Teachers’ unions and school board elections: a reassessment

Michael T. Hartney

Accepted: 6 January 2022 / Published online: 21 January 2022
© The Author(s), under exclusive licence to Springer Nature Limited 2022

Abstract
Drawing on an original data set of over 4000 teacher-union endorsements in local school board elections, I make three contributions to the literature on union power in education politics. First, despite some recent evidence that union strength has narrowed at the federal and state levels, I show that teachers’ unions remain an influential player in local school politics today. Second, I provide evidence that teachers’ unions are active and influential in elections that occur outside of traditionally strong union states and prolabor school districts. Finally, I show that union-endorsed candidates do not win simply because they are stronger candidates ex ante, but in part, because union support makes them more formidable candidates on Election Day. I conclude with a brief discussion of the implications of these findings and suggest some avenues for future research on interest groups in local school politics.

Keywords Teachers unions · School boards · Education policy · Interest groups · Local politics

An emerging narrative in American education suggests that teachers’ unions have lost significant political clout in recent years (Brill 2010; Ferman and Palazzolo 2017; Viadero 2009). On the surface, this thesis seems reasonable. The Great Recession put public sector unions squarely on the defensive (DiSalvo 2015). Teachers’ unions, in particular, have faced a variety of new political obstacles. Wealthy education reform advocacy groups emerged to challenge their dominance (Henig et al. 2019; McGuinn 2012; Sawchuk 2012). For a short time, the unions even faced pushback from their traditional allies: In the early aughts, many Democrats joined with Republicans to support union-opposed school reforms (Hartney and Wolbrecht 2014). Then, at the end of the decade, the US Supreme Court announced that public
sector unions could no longer collect fees from dissenting nonmembers, reducing the revenue that unions have to engage in advocacy (DiSalvo and Hartney 2020).

Despite these recent setbacks at the state and federal levels, we know much less about how these new dynamics have affected teacher-union influence in local school politics. Although several scholars have examined union power in collective bargaining (see, e.g., Anzia and Moe 2014; Marianno and Strunk 2018; Strunk et al. 2018; 2021; Hemphill and Marianno 2021), few studies have assessed teacher-union electioneering in contemporary school board elections.\(^1\) In fact, since Terry Moe first showed—nearly 20 years ago—that California’s teachers’ unions were active and influential in board elections there, no subsequent large-N analysis has been carried out to evaluate the size and scope of union power in school board elections. Attending to this omission is important because research shows that interest group electioneering is an important and consequential political tool, especially for public sector unions in local politics (Moe 2005; Sieg and Wang 2013; Anzia 2022).

My aim in this study is important but circumscribed: to carefully assess the state of teacher-union influence in local school board elections, paying special attention to the trajectory of that influence over time. Drawing on an original data set of over 4,000 union endorsements in two states, I make three new contributions to the literature on local school politics.

First, despite some recent evidence that labor retrenchment has narrowed union power at the federal and state levels (Hertel-Fernandez 2018; Feigenbaum, Hertel-Fernandez, and Williamson 2019), I show that teachers’ unions remain quite influential in local school board elections. Specifically, I find that union-endorsed candidates win roughly 70 percent of all competitive school board elections—a rate that matches their previous level of electioneering success prior to the Great Recession.

Second, I provide evidence that teachers’ unions are active and influential in board elections that take place in both strong (California) and relatively weaker union states (Florida), and that union-favored candidates do well in districts with pro- and anti-union electorates. Third and finally, I improve on a key limitation in prior studies of union electioneering. Specifically, I address the thorny issue of selection bias—that union-backed candidates are more successful only because unions strategically endorse the strongest candidates: those who would win irrespective of having gained union support. By evaluating the performance of the very same candidates \textit{over time}—both when they run with and without union support—I find that both incumbents and challengers benefit electorally when they run with union support. This finding suggests that union-endorsed candidates do not simply do better because they are stronger candidates \textit{ex ante}, but rather, because union endorsements confer advantages that make endorsed candidates more successful on Election Day.

Below, I begin by explaining why it is important for scholars to invest more time and effort into studying the backwaters of local school politics, especially if they seek to make progress in understanding the full scope of how organized interests

\(^1\) One exception are a series of recent case studies on school board elections conducted by Henig, Jacobsen, and Reckhow (2019).
influence US education policy. I then review some relevant prior research on the role of unions in school board elections, before turning to present the results of my own analysis. After presenting several different sets of findings, I conclude by discussing their implications and providing some suggestions for future avenues of research on interest group activity in local school politics.

**Why local education politics still matter**

The shortage of large-N analyses on interest group electioneering in local school board elections is not altogether surprising. It is exceedingly difficult to get data on local election outcomes and candidates’ characteristics—to say nothing of endorsements—over time within even a single state. As Anzia (2022, 3) observes, “research on local politics in the United States tends to ignore interest groups, and research on interest groups tends to ignore local government.” But the absence of good data is, I suspect, just one factor at play.

The growing centralization of American education since *A Nation at Risk*, combined with the “reabsorption” of education politics into general purpose politics (Henig 2013), has led scholars to put tremendous energy into understanding the activity of education interests at the state and federal levels (Finger 2018; Finger and Reckhow 2021; Hartney and Flavin 2011; Howell and Magazinnik 2017; Rhodes 2012; Manna 2006; McGuinn 2016). These are valuable contributions. And they are surely necessary. The focus on states, in particular, makes good theoretical sense. Under the US constitution, state officials are the actors who are legally empowered to make most key education decisions. But there are also good reasons—I will briefly discuss two—for putting greater effort into understanding how education interests wield political power and influence in local school districts.

For one thing, the demise of local control in American education is surely exaggerated. One need to look no further than the COVID-19 pandemic to see that localism remains a powerful and enduring force in American education. The role of teacher-union interest groups in policy debates over school reopenings, for example, was waged most consequentially at the local level. Even after many public health experts began to conclude that schools could reopen safely (Bailey 2021; Zimmermann et al. 2021), two American presidents and countless governors found that they had little practical power to compel districts to reopen. Moreover, the inability of many districts to negotiate reopening agreements with their local teachers’ union helped contribute to a year of entirely remote learning for a significant number of students. Unsurprisingly, several studies found that districts’ decisions about when and how much to reopen schools were influenced by local teacher-union strength (Antonucci 2021; DeAngelis and Makridis 2021; Flanders 2020; Grossmann et al. 2021; Harris, Ziedan, and Hassig 2021; Hartney and Finger 2020; Marianno et al. 2021). In one of these studies (Hartney and Finger 2020), the authors found a direct relationship between districts’ use of remote-only instruction and the rate of political activity (PAC donations) mobilized by the local teachers’ union. Marianno (2021) explains why education scholars are likely to underestimate teacher-union influence when they focus narrowly on union power in federal and state politics:
There are far more education interest groups and competing education policy ideas at the state level, making it much more difficult for a single organization to garner a dominant voice among policymakers. When these [school reopening] decisions are brought down into local school board meetings, there remain only a few organizations that are organized enough to exert influence. The teachers’ unions are the largest elephant in the room…

Second, even when higher-level political authorities do assert themselves, local education officials are the ones who ultimately implement education policies on the ground. This matters for two reasons. First, since implementation is itself a political process rife with contestation (Pressman and Wildavsky 1984), local governments will tend to resist top-down federal and state reforms that undermine their own authority. We saw this, for example, when local school districts were asked to implement the choice and accountability provisions in the federal No Child Left Behind law—provision that ran counter to their own vested interests (Manna 2011). Second, and most relevant to the present study, local school officials can and often do face immense political pressure—including electoral pressure—to satisfy the preferences of those education interest groups—like teachers’ unions—that remain among the most organized and active groups in local school politics (Hess and Leal 2005; Moe 2005; Hartney 2022). Narrowly focusing on the behavior of education interests in federal-state politics will often cause us to overlook all of this important politicking that goes on in local school districts.

