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Fit for the Job: Candidate Qualifications and Vote Choice in Low Information Elections

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Abstract

Cues and heuristics—like party, gender, and race/ethnicity—help voters choose among a set of candidates. We consider candidate professional experience—signaled through occupation—as a cue that voters can use to evaluate candidates' functional competence for office. We outline and test one condition under which citizens are most likely to use such cues: when there is a clear connection between candidate qualifications and the particular elected office. We further argue that voters in these contexts are likely to make subtle distinctions between candidates, and to vote accordingly. We test our account in the context of local school board elections, and show—through both observational analyses of California election results and a conjoint experiment—that (1) voters favor candidates who work in education; (2) that voters discriminate even among candidates associated with education by only favoring those with strong ties to students; and (3) that the effects are not muted by partisanship. Voters appear to value functional competence for office in and of itself, and use cues in the form of candidate occupation to assess who is and who is not fit for the job.

Keywords Low information elections · Voting behavior · Heuristics · Occupation · Conjoint experiments

Low information elections are part and parcel of American politics. While the top of the ticket often features high profile contests with large amounts of campaign spending that educates and mobilizes voters (Partin 2001; Rosenstone and Hansen 1993),

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down-ballot contests often receive little media attention and relatively little candidate spending, making these contests—for the average voter—a low information one. And yet, given the number of elected offices in the U.S., such contests are commonplace for the American voter. In these contests, voters often rely on heuristics or cues, at least some of which are contained on the ballot: candidate party (Popkin 1994; Rahn 1993), sex, ethnicity (Bullock and Campbell 1984; Pomper 1975; Matson and Fine 2006), name recognition (Box-Steffensmeier et al. 2000; Jacobson and Kernell 1981), incumbency status (Ferreira and Gyourko 2009, 2014; Kirkland and Coppock 2017; Trounstine 2011), and occupation (Kirkland and Coppock 2017; McDermott 2005).

Indeed, the information provided on the ballot may be the most salient and readily available information voters encounter when making their voting decision in low information contests. These contests often present voters with a conundrum because they may lack information, and even access to information, about the candidates. Ballot information thus may be the only information they have to make their decision. While every ballot provides basic sex and possibly ethnicity cues in the form of candidate names, additional ballot information usually includes party and sometimes incumbency status and occupational cues. California, in particular, provides these additional designations, as do many other countries (Mechtel 2013). We argue that occupational cues allow voters to assess one aspect of candidate quality: candidate professional experience. Knowing a candidate's professional experience allows voters to evaluate the relative competency of candidates, linking professional experience to the office in question. In such settings, voters who value the functional competence of candidates—which we define here as the extent to which a candidate appears to have the background and experience that make them qualified to perform the duties of the particular elected office—will be more likely to support the candidate whose qualifications for office are more tied to the particular office they seek, and less likely to support those candidates whose qualifications do not connect them to the same office. We suggest that many electoral contexts grant voters the chance to discriminate among candidates of various professional backgrounds, and that voters consider and weigh a set of candidate characteristics and choose the candidate that is best suited to hold the political office.

To test our theory about functional competence, we focus on local school board elections, which are decidedly low information elections and for which a particular background—experience in the education of students—may be of particular value to voters. We use a multimethod research design that incorporates real-world elections afforded by the unique nature of California's ballot design, as well as a conjoint experiment that tests for multidimensional preferences in a simulated election environment. More concretely, our study extends previous work on occupation cues in voting theoretically by identifying the importance of functional competence over general political experience or incumbency and by testing our model with data from actual elections. But, because our primary model is an aggregate one, and we want to speak directly about individual level-behavior, we conducted a candidate conjoint experiment on Mechanical Turk (MTurk), where we offer voters a similar set of cues and include candidate party to identify the relative impact of each on vote choice.

We report three central findings. First, with both kinds of data, we show that candidates who work in education fare best at the ballot box, relative to those working in other fields. But, importantly we also find that voters distinguish even among candidates who work in education: those who work closest with students—teachers, tutors, etc.—fare the best. Those who work in more administrative roles, though still with students—such as guidance counselors—fare almost as well. Most notably, those who work at a school, but are not truly associated with education—like a school finance analyst, school cafeteria worker, or janitor—receive no boost in vote share. Combined, these findings provide broad support for the idea that voters value functional competence and that they discriminate among candidates on the basis of their professional background and qualifications. Finally, in our experimental analysis, we also examine whether the effect of these occupation cues disappears once partisanship is accounted for. We find no evidence that this is the case. Though shared partisanship matters, the effect of education-related cues on vote choice does not disappear once party is taken into account. In sum, we conclude that occupation cues—specifically, occupation cues that are closely tied to the particular office—may be an important heuristic independent of partisan and group loyalty cues in low information elections.

Heuristics in Electoral Politics

Theory predicts that short cuts, heuristics, or cues can help to create a more competent and effective citizen (Downs 1957; Mondak 1993; Popkin 1994; Sniderman et al. 1991; Sniderman 2017). Lupia and McCubbins (1998) and Popkin (1994) explicate this view, arguing that the use of information shortcuts allows citizens to make more rational choices. In this framework, voters use available information to inform their vote choice and to make a reasonable prediction about what kind of elected official someone would be. In short, this view argues that voters do not need to be fully informed to make political choices as if they were fully informed.

