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**Democratic Education across School Types:  
Evidence from the NHES99**

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**Abstract** This paper reports on the differences in democratic education across school types, using the National Household Education Survey (NHES) of 1999. We replicate the estimation approach of Campbell (1998) and find a strongly positive effect from attendance at Catholic school or private independent schools on community service participation, civic skills, civic confidence, political knowledge and political tolerance. The results are reasonably robust to alternative specifications. We consider the implications of these results for policy.

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## 1. Introduction

### *Privatization and the Social Good*

A major public purpose of schooling in a democratic society is the adequate provision of a common educational experience that will orient all students to grow to adulthood as full participants in the social, political, and economic institutions of our society. A democracy requires that its members master the skills and knowledge necessary for civic and economic participation including one's rights and responsibilities under the law, the principles of democratic government, and an understanding of the overall economy and preparation for productive roles (for a general discussion, see Ravitch and Viteritti, 2001). In general, this is usually interpreted as necessitating common elements of schooling with regard to curriculum, values, goals, language, and political orientation (although precisely what should be taught is a matter of debate, see Soder, 1996; Hirsch, 1987; Goodlad, 1997; Cuban and Shipps, 2000; Guttman, 1986). By virtue of public funding, schools are expected to fulfill these objectives (Carnegie Corporation and CIRCLE, 2003).

Yet, recent reforms to privatize the U.S. education system may influence the capacity of schools – and the education system as a whole – to foster such social cohesion. Such reforms essentially give families the option to distance themselves from the traditional neighborhood public school system. Charter schooling laws allow communities and corporations to set up schools that are separated from local public schools; the legalization of home-schooling allows families to quit the public school system entirely; as do vouchers for private schools; and education tax credits offer subsidies to families to spend on private educational resources (see Levin, 2002). Together, these reforms could affect the school choices of many families and lead to an educational system which is organized very differently and with very different outcomes in terms of social goods produced.

However, whether privatization will reduce or enhance civic cohesion is an open question. Traditional public schools have an advantage in producing a common curriculum and instruction. But, privatization – by allowing more private choices – need not automatically reduce civic cohesion. Private choices may indeed lead to *de facto* segregation, and new choosers tend to be more affluent than those who do not have choice. However, if students from environments that are highly segregated socio-economically and racially are given a voucher to exercise their choice of schooling,

privatization may raise civic cohesion. Others have argued that public schools are not 'public' – in the sense of 'open to all' – but are often organized to keep social groups from integrating (Ryan and Heise, 2002). Also, civic cohesion may increase if private schools either do a better job of teaching civic values, as some authors have found (Greene, 1998; Godwin et al., 2001), or raise attainment, which is positively correlated with civic participation (Dee, 2003). Finally, privatization programs will differently impact on civic cohesion, depending on the programs' design (e.g. who is eligible for additional funds or services). Privatization includes many different reforms, and these may be targeted at specific student groups to raise or reduce civic cohesion.

### *Empirical Tests for the Relationship Between Privatization and the Social Good*

There are two approaches to investigating social cohesion and education privatization. The first investigates what types of schools students enroll at, what motivates their decisions, and what are the characteristics of the other students at these chosen schools (Martinez et al., 1996; Schneider et al., 2000; Fairlie and Resch, 2002). This approach is useful, although it often leaves unresolved the normative issue of what choices are permissible or benign, versus those that are pernicious and divisive. In general, this evidence indicates that those who choose are among the more highly educated (of the target population) and that these choices are often motivated by racial or social, rather than strictly academic, factors.

The second approach, which is the one adopted here, looks directly at the outcomes of students in different circumstances, conditional on the type of school they attend or the choices available.<sup>1</sup> This approach has the advantage of comparing actual amounts of social cohesion across different groups, and specifically in comparing public and private schools. (We note its limitations below).