In sum, the highly localized and heavily fragmented nature of American education provides myriad opportunities for teachers’ unions to shape education policy from the ground up (Moe 2011; Hartney 2022). Consequently, the degree of influence that teachers’ unions can bring to bear on education policy will often turn on the type of influence that they can exert as an interest group in local school board elections. After all, it is these electoral contests that determine, at least in part, who holds formal policymaking authority in local school districts.

Relevant literature

To date, the most influential set of studies on union activity in school board elections were carried out by Terry Moe in the early 2000s (2005, 2006). Drawing on a survey of over 500 candidates in over 250 districts between 1998 and 2002, Moe found that unions were highly successful in getting their favored candidates elected. Among his key findings, union support was as powerful as incumbency in predicting a candidate’s likelihood of victory. Even after controlling for competitiveness, incumbency, and other measures of candidate quality, Moe found a strong relationship between union support and candidate electoral success. Overall, 76 percent of union-endorsed candidates in California won their elections—with 62 percent of challengers and 92 percent of incumbents emerging as winners.

Moe’s studies offered two other important insights. First, he showed that occupational self-interest is at the heart of the unions’ successful mobilization efforts. Teachers who lived outside of the district where they taught were not especially
likely to vote in school board elections. But teachers who lived in the district where they worked turned out anywhere from two to seven times more than of other citizens. In other words, the ability of unions to mobilize their members to elect sympathetic candidates is driven by the rational self-interest of school employees—the chance for them to help elect their employers. Importantly, Moe then showed that union electioneering results in more union-friendly boards. Winning candidates who were endorsed by the union became board members who were far more likely to hold pro-union attitudes on policy issues compared to the unendorsed candidates they defeated.

More recently, two other studies—also from California—have each linked union electioneering success to more union-friendly school board policymaking. An analysis by Strunk and Grissom (2010) found that boards that were comprised of more (1) educators and (2) union-endorsed members were more likely to adopt union-friendly contracts. In a similar vein, Shi and Singleton (forthcoming) found that districts that elected more educators to their school board increased teacher salaries and approved fewer charter schools. While more work is needed to fill in the bigger picture, it is clear that, to the extent that unions are able to shape the composition of boards in their favor, they can and do influence the tone and direction of local school policy.

However, there are two reasons—one related to space and the other to time—to think that the extant literature may cause us to overestimate the current level of union influence in school board elections today. First, prior research has focused heavily on California—a state where unions are especially strong. Moreover, until recently, many California school board elections were held “off-cycle,” when research shows that teachers’ unions benefit from lower turnout (Anzia 2011, 2013). Second, as discussed in the introduction, since Moe first carried out his studies, teachers’ unions have lost some important political battles. The environment facing unions in the wake of the Great Recession has been characterized by greater austerity, labor retrenchment, and political polarization. After winning governing trifectas in the 2010 midterms, for example, Republican lawmakers in several US states immediately curtailed teacher bargaining rights. These retrenchment efforts sometimes restricted teachers’ unions’ access to payroll deduction, making it more difficult for them to collect dues and PAC contributions from members—which reduces unions’ revenue for electioneering (Finger and Hartney 2021). More recently, in 2018, the US Supreme Court eliminated a benefit that teachers’ unions had long enjoyed under American labor law: the ability to charge fees to nonmember teachers in states without right-to-work laws. By adopting these changes, the court imposed a new cost on unions, leaving them with less revenue for other organizational needs, including political advocacy and mobilization campaigns (Finger and Hartney 2021).

How have these changes affected the political power and influence of teachers’ unions in local school board elections? One possibility is that teachers’ unions have lost some clout in federal and state education politics, but have nonetheless been able to maintain influence in local school board elections. On the other hand, recent evidence from a series of case studies argues that school reform groups have gained a greater foothold over unions and other establishment interests. Examining school board elections in five large districts, Jeffrey Henig and colleagues found that networks of wealthy donors often provided campaign contributions that enabled
“reform candidates” to match or exceed the funds raised by unions-favored candidates. While these authors were careful to acknowledge that these trends are not necessarily representative of “the broad universe of districts with elected boards,” they nevertheless see more pluralist dynamics at work. “Teacher unions,” they explain, “have often been portrayed as the eight-hundred-pound gorilla in local school politics—and our evidence already shows that this image is overblown—but the Janus decision throws up new barriers for unions’ political efforts” (Henig et al. 2019, 186).

A new study

Ultimately, measuring the level of teacher-union influence in school board elections is an empirical question. But until now, the absence of good data has made it a difficult one to answer. In what follows, I discuss the construction of a new data set tracking union endorsements in competitive school board elections across two states. These data allow me to tackle several important questions. First, I examine union electioneering across space—moving beyond a single state (Moe 2005) or a handful of districts (Henig et al. 2019). Second, I use these data to evaluate union electioneering success over time, both before and after the unions experienced setbacks like the Great Recession and Janus. Third, I consider whether union influence has narrowed geographically, confining itself to those districts where voters support unions and their policy agendas. Fourth and finally, I examine a panel of the same candidates seeking election/reelection in the same school districts over time to estimate the effect of receiving a union endorsement on the likelihood of candidate victory.

Data and sample construction

Quantifying the size and scope of teacher-union influence in school board elections presents a major empirical challenge. It is rare to have good data on local election results, let alone corresponding information on teacher-union endorsements. To overcome these limitations, I built my own original data set, tracking union endorsements in board elections across two states: California and Florida. The California data include endorsements in school board elections held annually between 1995 and 2020. In Florida, where board elections are held in even-numbered years, the panel runs biennially, from 2010 to 2020. These two states were chosen for strategic reasons, with each state offering specific analytic advantages and disadvantages. Since the primary aim of this study is to compare the state of union influence in school board electioneering today to that

---

2 To my knowledge, Moe (2005) is the only scholar who has carried out a survey of candidates about union electioneering in a large sample of school districts.

3 In Florida, a statewide August primary election always precedes the November general election. If any board candidate earns more than 50 percent support, or if just two candidates are competing, the primary then becomes the de-facto general election contest.
of the past, returning to California for comparison makes sense because, as previously noted, the majority of empirical research on school board elections comes from California.

However, one concern with focusing solely on California is the fact that public sector unions are especially powerful there. The state’s labor laws and its broader political culture provide one of the most teacher-union friendly environments in the USA (Winkler, Scull, and Zeehandelaar 2012). Florida provides an attractive alternative. It too is a large and racially diverse state. But labor law in the Sunshine State has historically been less favorable to teachers’ unions. Although Florida teachers have enjoyed collective bargaining rights since the mid-1970s, the state’s long-standing right-to-work law has made it more challenging to organize teachers there. Finally, Florida school board elections are held “on-cycle,” when turnout is higher and research has shown that unions may be less dominant (Anzia 2011, 2013).4

The process of gathering information on union endorsements required triangulating from several different sources. In California, I began by consulting Board of Directors Reports from the state’s largest teachers union: the California Teachers Association (CTA). In election years, these reports provide the names of local candidates who received financial support from the union’s political action committee (PAC). I next consulted the California League of Women Voters’ “Smart Voter” database, a Web site where candidates self-report their endorsements. Third, I performed online searches of news stories about school board elections using several different databases (e.g., Newsbank, LexisNexis, Newspapers.com). Finally, I visited both the Web sites and social media pages (e.g., Facebook, Twitter) of local unions and board candidates. In California, this approach yielded 4075 separate endorsements conferred on 3336 unique individuals running in 2345 elections in 468 different school districts.5 It is notable that these 468 districts—while by no means perfectly representative of California districts as a whole—combine to represent roughly half of all of the state’s regular local school districts. Moreover, the 2345 elections where I was able to find evidence of union electioneering combine to represent a little over 26 percent of all competitive school board elections held between 1995 and 2020 in the Golden State (according to data provided by the California Elections Data Archive (CEDA) at the Institute for Social Research at Sacramento State University).6

4 This is not to say that Florida is the “weakest” union state that one could study. But as one of the 30-plus states that have kept a mandatory teacher bargaining law in place, Florida is a more representative state than are the handful of states (e.g., Arizona, South Carolina, Texas) that ban public sector bargaining altogether. An analysis in one of those states would no doubt provide an attractive opportunity to assess whether teachers unions shape school board elections in the absence of bargaining, but I leave it to other researchers to collect and analyze that data.

