

School District Democracy: School Board Voting and School Performance

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In line with social capital theory, citizen involvement in local education policy making should affect education performance. Specifically, because voting turnout and candidate competition in school district elections are accountability mechanisms and reflections of a district's social capital, these characteristics of school board elections should affect how schools perform. Using official Missouri election records and school district data, this article examines the effect of district social capital (i.e., voting turnout and candidate competition), demographics, and school resources on school performance (i.e., standardized test scores and graduation rates). Mixed support is found for social capital theory, with voting turnout significantly affecting standardized test scores, though not graduation rates, and candidate competition influencing graduation rates, though in an unexpected direction. This study expands our understanding of the factors affecting school performance and informs the discussion of education reform.

Keywords: Voting Effects, U.S. Local School Districts.

En línea con la teoría del capital social, la participación de los ciudadanos en la hechura de las políticas de educación local debería afectar el rendimiento escolar. Específicamente, porque la participación en la votación y el grado de competencia entre candidatos en las elecciones en los distritos escolares son mecanismos de rendición de cuentas y un reflejo del capital social del distrito, estas características de las elecciones del consejo escolar deberían afectar el desempeño de las escuelas. Utilizando registros oficiales de las elecciones en Missouri e información de los distritos escolares, este artículo examina el efecto del capital social del distrito (i.e., participación en la votación y el grado de competencia entre candidatos), la demografía, y los recursos escolares en el rendimiento escolar (i.e., los resultados estandarizados de las pruebas y las tasas de graduación). Se encuentra un apoyo mixto para la teoría del capital social donde la participación en la votación afecta considerablemente los resultados estandarizados de las pruebas, aunque no a las tasas de graduación, y en una dirección inesperada, el grado de competencia entre candidatos influye a las tasas de graduación. Este

artículo amplia nuestro entendimiento de los factores que afectan el rendimiento escolar y fortalece la discusión sobre la reforma educativa.

School board elections are arguably the most prevalent venue of classical democratic theory in the political system of the United States. School board elections generally are small-scale, low-cost, usually nonprofessional, and local. While the local, nonprofessional atmosphere could potentially attract high levels of citizen involvement, unfortunately few candidates and equally few voters tend to get involved in school board elections.

Despite the local nature of school board elections and the rallying cry for increased citizen participation as a means of promoting more accountability in government, school district elections remain an understudied focus of research. The limited research in this area has largely focused on representational issues and the relationship between elections and public opinion. For example, Stewart, England, and Meier (1989) examine the effect of at-large and/or ward-based school board voting systems on racial groups, and Berkman and Plutzer (2005) examine the impact of public opinion on school spending issues. The connection between electoral politics and education performance, however, has received scant attention.

I build here on Putnam's theory of social capital and suggest that as part of a locality's social capital, the electoral context of school board elections should affect how schools perform. Social capital is the network of social interrelationships that foster expectations, interactions, and involvement in society (Putnam 2000, 2001). As noted by Stone and others (2001) and Fischel (2006), schools are likely to be affected by the social capital of a school district. In this paper, I expand the work on social capital to education performance and examine the link between the electoral context (i.e., voter turnout and candidate competition) and local school performance.

The first section describes democratic theory in terms of school board elections and lays out the theoretical link between social capital and education performance. Next, the electoral context variables (i.e., voting turnout and candidate competition), which are the key independent variables, from four years (1998-2001) of Missouri school board elections, are presented. The two measures of education performance, which are the dependent variables, and the control variables capturing alternative explanations for education performance, are then described. Finally, the influence of voting and candidate competition on school performance is examined and the implications and conclusions are discussed.

Voting and Candidate Competition as Social Capital Inputs into Education Performance

Democracy has both an instrumental and transformative effect. The former links public preferences to policy decisions, while the latter potentially transforms individual citizens into more community-minded individuals who

are civically engaged and who shape the performance of political institutions. The transformative effect is similar to social capital, a concept developed by sociologist James Coleman (see Coleman and Hoffer 1987) and revived by Putnam (1995, 2000, 2001). Local school board elections are an opportunity for both effects of democracy to affect education policy—the instrumental effect through the selection of candidates to serve on the school board and the transformative effect manifests in the elections themselves providing a regularly scheduled forum for citizens to re-engage in the local education process.