Perhaps the strongest and most relevant cue for voters is the candidate's partisanship. Partisan cues provide voters with reasonably reliable direct information about candidates' policy preferences, and as such provides a valuable resource for voters to make reasonably informed decisions on down-ballot and other low information contests (Rahn 1993). Along these lines, research suggests that partisan ballot cues are very important to voter decision-making and help voters to make more correct voting decisions (Klein and Baum 2001; Schaffner et al. 2001).

But local contests, such as city offices and school board elections, are often nonpartisan and therefore provide no party linkage information to help a voter align her predispositions with her vote choice. In these contests, voters must rely on other information to fill the knowledge gap. These often include factors implied on the ballot like candidate gender and ethnicity (Bullock 1994; Matson and Fine 2006; McDermott 1997, 1998). Using stereotypes about the sex and ethnicity of candidates allows voters to impute traits and issues positions to a candidate (Huddy 1994; Rapoport et al. 1989). Koch (2000) and McDermott (1997,

1998) use survey data to show that sex stereotypes influenced vote choice, with more liberal voters choosing the female candidate and more conservative voters choosing the male candidate. Meanwhile, other research shows that that some voters may have a baseline sex or ethnicity preference that can be inferred from candidate names that influences their vote choice (Barreto et al. 2005; Lien 1998; Longoria 1999; Squire and Smith 1988; Sanbonmatsu 2006; Vanderleeuw 1990), especially when there are no incumbents running or party designations on the ballot (Matson and Fine 2006; McDermott 1998; Squire and Smith 1988).

Research also shows that candidate political experience may also play a role. This line of work comes with significant limitations, however. For starters, the vast literature on "candidate quality" in congressional elections has considered whether candidates who have held any political office are more successful at winning future office, but has paid little attention to the particular qualifications of those previous offices, opting instead for a dichotomous variable indicating political or no political experience (e.g., Bianco 1984; Bond et al. 1997; Jacobson and Kernell 1981; but see Krasno and Green 1988; Lublin 1994; and Squire 1989 for more fine-grained office-based measures of quality). This line of research uses candidate quality as a proxy for many factors: name recognition, ability to fundraise, competence at legislating or governing, etc., but does not speak to whether voters use such cues to inform their decision, or whether the rewards to quality candidates are a function of the broader set of factors that distinguish them from their opponent or to the unmeasured factors that make those experiences more or less successful to a candidate's campaign. Simply put, these works have yielded only limited insight into what drives the relationship between political experience and voting and have not considered how professional experience outside of politics might augment it.

Other research, both observational and experimental, has more closely considered the particular occupation cues that may matter to voters. For example, Nakanishi et al. (1974) report that candidates working in the field of education fare better in elections in the Los Angeles Community College system. Mueller (1970) examines a similar context and shows that candidates who listed an education field on their ballot designation did better than those who had no such designation or were designated an attorney or lawyer. Dubois (1984) considers elections to the California courts, and finds that both sitting judges and attorneys get roughly about the same electoral boost in primary elections, while "commissioners" receive about half the electoral boost.[1]

The most well-known of these studies is perhaps McDermott (2005). She used a survey experiment during the 1994 statewide elections in California to examine how ballot designations influenced vote choice. She finds that voters preferred the incumbent candidate when an incumbent was present, but preferred candidates whose occupation demonstrated a connection to business when there was no incumbent on the ballot. We note though that in the races for Treasurer and Controller (both open seats), the alternative designations hardly seem like work-life experience. Indeed,

[1] The author did not provide standard errors and so we cannot calculate whether these coefficients, which are very close in magnitude, are statistically different from one another.

"taxpayer advocate," for example, seems to be less of a candidate qualification, and more of a policy statement. This notwithstanding, one may also wonder what candidate for political office would *not* identify as a "taxpayer advocate." From these data, McDermott (2005) suggests that office-relevant experience may be an important cue in understanding voter decision making. But taken together, her findings in both open seat elections and elections featuring an incumbent could also suggest that voters may simply prefer politically experienced candidates over politically inexperienced ones, and may not really vote with the connection between the particular candidate qualifications and the elected office in mind. In sum, McDermott (2005) does not directly test the value of different occupational cues, particularly in relation to the qualifications we might think of as important for a particular political office.

More recently, Kirkland and Coppock (2017) use a conjoint experiment and examine how former political experience and professional experience, along with ethnicity and sex, drives candidate choice in both the absence and presence of partisan cues. They find that voters prefer politically experienced candidates over candidates who have no political experience in both partisan and nonpartisan treatment conditions, but that (in both treatment conditions) the effect of various professional experiences on vote choice is statistically indistinguishable from zero. Their experiment, however, provides no office cue: respondents are asked to evaluate candidates without information about the office they seek. Elections are labeled only as partisan or nonpartisan. In this experimental context, voters cannot use professional experience to assess candidate' functional competence for office; occupation is much less likely to be activated in associative memory and consequently much less useful in choosing a candidate. We think this may even explain the weak or nonexistent effects found for professional experience cues included in their study. In our design, we vary the occupation cue, but more fully capture the conditions under which occupation drives vote choice by additionally cueing local school board elections.