5 In some cases, I could only identify a partial list of endorsements in an election. To ensure that missing data did not bias my results, with the exception of the descriptive statistics presented in Table 1, all of my analyses are based on elections where the endorsement status of all candidates is known. Fortunately, for 3,369 of the endorsed candidates (or 84% of the total number of identified endorsees), I was able to confirm the endorsement status of every candidate that ran.

6 Not surprisingly, it was easier to uncover union endorsement information in board elections held after 2000. In elections held in the 2010s, for example, I was able to identify union electioneering in roughly one-third of all competitive school board elections in California.
In Florida, there were 1109 board seats that were up for election between 2010 and 2020 (according to data made available by the Florida School Boards Association (FSBA)). However, just 722 of those seats generated any competition. I was able to identify union electioneering activity (endorsements) for 361 of these 722 competitive elections (50 percent coverage). These 361 competitive elections took place in 36 of the state’s 67 public school districts.

An obvious limitation of my study is the fact that I can only study union electioneering in school districts where teachers’ unions are sufficiently active to issue endorsements and in districts where I am able to identify such activity. And there is no doubt that I am missing some endorsement data for some elections where unions did, in fact, make endorsements. For obvious reasons, missing data is more likely to be a problem in very small (and especially geographically rural) school districts where local newspapers either do not exist or do not have sufficient reporting capacity to cover interest group endorsements in local elections. Therefore, it is reasonable to ask how representative are the subset of school districts where I was able to find information on teacher-union endorsements compared to the school districts in California and Florida as a whole.

To provide some context on sample representativeness, Table 4 in the Appendix presents descriptive statistics comparing the demographic (district-level)
characteristics of my own sample of school districts (where I have information on endorsements) with the remaining districts in each state where I do not. As the table shows, although my samples are broadly representative of Florida and California districts on the whole, they are, as expected, much less likely to include small rural districts (e.g., fewer than 1000 students). On the one hand, this limits my ability to generalize my findings to very small and rural communities. On the other hand, the districts in my sample—those where unions regularly make endorsements—are the districts that serve the vast majority (roughly 90 percent) of all public school students in each state. Although the absence of information on union endorsements in small districts is a concern, I attend to this issue through a robustness test later in the paper. I also discuss some related limitations surrounding the generalizability of my findings in the paper’s conclusion.

Before we can proceed to analyze union electioneering outcomes in California and Florida, it is important to briefly mention a few key differences concerning how school board elections work in these states. With the exception of districts that use district- or ward-based elections, California school districts hold “multi-seat elections” where citizens vote for several candidates in a single contest. By contrast, like many southern states, Florida districts are large countywide entities where voters only vote for a single candidate in each contest. Importantly, Florida holds its board elections entirely in even-numbered years whereas California has only recently transitioned to a system where elections are uniformly held “on-cycle.” These two factors—the use of on-cycle elections combined with larger countywide districts should, if anything, make it harder for any single interest—including teachers’ unions—to dominate district politics in Florida (see, e.g., Anzia 2011, 2013).

Results

Table 1 displays the electoral outcomes for all union-endorsed school board candidates in my data set over four specific periods of time separately by state and candidate incumbency status. A few key patterns in the table stand out. First and foremost, teacher-union endorsed candidates do exceptionally well in the majority of competitive school board elections. Consistent with Terry Moe’s findings in his earlier studies, in California, union-backed candidates are the ones to beat. On average (across the time series) union-endorsed candidates won 71 percent of their races in California. Moreover, irrespective of the particular time period one examines, roughly 90 percent of union-favored incumbents in California secured reelection and two-thirds of union-backed challengers won their race.

In Florida, where we have good reasons to anticipate that teachers’ unions won’t make nearly as strong of a showing, they do surprisingly well. Across the entire time period of the Florida sample (2010–2020), 63 percent of candidates who received the endorsement of their local teachers union prevailed, with union-backed challengers winning more than half of their races and union-backed incumbents winning about 80 percent of theirs. In short, despite the fact that Florida’s teachers’ unions operate at a comparative disadvantage (relative to teachers’ unions in California),
they appear to have been remarkably successful at overcoming the headwinds of on-cycle countywide elections and a more politically conservative electorate.

The results presented in Table 1, however, are just a starting point. To more closely evaluate whether teachers’ unions remain influential in school board elections today, we need to examine their rate of electioneering success over time, examining patterns from one year to the next. Figure 1 presents some basic evidence on this score—showing how union endorsed candidates have fared in competitive board races held in each state over the past two decades. The figure highlights a number of important patterns. First, union-endorsed candidates are consistently more successful than are unendorsed candidates, irrespective of the prevailing political environment toward teachers’ unions in the USA at any given time. Across twenty-five separate election cycles in California, in no year do union-endorsed candidates win fewer than 60 percent of the time. In Florida, union-backed candidates meet or exceed the 60 percent win rate in all but one election cycle (where they narrowly miss it at 56 in 2012).

These consistent levels of electioneering success are especially noteworthy when we consider all of the various challenges that unions have faced during these two decades. In 2001, unions had to deal with the new accountability and choice provisions of the federal No Child Left Behind (NCLB) law. NCLB shined a spotlight on student achievement, giving school reformers a new data point to wield against incumbents in districts with chronically low levels of student achievement (see, e.g., Payson 2017). Then, in 2007, the Great Recession and the rise of the Tea Party...
set into motion a new political and fiscal climate that disadvantaged the unions. Yet teacher-union support in school board elections continued to confer—at least descriptively—a sizeable electoral advantage in each and every year of the time series shown in Fig. 1.

Consider the effects of the much ballyhooed Janus Supreme Court decision handed down in 2018. Careful attention to the patterns displayed in Fig. 1 highlight the resilience of teachers’ unions in the post-Janus era. The comparison between Florida and California in 2016 and 2020 is instructive. Florida’s right-to-work law prohibited teachers’ unions from charging nonmember teachers agency fees prior to Janus. The decision, therefore, had no direct practical effect on Florida’s unions. California, however, is a different story. The law there had mandated that all teachers—union member and nonmember alike—pay union fees. To the extent that Janus weakened teachers’ unions politically then, we should see a decline in their power in California. Yet the data show no such reversal in either state. Union-endorsed candidates in Florida won 68 percent of the time in 2016 and 72 percent of the time in 2020. In California, union-favored candidates won 66 percent of their races in 2016 compared to 69 percent in 2020, a statistically indistinguishable “difference-in-difference.”

Another possibility to consider is that teacher-union power has simply narrowed to blue communities, so that union electioneering only packs a punch in school districts with liberal, prolabor electorates. Although Moe’s original analysis found no such evidence for this dynamic, increased partisan polarization, including in US local politics (Hopkins 2018), could have narrowed union influence in the intervening years. To examine this possibility, I analyzed the win rates of union-endorsed candidates in California districts (where such data was uniquely available) with significantly different types of political environments. First, following Moe (2005), I divided districts by political culture. Conservative (Republican) districts were classified as those where 55 percent or more of the voters who registered with one of the two major parties were registered as Republicans. Similarly, districts where 55 percent or more of partisan registrants aligned themselves with the Democratic party were classified as Democratic districts. The remaining districts were deemed “Independent.”