Empirical research comparing social cohesion across school types is growing. Using similar approaches, however, Mocan et al. (2002) and Figlio and Ludwig (2001) find discrepant results on the behavior of Catholic school students relative to public school students: the former researchers identify no substantive behavioral differences, whereas the latter find lower arrest rates and hard drugs usage (but no effect on gang involvement or marijuana usage). From data from the 1996 Youth Civic Involvement

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<sup>1</sup> A related approach is to compare the educational processes (e.g. pedagogies, cultures, classroom interactions, and textbooks) of private versus public schools (see Peshkin, 1986; Brint et al., 2001).

survey, Smith (2003, 114) reports higher levels of tolerance, civic capital efficacy, and participation in private schools, although when these correlations are adjusted for student and community characteristics only private independent schools show an advantage.

This paper adds to this research base and begins by re-estimating – with more recent but harmonized data – the analysis reported by Campbell (1998). Our results are very similar. We then follow this research with a detailed inquiry into both the internal and external validity of these initial results. Internal validity is checked through sensitivity analysis. External validity is considered in terms of what the results mean for educational policy. We conclude with a discussion of the implications for policy on the promotion of social goods.

## **2. Empirical Estimation**

### *2.1 Data*

The data for analysis are taken from the National Household Education Survey (NHES) of 1999. The survey asks questions about the educational experiences of families, both the children and the adults. It is harmonized with previous NHES from 1992 and 1996, although there are some slight differences in the questionnaire and the sampling scheme.

Youth are asked directly to identify the type of school they attend: assigned public school (76.1%); magnet or choice school (13.7%); Catholic religious school (4.5%); non-Catholic religious school (2.7%); or private independent school (3.0%). At issue is whether there are differences in civic cohesion across students of different types.

The specific measures of civic education follow exactly those used by Campbell (1998). *Community Service* is a binary variable indicating whether the youth participated in “any community service activity or volunteer work at school or the local community.” *Civic Skills* is an index based on how many of the three following actions the student had performed during the school year: written a letter to someone they did not know; given a speech or an oral report; taken part in a debate or discussion to persuade others about one’s point of view. *Civic Confidence* is an index based on whether the student feels he or she could effectively write a letter to someone in government about something of

concern and make a comment or statement at a community meeting. *Political Knowledge* is an index based on responses to factual questions about American politics. Ten questions were included on the questionnaire, although each individual respondent was asked only five of them (so that parents and children in the same households did not receive the same questions); so the index is therefore a score out of 5. *Political Tolerance* is an index based on answers to two questions: (1) If a person wanted to make a speech in your community against churches and religion, should he or she be allowed to speak? (2) Suppose a book that most people disapproved of was written, for example, saying that it was all right to take illegal drugs. Should a book like that be kept out of a public library? Responses to these questions are coded so that a “tolerant” response equals one [that is, yes to (1) and no to (2)] and an “intolerant” response equal zero. The responses were then added to together to produce a two-point scale, although the responses to each individual question are also investigated directly.

Initially, we re-estimate the relationships reported by Campbell (1998), as nearly as the dataset will allow. We then supplement this analysis by examining issues of internal and external validity.

## 2.2 Results

Tables 1-6 report the differences across school types. Raw differences are reported, along with predicted values for each school type based on probit or ordered probit estimation (see Notes to Table 1).

Table 1 shows that the incidence of *Community Service* is considerably higher in the private sector, religious or secular, even when a large set of statistical controls are included. Table 2 shows that *Civic Skills* vary somewhat across school type, although only the Catholic school students report a statistically significant advantage over the other types. However, the ordered probit estimation has extremely low power and predicts the level of civic skills very poorly (see Row 2 of Table 2). These results and frequencies are almost exactly the same as those of Campbell (1998, Table 12-1).<sup>2</sup>

Table 3 shows few differences between the unadjusted *Civic Confidence* levels across school types. When statistical controls are added, the religious, non-Catholic and private secular school types appear to promote more civic confidence than assigned

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<sup>2</sup> Campbell controls for whether the school mandates community service, and the extent of the civic engagement of the parents.

public schools. In this case, Campbell (1998, Table 12-3) finds that all private schools report higher levels of civic confidence.