This evidence suggests that voters may be evaluating candidates based upon their work experience and view some experiences as more qualifying than others, but does little to differentiate incumbency or political experience from professional experience, or consider the role of particular work experiences in the context of particular electoral contexts and offices. In light of these works, below we develop a theory of qualifications in vote choice, with a particular emphasis on whether and how electorally-relevant work experiences translate into political support.

Qualifications and Functional Competence in Vote Choice

As noted, some contests, as a by-product of the campaign, produce large quantities of information for voters to consume, while other contests do not. Voters learn more about candidates in a high information environment, where getting to know the candidates becomes relatively costless (Partin 2001). In contrast, they learn much less about candidates in low information contests, forcing them to rely on a smaller set of considerations in casting their ballot. Therefore, in these low information contests, information about qualifications may be a critical factor in determining vote choice.

Like McDermott (2005), we argue that occupation is a particularly important cue when the elected office is aligned with particular professions. Occupation, we argue, is a particularly important cue in these contexts because it speaks to the likelihood that the candidate can adequately perform the duties of the office in question. Indeed, it affords voters the opportunity to assess candidates on the basis of competency. In these circumstances, voters choose the candidates whose qualifications for office are tied to the particular office they seek. For example, we should expect someone with experience in finance to be uniquely qualified to serve as State Treasurer, Comptroller, or Auditor. All else equal, in such a context, we should thus expect a candidate with a finance background to fare better electorally than a candidate with a background in law or education.

We depart from previous work, however, in noting that not all ballot cues are likely equal, and most critically, that the relevance of candidate qualifications for a particular office might vary even within a particular occupational domain. In our example, a candidate may work in the financial industry, but have little to no experience with finance itself. A candidate for State Treasurer or County Tax Assessor who worked in customer service at a "Big Four" accounting firm is unlikely to be as qualified for the position as a candidate who worked as an audit professional in the same firm. We suggest then that voters who value functional competence should also discriminate among candidates of various—albeit similar—backgrounds. In sum, we suggest candidate qualifications should matter in low information elections, so much so that voters prefer the candidate who appears *most* qualified for that particular office.

Of course, some down-ballot state and local elected offices (e.g. school board, Treasurer, Attorney General, Sheriff, etc.) are more clearly tied to particular qualifications and competencies than other offices (e.g. Public Regulation Commissioner, County Supervisor, Lieutenant Governor, etc.). But, even in situations where there is not an obvious link between the office and professional characteristics, some experience may be more valued than other experienced. For example, for a local executive position, such as Mayor, a candidate with a background as a CEO or small business owner may seem more qualified than an attorney.

For purposes of our test, we propose local school board elections as one context where voters are likely to value functional competence, frequently have the opportunity to use functional competence as a criterion in their decision-making, and subsequently are able to vote with such considerations in mind. Here, there is a clear connection between qualifications and the office itself. We assume that teachers and those who work in the education field are those most qualified—relative to those working in other sectors, such as business or law—to serve on the local school board. Teachers have experience working with students, understand how schools operate, and are cognizant of the demands placed on teachers, students and staff. These professional experiences make them uniquely qualified to sit on school boards. School board elections thus provide a setting in which voters might use candidate qualifications to make a decision in an environment that otherwise lacks information about the candidates. But it also offers voters the chance to discriminate on the basis of experience within the occupation itself. We should expect, therefore, that a candidate who identifies as a "high school teacher" to fare better, all

else equal, in a school board election than one who identifies as a "school cafeteria worker." The former candidate works directly with students, and her expertise is in education, whereas the latter candidate's expertise is, by and large, outside of education. In short, we suggest that occupation is an important, nonpartisan cue often present in low information environments that allows voters to assess the qualifications of candidates. Most notably, unlike previous work, by disentangling the effects of similar yet distinct occupational categories, our theory distinguishes between the role of incumbency (and experience within a certain sector more broadly) and the role of professional qualifications signaled through a particular job. Indeed, while past studies conflated incumbency with occupation (McDermott 2005), we see these as two distinct measures of candidate quality with independent effects.

Data, Methods, and Results

Overview of Studies

We conducted a mixed-methods research design consisting of two studies: (1) using election data, we examined the relationship between candidate occupation—expressed through official ballot designations—and vote share in California school board elections from 1996 to 2015; and (2) using a discrete choice conjoint experiment, in which we exposed respondents to two hypothetical candidates for the local school board, varied the occupation of each candidate (among other items), and assessed vote choice.

Both studies have their strengths and weaknesses, but combined provide more leverage to answer our question. Our observational analyses allow us to situate our research within actual electoral contexts, and ask whether actual school board candidates with strong ties to education fared better relative to other candidates with weaker ties to education and those in other professions. The use of aggregate election data provides us with greater external validity. Our theory, however, is an individual-level theory about how citizens use heuristics in the ballot box. Therefore, we add a micro-level experimental manipulation to supplement and extend our observational analysis. One advantage of the conjoint experiment is that it offers greater internal validity. The conjoint experiment simulates a low information electoral experience, offers several simple pieces of information to the voter, and allows us to better capture how voters may prioritize certain candidate characteristics over others.