Table 2 shows that union-endorsed candidates fare equally well in both Republican and Democratic districts. In fact, just like Moe found in his analysis, I too find that union-backed candidates do slightly better in Republican-leaning districts. Of course, these results do not account for the fact that unions likely endorse less union-friendly candidates in more politically conservative districts. Examining surveys of the candidates themselves, Moe found that unions are forced to make some concessions with the candidates they support in more conservative districts. Endorsed

---

8 See Finger and Hartney (2021) for a discussion of some possible indirect effects of Janus on teachers unions in right-to-work states.
9 Here, I focus on California because I have access to multiple measures of citizens’ political attitudes and voting behavior at the school district level. In Florida, I would only have access to partisanship. However, it is worth noting that I find similar results for partisanship in Florida whereby union electioneering is equally successful in both Republican- and Democratic-leaning Florida districts.
winners in conservative districts, for example, had slightly less favorable views toward collective bargaining than endorsed winners in liberal districts. It is unfortunate that I do not have similar survey data of candidate attitudes to explore this dimension of constraints on union power in politically conservative districts today. However, what we can conclude, at least in California, is that union-endorsed candidates, irrespective of the partisan nature of the local electorate, are far more likely to win their competitive school board elections than unendorsed candidates.

Partisanship, however, is just one dimension that could work to constrain union power in school board elections. In fact, while partisanship has grown more acute in local politics in recent years, unlike other policy issues, education has not been divided as predictably along conventional party lines (Hartney and Wolbrecht 2014; Houston 2019). Recall that within the Democratic party a significant number of elites embraced major market-based reforms opposed by the unions these past two decades. Since partisan differences may not adequately capture public attitudes toward unions and market-based education reforms in a particular school district, I consider two additional ways of classifying local electorates as union friendly or unfriendly.

First, I classify California school districts as anti-union if a majority of a district’s electorate voted in favor of Prop. 75, a 2005 statewide a ballot measure that threatened to make it harder for unions to raise PAC donations through a procedure that union opponents call “paycheck protection.” Second, I classify districts as pro-charter school based on whether a majority of voters supported charter school advocate Marshall Tuck over union-favored incumbent Tom Torlakson in the state’s 2014 race for superintendent of public instruction. Rows 2 and 3 in Table 2 show, quite clearly, that teachers’ unions are equally successful at getting their endorsed candidates

### Table 2 Election outcomes for union-endorsed candidates, by district type

| Political culture | Republican districts | Independent districts | Democratic districts |
|-------------------|----------------------|-----------------------|----------------------|
| Percent won       | 72                   | 74                    | 69                   |
| Percent lost      | 28                   | 26                    | 31                   |
| Number of candidates | (633)              | (540)                 | (1680)               |
| Union sentiment   | Pro-union districts  | Anti-union districts  |
| Percent won       | 70                   | 72                    |
| Percent lost      | 30                   | 28                    |
| Number of candidates | (1700)            | (1155)                |
| School reform attitudes | Pro-charter districts | Anti-charter districts |
| Percent won       | 71                   | 70                    |
| Percent lost      | 29                   | 30                    |
| Number of candidates | (1298)            | (1557)                |

Election and voter registration data used to classify California districts come from the Statewide database at UC-Berkeley.
elected in both pro- and anti-union districts as well as in both pro- and anti-charter districts across California. In other words, irrespective of district partisanship, attitudes toward labor unions, or support for charter schooling, teachers’ unions reliably win 70 percent of the school board elections in which they make an endorsement.

**Multivariate analysis**

So far, I have presented simple descriptive data, comparing the election outcomes for endorsed and unendorsed candidates over time and across different types of districts. Though the results have begun to tell a story in which teacher-union endorsements are still influential, more elaborate statistical models are needed to firm up these descriptive patterns.

To that end, I estimate a series of regression models where the outcome of interest is a simple binary indicator for whether a given school board candidate prevailed in their election alongside dummy (predictor) variables indicating whether a candidate (1) received the union endorsement and (2) whether they were the incumbent. Following Moe’s (2006) empirical approach, I use OLS (for ease of interpretation), along with election-specific fixed effects, to account for differences in the number of candidates and seats available in a specific election (a necessity in analyzing multi-seat election contests). Finally, because my aim is to assess whether union electioneering power has narrowed in the intervening years, I run four models that (separately) pool together elections held in the following time periods: (1) the period prior to No Child Left Behind (NCLB) (1995–2002), (2) the post-NCLB era preceding the Great Recession (GR) (2003–2007), (3) the Obama/GR era of labor retrenchment (2008–2015), (4) and the Trump/Janus era of conservative dominance (2016–2020).\(^\text{10}\)

Figure 2 displays the point estimates of these four period-specific regressions for the two main variables of interest (incumbency and union endorsement). As the figure shows, even after controlling for incumbency and electoral competitiveness, teacher-union endorsements are a strong predictor of candidate electoral success during all four time periods, even in those periods where unions faced much greater political opposition, and lost some major battles in education politics at the federal and state levels. It is important to note that, although the influence of union endorsements visually appears to be slightly weaker in later periods, these differences are not statistically significant. In fact, the only statistically significant difference in the strength of these predictors across time periods is for incumbency, which declines in relative importance during the most recent period of elections in California that I examined (from 2016-present).\(^\text{11}\)

Like Moe then, I find suggestive evidence that union support is possibly a stronger predictor of candidate success than incumbency, though the difference between the endorsement and incumbency coefficients are

\(^{10}\) Because I only have data on union endorsements in California across these four time periods, I focus exclusively on the results from that state in these models. Later in the paper, when I examine patterns in union electioneering success with candidate fixed-effects, I examine endorsement effects in both states.

\(^{11}\) To confirm these patterns, I ran an additional robustness test where I interacted a dummy variable for each for the four separate time periods with a candidate’s incumbency status. I also did the same (interacting each time period with a candidate’s union endorsement status).
only statistically significant in the most recent period (since 2016). In sum, there is very little evidence to suggest that unions have lost influence in local school board elections. If anything, at least in California, the union endorsement appears to provide a stronger benefit than incumbency in recent years.

Robustness tests

Across both time and geographic space, and irrespective of the prevailing political environment facing unions in education politics at the federal or state level, union-favored school board candidates have continued to do exceptionally well in local school board elections. After accounting for incumbency and the overall competitiveness of the elections that union-backed candidates run in, the union endorsement remains a very strong predictor of candidate success. However, despite these clear and consistent patterns in the data, it is still somewhat unclear how much union support itself makes the difference of school board candidates on Election Day. In this section of the paper, I address three specific shortcomings in the analysis that has been carried out so far: (1) the absence of equal amounts of endorsement data in smaller rural/township districts, (2) the lack of any observable measures (beyond incumbency) of candidate quality, and (3) the possibility that union endorsements are a proxy for unobserved conditions in a district that drive voters to support the union-favored candidate.

One issue—acknowledged at the outset of the paper—is the difficulty of finding information on union endorsements in smaller school districts that are located in rural and township communities. These missing data could create some obvious biases. For example, if union-backed candidates tend to do worse in the type of
smaller rural and township districts that comprise a smaller portion of my data set, then we may be putting too much weight on observations from city and suburban districts where unions are (potentially) more likely to win. To address this concern, I re-estimate the main results presented in Fig. 2 (and also Table 5) earlier in the paper but include only school districts that the National Center for Education Statistics (NCES) classifies as rural or township school districts. Table 6 in the Appendix presents the results of this subset analysis. In these much smaller districts (where I have fewer elections to analyze), I find no evidence that union endorsements are less important predictors of candidate performance. In fact, the coefficient on the endorsement variable is uniformly similar in magnitude to the coefficient in the full sample. In one time period (where I observe just 78 candidates running in 32 elections), the endorsement variable narrowly misses statistical significance (p = 0.102). But on the whole—and accounting for the much smaller sample size—these results look similar to the baseline estimates using the full sample of California elections.

