

The Effects of Partisan Elections on Political and Policy Outcomes: Evidence from North Carolina School Boards

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Note: Very preliminary draft.

Abstract

This paper aims to provide new evidence on the political and policy consequences of partisan vs. nonpartisan local elections, in the context of school board elections in North Carolina. Specifically, we study the impacts of shifting to partisan elections in a difference-in-differences framework. First, we examine political outcomes. Our main preliminary results show that the shift to partisan elections reduces the likelihood that a Democrat is elected. This negative effect on Democrats also leads to a lower likelihood of non-white candidates being elected. Next, we consider policy outcomes, extending beyond the direct impacts of partisan elections. Our main preliminary results show that districts that switch to partisan elections experience reductions in per-pupil spending and schools located in districts that switch to partisan elections experience increased teacher turnover and an increase in less experienced teachers. Despite these results, school performance measures at the high-school level are positively impacted.

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1 Introduction

A vast majority of local elected offices in the United States are contested on a nonpartisan basis, with candidates’ partisan affiliations not appearing on the ballot. This has been true since the early 20th century, stemming from Progressive Era reforms aimed at separating local from national politics and achieving more “businesslike” administration of local policy matters (Adrian, 1952). Today, at least 75% of city council elections¹ and 90% of school board elections² are nonpartisan. There are exceptions. Most sheriff elections are held on a partisan basis (Thompson et al., 2020) and a growing (but still small) number of school boards are shifting from nonpartisan to partisan elections. In North Carolina, the setting for our analysis, as of the year 2000, 14 out of 115 school districts held elections on a partisan basis; as of 2018, that number had grown to 36, nearly one-third of all districts in the state.

This paper aims to provide new evidence on the political and policy consequences of partisan vs. nonpartisan local elections, in the context of school board elections in particular. To do so, we take advantage of the fact that a nontrivial number of school districts in North Carolina have shifted from holding nonpartisan to partisan school board elections in recent years; we can therefore study the impacts of shifting to partisan elections in a difference-in-differences framework. We first test the impacts of partisan elections on political outcomes: namely, whether partisan elections alter the composition (by race, gender, and – especially – party) of candidates elected. We then turn to impacts on policy outcomes; focusing primarily in this preliminary draft on personnel outcomes, such as teacher turnover within impacted districts, and school-level performance measures on student achievement, such as grades 3-8 math and reading.

Theoretically, the shift to partisan elections may have little impact if candidates already run as partisans, even if their affiliation is not listed on the ballot. If that is the case, there should be no shift in partisan advantage (for either party) when the election becomes

¹ <https://www.nlc.org/resource/cities-101-partisan-and-non-partisan-elections/>

² <https://www.k12dive.com/news/trend-toward-partisan-school-board-elections-raises-concerns/513414/>

partisan. On the other hand, the shift may lead voters to choose candidates of their own party, rather than choosing candidates based on relevant expertise or experience, which in turn may impact both the composition of boards and the resulting policy outcomes.

Our main results are as follows:

- The shift to partisan elections reduces the likelihood that a Democratic candidate is elected. We find that this is true in both Republican-leaning areas and Democratic-leaning areas (but is less precisely estimated in the latter).
- Considering other aspects of representation, the shift to partisan elections negatively impacts the likelihood that a non-white candidate wins. This appears to be explained by candidates' partisan affiliation (the reduced likelihood of Democratic victory). There is no clear effect on female candidates.
- Partisan elections are associated with a decrease in per-pupil spending, increased teacher turnover, and an increase in the share of teachers with 0-3 years of experience.
- Despite the negative results on funding and personnel outcomes, partisan elections appear to have a positive impact on school-level school performance measures at the high-school level, namely in math, English and ACT scores.

2 Connections to prior work and expectations for our setting

Our study is far from the first to consider differences in outcomes resulting from partisan and nonpartisan elections. We view our contributions as (1) examining these issues in a setting where we observe within-district shifts in election type allowing for causal inference through a difference-in-differences framework and (2) considering both political and subsequent policy outcomes within that setting. Much of the most relevant work is in the context

of judicial elections, where there is substantial variation across jurisdictions in election type. Our work connects ideas from those papers to the context of local school board elections.

In this preliminary draft, we discuss only a small set of representative papers from the existing literature.