Study #1: Observational Analysis of California Election Results

We first exploit the unique nature of California ballot design where candidates for federal, state, and local office are allowed to include ballot designations, or, up to

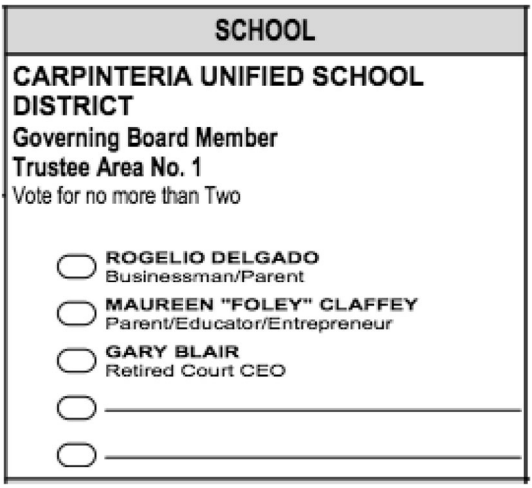


Fig. 1 Sample ballot from Santa Barbara County in 2016 (Photo from https://www.sbcassessor.com/SampleballotandpollplaceLookup/ballots/bt000001.pdf)

three words that identify the candidate's "principal profession(s), vocation(s), or occupation(s)" on the ballot.[2] Incumbent candidates may opt to note their status as an incumbent, with or without their other occupation status. Candidates must also provide documentation to support their proposed ballot designation, and these designations must be approved by election officials prior to inclusion on the ballot.[3] In some cases, such occupation designations are not approved by the Secretary of State and candidates must change their designation before the ballots are certified and printed. In other cases, a challenger may sue over another candidate's designation (Cadei 2018).[4] Figure 1 provides an example of a California ballot from a Santa Barbara County school board election in 2016, including the ballot designations provided by each candidate.

We collected data on ballot designations and election returns from the California Elections Data Archive (CEDA). CEDA, housed at California State University, Sacramento, has collected and cleaned all federal, state, and local California election results—including local school board elections—dating back to 1996. These data are organized at the candidate-race level, and most importantly, include the full ballot designation for each candidate as well as each candidate's share of the vote. Consistent with our theory, we classified each candidate first based on whether their ballot designation indicated a tie to education, and then from here, divided the "educators" into one of three categories ranging from "high" to "low" student involvement:

[2] Per the California Code of Regulations, Ballot Designations. http://www.sos.ca.gov/administration/regulations/current-regulations/elections/ballot-designations/#section-20714.

[3] A copy of the ballot designation worksheet can be found here: http://elections.cdn.sos.ca.gov/ballot-designation-worksheet/ballot-designation-worksheet.pdf.

[4] These two features make it seem less plausible that candidates can stretch the reality of their backgrounds for political gain. Yet, decisions about ballot designations are certainly likely to be influenced by the attributes of their opponent. In our setting, highlighting a background in education would seem to be most electorally beneficial when the opposing candidates come from different, less-relevant fields. Future research should certainly address the strategic nature of ballot designations, and its consequences for election outcomes.

(1) High: candidates who work in education and directly with students. Examples of such designations include: teacher, educator, instructor, professor, lecturer, tutor, classroom or instructional aide, Superintendent, Principal, Assistant Principal, Dean, and Provost.
(2) Medium: candidates who work in education, but work with students only outside of the classroom and perhaps only occasionally. Such designations include: school administrators (e.g., secretaries, counselors), school district employees, and all college and university administrators.
(3) Low: candidates who work in a school or for the school district, but do not work directly with students at all. Such designations include: school janitor, school inspector, school cafeteria worker, and school finance analyst.

These three categories adequately capture the "levels" of working in education. Our theory predicts that voters will use ballot designations to evaluate candidates on the basis of their qualifications, first by favoring candidates who work in education, and second by favoring those whose work in education brings them closest to students. Given this, we anticipate that candidates in the "high" educator category will see the largest boost in voter share. Based upon our theory, candidates in the second group should receive a smaller increase in vote share, while those candidates who may work for a school, but may not work with students should receive little to no boost in vote share. The third category is particularly useful because we want to know the boundaries of occupational cues. In particular, we want to know whether voters simply use crude heuristics—such as the association with a school—or are able to delineate more and less qualified candidates within the broader education category. Such sophisticated decision-making would indicate that citizens discriminate among the candidates based upon informational cues that connect candidates to their desired office.[5]

Rather than collapse all non-educator occupations into one baseline category, we also coded for two of the more common designations in the data: business owner and attorney. We include indicators for both in our model as a point for comparison: if voters are assessing candidates on the basis of their professional experience in relation to the elected office, then business owners and attorneys should not fare better than or even the same as teachers, or those associated with education, in local school board elections. Note again that candidates can include up to three designations on the ballot. As a result, it is possible that candidates may include both an education-related occupation, and a non-education related occupation (e.g., Teacher/Businessman/Parent). Our coding scheme does not make distinctions between candidates who include only one designation and those who include more than one, and so our education, business owner, and attorney categories are not necessarily

[5] It is possible that these three categories reflect both experience working with students as well class differences. For example, we may simply expect candidates in the "high" and "medium" education category to fare better than those in the "low" education category simply because the jobs in the former are viewed more generally by society as "better" jobs, reflecting higher status. We return to this point later in the manuscript as we interpret our results.

mutually exclusive. Candidates may be included in one of the education categories and one or both of business owner and attorney groups.