A second concern with the analyses carried out so far is that—aside from incumbency—I have not been able to account for other differences in candidate quality. If teachers’ unions endorse higher-quality candidates who are more likely to win (irrespective of union support), without accounting for measures of candidate quality, we may misattribute the success of union-backed candidates to the power of the union endorsement itself. To get at this concern, I draw on data that has been made available by other scholars for a subset of the candidates in my California data set to measure candidate quality. Specifically, using data on candidates’ racial/ethnic backgrounds provided by Kogan et al. (2020) and information on candidate gender and occupational background from Atkeson and Hamel (2020), I once again re-estimate the main results presented in Fig. 2 (Table 5) controlling for a variety of individual (observable) candidate characteristics. The results of this robustness test are shown in Table 7 in the Appendix. Although these data are only available in California and in elections prior to 2016, I am able to confirm my main finding that union endorsements are robustly associated with a significantly higher likelihood of candidate victory, even after accounting for the prestige and relevance (in terms of running for school board) of a candidate’s occupation along with a candidate’s gender and racial background.

Finally, I address the possibility that union endorsements are a proxy for unobserved conditions in a school district—conditions that drive voters to support the union-favored candidate. Specifically, in Table 8 I re-estimate a pooled analysis of my baseline specification but introduce (in the years for which such data are available) information provided by the state of California on district-level growth in teacher salaries and district-level growth in academic achievement (proficiency). This robustness test is designed to test the possibility that unions simply endorse candidates that are presiding over positive changes in the district that both they and the local electorate approve of, and thus, that the association I find between candidate success and endorsements is simply driven by these broader changes. The results of this robustness test appear to rule out this concern. Looking separately at incumbents and challengers (see columns 1–4 of Table 8 in the Appendix), I find no evidence that the strong relationship between union endorsements and candidate
electoral outcomes is attenuated after controlling for changes in district test scores or teacher pay during an incumbent’s term in office.

**Do union endorsements really make the difference?**

My findings thus far appear to confirm (and strengthen) Moe’s conclusions from the early 2000s that unions exert significant influence in school board elections. Across time and space, irrespective of the political or geographic environment, union-backed candidates are much more likely to win than their unendorsed counterparts on Election Day. One potential criticism of this conclusion—a criticism that Moe himself anticipated and acknowledged—is the issue of selection bias. Union endorsements—like any interest group endorsement—are not randomly assigned to candidates and instead are driven by a mix of considerations, including strategic calculations about which candidates are likely to win.12

Like Moe, I have only limited (observable) measures of candidate quality (e.g., occupation, incumbency) to account for these sorts of unobserved differences between candidates. I do, however, have one advantage that enables me to address this type of selection bias and more credibly estimate the causal effect of receiving a union endorsement: time. Since my data set tracks union endorsements across the same districts over decades, I am able to observe many of the same candidates running in different elections within the same district over time. In fact, nearly 500 candidates in my data set are observed running in multiple elections where they sometimes receive (but other times do not receive) the endorsement of the local teachers union. Using this panel of repeat candidate observations for which I can observe variation in each candidate’s endorsement status, I estimate a series of regression models that assess the relationship between electoral outcomes and a candidate’s endorsement with the inclusion of individual candidate-specific fixed effects. The introduction of these candidate-specific fixed effects are not a panacea, but they do allow me to rule out any time invariant unobserved differences between candidates, better isolating the effect of the union endorsement itself. The results of these estimations are arrayed in three columns in Table 3.

In column 1, I present the results for the full sample of candidates in both states—a sample that includes 487 candidates whom I was able to observe running with and without union support in at least one competitive election.13 Even after the heavy bar of including candidate-specific fixed effects, I continue to observe both a strong and statistically significant relationship between candidate performance and union endorsements. Although the inclusion of candidate-specific fixed effects (as expected) somewhat attenuates the coefficient on the union endorsement variable (compared to the baseline model presented earlier in Fig. 2 and reported in Table 5), the electoral value of earning the union endorsement remains statistically significant and substantively meaningful: the very same candidates are significantly more likely to win election when they run with a union endorsement compared to when they run without it.

---

12 As Moe (2006, 11) put it, “while union support may boost a candidate’s probability of winning, the unions may also tend to support ‘good’ candidates who are likely to win anyway, which would inflate estimates of union impact”.

13 Specifically, I observe 439 such candidates in California and 48 in Florida.
The inclusion of candidate-specific fixed effects is certainly an improvement over prior studies which were not able to follow the performance of the same candidates over time in relation to union support. However, it is important to acknowledge that these fixed effects cannot guard against every threat of bias. One possibility that needs to be acknowledged is that candidate quality can vary over time. For example, a candidate who runs in their very first election (i.e., as a challenger) may well become a more formidable candidate the second time they run for office (irrespective of union support). If unions tend to support stronger candidates who are more likely to win, there is a risk in assuming that candidate-fixed effects are not able to account for these sorts of time-varying changes in candidate quality. The best way to deal with this concern is to more narrowly examine the performance of the subset of repeat candidates who are observed running solely as challengers or incumbents. The intuition here is simple. It is far less likely that incumbents who have run with union support in the past and won but then lose union support in future elections and fail to regain office suddenly and simply became low-quality, low-status candidates. If anything, the typical incumbent becomes a more skilled (and formidable candidate) over time. The more likely scenario for incumbents that lose union support is that these incumbents have become less attractive candidates to the teachers’ unions. Prior research suggests that unions are likely to withhold support from incumbents because those incumbents are not sufficiently supportive of the union’s agenda during their tenure on the board, not because of some sudden shortcoming in candidate quality (see, e.g., Moe 2005).[^14]

The inclusion of candidate-specific fixed effects is certainly an improvement over prior studies which were not able to follow the performance of the same candidates over time in relation to union support. However, it is important to acknowledge that these fixed effects cannot guard against every threat of bias. One possibility that needs to be acknowledged is that candidate quality can vary over time. For example, a candidate who runs in their very first election (i.e., as a challenger) may well become a more formidable candidate the second time they run for office (irrespective of union support). If unions tend to support stronger candidates who are more likely to win, there is a risk in assuming that candidate-fixed effects are not able to account for these sorts of time-varying changes in candidate quality. The best way to deal with this concern is to more narrowly examine the performance of the subset of repeat candidates who are observed running solely as challengers or incumbents. The intuition here is simple. It is far less likely that incumbents who have run with union support in the past and won but then lose union support in future elections and fail to regain office suddenly and simply became low-quality, low-status candidates. If anything, the typical incumbent becomes a more skilled (and formidable candidate) over time. The more likely scenario for incumbents that lose union support is that these incumbents have become less attractive candidates to the teachers’ unions. Prior research suggests that unions are likely to withhold support from incumbents because those incumbents are not sufficiently supportive of the union’s agenda during their tenure on the board, not because of some sudden shortcoming in candidate quality (see, e.g., Moe 2005).[^14]

[^14]: For example, Moe (2005, 275) found that “[school board] incumbents who are especially negative toward union interests are systematically being removed from office, while incumbents who are more sympathetic are being kept.”