Tables 4 and 5 report on *Political Knowledge* and *Political Tolerance*. Unadjusted means show that political knowledge is higher in the private sector; this advantage is reduced when statistical controls are added, such that only the secular schools convey an advantage. Tolerance is greater in Catholic schools, but appears to be lower in other religious schools. This last result is also found by Campbell (1998, Table 12-5). Finally, Table 6 shows the results for allowing unpopular books and speaking out against religion. Here, Catholic schools appear the most tolerant, followed by secular schools; the outlier school type is the religious non-Catholic schools, where unpopular books receive less than majority support.

Table 7 reviews these findings, and gives an overall comparison to Campbell's results. Given the substantial increase in educational privatization even over the short period of the late 1990s, the robustness of these results is of interest. As with Campbell, we find little difference between the assigned and the magnet public schools. We find moderately positive results for Catholic school students, weaker than Campbell's uniformly positive evidence. For schools of other religions, there is more community service, but otherwise little difference to public schools. Finally, the independent schools report somewhat more civic education, for three of the five items. Overall, the results are consistent with those of Campbell, lending some credence to the idea that privately-run schools do foster civic education to a greater extent than publicly-run schools.

### **3. Sensitivity Analysis**

#### *3.1 Internal Validity*

The results from NHES1999 affirm extant evidence, albeit where a similar method has been applied. Here, we test for the robustness of these results. we test for the correlation between the measures of civic education, and consider alternative measures which are available from the NHES. Next, we test for omitted variable bias and for whether the model is sensitive to outliers and sample weights.

#### *Construct Validity for Civic Education*

It is possible that all these measures do not represent discrete behaviors, but a single measure of 'civic education'. All the six measures are highly correlated ( $p < 0.02$ ), and if

they are measuring the same behavior then a statistically significant coefficient may arise because of sampling error. However, applying principal components factor analysis yields only two factors with Eigen values above zero, but both are below 1 (high weights are on the community service and civic variables for one factor and political knowledge and tolerance for another factor). Thus, it is plausible to assume these are discrete behaviors.

Many private and religious schools require community service, and this strongly influences the results in Table 1. When community service is narrowed to only the youth who report regular service (23% of the sample), differences across school types are stronger: students from all types of private school report more regular community service than students in public schools. But, when the sample is restricted to only those who attend schools where community service is non-mandatory at the school-level, students in assigned public schools perform more service, relative to private independent, Catholic, and magnet schools. Further inspection reveals that this result is non-robust depending on the terms under which the community service is conducted. When it is non-mandatory for the individual student, no differences in school type are evident; although when the community service is not for credit, then all types of private school report higher levels. Overall, from the set of social cohesion variables available in the NHES99, it is unlikely that these results can be undermined by the charge of construct invalidity.

#### *Model Misspecification*

The model determining social cohesion may be misspecified, as may the estimation procedure. Three approaches – in relation to family income/resources, to parental characteristics, and to race – are considered. Also, sensitivity to outliers should be considered.

Social cohesion is likely to be higher with family income: volunteering one's time (rather than studying or taking leisure) is probably a luxury good. In these data, civic education and household income are positive correlated, but weakly. Moreover, when the estimation is split into high-income and low-income families, the Catholic school effects are evident – and stronger – but only for the low-income families. (This finding of greater benefits for low-income groups is common, see Howell and Peterson, 2002). For the student, the opportunity cost to volunteering time is either leisure or pay. However, there is a positive relationship between the student working at a job for pay within the school year and whether the student does community service and has high

civic skills. If there is an opportunity cost to civic engagement, therefore, it must be in terms of leisure foregone.

Parental characteristics influence the levels of social cohesion reported by youth. There is a positive correlation between community service and family activities (visiting the library, an art gallery, museum or historical site), and the family-level variables are strong predictors of the behaviors reported by the youth. However, controlling for parental influences on civic education with a binary variable where the student talks with family at least once per week about politics or national issues has no effect on the coefficients across school types; and splitting the sample by parental education level does not materially affect the conclusions.

The results are moderately sensitive to treatment of outlier responses. For two variables, political tolerance and civic confidence, there are very small samples (less than 10%) in the bottom cells. When these two variables are collapsed into binary indicators of tolerance and confidence, however, a premium for Catholic school students emerges for students with the lowest levels of social cohesion.