One core question is whether nonpartisan elections succeed in eliminating the influence of partisanship in voter choice and candidate success. An important contribution on this front is from [Schaffner, Streb and Wright \(2001\)](#). They draw on precinct level turnout data from two cities (one with partisan mayoral elections, one with nonpartisan) and two states (one with partisan state legislative elections, one with nonpartisan), and assess the relationship between precinct partisan composition and support for Democratic candidates. They find a clear relationship between precinct-level Democrat share and support for Democratic candidates the city (and state) with partisan elections, but no significant relationship in the nonpartisan city (and state). Their results suggest that nonpartisan elections successfully eliminate voters' attachment to candidates based on partisan alignment.

However, [Squire and Smith \(1988\)](#) document that highlighting some aspect of partisanship of candidates in nonpartisan state supreme court elections leads voters to revert to preferences for candidates based on partisan alignment, even though the elections remain nonpartisan. [Bonneau and Cann \(2015\)](#) draw on both observational and experimental data, again in the context of judicial elections, and conclude that nonpartisan elections are “ineffective” in achieving the purported goal of removing “voters' abilities to bring their partisan identification to bear on their voting decisions”. They find that party identification is predictive of voting for a Democratic candidate in both partisan and nonpartisan elections. They note that their conclusion would likely hold in any context where campaign spending is high and a large amount of information is available to voters. Importantly for our paper, these conditions generally do not hold in school board elections.

That being said, within the context of school boards, [Crawford \(2018\)](#) conducts a survey and finds that school board members elected through nonpartisan elections are *more* polar-

ized than partisan-election counterparts. He suggests, as an explanation, that “candidates in nonpartisan elections may be more likely to signal their preferences because they lack a party label to do it for them”. This highlights a channel and a potential desire of school board candidates, even in nonpartisan elections, to connect with partisan-aligned voters.

In short, taking stock of these prior works, there remains ambiguity in whether shifting from nonpartisan to partisan elections in the context of school boards would impact the partisan composition of the board, or at least to a sizable degree. Our project assesses this empirically.

A separate piece of our results focused on policy outcomes resulting from partisan elections (e.g., changes in teacher turnover stemming from dissatisfaction with policy). School boards are a nice setting to assess this question, as there are some clear, objective metrics of policy success to point to (teacher retention, student outcomes); the same could not be said of, for instance, city councils. Theoretically, in partisan elections, voters may choose preferred candidates solely based on partisan alignment; in nonpartisan elections, voters may instead select candidates on the basis of their expertise or experience for the position. [Lim and Snyder Jr \(2015\)](#) provide evidence in support of this possibility; partisan labels in judicial elections strongly impact voter behavior and lead to the election of judges who are less qualified, as judged by peers. In work that is closely related in some ways to ours, [Ash and MacLeod \(2020\)](#) leverage switches from partisan to nonpartisan elections for state supreme court judges in three states; in a difference-in-differences framework, they find that judges elected under partisan (rather than nonpartisan) elections are less productive and produce lower quality work (as measured by number of citations to a judge’s opinions). If these results extend to school boards, we would expect that partisan elections are associated with worsened outcomes within school districts (increased teacher turnover and declines in student outcomes). However, the judicial context is very different from the school board context, so it is not *ex ante* clear that the same patterns would hold.

Finally, it is worth noting that who is represented on school boards has important impacts

on outcomes within school districts. [Macartney and Singleton \(2018\)](#) study the impacts of partisan composition of school boards in North Carolina, and - in a regression discontinuity framework - find that the addition of a Republican member is associated with an increase in within-district segregation. [Kogan, Lavertu and Peskowitz \(2020\)](#) find that increased nonwhite representation on California school boards increases both the share of nonwhite principals within the district and also increases test scores for nonwhite students. We document impacts of partisan elections on both of these dimensions, highlighting the potential impacts beyond those we directly study. Lastly, [Shi and Singleton \(2019\)](#) find that the election of teachers to school boards in California leads to increases in teacher salaries, but no increases in student outcomes. To the extent that teaching experience is associated with expertise, this arguably runs counter to findings on judges noted above.

3 Context, methods, and data

We estimate difference-in-differences models, leveraging shifts from nonpartisan to partisan school board elections in North Carolina. We study two main sets of outcomes: political outcomes (candidate- and election-level) and policy outcomes (school- and district-level). We have data on the former from 2014 through 2020. We have data on the latter from 2006 through 2018. As noted in the introduction, as of the year 2000, 14 of the 115 districts in North Carolina held partisan school board elections. No additional districts shifted until 2011. Since 2011, 22 districts have done so, with 19 of those having done so after 2014. Notably, these shifts are not decided within the districts themselves and are instead acts of the state legislature.