Of course, voters may also use other cues to decide among candidates. For starters, incumbent candidates are likely to fare much better than non-incumbent candidates, regardless of the candidate's ties to education or other qualifications. Research on congressional elections has consistently found a strong incumbency advantage (e.g., Cox and Katz 1996; Erikson 1971; Gelman and King 1990), and scholars studying local elections have uncovered similar effects (e.g., Trounstine 2011). The CEDA data includes a variable that identifies whether the candidate is an incumbent or not, and we include this as a dummy variable in our model. All things equal, we expect incumbency to be positively related to vote share. Voters may also use other observable ballot cues, such as sex and ethnicity, to guide their vote choices. To account for these possibilities, we coded each candidate as male or female using a first name match.[6] We also coded each candidate surname as Hispanic or non-Hispanic.[7] Both binary variables are included in the model. The use of descriptive cues in voting may reflect implicit or explicit biases. For example, voters may associate female candidates with teaching and education already, and opt to support them on these grounds. In addition, we suggest that sex stereotypes may also play a role in these types of contests. Women are seen as more compassionate than men, which may be particularly important in a position where individuals are working on programs related to a broad cross-section of children with all types of backgrounds (Huddy and Terkildsen 1993). For these reasons, we expect a positive relationship between female and vote share. We, however, have no a priori expectations about the effect of ethnicity at the aggregate level.

Our analysis also controls a contest-level contextual factor that should influence each candidate's share of the vote. Namely, we control for the number of candidates on the ballot, relative to the number of seats to be filled. We use this ratio as a measure of electoral competition. For example, elections with a large number of candidates, but only a few seats, signals more intense electoral competition, and should decrease the share of the vote received by each candidate (on average). We also include year fixed effects, which should hold constant any over time trends in how education cues relate to the vote share. We run an ordinary least squares (OLS) regression with clustered standard errors by election.[8] Table 2 in the Appendix gives descriptive statistics for each of our explanatory variables and the outcome variable.

Table 1 presents our model results. As anticipated, we find that candidates who work in education and work closest with students receive the greatest boost in vote share, while candidates who work in education but with students only outside of the

[6] We used the following as a database of female first names: http://www.cs.cmu.edu/afs/cs/project/ai-repository/ai/areas/nlp/corpora/names/female.txt.

[7] We recognize that using a Hispanic surname match is not a perfect indicator of whether a respondent is Hispanic or not. Some candidates, especially married women, with Hispanic surnames may not identify as Hispanic. Nevertheless, this is a reasonable proxy. And perhaps most importantly, regardless of whether the candidate is Hispanic-born or not, our coding reflects the information that voters may use in evaluating candidates.

[8] We also run a model which excludes those candidates who ran unopposed. These results are presented in Table 2 of the Appendix, and are substantively and statistically similar to these presented below.

Table 1 Effect of working in education on vote share

	β (s.e.)
"High" education	4.70*** (0.25)
"Medium" education	2.70*** (0.69)
"Low" education	0.84 (1.74)
Business owner	1.17*** (0.28)
Attorney	− 0.75 (0.49)
Incumbent	6.19*** (0.19)
Hispanic	0.01 (0.25)
Female	0.97*** (0.19)
Candidates/seats	− 3.95*** (0.09)
Constant	33.03*** (0.40)
Year fixed effects	Yes
Observations	29,937
Adjusted R^2	0.12
RSE	14.56

Standard errors clustered by election are in parentheses

*** $p < 0.001$ (two-tailed)

classroom receive a slightly smaller increase in vote share. More specifically, we find a positive and statistically significant effect of almost 5 percentage points among candidates of "high" educator status and roughly about half of that, an additional 2.7 points, for candidates in the "medium" education group. We also find no statistically reliable relationship between candidates in the "low" educator status and vote share. These results are consistent with our theory that voters consider candidate competence when voting: voters distinguish among candidates for the local school board on the basis of their ties to education, and from here, distinguish among candidates working in education based on the strength of their ties to students. Voters do not see "school" and reflexively support any and all candidates. Rather, they discriminate among candidates, and consider those who have direct contact with students to be more qualified than those who work in education, but only have indirect contact with students.

Moreover, though we find a positive and statistically significant relationship between "business owner" and vote share, we note that the magnitude of this effect is substantially smaller in comparison to the effect of both "high" and "medium" education category. In fact, the coefficients are also statistically distinguishable from one another.[9] Furthermore, we find no statistically reliable relationship between "attorney" and vote share, suggesting again that voters largely care about particular experiences of candidates relative to the office they seek.Voters, in short, are valuing functional competence for office.

[9] The 95% CI for the difference between the "high" education group and "business owner" is [2.79, 4.27], and the 95% CI for the difference between the "medium" education group and "business owner" is [0.79, 2.27].