### Table 3: Estimating the effect of union endorsements with candidate-specific fixed effects

|                      | All candidates | Only incumbents | Only challengers |
|----------------------|----------------|-----------------|------------------|
| Union endorsement    | 0.254***       | 0.239***        | 0.300***         |
|                      | [0.025]        | [0.050]         | [0.061]          |
| Candidates running   | -0.031***      | -0.012          | -0.011           |
|                      | [0.010]        | [0.021]         | [0.022]          |
| Seats available      | 0.039          | 0.138           | -0.083           |
|                      | [0.039]        | [0.109]         | [0.084]          |
| Incumbent            | -0.080**       | –               | –                |
|                      | [0.034]        |                 |                 |
| Year FE              | Yes            | Yes             | Yes              |
| Candidate FE         | Yes            | Yes             | Yes              |
| Observations         | 1205           | 254             | 201              |
| Number of candidates | 487            | 104             | 92               |
| Adjusted $R^2$       | 0.26           | 0.49            | 0.48             |

Dependent variable is the outcome for an individual candidate in a specific election (1 = won, 0 = lost). Cell entries are OLS regression coefficients with standard errors clustered by candidate beneath in brackets. All measures are two-tailed tests. *$p<0.10$, **$p<0.05$, ***$p<0.01$
Columns 2 and 3 present the results of these separate estimations focusing on the 104 incumbent-only repeat candidates and 92 challenger-only repeat candidates in my sample. In both cases, the coefficient on the variable for union endorsement remains positive and statistically significant, indicating that even after accounting for each individual candidate’s time invariant characteristics (through candidate fixed effects) and their status as an incumbent or challenger only, I find that the union support (or the withholding of that support) is a significant predictor of a candidate’s electoral success. Simply put, gaining a union endorsement enables losing candidates to become union-backed winners the second time around. Similarly, incumbents who lose union support find themselves in real jeopardy of being voted out of office, even accounting for their personal strengths as a candidate. Altogether this suggests that the union endorsement itself, rather than unobserved factors related to candidate quality, makes up a significant share of the electoral advantage that union-backed candidates receive.

**Conclusion and discussion**

In this study, I have shown that organized teacher interests remain a potent force in contemporary school board elections. To summarize:

- Union endorsed candidates still win roughly 70 percent of all competitive races.
- There is no evidence that the unions’ impressive win rates have declined in recent years. Neither the Great Recession nor the loss of agency fees has materially weakened their electioneering successes in Florida or California, two large and diverse states with very different political and union cultures.
- Union support appears to exert a strong effect on election outcomes. By examining how the same candidates perform over time, I show that gaining a union endorsement enables losers to become winners the next time around.
- Union favored candidates tend to win in both strong and weak union states and in conservative and liberal school districts. There is no evidence that the unions’ electioneering success is narrowly confined to districts where voters hold politically liberal, pro-union attitudes.

These findings are both theoretically and empirically important. On the theoretical side, they confirm our expectations about vested interests in local politics—they have strong incentives to remain active in the particular set of elections where the officials that are chosen will make key decisions relevant to their occupational interests. On the empirical side, I have shown, quite simply, that union power in school board elections remains both robust and resilient. Irrespective of the very real setbacks that unions have faced in state and national politics, in the local trenches of school board electioneering, the data tell an unambiguous story: teacher-union interest groups remain an important player, they are still the ones to beat.

While my findings help to fill in the bigger picture of union influence in local school politics, more work remains to be done. Three specific lines of inquiry stand out. First, we know far too little about how organized interests—unions and
otherwise—wield their power and influence in small school districts. Moe’s surveys, for example, revealed that unions are much less politically active in small districts. Yet he also found that unions in these smaller locales were quite satisfied with the status quo policy environment. In building my own data set on union endorsements, I too found less overt electioneering in small districts (see Table 4). In Florida, for example, teachers’ unions endorsed candidates in just over half of the state’s districts. And while those districts where unions were highly active educate roughly 90 percent of Florida’s public school students, there are surely important lessons to be learned in the remaining districts where unions behave far differently. Indeed, we know very little about the power dynamics that surround uncompetitive elections. It is tempting to conclude that the absence of competition reflects a happy equilibrium where voters are satisfied and pluralism reigns. But we also know that interest groups can and do wield power in far subtler ways that are less easily observed by voters (Bachrach and Baratz 1962; Moe 2019). Are these dynamics at work in districts that routinely see uncompetitive school board elections and incumbents face less overt electoral pressure in the absence of any challengers? Second we still know too little about the role that other—non-union—interest groups are doing in local school board elections. While Moe’s studies from the early 2000s found that school board candidates said teachers’ unions and other school employees unions were the most active and influential groups in board politics, it would be helpful to revisit those findings today, given some of the changes in the landscape of education politics after the Great Recession. Given the paucity of data, getting at both of these questions surrounding smaller districts and other groups is difficult, but necessary work.

A third set of questions that should be tackled involve asking who teachers’ unions endorse and why they do so. This broader question is profoundly important given that unions play an important role in electioneering the composition of school boards. If unions are important players in these elections, scholars interested in issues related to descriptive representation and educational equity, for example, would do well to examine whether and when unions mobilize to support board candidates from historically marginalized groups. Examining the campaigns of Black and Latino candidates would be one interesting starting point. Although some establishment Civil Rights organizations (e.g., NAACP, UnidosUS) have tended to ally themselves with teachers’ unions in opposing choice reforms like vouchers and charter schooling, many voters of color hold more positive views about school choice (Reid 2001; Moe 2004). Do these mass–elite differences influence the path for racial minority candidates running in school board elections, including their ability to secure the very union endorsements that, more often than not make the difference on Election Day? Unless and until scholars return to the trenches to study power and the role of vested interests in local politics, we simply won’t know the answer to these and many other important questions.

Appendix

See Tables 4, 5, 6, 7 and 8.
Table 4  Descriptive statistics comparison of the sample of districts with union endorsement data compared to districts without and all districts (combined) in each state

| District characteristics          | California |                         | Florida |                         |                         |
|----------------------------------|------------|--------------------------|---------|--------------------------|--------------------------|
|                                  | Endorsement sample (N = 468) | Missing districts (N = 470) | All districts (N = 938) | Endorsement sample (N = 36) | Missing districts (N = 31) | All districts (N = 67) |
| Average enrollment (thousands)   | 11.2       | 1.2                      | 6.1     | 72.8                     | 6.7                      | 42.2                     |
| Percent (ages 5–17) in poverty   | 15.0       | 19.4                     | 17.3    | 17.7                     | 27.0                     | 22.0                     |
| Percent white students           | 29.8       | 44.4                     | 37.3    | 50.1                     | 58.9                     | 54.2                     |
| Percent urban district           | 7.7        | 1.5                      | 4.6     | 20.5                     | 4.3                      | 13.0                     |
| Percent suburban district        | 17.0       | 4.4                      | 10.5    | 47.8                     | 7.0                      | 28.9                     |
| Percent rural or town district   | 4.3        | 13.7                     | 9.1     | 31.7                     | 88.7                     | 58.1                     |
| Percent of all students in state | 89.4       | 10.6                     | –       | 92.7                     | 7.3                      | –                        |

Note that the number of observations varies slightly across each covariate shown in the table because some districts were missing this information. Small Area Income and Poverty Estimates (SAIPE) Program
### Table 5
Effect of union endorsements and incumbency on candidates’ electoral outcomes in California school board elections 1995–2020

|                  | Pre-NCLB (1995–2001) | Post-NCLB (2002–2007) | Obama/great recession (2008–2015) | Trump/Janus (2016–2020) |
|------------------|-----------------------|-----------------------|-----------------------------------|-------------------------|
| **Endorsed by union** | 0.428*** [0.032]     | 0.399*** [0.041]     | 0.360*** [0.029]                 | 0.373*** [0.032]        |
| **Incumbent candidate** | 0.319*** [0.033]     | 0.341*** [0.042]     | 0.329*** [0.032]                 | 0.203*** [0.035]        |
| Observations     | 2270                  | 1647                  | 2846                              | 2260                    |
| Number of elections | 518                   | 496                   | 801                               | 647                     |
| \( R^2 \)       | 0.40                  | 0.41                  | 0.35                              | 0.25                    |

Dependent variable is the outcome for an individual candidate in a specific election (1 = won, 0 = lost). Cell entries are regression coefficients with fixed effects for each election and standard errors clustered by election beneath in brackets.