The elections that we study mostly occur in November of even years. However, school board election timing and institutions are not uniform across the state; roughly 28% of the elections in our sample occur earlier in the year (in the Spring) and a smaller share occur in odd years (7%). 78% of the contests in our data are for a single seat; the remaining elections

are filling multiple seats.

3.1 Political outcomes

Our first (and, in this preliminary draft, main) section of analysis considers the differential impacts of partisan elections on candidates with different characteristics (party, race, gender). For instance, we test whether, at the candidate-level, a shift to partisan elections has a differential impact on the electoral success of Democratic candidates relative to Republican candidates. (If not, it suggests that partisanship was already built into the nominally nonpartisan elections that had been in place.) To do so, we require data on candidate-level election outcomes, as well as candidate characteristics.

Election returns data can be easily obtained from the North Carolina State Board of Elections (NCSBE) website. However, data prior to 2014 do not indicate whether a candidate won. School board elections often fill multiple seats with a single race; the data prior to 2014 also do not list how many seats are being filled. Otherwise, one could back out who won by vote totals. For those reasons, we focus (for now) on elections from 2014 through 2020 (excluding November 2020).

From 2014, the election returns report candidates' names, the office they were running for, vote totals, the number of seats being filled, and whether the candidate in question won. The data only report candidates' partisan affiliation if the election was partisan.

To identify candidates' partisan affiliation *regardless* of whether they ran in a partisan or nonpartisan election, we draw on North Carolina Voter Registration files (also from the NCSBE website). The voter files list the universe of registered voters in the state. We match candidates from the election returns to the voter files by name and location in an iterative sequence of matches.³ From those data, we obtain partisan affiliation, as well as the race

³ For example, we start by attempting match on first name, last name, and city, which generates some number of matches. With unmatched candidates, we then attempt first initial, last name, and city. This process continues with other variations. However, we note that we err on the side of accuracy in our matches. For a candidate named “Dan Jones” in Mecklenburg County, we may identify multiple potential matches in the voter files – unless all potential matches have the same partisan affiliation,

and gender, of candidates.

Of 2,236 total candidates, only 466 (roughly 20%) are left with no information about partisan affiliation; this would occur for candidates running in nonpartisan districts who we were unable to match to the voter files. Of candidates with partisan information both from election returns and voter files, the partisan affiliation matches in 92% of cases.⁴ (We default to affiliation listed in election returns when both are available.) 1,511 candidates (of the 1,770 with any partisan information) are identified as Democrats or Republicans; of these, 58% are Democrats. Finally, 48.8% of candidates are women; 67% are non-Hispanic white.

With these data, our baseline estimating equation takes the following form:

$$Win_{c dt} = \alpha + \beta_1 Partisan_{dt} + \delta_d + \tau_t + \epsilon_{c dt} \quad (1)$$

where $Win_{c dt}$ is a dummy variable equal to 1 if candidate c (in district d , in year t) wins, and 0 otherwise. δ_d and τ_t are district and year-by-November fixed effects⁵, respectively. $Partisan_{dt}$ equals 1 if the district's election in period t are partisan, and 0 otherwise. Given that, and the fixed effects, β_1 is therefore our main difference-in-differences coefficient of interest, estimating the causal effect of adopting partisan elections.

However, the equation above does not test for differential effects of partisan elections by different candidate characteristics, and therefore cannot answer some of our key questions, including: do partisan elections drive differential support for candidates based on partisan affiliation? To answer that our main estimating equation is:

$$Win_{c dt} = \alpha + \beta_1 Partisan_{dt} + \beta_2 Partisan_{dt} * Democrat_c + \beta_3 Democrat_c + \delta_d + \tau_t + \epsilon_{c dt} \quad (2)$$

we do not make a match and that candidate is omitted from analysis that requires partisan information.

⁴ The modal error is a candidate listed as a Democrat or Republican in the election returns, but listed as unaffiliated in the voter files.

⁵ We have two time fixed effects per a year t : one for elections in November of year t , another for elections not in November of the same year.

Note that when we define a candidate as a *Democrat* as in this equation, we employ a two-party definition; thus, Democrat in this equation equals 1 if the candidate is a Democrat, and equals 0 if the candidate is a Republican. Thus, β_1 identifies the causal effect of partisan elections on Republican candidate success. β_2 identifies the *differential* causal effect on Democrats. If partisanship is already built into nonpartisan elections in this setting, we would expect $\beta_2 = 0$; that is, partisan elections should not change the baseline difference between Democrat and Republican candidates' success.