Our control variables also perform as anticipated. Incumbency status improves vote share by just over 6 percentage points. Female candidates fare better receiving an additional 1 percentage of the vote, and candidates running in races where there is greater electoral competition—measured here by the number of candidates relative to the number of seats available—lose about 4 percentage points. We also find a negative but statistically unreliable relationship between Hispanic and vote share. In sum, our analysis of real-world election data provides initial evidence that voters connect candidate qualifications with vote choice. Voters are inclined to support those candidates in these low information contests whose qualifications appear most appropriate for the office (e.g., school teacher), and reject those whose qualifications are only marginally relevant (e.g., school cafeteria workers) and perhaps not relevant at all (attorney).

Study #2: Conjoint Experiment

We recognize, however, that the above analyses are not suggestive of individual-level behavior. To examine whether our results are simply a methodological artifact, we conducted a candidate conjoint experiment (e.g., Hainmueller et al. 2014), where we randomly assigned a sample of U.S. citizens to information about pairs of hypothetical local school board candidates. A conjoint experiment is ideal for our question, as it allows for us to evaluate the *relative* influence of occupation, race, gender, incumbency, etc., on vote choice in two ways. First, as implied, we can examine the effect of occupation cues on vote choice, relative to race, gender, etc. And second, we can assess the effect of various occupations (or race cues, gender cues, etc.) relative to one another.

We recruited 1500 U.S. citizens of voting age from Mechanical Turk (MTurk) between November 4, 2017 and November 5, 2017.[10] MTurk is a web-based crowdsourcing platform provided by Amazon that allows businesses and researchers to recruit and pay subjects to perform tasks. Berinsky et al. (2012) replicate a number of experimental studies, find similar results on MTurk as in the original study, and suggest that respondents recruited on MTurk are often more representative of the U.S. population than convenience samples, such as undergraduate students. And indeed, for these reasons and more, the use of MTurk in political science research has substantially increased (e.g., Ahler 2014; Butler and Powell 2014; Hersh and Schaffner 2013).

Our instrument began with a set of demographic and political questions (see the "Appendix") before proceeding to the conjoint task, which was repeated three times for each respondent. In each, respondents were provided five pieces of information about each candidate—all of which are attributes that are or could be provided on the ballot: occupation, race, gender, incumbency status, and party affiliation (see the

[10] This study was approved by the Office of the Institutional Review Board at the University of New Mexico (1129029-1) and the Office of the Human Research Protection Program at the University of California, Los Angeles (IRB#17-001659).

"Appendix" for a complete list of attribute levels). Each of these attributes, within each of the three tasks, were independently randomly assigned with replacement.[11]

A few notes are in order. First, we selected one occupation for each of the three education categories highlighted above: (1) school teacher; (2) school guidance counselor; and (3) school janitor. Second, as in the observational analysis, we selected business owner and attorney as our non-education baselines. Note here that, unlike in the election data, our five occupation cues are mutually exclusive: we do not cue voters to think about a candidate who is both an educator and a business owner, for example. Finally, for the purposes of our experiment, we included party affiliation as an attribute. We included party in these contests for a number of reasons. First, even though California school board elections are nonpartisan, roughly one-third of these types of contests across the country are partisan and recently several states have been considering moving these types of elections to partisan contests or allow districts to switch (Crawford 2018). Thus, in many locales, party is often a relevant cue. Indeed, in a partisan context, voters may vote strictly along party lines, without much care for whether the candidate works in education, or in what capacity. Such a finding would be consistent with one in which voters blindly vote on the basis of partisan loyalty alone. In a nonpartisan context, though, candidate experience may be much more important to voters. Because we wanted to ensure that qualifications were relevant in the broadest possible voter information environment, we included partisanship to ensure that our results are robust. Figure 2 shows the task as it appeared to subjects.