Citizens show up to vote on election day for a variety of reasons. While some are policy related (see Hill, Leighley, and Hinton-Anderson 1995), other reasons are psychological and center on reinforcing the involved citizen self-image. Gerber, Green, and Shachar (2003) and Campbell (2006) argue that voting may be habit-forming in that voting in one election increases a voter's chance of voting in future elections. Gerber, Green, and Shachar (2003) consider four hypotheses to explain the habit forming nature of voting. They settle on a "changed self-perception" explanation where "going to the polls confirms and reinforces one's self-image as a civic-minded, politically involved citizen. The more one votes, the more one comes to regard going to the polls as 'what people like me do on election day'" (548).

This long-term habit interpretation of voting is compatible with another research tradition: social capital. Putnam (2000, 18-9) submits that the "core idea of social capital theory is that social networks have value," and they affect the productivity of individuals and groups. Social capital is based on social connectedness of reciprocity, whereby an individual's participation contributes to the production of a community service. Indicative of the connection between voting and social capital, Putnam (2001, 67-8) proposes a state-wide Social Capital Index based on 13 indicators of "formal and informal community networks and social trusts," one of which is voter turnout. He shows that the Social Capital Index is highly correlated (r greater than .63) (68), with measures of community organization life, engagement in public affairs, community volunteerism, informal sociability, and measures of trust.

Particularly germane to this research, Putnam (2001, 65-76) also looks at the relationship between the Social Capital Index and an Index of Educational Performance at the state level, reporting that the Social Capital Index correlates with each of seven National Assessment of Educational Progress tests with low correlation of .64 and a high of .90 (92), and also correlates with the Scholastic Aptitude Test (SAT) at .67. Moreover, he reports that the Social Capital Index and high school dropout rates for 1990-95 have an r of $-.79$. Overall, he finds "more than half of all interstate variation in these three measures of educational outcomes appears linked to the level of social capital" and "nearly three-quarters of the total interstate variance in education performance is directly explicable in terms of difference in community-based social capital" (69).

For education, social capital can take many different forms. It includes the network of human development resources available to nurture students, such as

the public library, preschool alternatives, youth activities, churches, recreation facilities, as well as supporting neighbors and community members. Voter turnout and candidate competition (i.e., the number of candidates vying for a seat) in school board elections are also forms of social capital in the education community, and they reflect different facets of a community's social capital. Similar to Campbell's (2006, 6) distinction between civically motivated (e.g., volunteering at a soup kitchen) and politically motivated (e.g., working on a campaign for a candidate who advocates more soup kitchens) actions, for voter turnout and candidate competition, there is a difference in the motivation, level of involvement, and commitment of voters and candidates. While concern for and involvement in schools may motivate some citizens to vote in school board elections, that same level of community involvement seldom motivates citizens to become candidates. Similarly, voter turnout is "politically motivated" social capital, and electoral candidacy is "electorally motivated" social capital, and the level of candidate competition and voting turnout in school board elections are different manifestations of a community's social capital.

Although Putnam (2001, 65) does not directly examine voting and its effect on policy performance, it is clear that he expects social capital to increase both voting and education performance, and he argues that "community-based social capital improves educational performance." I specifically consider here the link between voter turnout in school district elections and educational performance. I also extend the concept of social capital to include candidate competition and explore its connection to education performance. While causality is particularly difficult to establish in the social capital literature where both the conceptualization and direction of causal relationships are unclear (Campbell 2006, 4), I evaluate the link between the two forms of electoral social capital and education performance.