We also include specifications where instead of interacting *Partisan* with *Democrat* we interact it with race or gender information.

Finally, in some specifications, to account for differential partisan success driven by higher ticket races in a given election cycle, we interact our time fixed effects with *Democrat*. We also include candidate characteristics, namely race and gender, in some specifications.

Standard errors are clustered at the district level.

3.2 Policy outcomes

We also draw on data from the North Carolina Department of Public Instruction's School Report Cards.⁶ As the name suggests, these are data compiled by the State so that they can report information about school quality to interested North Carolinians on their School Report Card website. The data report a variety of school- and district-by-year level measures, many of which we have not taken advantage of in this preliminary draft. Unfortunately, some of the available measures do not cover a sufficient number of years to be useful to us. We focus on a subset of measures with wide coverage during our sample period. Specifically, in this draft, we draw on the following district-by-year and school-by-year measures:

1. Total spending per pupil, for salary and benefits (assumed to be across all personnel),
and for supplies & equipment

⁶ Available here: <https://www.dpi.nc.gov/data-reports/school-report-cards/school-report-card-resources-researchers>

2. Teacher turnover rate (number of teachers employed in a school in year (t-1), no longer employed there in year t)
3. Teacher experience share (percent of teachers with 0-3 years of experience, 4-9, or more than 10)
4. Share of teachers who receive a “high” rating under North Carolina’s teacher accountability system (based on a combination of factors, including both quantitative measures and classroom observation)
5. School performance scores on the following outcomes: math and reading for grades 3-8 and Math I, English II, ACT, and graduation at the high-school level. For a given school, each outcome is measured on a 100-point scale and assigned the corresponding letter grade. Additionally, average SAT scale score at the school level is examined as an outcome.

District-level funding measures are available from 2003-2018, personnel measures from 2003-2018, and school performance measures from 2014-2018, except SAT, which is available from 2002-2018.

We take teacher turnover as a potentially important proxy for teacher dissatisfaction with new policies implemented by the school board. However, we cannot rule out that any changes in teacher turnover are instead driven by changes in terminations of teachers initiated under a new school board.

For these outcomes, our main estimating equation is similar to equation 1, except that analyses are at the school-by-year level. We include district and year fixed effects. For outcomes that are averages of teachers within a school (outcomes 1-3 above), we weight by number of teachers. Standard errors are clustered at the district level.

4 Results

4.1 Political outcomes

Table 1 shows the results on whether partisan elections alter the composition of candidates elected (by party). For context, model (1) shows that the relationship between being a Democrat candidate and the probability of winning school board elections is negative, on average, relative to Republicans. The differential effect of being a Democrat on the probability of winning is -6.1 percentage points, on average. This effect is not statistically significant, so perhaps there exists a partisan disadvantage for Democrats in North Carolina school board elections, but these races might instead be fairly competitive.

In circumstances where a partisan disadvantage exists for either party, how much of the predictive power of partisanship for election outcomes stem from partisan elections? Models (2) through (4) of Table 1 examines this question. Model (2) corresponds to equation 2, where *Partisan* is interacted with *Democrat*. We report the overall effect on a Democrat candidate’s winning probability, on average, which is the linear combination of the estimated coefficients for *Partisan* and *Partisan* \times *Democrat*. Based on the results of model (2), the shift to partisan elections reduces the likelihood that a Democratic candidate is elected. The differential effect is negative and statistically significant (-0.446), providing evidence that the switch to partisan elections impacts Democrat and Republican candidates differently, with Democrats performing worse, on average. Overall, Democrat candidates’ winning probability, on average, is reduced by 25.7 percentage points following a switch to partisan elections. Contrarily, Republican candidates’ winning probability increases by 18.9 percentage points, on average, following a switch to partisan elections. The narrative holds when accounting for differential partisan success driven by higher ticket races in a given election cycle (model 3) and when controlling for the race and gender of the candidate (model 4, which includes our preferred controls). Table A1 provides evidence that the estimated effects of switching to partisan elections is not driven by changes in the number of candidates in a given contest

or the composition of candidates running (by party) in a given contest.

Figure 1 displays the event-study estimates of shifting to partisan elections separately for Democrats and Republicans. Given that there are a smaller share of observations in odd years, we estimate a variant of equation 2 where we include indicator variables for whether candidate-level observations are 3-4 years before the switch to partisan elections and whether observations are on or after the switch. These event-study estimates are relative to observations 1-2 years before the switch to partisan elections, the reference category. Our main motivation for conducting this analysis is to test for the presence of pretrends, the possibility that winning probabilities for both or either parties were already trending before the switch to partisan elections. The pre-period estimated coefficients on the “3-4 years Before Switch” indicator are not statistically different from zero, suggesting that pre-trends are not driving the switch to partisan impacts observed on winning probability.