It is readily possible that the models applied above are incomplete and that the effect of private school is attributable to variables not observed in the model. One simple way to test for the size of the bias of the unobservables is to compare the coefficients of the full model with a basic model only including the school type variable. If the coefficients are not much altered when additional important and observable variables are included, it is unlikely that the bias from unobservable variables will be significant. In fact, in this basic model the coefficients are around 25% larger than for the full model possible with these data. The bias from the unobservable characteristics would have to be of equivalent magnitude for the results presented here to be materially changed. Finally, when the weights are not applied, there are no material changes to the conclusions reached above.

In conclusion, therefore, there is certainly no evidence that private schools generate less of these socially cohesive attributes than public schools, and reasonable evidence of more social cohesion.

### *3.2 External Validity*

We now turn to the substantive interpretation of school type on social cohesion. To begin, we should caution that the overall fit of the model is not very strong: more than 50% of the variation in civic activities is unexplained by the model. Nevertheless, the



coefficients on school type appear to be substantively significant, relative to other possible changes in household characteristics. For example, switching from a public school to a private independent school has an equivalent effect on community service as would: moving up two deciles in household income; or moving up one quintile in parental education levels. The effects from switching to a Catholic private school are even greater. Given that it may be easier to liberalize the school market than to increase household income, there may be public policy implications from these findings.

However, there are several cautions about drawing straightforward policy conclusions from such analysis. First, outcomes-based analysis cannot explain why there are differences between school types in the amounts of social cohesion produced. Brint et al. (2001) argue that, in producing socialized students, (primary) schools differ in terms of: their organizational priorities (“maintenance of order, the minimization of trouble, the encouragement of work effort, and the promotion of a sense of identification with the school by all students”, p.174); as well as “value messages originating in the broader society that are expressed primarily through the subject matter curriculum and through the routine practices of everyday classroom life” (p.174). The first of these – organizational priorities – may be cultivated by different public school management. But the latter depends more on the characteristics of local communities, and these are unlikely to be ameliorated by enrollment in private schools.

Second, these outcome measures are not directly related to the curriculum that may be taught in public versus private schools. By definition, religious schools will be offering faith-based education, and the influence of this instruction on social cohesion is not easily identified in the constructs available in the NHES. Private religious schools may influence the very knowledge that students acquire, by, for example, integrating religious and nonreligious materials into the curriculum; or social cohesion may be very subtly introduced, through presenting one side of an argument as fact, or by including descriptive terms that disparage other (religious) groups, creating a sense of social invidiousness. To some, the very fact that religious education is being sanctioned by the state is an indicator that social cohesion has been impaired.

Third, it is unknown whether expansion of private schooling would produce proportionately equivalent social cohesion. So, the student induced into the marginal private school may receive education of different quality to that currently received by students in the private sector. Or, the marginal student may not be equivalent to the average private school attendee.

Fourth, it is not possible to identify whether the survey data used here suffers from a bias caused by the desire to give socially acceptable answers to questions about civic attitudes.

Finally, these individual-level measures of social cohesion may fail to identify the social nature of education insofar as it relates to the quality of interactions between individuals within social groups.

#### **4. Conclusion**

The privatization of American education is on-going, and yet the full social and moral implications of this change are only just being identified (Wolfe, 2003). Private schools may be more effective at raising attainment, as most reviews suggest, but this is not the only goal of a publicly funded education system and there is some expectation that private choices will lead to socially undesirable outcomes. However, when the actual behaviors of private school students are compared with public school students we can identify reasonable confidence that the propensity to undertake civic activities will not be diminished.

Notwithstanding, there are two main concerns with such conclusions. The first is that there is little evidence as to what determines social cohesion (or the breakdown of social order). Without a theory of determination, it is difficult to predict how schools can have influence. The second concern is that social cohesion itself has not been measured properly. To alleviate this concern, further testing of alternative constructs in other datasets is necessary.