Local school board elections in the United States are a promising venue for understanding social capital. School boards typically consist of seven or eight members who are elected for four-year terms, with about as many elected in the national or state general elections as are in special or municipal elections (Hess 2002, 33-6). The specific characteristics vary quite a bit from state to state, however. In Missouri, for example, candidates file with the school board superintendent rather than a county or state election official, school board elections are held every April with members serving staggered terms of three years, elections are nonpartisan, and, generally, they are held when few other items are on the ballot. Of the nearly 15,000 districts in the United States, 79 percent of school districts have at-large elections, 11 percent have district-based elections, 6 percent have "mixed" electoral systems, and 4 percent appoint their board members (Berkman and Plutzer 2005, 92).¹

¹ Citizens have rather high expectations of local school boards. A 2006 Gallup Poll found, in response to the question "who should have the greatest influence in the public schools here?" that 14 percent of respondents said the federal government, 26 percent said the state government, and

Social Capital Variables: Principal Independent Variables

In this analysis, I use a sample of 206 (40 percent) of Missouri's 524 school districts. Because Missouri's two largest school districts (Kansas City and St. Louis school districts) have been under court order or state control over the past 25 years, they are excluded from this analysis.² Missouri districts range in population from fewer than 500 citizens to more than 180,000. The sample of 206 school districts was collected from the 113 individual county clerks who are responsible for administering school board elections. Complete election information was provided for 206 school districts so they are the data examined in this analysis. The sample of districts slightly overrepresents medium-sized school districts (10 percent of sample compared with 6.6 percent of population) and slightly underrepresents the smallest-sized districts (59 percent in this sample versus 65 percent of Missouri school districts).

For the 206 school districts, the two social capital variables (i.e., voter turnout and candidate competition) were collected from individual county clerk's offices and the Missouri Department of Elementary and Secondary Education for the years 1998-2001. Table 1 presents the two social capital variables, which serve as the key independent variables in the analysis: Missouri school board election voter turnout and candidate competition for 1998-2001.

Voter turnout is the number of voters divided by voting age population averaged for the years 1998, 1999, 2000, and 2001. On average, 22 percent of the Missouri voting age population cast ballots in the 1998-2001 school board elections (for comparison, Abernathy 2005) reports that turnout was 13 percent of registered voters in the April 2000 New Jersey school district elections). Across school districts in Missouri, the average voter turnout was rather consistent in 1998, 2000, and 2001 (19.4, 18.1, and 17.9 percent, respectively), but there was an anomaly in 1999, when the average voter turnout jumped to 35 percent. There are two possible explanations for the increase in 1999. First, in Missouri, school boards consist of seven people elected in a three-year rotation, with two seats elected in the first year, two seats in the second, and three seats in the third. The election of 1999 was a three-seat race.

58 percent said the local school board (Gallup 2006). These results are rather stable, for in 2003, the responses were 15, 22, and 61 percent respectively. Citizens apparently have positive views of school boards with 35 percent seeing them as "strongly committed" to improving education, 38 percent "committed," and 21 percent "not committed" (Gallup 1996). Citizens consider school boards important, with 47 percent responding "a lot" to the question "How much impact do school board elections have on the quality of the school?" Thirty-five percent said "some," and 15 responded "a little" (Lake and Associates 2002).

² While there is a good deal of variation across regions of the United States, school districts do not neatly coincide with other governmental jurisdictions. Fischel (2007, 8) estimates that only about one-third of cities over 50,000 population are coterminous with a single school district. In Missouri, for example, there are 524 school districts in the 114 counties of the state. It is not unusual to have one county containing parts of several school districts or for a school district to straddle two counties. In addition to any difficulties this may create for school governance, these overlapping boundaries make social science research problematic.