Table A2 shows the results on whether partisan elections differentially impact vote shares between Democrats and Republicans. Figure A1 shows the event-study estimates of shifting to partisan elections on vote shares for Democrats and Republicans. Like the results on winning probability, shifting to partisan elections negatively impacts the election performance of Democrats, on average, (as measured by vote share) relative to Republicans. The differential effect of being a Democrat is both negative and statistically significant across all specifications in Table A2. Event-study estimates provide no clear evidence that vote shares for either party were trending in any particular way before the switch to partisan elections. Results on vote share tend to be less precisely estimated relative to results on the winning probability of candidates. This could be because impacts are concentrated among close races, where vote shares are similar between Democrats and Republicans. Results on voter share might also be less precisely estimated because we do not control for the number of candidates running, an outcome that can be impacted by a switch to partisan elections. We view these results as complementary to the impacts on winning probability.

Table 2 shows the results not only on whether partisan elections alter the party compo-

sition of candidates elected, but also whether partisan elections alter the gender or racial composition of candidates elected. In Model (1), *Partisan* is interacted with indicator variables for female and non-white. Based on the results of this model, the shift to partisan elections negatively impacts the likelihood that a non-white candidate wins. There is no clear effect on female candidates. Model (2) shows that the results on non-white candidates is explained by candidates' partisan affiliation. Still, it's important to highlight that the switch to partisan elections reduces the likelihood that non-white candidates are elected, albeit via the penalty associated with running as a Democrat. The corresponding results examining vote share (Table A3) show that switching to partisan elections reduces the vote share of Democrats, although female and non-white candidates do not appear to be impacted.

So far, we've shown that there exists a penalty on Democrats when elections switch to partisan. Next, we examine if the penalty for Democrats is generic or if the switch to partisan elections is more likely to occur in Republican-leaning districts, meaning the penalty is associated with candidates in the local minority party. Table 3 shows the results. First, model (1) examines whether candidates that are members of the local majority party benefit from switches to partisan elections. The results show that being a part of the local party majority does provide an advantage to candidates, the differential impact is positive and statistically significant (0.249). This result might imply that Democrats perform better in Democrat-leaning areas. Next, we examine this possibility. Models (2) and (3) examine whether Democrats face a reduced likelihood of being elected in both Republican- and Democrat-leaning districts, respectively. Results show that Democrats do face a reduced likelihood of winning after the switch to partisan elections in both Republican- and Democrat-leaning districts, although the effect is less precisely estimated in the latter. Table A4 provides the estimates for vote share, where results are similar, although some are less precisely estimated.

4.2 Policy outcomes

In addition to examining the impact of partisan elections on political outcomes, our preliminary analysis also considers the impacts of partisan elections on policy outcomes. Tables 4.2 through 4.2 shows the results of a school-level analysis that examines the impact on policy outcomes districts that switch to partisan elections and for schools that are located within districts that switch to partisan elections.

Table 4.2 shows the results on district-level funding from switching to partisan elections. Results indicate that per-pupil total spending and total spending on supplies and equipment are reduced following a switch to partisan elections. Table 4.2 shows the results on personnel outcomes. In this analysis, we consider impacts of switching to partisan elections on teacher turnover rate, teacher experience shares, the share of teachers who receive a “high” rating under North Carolina’s teacher accountability system, and the share of fully licensed teachers. Model (1) shows that schools located in districts that switch to partisan elections see an increase in teacher turnover by 0.6 percentage points, on average. As mentioned, this could be viewed as a proxy for teacher dissatisfaction with the policies implemented by the newly-elected board. Results on teacher experience (models (2) through (4)) show that schools located in districts that switch to partisan elections see an increase in the share of less experienced teachers (measured by the number of years a teacher has spent teaching) of 1.5 percentage points, on average. This result, coupled with the results from model(1), suggest that more experienced teachers are choosing to leave the schools following a switch to partisan elections, although the estimated coefficients for teachers with 4-9 and more than 10 years of experience are not statistically significant (models (3) and (4)). Model (5) shows a negative effect on the share of high-performing teachers, although estimated effects are not statistically different from zero. Lastly, model (6) shows that the share of fully licensed teachers is not impacted by a switch to partisan elections. Table 4.2 shows the results on student outcomes. The results show positive impacts on school performance measures at the high-school level, namely Math I, English II, and ACT scores. These results suggest that the

changes in the political or racial makeup of school board members, resulting from the switch to partisan elections, do not translate into a pool of less qualified school board officials.