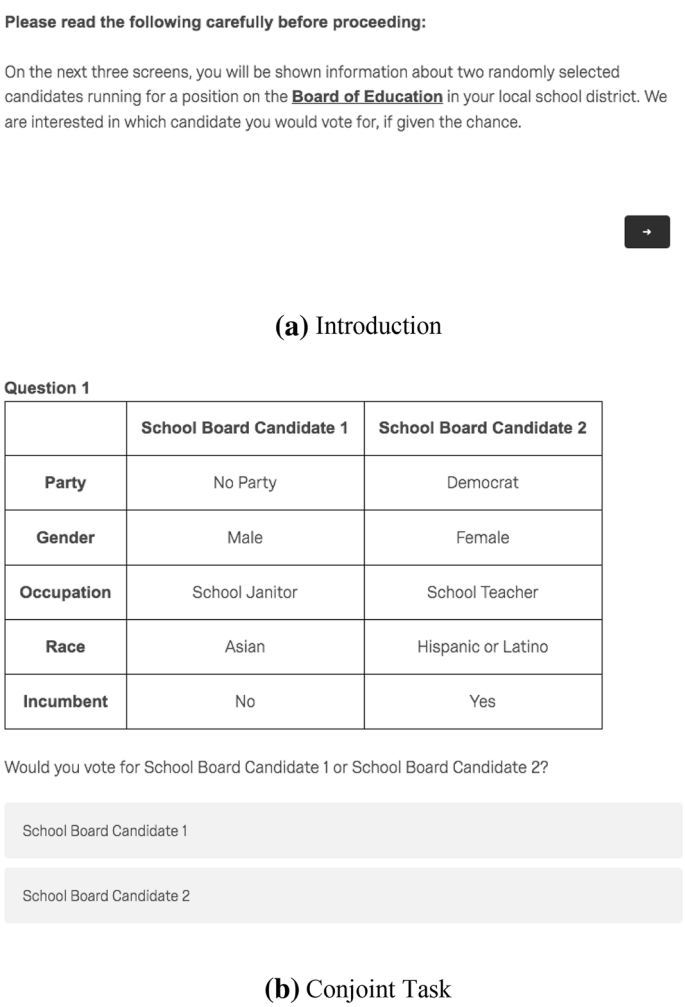
As noted, the benefit of a conjoint experiment is that it enables us to ascertain the relative influence of each attribute level on vote choice. We do so by calculating the average marginal component effect (AMCE) (Hainmueller et al. 2014), which gives the marginal effect of each component—i.e., "school teacher," "school guidance counselor," etc.—of each attribute (e.g., occupation) relative to the baseline within each attribute, averaged over the distribution of the remaining attributes. In practice, the AMCE follows three steps. For instance, let's consider the likelihood that a "school teacher" is chosen relative to a "business owner." First, it finds the probability that a "school teacher" with Z characteristics among the remaining attributes (e.g., white, female, Republican, incumbent) is chosen over an opposing candidate with the same set of characteristics along the other attributes. Next, it calculates the probability that a "business owner" with characteristics Z is chosen over an opposing candidate with those same characteristics, Z. We take the difference in probabilities between these two sets of candidates who differ on occupation, but are otherwise identical. We then do this same calculation again, but with a different set of candidate and opponent attributes—outside of occupation. After calculating the difference in probabilities for all possible combinations of candidate and opponent attributes, we sum these differences and weight the differences by all possible combinations of the attributes according to their joint distribution. Substantively, this calculation allows us to determine how moving from "business owner" to "school teacher" effects the probability of voting for a particular candidate, defined over the distribution of race, sex, party, and incumbency status.

[11] The order in which the attributes appeared was randomized in each of the three tasks.

Before proceeding, we note that we have recoded party to reflect the party match between the respondent and the candidate. We might expect that the power of partisan identification in American elections might mean that the effect of an association with education on vote choice might attenuate once shared partisanship is empirically considered, or that voters may only boost candidates with ties to education if they are of the same-party. We are able to account for this by recoding our party variable in three ways: (1) shared party (i.e., Democratic voter–Democratic candidate, Republican voter–Republican candidate, or nonpartisan voter–nonpartisan candidate); (2) non-shared party (i.e., Democratic voter–Republican candidate, Republican voter–Democratic candidate); and (3) no party (i.e., the candidate was randomly assigned to be nonpartisan, but the voter is a partisan of either stripe). We opted to create this third category, as we see Republican voter–Democratic candidate and Republican voter-nonpartisan candidate as qualitatively distinct from one another. Indeed, this particular voter should evaluate the former candidate much more negatively than the latter. In short, our analysis allows us to compare the effects of occupation cues—and in particular, education cues—to the effects of party.

Figure 3 plots the change in probability of support for each attribute and attribute level, and a 95% confidence interval for each estimate. First and foremost, consistent with expectations, we find a positive and statistically significant effect of working in education and with students on the probability of choosing that candidate. Specifically, relative to a "business owner," the probability of choosing a "school teacher" or "school guidance counselor" increases by about 17 percentage points, averaged over the distribution of the remaining attributes. Likewise, we find no substantive effect of candidates working in the "low" education category—operationalized here as a "school janitor"—on vote choice. These results confirm and expand our results from the previous analysis at the individual-level and through a causal inference framework. Voters reward candidates whose background uniquely qualify them for the particular office, and they do so in a very discriminate fashion: only those candidates whose background suggests expertise on education policy are rewarded, and not those whose associated position with education is only tangential. Moreover, we find no difference between a "business owner" and an "attorney," suggesting again that voters' decision-making process follows a logical and consistent set of criteria about who is fit to hold office. We find these non-effects particularly important for two reasons. First, as noted, it suggests that voters are thinking about occupation in relation to the office in question. Second, and related, it casts doubt on the possibility that the strong negative effect of "school janitor" is simply a reflection of candidate evaluation on the basis of some status-based hierarchy of occupations. In other words, if voters were simply evaluating candidates on the basis of the status of various professions within society (i.e., an evaluation of who has been most "successful" in life), we might expect "business owner" and "attorney" to do quite well, even relative to teachers. We find no evidence of this, and thus our findings point to the importance of the association between occupations and offices, and not simply perceptions and stereotypes about various professions.

We also find evidence of negative partisanship: voters marginally prefer candidates of their own party, but are particularly opposed to candidates of the opposition party. Indeed, the probability of voting for a candidate of the opposition party



(a) Introduction

(b) Conjoint Task

Fig. 2 Conjoint experiment as shown to respondents

decreases by just over 22 percentage points, relative to the "no party" condition. Such a finding is consistent with Kirkland and Coppock (2017), and more generally, corroborates with recent work on out-party hostility (e.g., Abramowitz and Webster 2016; Iyengar and Westwood 2015). Nevertheless, we conclude from our analysis that the positive impact of an association with students rivals in magnitude the negative effect of running under the opposition party label.