Table 1. Turnout and Competition by Missouri School District Size (Population)

Population	1998	1999	2000	2001	4-Year Mean	4-Year Standard Deviation
Voter turnout						
1-5,000	20	35.3	18.2	18.2	23.2	7.2
5,000-20,000	20.5	34.2	18.4	18.4	22.9	6.9
20,000-50,000	15.6	34.3	15.9	15.9	21	5.9
50,000-100,000	15.8	36.4	13.8	15.1	20.3	6.9
100,000+	15.4	39.2	20.1	22.8	22.3	3.3
Total	19.4	35	18.1	17.9	22.7	7
Candidate competition						
1-5,000	1.67	1.68	1.74	1.78	1.7	.43
5,000-20,000	2.08	1.75	2.04	2.18	1.98	.49
20,000-50,000	1.9	1.59	1.64	1.67	1.68	.36
50,000-100,000	2	1.79	2.13	2.6	2.11	.41
100,000+	2.16	1.17	1.61	2.25	1.87	.48
Total	1.81	1.68	1.82	1.91	1.79	.46

Entries are voter turnout percent and candidates per seat ratio for five categories of school district size.

Source: Missouri Department of Elementary and Secondary Education (2000).

Second, a controversial ballot initiative in 1999 pertaining to concealed weapons (Proposition B) undoubtedly increased turnout.

Relative turnout is mildly consistent across the districts over the four-year period. All inter-year correlations for the individual districts are positive for turnout, ranging from .36 and .54, indicating that higher turnout districts consistently have higher turnout. Also, there is a nonlinear relationship between district population and turnout rates, with greater turnout in lower and higher population districts and lower turnout in mid-range population districts.

Candidate competition is calculated as the number of candidates in the election divided by the number of seats up for election. Across Missouri, school district candidate competition was rather consistent in 1998, 2000, and 2001 (1.81, 1.82, and 1.91, respectively), though in 1999 it dropped slightly with an average of 1.68. On average, for every school board seat on which voters were asked to vote, there were fewer than two (1.79) candidates vying for the position. Clearly, races for school board do not provide voters with a large number of candidates or choices.³ Moreover, this candidate competition (or lack thereof) reflects not only the extent of electoral choices provided to voters,

³This low level of candidate competition is consistent with two of Hess's (2002) chief findings. First, slightly less than half of school board members did not know of a case when an incumbent was defeated for reelection, and, second, larger school districts have "more competitive" races than other districts, although Hess's findings are based on school board member surveys not on actual election results (36).

but also the involvement of citizens in the civic life of their community. While there are many reasons for candidacy, these low numbers might suggest a lack of the highly committed form of citizen involvement in the education community that would lead to school board candidacy.

As shown in Table 1, elections were slightly more contested in larger districts than in smaller districts, though this trend is not consistent across years. School districts with a population greater than 100,000 have the most candidates per seat of all school districts in 2001 (2.25), yet also the fewest candidates per seat in 1999 (1.17). Also, in 1999, candidate competition was the lowest at the same time that turnout was the highest. This suggests that in 1999, voters turned out in larger numbers because of the number of seats up for election, or, more likely, because of the concealed weapons ballot proposition, and not because of the number of candidates on the ballot.

Importantly, there is only a mild relationship between candidate competition and voter turnout ($r = .12$) suggesting that “politically motivated” social capital (voter turnout) and the “electorally motivated” social capital (candidate competition) are related but not identical. This confirms the necessity to refine the meaning and measure of social capital. It also suggests that voting is more of a habit (*qua* Campbell 2006) than a rational response to the level of school board electoral competition.

For the analysis below, the average voter turnout and candidate competition for the four years (1998-2001) for the 206 school districts are used as components of a district’s social capital that are expected to affect school performance.

School Performance: Dependent Variables

While voter turnout and candidate competition are based on an average of four years of observations, the measures of school performance (the dependent variables in the analysis) are for 1999-2000. The measures of school performance, the dependent variables, are two indicators of school district performance that are used by educational officials: (1) district composite scores on the Missouri Assessment Program (MAP) tests and (2) high school graduation rate (see Missouri Department of Elementary and Secondary Education 2007). Column two in Table 2 is a composite of the 1999-2000 MAP scores, which is the simple addition of four assessment tests for three grades as required by Missouri’s Outstanding School Act of 1993. The range of these composite scores is 651 to 699, with a mean of 679, which does not vary substantially by school district size.