All measures are two-tailed tests. *\( p < 0.10 \), **\( p < 0.05 \), ***\( p < 0.01 \)

### Table 6
Effect of union endorsements on candidates’ electoral outcomes are robust to focusing only on rural and township school districts (California only)

|                  | Pre-NCLB (1995–2001) | Post-NCLB (2002–2007) | Obama/great recession (2008–2015) | Trump/Janus (2016–2020) |
|------------------|-----------------------|-----------------------|-----------------------------------|-------------------------|
| **Endorsed by union** | 0.473*** [0.084]     | 0.391                 | 0.404*** [0.116]                 | 0.305*** [0.122]        |
| **Incumbent candidate** | 0.449*** [0.070]     | −0.186                | 0.078                             | −0.104                  |
| Observations     | 347                   | 78                    | 222                               | 210                     |
| Number of elections | 91                    | 32                    | 68                                | 62                      |
| \( R^2 \)       | 0.50                  | 0.42                  | 0.28                              | 0.19                    |

Dependent variable is the outcome for an individual candidate in a specific election (1 = won, 0 = lost). Cell entries are regression coefficients with fixed effects for each election and standard errors clustered by election beneath in brackets.

All measures are two-tailed tests. *\( p < 0.10 \), **\( p < 0.05 \), ***\( p < 0.01 \)
Table 7  Effect of union endorsements on candidates’ electoral outcomes is robust to controlling for other observable measures of candidate quality and characteristics (California only)

|                              | Pre-NCLB (1995–2001) | Post-NCLB (2002–2007) | Obama/Great Recession (2008–2015) |
|------------------------------|---------------------|----------------------|----------------------------------|
| Endorsed by union            | 0.407***            | 0.376***             | 0.346***                         |
|                              | [0.035]             | [0.044]              | [0.030]                          |
| Incumbent                    | 0.356***            | 0.380***             | 0.372***                         |
|                              | [0.037]             | [0.045]              | [0.032]                          |
| Female                       | 0.049*              | 0.083**              | 0.091***                         |
|                              | [0.030]             | [0.042]              | [0.028]                          |
| White                        | −0.03               | 0.048                | 0.000                            |
|                              | [0.039]             | [0.044]              | [0.031]                          |
| Classroom educator           | 0.170***            | 0.203***             | 0.198***                         |
|                              | [0.039]             | [0.048]              | [0.035]                          |
| Business professional        | 0.06                | 0.018                | 0.042                            |
|                              | [0.039]             | [0.060]              | [0.040]                          |
| Attorney                     | −0.037              | −0.029               | 0.098                            |
|                              | [0.074]             | [0.112]              | [0.085]                          |
| Observations                 | 1916                | 1527                 | 2700                             |
| Number of elections          | 461                 | 469                  | 774                              |
| $R^2$                        | 0.41                | 0.44                 | 0.37                             |

Dependent variable is the outcome for an individual candidate in a specific election (1 = won, 0 = lost). Cell entries are regression coefficients with fixed effects for each election and standard errors clustered by election beneath in brackets.

All measures are two-tailed tests. *p < 0.10, **p < 0.05, ***p < 0.01
Table 8 Effect of union endorsements on candidates’ electoral outcomes is robust to controlling for district-level changes in teacher salaries and academic performance (California only)

| Endorsed by union | Incumbents Teacher salary changes | Incumbents Test score growth | Challengers Teacher salary changes | Challengers Test score growth |
|-------------------|----------------------------------|----------------------------|-----------------------------------|-------------------------------|
| [0.031]           | 0.266***                         | 0.240***                   | 0.375***                          | 0.366***                     |
| [0.060]           |                                  |                            | [0.022]                           | [0.038]                      |
| Growth in teacher pay | −0.003                           | –                          | 0.002                             | –                             |
| [0.004]           |                                  |                            | [0.002]                           |                               |
| Growth in test scores | –                               | 0.001                      | –                                 | 0.000                        |
| [0.003]           |                                  |                            | [0.001]                           |                               |
| Candidates running | −0.026**                         | −0.001                     | −0.024***                         | −0.035***                    |
| [0.011]           |                                  |                            | [0.006]                           | [0.012]                      |
| Seats available   | 0.079***                         | 0.071                      | 0.048***                          | 0.03                         |
| [0.026]           |                                  |                            | [0.062]                           | [0.029]                      |
| Year FE           | Yes                              | Yes                       | Yes                               | Yes                           |
| District FE       | Yes                              | Yes                       | Yes                               | Yes                           |
| Observations      | 1517                             | 688                       | 3324                              | 1390                         |
| Number of elections | 260                             | 235                       | 273                               | 265                           |
| $R^2$             | 0.34                             | 0.50                      | 0.25                              | 0.33                         |

Dependent variable is the outcome for an individual candidate in a specific election (1 = won, 0 = lost). Cell entries are regression coefficients with fixed effects for each district and standard errors clustered by district beneath in brackets.

All measures are two-tailed tests. *p < 0.10, **p < 0.05, ***p < 0.01

Acknowledgements The author gratefully acknowledges the excellent research assistance of Sofia Marino and Taylor Nardone. He also wishes to thank Sarah Anzia and Vladimir Kogan for their thoughtful comments and suggestions and Terry Moe for generously sharing his earlier survey data. Finally, he wishes to thank the Hoover Institution for supporting his research as a W. Glenn Campbell and Rita Ricardo-Campbell National Fellow.

Funding The author received no financial support for the research, authorship, and/or publication of this article.

Declarations

Conflict of interest The author declares no ethical issues or conflicts of interest in this research.

Ethical approval The author affirms this research did not involve human subjects.

References

Antonucci, Mike. 2021. Teacher union resistance to reopening schools: An examination of the largest U.S. school districts. Washington, DC: Defense of Freedom Institute.

Anzia, Sarah F. 2011. Election timing and the electoral influence of interest groups. The Journal of Politics 73 (2): 412–427. https://doi.org/10.1017/S0022381611000028.
Anzia, Sarah F. 2013. *Timing and turnout: How off-cycle elections favor organized groups*. Chicago, IL: The University of Chicago Press.

Anzia, Sarah F. 2022. *Local interests: Interest groups and public policy in U.S. city government*. Chicago: University of Chicago Press.

Anzia, Sarah F., and Terry M. Moe. 2014. Collective bargaining, transfer rights, and disadvantaged schools. *Educational Evaluation and Policy Analysis* 36 (1): 83–111.

Atkeson, Lonna Rae, and Brian T. Hamel. 2020. Fit for the job: Candidate qualifications and vote choice in low information elections. *Political Behavior* 42 (1): 59–82.

Bachrach, Peter, and Morton S. Baratz. 1962. *The two faces of power*. *American Political Science Review* 55: 947–952.

Bailey, John. 2021. “Is it safe to reopen schools? An extensive review of the research.” Center on Reinventing Public Education.

Brill, Steven. 2010. The teachers’ unions’ last stand. *The New York Times Magazine* 5 (17): 2010.

DeAngelis, Corey, and Christos Makridis. 2021. Are school reopening decisions related to union influence? *Social Science Quarterly*. https://doi.org/10.1111/ssqu.12955.

DiSalvo, Daniel. 2015. *Government against itself: Public union power and its consequences*. New York: Oxford University Press.

DiSalvo, Daniel, and Michael T. Hartney. 2020. Teachers unions in the post-Janus world. *Education Next* 20 (4): 46–55.

Feigenbaum, James, Alexander Hertel-Fernandez, and Vanessa Williamson. 2019. “From the Bargaining Table to the Ballot Box: Political Effects of Right to Work Laws.” *NBER Working Paper* #24259.

Ferman, Barbara, and Nicholas Palazzolo. 2017. The fight for America’s schools: Grassroots organizing in education. In *The fight for America’s schools: Grassroots organizing in education*, ed. Barbara Ferman, 17–32. Cambridge, MA: Harvard Education Press.

Finger, Leslie K. 2018. Vested interests and the diffusion of education reform across the states. *Policy Studies Journal* 46 (2): 378–401.