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**Table 1**  
**School Type and Percentage of Students Participating in Community Service**

<i>Community Service</i>	<i>Type of School</i>				
	<i>Assigned public</i>	<i>Magnet public</i>	<i>Catholic</i>	<i>Religious, non-Catholic</i>	<i>Private secular</i>
Without statistical controls	50	51	73**	72**	70**
With statistical controls	50	50	75**	70**	70**
<i>N</i>	3509	634	207	126	138

*Notes:* \*\* statistically significant difference from assigned public mean. Weighted data. Statistical controls are: age; gender; race (4 dummy variables); academic performance; college expectations; interest in the news; hours worked at part-time job; parental education level (4); household income (10); two-parent household; >20% black in local community; school size (4); students' opinions matter (1); school courses require attention to politics; student government at school. For similar approach, see Campbell (1998, Appendix).

**Table 2**  
**School Type and Civic Skills Index**

<i>Civic Skills Index (0-3)</i>	<i>Type of School</i>				
	<i>Assigned public</i>	<i>Magnet public</i>	<i>Catholic</i>	<i>Religious, non-Catholic</i>	<i>Private secular</i>
Without statistical controls	1.74	1.83	1.90**	1.63	1.81
With statistical controls	0.46	0.54	0.75**	0.36	0.58
<i>N</i>	3509	634	207	126	138

*Note:* See Table 1.

**Table 3**  
**School Type and Civic Confidence Index**

<i>Civic Confidence (0-2)</i>	<i>Type of School</i>				
	<i>Assigned public</i>	<i>Magnet public</i>	<i>Catholic</i>	<i>Religious, non-Catholic</i>	<i>Private secular</i>
Without statistical controls	1.73	1.75	1.77	1.76	1.86
With statistical controls	1.75	1.85	1.81	1.95**	2.29**
<i>N</i>	1909	384	108	68	72

*Note:* See Table 1.

**Table 4**  
**School Type and Political Knowledge Index**

<i>Political knowledge index (0-5)</i>	<i>Type of School</i>				
	<i>Assigned public</i>	<i>Magnet public</i>	<i>Catholic</i>	<i>Religious, non-Catholic</i>	<i>Private secular</i>
Without statistical controls	1.81	1.77	2.23**	2.45**	2.88**
With statistical controls	2.27	2.22	2.51	2.52	3.00**
<i>N</i>	3230	578	223	80	102

*Note:* See Table 1.

**Table 5**  
**School Type and Political Tolerance Index**

<i>Political Tolerance Index (0-2)</i>	<i>Type of School</i>				
	<i>Assigned public</i>	<i>Magnet public</i>	<i>Catholic</i>	<i>Religious, non-Catholic</i>	<i>Private secular</i>
Without statistical controls	1.42	1.44	1.62**	1.26**	1.57**
With statistical controls	1.37	1.48	1.59**	1.14**	1.51**
<i>N</i>	1909	384	108	68	72

Note: See Table 1.

**Table 6**  
**School type and Individual Political Tolerance Items**

<i>Tolerance Item</i>	<i>Type of School</i>				
	<i>Assigned public</i>	<i>Magnet public</i>	<i>Catholic</i>	<i>Religious, non-Catholic</i>	<i>Private secular</i>
<i>Allow unpopular book</i>					
Without statistical controls	55	59	67**	44**	71**
With statistical controls	54	60	59	44**	66**
<i>Speak against religion</i>					
Without statistical controls	88	86	95**	82	86
With statistical controls	87	87	94**	86	82
<i>N</i>	1909	384	108	68	72

Note: See Table 1.

**Table 7**  
**School Type and Five Facets of Civic Education**

<i>Facet of civil education</i>	<i>Relative to Assigned Public School</i>			
	<i>Magnet public</i>	<i>Catholic</i>	<i>Religious, non-Catholic</i>	<i>Private secular</i>
Community Service	..	+ve	+ve [..]	+ve [..]
Civic Skills	..	+ve	..	..
Civic confidence	..	.. [+ve]	.. [+ve]	+ve
Political knowledge	..	.. [+ve]	..	+ve [..]
Political tolerance	+ve [..]	.. [+ve]	.. [-ve]	.. [+ve]

Notes: Results are from probit and ordered probit estimations (details available from author). +ve or -ve indicates that there was a statistically significant difference ( $p < 0.10$ ) from the assigned public school category; '..' indicates no statistically significant difference. Where they differ, Campbell's results (1998, Table 12-7) are given in square brackets.