High school graduation rates are also presented in Table 2 and average 84.5 for Missouri school districts and show much greater variation (standard deviation of almost 9) than the MAP scores. The Pearson correlation between the MAP composite scores and graduation rates is only .22, suggesting that they capture different aspects of school performance.

Table 2. School Performance by District Population

Population	MAP Score		Graduation Rate	
	Mean	Standard Deviation	Mean	Standard Deviation
1-5,000	677.37	9.18	86.82	8.8
5,000-20,000	682.22	9.07	82.01	7.05
20,000-50,000	681.25	11.52	81.43	8.32
50,000-100,000	680.63	10.46	81.62	5.01
100,000+	685.06	9.11	81.1	8.36
All	679.19	9.22	84.5	8.97

Entries are means and standard deviations for five categories of school district size for 1998-2001. *Source:* Missouri Department of Elementary and Secondary Education (2000). MAP, Missouri Assessment Program.

Alternative Explanations and Control Variables

Following the 1966 Coleman Report's (Hacsí 2002, 180) focus on the factors shaping education achievement, a sizeable social science literature has aimed to understand school performance (see Chubb and Moe 1990; Hacsí 2002; Hanushek 1981). Three rival explanations (to voter turnout and candidate competition) of school performance are readily apparent in education policy research—socioeconomic status, school resources, and district characteristics. To control for these alternative explanations, variables capturing these factors are included in the present analysis.

Table 3 presents a demographic description of Missouri school districts by factors thought to be related to school performance—income per capita, the percentage of students who have free and reduced-price lunch, the percentage of minority students, and the education level of the district. As indicated by both lower per capita income and the percentage of students receiving free or reduced-price lunch, smaller school districts tend to be poorer. Overall, about 40 percent of Missouri students receive free or reduced-price lunches. Also, Missouri school districts have tremendous variability regarding minority students, with a range from 0 to 99 percent and an average of 12.99 percent. Larger school districts have more minority students.

While it has been debated for decades (see Hanushek 1981), school characteristics are also thought to be related to school performance. Table 4 summarizes three such characteristics: spending per average daily attendance (ADA) by student, teacher quality as measured by American College Test (ACT) scores, and the pupil/teacher ratio. Two of these three school factors have substantial variation with spending per ADA, and pupil/teacher ratio both consistently increasing with school district size. Teacher ACT, however, shows

Table 3. SES Characteristics by District Population

Population	Per Cap Income		Per Free and Reduced Lunch		Percent Minority		Per with More than High School	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
1-5,000	\$9,662	1,596	42.9	17.3	1.86	3.6	25.1	6.9
5,000-20,000	\$11,238	3,533	35.7	13.1	8.78	15.3	31.4	12.2
20,000-50,000	\$15,066	7,339	36.8	18.4	29.75	29.3	45.9	15.7
50 K-100,000	\$14,535	2,753	30.6	13.4	26.72	24.4	50.6	10.3
100,000+	\$18,401	7,370	24.6	10.7	31.25	15.4	64.1	17.7
All	\$10,913	3,823	39.8	16.7	12.99	16.7	30.1	12.8

Entries are means and standard deviations for five categories of school district size for 2000.
Source: Missouri Department of Elementary and Secondary Education (2000).
 SES, socioeconomic status.

Table 4. School Resources by District Population

Population	Spending per ADA		Teacher ACT		Pupil/Teacher Ratio	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
1-5,000	\$5,793	1,061	21.6	1.00	11.7	2.1
5,000-20,000	\$5,514	1,296	21.75	.67	14.5	1.5
20,000-50,000	\$6,343	1,490	21.75	1.21	15.14	1.5
50,000-100,000	\$6,094	869	21.88	.7	15.24	1.8
100,000+	\$6,514	979	22.13	.47	16.3	.3
All	\$5,657	1,186	21.67	.94	12.9	2.4

Entries are means and standard deviations for five categories of school district size for 1998-2001.
Source: Missouri Department of Elementary and Secondary Education (2000).
 ADA, average daily attendance; ACT, American College Test.

less variation within and between school districts. Given this lack of variation, it is necessarily dropped from the ordinary least squares (OLS) regression model presented in Table 6.

