. 2001-2002. What Adolescents Know About Citizenship and Democracy. *Educational Leadership* 59 (4):45-50.
- . 2002. The School's Role in Developing Civic Engagement: A Study of Adolescents in Twenty-Eight Countries. *Applied Developmental Science* 6 (4):203-212.
- Torney-Purta, Judith, Rainer Lehmann, Hans Oswald, and Wolfram Schulz. 2001. *Citizenship and Education in Twenty-Eight Countries: Civic Knowledge and Engagement at Age Fourteen*. Amsterdam: International Association for the Evaluation of Educational Achievement.
- Torney-Purta, Judith, and Wendy Klandl Richardson. 2005. Anticipated Political Engagement among Adolescents in Australia, England, Norway, and the United States. In *Citizenship and Political Education Today*, edited by J. Demaine. New York: Palgrave Macmillan.
- U.S. Department of Education. 2002. *Common Core of Data*. Washington, DC: National Center for Education Statistics, <http://nces.ed.gov/ccd>.
- Verba, Sidney, Kay Lehman Schlozman, and Henry E. Brady. 1995. *Voice and Equality: Civic Voluntarism in American Politics*. Cambridge, MA: Harvard University Press.
- Walker, Tobi. 2002. Service as a Pathway to Political Participation: What Research Tells Us. *Applied Developmental Science* 6 (4):183-188.
- Youniss, James, Jeffrey A. McLellan, and Miranda Yates. 1997. What We Know About Engendering Civic Identity. *American Behavioral Scientist* 40 (5):620-631.

Youniss, James, and Miranda Yates. 1997. *Community Service and Social Responsibility in Youth*. Chicago: University of Chicago Press.

CIRCLE (The Center for Information and Research on Civic Learning and Engagement) promotes research on the civic and political engagement of Americans between the ages of 15 and 25. Although CIRCLE conducts and funds research, not practice, the projects that we support have practical implications for those who work to increase young people's engagement in politics and civic life. CIRCLE is also a clearinghouse for relevant information and scholarship. CIRCLE was founded in 2001 with a generous grant from The Pew Charitable Trusts and is now also funded by Carnegie Corporation of New York. It is based in the University of Maryland's School of Public Policy.



CIRCLE

The Center for Information & Research
on Civic Learning & Engagement