Finger, Leslie K., and Michael T. Hartney. 2021. Financial solidarity: The future of unions in the post-Janus era. *Perspectives on Politics* 19 (1): 19–35.

Finger, Leslie K., and Sarah Reckhow. 2021. Shifting alliances in state political parties: The case of education interest groups. *State Politics and Policy Quarterly*. https://doi.org/10.1017/spq.2021.25.

Flanders, Will. 2020. Politics in the pandemic: The role of unions in school reopening decisions. *Wisconsin Institute for Law & Liberty*. Available At [https://will-law.org/wp-content/uploads/2020/12/reopening-brief.pdf].

Grossmann, Matt, Sarah Reckhow, Katharine O. Strunk, and Meg Turner. 2021. All states close but red districts reopen: The politics of in-person schooling during the COVID-19 pandemic. *Educational Researcher*. https://doi.org/10.3102/2F0013189X211048840.

Harris, Douglas N., Engy Ziedan, and Susan Hassig. 2021. “The Effects of School Reopenings on COVID-19 Hospitalizations.” *National Center for Research on Education Access and Choice*.

Hartney, Michael T. 2022. *How policies make interest groups: Governments, unions, and american education*. Chicago: The University of Chicago Press.

Hartney, Michael T., and Patrick Flavin. 2011. From the schoolhouse to the statehouse: teacher union political activism and state education reform policy. *State Politics and Policy Quarterly* 11 (3): 251–268.

Hartney, Michael T., and Christina Wolbrecht. 2014. Ideas about interests: explaining the changing partisan politics of education. *Perspectives on Politics* 12 (3): 1–28.

Hartney, Michael T., and Leslie K. Finger. 2020. “Politics, Markets, and Pandemics: Public Education’s Response to COVID-19.” *Perspectives on Politics*, 1–17.

Hemphill, Annie A., and Bradley D. Marianno. 2021. Teachers’ unions, collective bargaining, and the response to COVID-19. *Education Finance and Policy* 16 (1): 170–182.

Henig, Jeffrey R. 2013. *The end of exceptionalism in american education: The changing politics of school reform*. Cambridge, MA: Harvard Education Press.

Henig, Jeffrey R., Rebecca Jacobsen, and Sarah Reckhow. 2019. *Outside money in school board elections: The nationalization of education politics*. Cambridge, MA: Harvard Education Press.

Hertel-Fernandez, Alexander. 2018. Policy feedback as political weapon: Conservative advocacy and the demobilization of the public sector labor movement. *Perspectives on Politics* 16 (2): 364–379.

Hess, Frederick M., and David L. Leal. 2005. School house politics: expenditures, interests, and competition in school board elections. In *Besieged: School boards and the future of education politics*, ed. William G. Howell, 228–253. Washington, DC: Brookings Institution Press.
Hopkins, Daniel J. 2018. *The increasingly united states: how and why american political behavior nationalized*. Chicago: University of Chicago Press.

Houston, David M. 2019. Polarization and the politics of education: What moves partisan opinion? *Educational Policy* 35: 566–589.

Howell, William G., and Asya Magazinnik. 2017. Presidential prescriptions for state policy: Obama’s race to the top initiative. *Journal of Policy Analysis and Management* 36 (3): 502–531.

Kogan, Vladimir, Stéphane. Lavertu, and Zachary Peskowitz. 2020. How does minority political representation affect school district administration and student outcomes? *American Journal of Political Science* 65: 699–716.

Manna, Paul. 2006. *School’s In: Federalism and the national education agenda*. Washington: Georgetown University Press.

Manna, Paul. 2011. *Collision course: Federal education policy meets state and local realities*. Washington, DC: CQ Press.

Marianno, Bradley D., Annie Hemphill, Ana Paula Loures-Elias, Libna Garcia, and Cooper Deanna. 2021. Power in a pandemic: Teachers’ unions and their responses to school reopening. *Working Paper*.

Marianno, Bradley D., and Katharine O. Strunk. 2018. The bad end of the bargain?: Revisiting the relationship between collective bargaining agreements and student achievement. *Economics of Education Review* 65: 93–106.

McGuinn, Patrick. 2012. Fight club: Are advocacy organizations changing the politics of education? *Education next* 12 (3): 25–31.

McGuinn, Patrick. 2016. From no child left behind to the every student succeeds act: Federalism and the education legacy of the obama administration. *Publius: The Journal of Federalism* 46 (3): 392–415.

Moe, Terry M. 2004. *Schools, vouchers, and the American public*. Washington: Brookings Institution Press.

Moe, Terry M. 2005. Teacher unions and school board elections. In *Besieged: School boards and the future of education politics*, ed. William G. Howell, 254–287. Washington, D.C.: Brookings Institution Press.

Moe, Terry M. 2006. Political control and the power of the agent. *Journal of Law, Economics, and Organization* 22 (1): 1–29.

Moe, Terry M. 2011. *Special interest: Teachers unions and America’s public schools*. Washington, D.C.: Brookings Institution Press.

Moe, Terry M. 2019. *The politics of institutional reform: Katrina, education, and the second face of power*. Cambridge University Press.

Payson, Julia A. 2017. When are local incumbents held accountable for government performance? Evidence from US School Districts. *Legislative Studies Quarterly* 42 (3): 421–448. https://doi.org/10.1111/lsq.12159.

Pressman, Jeffrey L., and Aaron Wildavsky. 1984. *Implementation: How great expectations in Washington are dashed in Oakland; or, Why it’s amazing that federal programs work at all, this being a saga of the economic development administration as told by two sympathetic observers who seek to build morals on a foundation*, vol. 708. California: University of California Press.

Reid, Karla Scoon. 2001. Minority parents quietly embrace school choice. *Education Week* 21 (14): 1–8.

Rhodes, Jesse. 2012. *An education in politics: The origins and evolution of no child left behind*. Ithaca: Cornell University Press.

Sawchuk, Stephen. 2012. New advocacy groups shaking up education field. *Education Week* 31 (31): 1.

Shi, Ying, and John D. Singleton. Forthcoming. School boards and education production: Evidence from randomized ballot order. *American Economic Journal: Economic Policy*.

Sieg, Holger, and Yu. Wang. 2013. The impact of unions on municipal elections and urban fiscal policies. *Journal of Monetary Economics* 60 (5): 554–567.

Strunk, Katharine O., and Jason A. Grissom. 2010. Do strong unions shape district policies? *Educational Evaluation and Policy Analysis* 32 (3): 389–406. https://doi.org/10.3102/0162373710376665.

Strunk, Katharine O., Joshua M. Cowen, Dan Goldhaber, Bradley D. Marianno, Tara Kilbride, and Roddy Theobald. 2018. It is in the contract: How the policies set in teachers’ unions’ collective bargaining agreements vary across states and districts. *Educational Policy* 32 (2): 280–312.

Strunk, Katharine O., Joshua Cowen, Dan Goldhaber, Bradley D. Marianno, Roddy Theobald, and Tara Kilbride. 2021. Public school teacher contracts and state-level reforms: assessing changes to
collective bargaining restrictiveness across three states. *American Educational Research Journal.* https://doi.org/10.3102/2F00028312211048950.
Viadero, Debra. 2009. Is the end near for teachers’ unions? *Education Week,* May 7, 2009.
Winkler, Amber M., Janie Scull, and Dara Zeehandelaar. 2012. How strong are US teacher unions? A state-by-state comparison. *Thomas B. Fordham Institute.*
Zimmerman, Kanecia O., Ibukunoluwa C. Akinboyo, M. Alan Brookhart, Angelique E. Boutzoukas, Kathleen McGann, Michael J. Smith, Gabriela Maradiaga Panayotti, Sarah C. Armstrong, Helen Bristow, and Donna Parker. 2021. Incidence and secondary transmission of SARS-CoV-2 infections in schools. *Pediatrics.* https://doi.org/10.1542/peds.2020-048090.

**Publisher’s Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.