To capture the effect of a district's physical characteristics on school performance, two measures of school district size are included: land area in squares miles and population density. As shown in Table 5, on average, Missouri school districts are 126 square miles, with a population density of 494 persons, although the variability of both is quite large. It should be noted that these measures are not simply indicators of rural and suburban schools, for the second highest category of school district population size is geographically as large as school districts with the smallest populations.

Table 5. Land Size and Population Density by District Population

Population	Land Area (Square Miles)		Population Density	
	Mean	Standard Deviation	Mean	Standard Deviation
1-5,000	117.3	76	66.2	402.15
5,000-20,000	163.7	122.4	728	1,692
20,000-50,000	94.5	110	1,970	2,068
50,000-100,000	115	105	1,317	1,263
100,000+	92.8	46.2	1,682	505
All	126	95.8	494.3	1,287.1

Entries are 2000 means and standard deviations for five categories of school district size.
Source: Missouri Department of Elementary and Secondary Education (2000).

Results: Are Voting Turnout and Candidate Competition Related to School Performance?

Voter turnout and MAP scores have a correlation of .32, and voter turnout and graduation rate is correlated at a lower, but still significant, .18. Unexpectedly, candidate competition and graduation rate have a negative correlation of $-.24$, suggesting that school districts with lower graduation rates attract more candidates than do school districts with higher graduation rates. The percentage of free and reduced price lunches and the percentage of minority students are strongly related ($r = .21$) to school performance. Moreover, resources, such as the quality of teachers ($r = .29$), are more important for school performance than the spending per student ADA ($-.08$).

Overall, the correlations between voter turnout and MAP scores and candidate competition and graduation rates (.32 and $-.24$, respectively) compare well with the importance of school resources and socioeconomic factors in explaining school performance. The finding for voter turnout is the first sign of support for the importance of the social capital in influencing school performance. Also, the unexpected negative relationship between candidate competition and graduation rates is the first indication that “politically motivated” and “electorally motivated” social capital have different implications for the education community.

To further examine the relative importance of variables capturing social capital, school resources, and other district characteristics, OLS regression was employed to estimate the influence of the ten independent variables on the two measures of school performance.⁴ Table 6 presents the OLS results. The results for the MAP scores indicate that about half the variation of the MAP scores is

⁴Diagnostic tests and the lack of highly correlated explanatory variables indicate that the regression analysis does not exhibit problems with multicollinearity.

Table 6. OLS Estimates of Determinants of Education Performance

	MAP Coefficient	Standard Error	Beta	t-Value	Graduation Rate Coefficient	Standard Error	Beta	t-Value
Social capital								
Voter turnout	1.09	.49	.12	2.22**	.64	.69	.07	.92
Candidate competition	.36	1.08	.02	.33	-3.3	1.43	-.17	-2.31**
SES								
% Free and reduced lunch	-.19	.4	-.34	-4.9***	-.06	.06	-.10	-.92
% Minority	-.12	.05	-.23	-2.6***	-.11	.06	-.23	-1.70*
Education level	.32	.10	.35	3.38***	-.12	.13	-.14	-.96
Per capita income	0	0	-.09	-.86	.00	0	.27	1.65*
School resources								
Spending per student	.00	.00	.15	1.54	-.001	.001	-.01	-.07
Pupil-teacher ratio	1.04	.35	.28	2.93***	-.93	.52	-.25	-1.77*
District								
Land area	.02	.00	.23	3.82***	0	.01	-.00	-.49
Population density	-.00	.00	-.11	-1.10	0	.00	.02	.13
Intercept	661.7	7.79		84.9***	101.87	11.65		8.74***
R	.73				.47			
R ²	.54				.22			
Adj. R ²	.52				.17			
F	22.22				4.54			
N	206				206			

Columns 2-5 relate to MAP as the dependent variable; columns 6-9 relate to graduate rate as the dependent variable. Columns 2 and 6 are unstandardized OLS estimates.