All-in-all, these preliminary results provide promising evidence that partisan elections not only result in electoral penalties for non-white candidates, driven by the penalty of being a Democrat, but also result in impacts on schools, teachers, and students.

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Tables

Table 1: The Effect of Partisan Elections on Electoral Success

	(1)	(2)	(3)	(4)
	Winning Probability	Winning Probability	Winning Probability	Winning Probability
Democrat	-0.061 (0.047)	0.079 (0.048)		
Partisan		0.189** (0.076)	0.181** (0.078)	0.149* (0.089)
Partisan \times Democrat		-0.446*** (0.100)	-0.442*** (0.108)	-0.416*** (0.117)
Board of Education District FE	Yes	Yes	Yes	Yes
Number of Open Seats FE	Yes	Yes	Yes	Yes
Election Year##November	Yes	Yes	Yes	Yes
Election Year##November##Democrat	No	No	Yes	Yes
Candidate Characteristics	No	No	No	Yes
Overall Effect on a Democrat		-0.257	-0.260	-0.267
P-Value		0.005	0.005	0.005
R-Squared	0.122	0.151	0.156	0.164
Observations	1,511	1,511	1,511	1,409

Standard errors in parentheses.

Standard errors are robust and clustered at the district level.

OLS estimates.

indicates a full interaction of variables in the regression.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2: The Effect of Partisan Elections on Electoral Success

	(1)	(2)
	Winning Probability	Winning Probability
Partisan × Female	-0.058 (0.076)	-0.037 (0.077)
Partisan × Non-White Candidate	-0.156** (0.075)	-0.042 (0.068)
Partisan × Democrat		-0.393*** (0.118)
Female	0.113*** (0.038)	0.105*** (0.038)
Non-White Candidate	-0.044 (0.045)	-0.069 (0.045)
Partisan	0.021 (0.097)	0.166* (0.096)
Overall Effect on a Democrat		-0.227
P-Value		0.050
Overall Effect on a Female	-0.037	0.129
P-Value	0.669	0.202
Overall Effect on a Non-White Candidate	-0.135	0.123
P-Value	0.149	0.215
R-Squared	0.151	0.165
Observations	1,409	1,409

Standard errors in parentheses.

Standard errors are robust and clustered at the district level.

indicates a full interaction of variables in the regression.

OLS estimates.

Regressions also include a control for the total number of open seats in a contest; the full interaction of the election year of the contest, whether or not the election was held in the month of November, and an indicator variable for whether or not the candidate is a democrat; controls for candidate characteristics; and district fixed effects.

* p<0.10, ** p<0.05, *** p<0.01

Table 3: The Effect of Partisan Elections on Electoral Success

	(1)	(2)	(3)
	Winning Probability	Winning Probability (Republican-Leaning District)	Winning Probability (Democrat-Leaning District)
Partisan \times Local Majority Party Candidate	0.249** (0.125)		
Local Majority Party Candidate	0.156*** (0.050)		
Partisan \times Democrat		-0.483*** (0.131)	-0.180 (0.206)
Partisan	-0.184* (0.102)	0.167* (0.090)	-0.189 (0.159)
Overall Effect on a Democrat		-0.316	-0.369
P-Value		0.006	0.000
Overall Effect on a Local Majority Party Candidate	0.066		
P-Value	0.481		
R-Squared	0.175	0.196	0.218
Observations	1,409	893	513

Standard errors in parentheses.

Standard errors are robust and clustered at the district level.

OLS estimates.

Regressions also include a control for the total number of open seats in a contest; the full interaction of the election year of the contest, whether or not the election was held in the month of November, and an indicator variable for whether or not the candidate is a democrat; controls for candidate characteristics; and district fixed effects.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 4: The Effect of Partisan Elections on District-Level Funding Outcomes

	(1)	(2)	(3)
	Per-Pupil	Total Spending	Total Spending
	Total Spending (USD)	Salary and Benefits (USD)	Supplies and Equipment (USD)
Treated School	-160.867*	-91.857	-53.204***
	(93.841)	(85.212)	(19.784)
R-Squared	0.958	0.958	0.771
Observations	1,840	1,725	1,840

Standard errors in parentheses.

Standard errors are robust and clustered at the district level.

OLS estimates.

Regressions include district and year fixed effects.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5: The Effect of Partisan Elections on School-Level Teacher Outcomes

	Teacher Experience					
	(1)	(2)	(3)	(4)	(5)	(6)
	Teacher Turnover Rate	Pct w/ 0-3 Years	Pct w/ 4-9 Years	Pct w/ 10 Years or more	Pct w/ High Teacher Rating	Pct Fully Licensed
Treated School	0.006* (0.003)	0.015* (0.008)	0.001 (0.007)	-0.017 (0.014)	-0.008 (0.016)	-0.003 (0.004)
R-Squared	0.442	0.589	0.410	0.676	0.645	0.719
Observations	30,485	31,081	31,131	31,160	19,502	32,707

Standard errors in parentheses.

Standard errors are robust and clustered at the district level.

OLS estimates.

Regressions are weighted by the average class size at the school level and include school and year fixed effects.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6: The Effect of Partisan Elections on School-Level Student Outcomes

	Middle Years (3-8)		High School				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Math Score	Reading Score	Math I Score	English II Score	ACT Score	Avg SAT Scale Score	Graduation Score
Treated School	-0.420 (0.916)	0.153 (0.771)	8.321*** (0.404)	2.632*** (0.321)	2.028*** (0.440)	-1.115 (4.680)	0.465 (0.730)
R-Squared	0.906	0.930	0.920	0.912	0.924	0.790	0.788
Observations	11,820	11,819	4,279	2,145	2,120	7,955	3,120

Standard errors in parentheses.

Standard errors are robust and clustered at the district level.

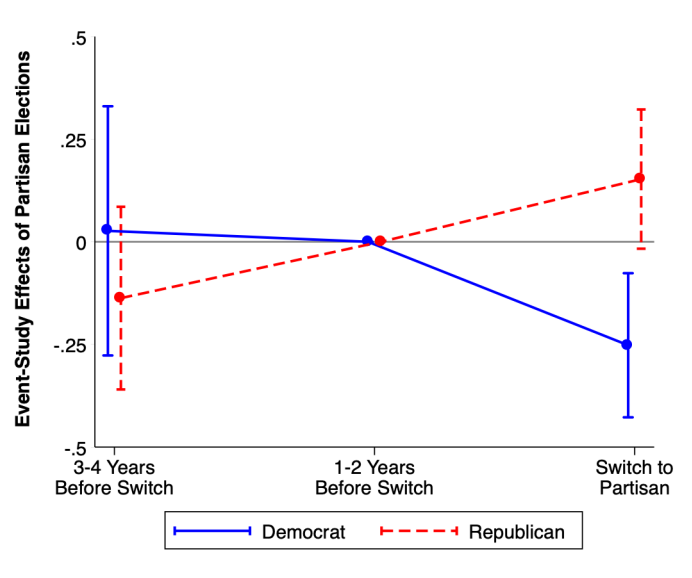
OLS estimates.

Regressions include school and year fixed effects.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Figures

Figure 1: Event-Study Effects of Partisan Elections on Winning Probability



Note: Regressions also include a control for the total number of open seats in a contest; the full interaction of the election year of the contest, whether or not the election was held in the month of November, and an indicator variable for whether or not the candidate is a democrat; controls for candidate characteristics; and district fixed effects.

Appendix Tables

Table A1: The Effect of Partisan Elections on Contest-Level Election Outcomes

	(1)	(2)	(3)
	Total Number of Candidates	Democrat Share of Candidates	Republican Share of Candidates
Partisan	0.158 (0.291)	0.059 (0.080)	0.026 (0.083)
R-Squared	0.776	0.752	0.726
Observations	874	868	868

Standard errors in parentheses.

Standard errors are robust and clustered at the district level.

OLS estimates.

Regressions also include a control for the total number of open seats in a contest; the full interaction of the election year of the contest and whether or not the election was held in the month of November; and district fixed effects.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A2: The Effect of Partisan Elections on Electoral Success

	(1)	(2)	(3)	(4)
	Vote	Vote	Vote	Vote
	Share	Share	Share	Share
Democrat	0.015	0.052***		
	(0.017)	(0.019)		
Partisan		0.081	0.072	0.049
		(0.054)	(0.053)	(0.055)
Partisan × Democrat		-0.121***	-0.109**	-0.096**
		(0.039)	(0.044)	(0.047)
Board of Education District FE	Yes	Yes	Yes	Yes
Number of Open Seats FE	Yes	Yes	Yes	Yes
Election Year##November	Yes	Yes	Yes	Yes
Election Year##November##Democrat	No	No	Yes	Yes
Candidate Characteristics	No	No	No	Yes
Overall Effect on a Democrat		-0.040	-0.038	-0.047
P-Value		0.462	0.492	0.404
R-Squared	0.620	0.626	0.630	0.636
Observations	1,511	1,511	1,511	1,409

Standard errors in parentheses.