* p ≤ .10, ** p ≤ .05, *** p ≤ .01, two-tailed test.

MAP, Missouri Assessment Program; SES, socioeconomic status; OLS, ordinary least squares.

explained by the ten explanatory variables. Given the tight variation (standard deviation of 9 for a mean of 679) in the statewide MAP scores, this is a startling result. Important for this analysis, voter turnout significantly increases district MAP scores. Specifically, 1 percent increase in school board election voter turnout increases MAP scores by over one point. Unexpectedly, candidate participation does not significantly affect MAP scores.

Regarding the control variables, the percentage of free and reduced lunches, the percentage of minority students, district education level, district size, and the pupil/teacher ratio significantly affect MAP scores. Specifically, the lower a district's free lunch level, the lower the percentage of minority students, the greater the district's median education level, and the larger the school district, the higher the MAP score. This last result provides some evidence that larger rural districts perform as well as smaller urban and suburban districts. Among school resources, pupil/teacher ratio is significantly related MAP scores, though in the unexpected direction (i.e., more pupils per teacher leads to higher MAP scores).

For graduation rates, overall, the regression model does less well with under a quarter of the variation explained by the model. Strikingly, the candidate participation variable is the strongest predictor of graduation rates. Consistent with the simple correlation, the lower a district's graduation rate, the greater the number of candidates who seek a school board seat. In contrast to the MAP score findings, while candidate competition is significant, voter turnout is an insignificant predictor of graduation rates.

Regarding the control variables, the percentage of minority students, the income per capita, and the pupil/teacher ratio also significantly affect graduation rates. The percentage of minority students and the pupil/teacher ratio are negatively associated with graduation rates, indicating that districts with greater minority student populations have lower graduation rates, and districts that have fewer students per teacher have a greater proportion of students who graduate. This latter result is interesting in light of the inverse relationship of pupil/teacher ratio with MAP scores, and may indicate that teacher attention is more important for staying in school and graduating, and less important for success on MAP tests. Finally, as the per capita income of a district increases, the proportion of students that graduate also increases.

In terms of the primary research interest—the social capital variables—while voter turnout has little explanatory power for graduation rate, it is significantly linked to MAP scores. This suggests that this politically motivated form of social capital is associated with improved school performance and is an important reflection of the education community's social capital. Yet while candidate competition does not significantly predict MAP scores, it is strongly, albeit negatively, related to graduation rate. This negative relationship indicates that poor school performance might attract more political attention, and, thus, more school board candidates. This is an unexpected relationship that deserves further research.

Conclusion: Voting Makes a Difference

Social capital theory predicts that communities with well-developed social networks will have better school performance. Putnam (2001, 65) finds support for this prediction at the state level. In this article, I relate social capital theory to voting turnout and candidate competition, and predict that school districts with higher turnout and candidate competition will have better school performance. Using Missouri school district data, I find that voting turnout has a statistically significant link to state assessment tests (MAP scores), but a weaker tie to a district's graduation rate. While turnout performs in the expected way, candidate competition has an unexpected negative relationship with graduation rates, and is not significantly linked to MAP scores.

The significance of this analysis is that it shows that increased voting turnout is associated with better school performance. The principal policy implication of this finding is that citizen involvement in schools districts should be valued as a means for improving school performance. Similar to Abernathy (2005), who found that charter schools increased voter turnout, and Schneider and others' (1997) finding that the opportunity for school choice increases a school district's social capital, I detect a link between voter turnout and school performance that merits further study by political scientists. The education reform debate, so far, has focused on the long-disputed issues of high-stakes assessment and accountability and on adequate funding and teacher qualifications, while ignoring the fundamental idea that a school district's social capital, as reflected in voting participation (and other forms of civic engagement), could make a difference in education policy performance.

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