Standard errors are robust and clustered at the district level.

OLS estimates.

indicates a full interaction of variables in the regression.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A3: The Effect of Partisan Elections on Electoral Success

	(1)	(2)
	Vote	Vote
	Share	Share
Partisan \times Female	-0.011 (0.027)	-0.006 (0.027)
Partisan \times Non-White Candidate	-0.001 (0.030)	0.029 (0.029)
Partisan \times Democrat		-0.103** (0.048)
Female	0.025* (0.015)	0.023 (0.015)
Non-White Candidate	-0.043*** (0.016)	-0.050*** (0.017)
Partisan	0.012 (0.057)	0.050 (0.057)
Overall Effect on a Democrat		-0.053
P-Value		0.393
Overall Effect on a Female	0.000	0.044
P-Value	0.997	0.449
Overall Effect on a Non-White Candidate	0.011	0.079
P-Value	0.831	0.158
R-Squared	0.634	0.636
Observations	1,409	1,409

Standard errors in parentheses.

Standard errors are robust and clustered at the district level.

indicates a full interaction of variables in the regression.

OLS estimates.

Regressions also include a control for the total number of open seats in a contest; the full interaction of the election year of the contest, whether or not the election was held in the month of November, and an indicator variable for whether or not the candidate is a democrat; controls for candidate characteristics; and district fixed effects.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4: The Effect of Partisan Elections on Electoral Success

	(1)	(2)	(3)
	Vote Share	Vote Share (Republican-Leaning District)	Vote Share (Democrat-Leaning District)
Partisan × Local Majority Party Candidate	0.053 (0.044)		
Local Majority Party Candidate	0.077*** (0.020)		
Partisan × Democrat		-0.099** (0.044)	-0.080 (0.111)
Partisan	-0.023 (0.053)	0.040 (0.059)	-0.164 (0.103)
Overall Effect on a Democrat		-0.059	-0.244
P-Value		0.323	0.000
Overall Effect on a Local Majority Party Candidate	0.031		
P-Value	0.590		
R-Squared	0.644	0.672	0.642
Observations	1,409	893	513

Standard errors in parentheses.

Standard errors are robust and clustered at the district level.

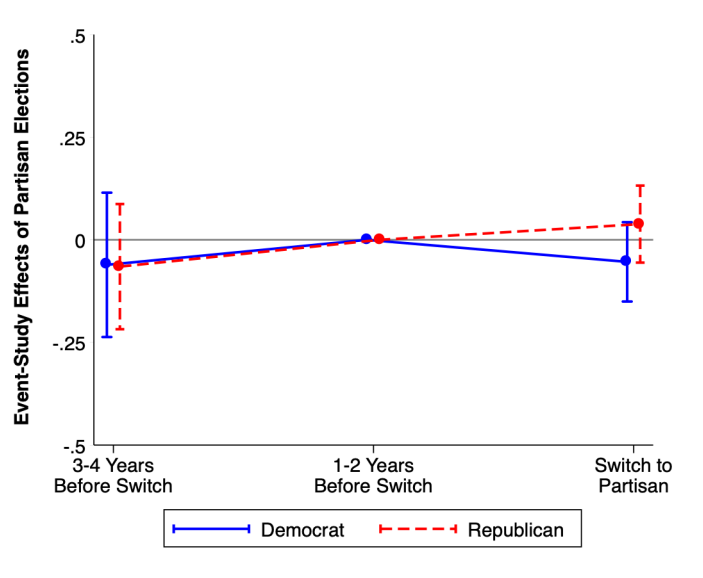
OLS estimates.

Regressions also include a control for the total number of open seats in a contest; the full interaction of the election year of the contest, whether or not the election was held in the month of November, and an indicator variable for whether or not the candidate is a democrat; controls for candidate characteristics; and district fixed effects.

* p<0.10, ** p<0.05, *** p<0.01

Appendix Figures

Figure A1: Event-Study Effects of Partisan Elections on Vote Share



Note: Regressions also include a control for the total number of open seats in a contest; the full interaction of the election year of the contest, whether or not the election was held in the month of November, and an indicator variable for whether or not the candidate is a democrat; controls for candidate characteristics; and district fixed effects.