We also note the magnitude of these effects. In this experiment, the magnitude of the effects of working in education vastly outpace two other voter cues—sex and incumbency. Indeed, moving from a non-incumbent to an incumbent only increases the probability of voting for that candidate by 4 percentage points. We find similar effects as one moves from male to female. This again suggests that voters use

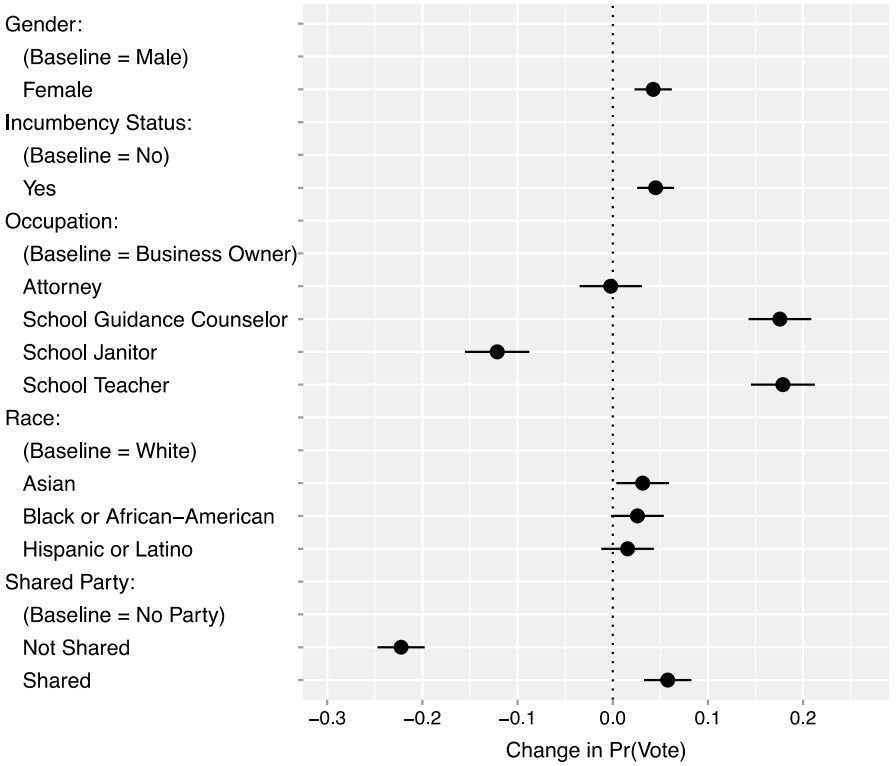


Fig. 3 Effect of working in education on vote choice

heuristics, but that not all heuristics are equal. Those heuristics that are most relevant for the particular electoral context are the best determinants of vote choice.

In sum, these results are striking—particularly given the power of party identification in determining vote choice in the United States. It provides evidence to suggest that voters value functional competence and fitness for office in and itself at least in school board contests, and that partisanship is not so powerful of a heuristic that it can dominate occupation as a consideration, or only matter when candidate and voter partisanship align.[12]

[12] We also calculated three conditional AMCEs (i.e., an exploration of heterogeneous treatment effects) of occupation on vote choice: one where the party of the candidate and the party of the respondent are the same (i.e., Republican and Republican/Republican and lean-Republican, Democrat and Democrat/Democrat and lean-Democrat, or no party (candidate) and neither party (voter)), one where the two differ, and one where the candidate had no party affiliation. These analyses re-run the same model, but include an interaction between the occupation attribute and indicator for shared party affiliation and allow us to determine whether the effects uncovered so far appear only when the candidate and respondent share a party affiliation. We find that that the effect of occupation does not differ dramatically depending on whether the respondent shares the party of the candidate. Figure 4 in the Appendix presents the results of this analysis.

Discussion and Conclusion

Heuristics and cues play a vital role in American elections. Candidate characteristics like party, sex, race, ethnicity, and occupation are regularly used by voters—particularly in down-ballot, low information contests—to infer the qualities of candidates. Our work focuses on the role of occupation cues in such contests, and in particular, the extent to which these cues allow voters to vote with functional competence—with a consideration of the ability of the particular candidate to perform the duties of the office they seek—in mind. We demonstrate that the nuances of particular work experience and particular professional lives matter in low information school board election environments. Across two research designs, we find that teachers and educators who work directly with students are rewarded the most, educators who work indirectly with students are rewarded slightly less, and non-educators who nevertheless work in schools are not rewarded at all. The boost in vote share that these individuals receive are instead comparable to how those from other unrelated professions, such as law and business, perform.

These results suggest a relative sophistication among some voters because vote choice appears tied to the qualification of office. Thus, in these low information environments voters are using available information to determine which candidates are more or less qualified. These results fit with a literature that suggests that voters differentiate across different types of offices in terms of expectations and responsibilities (e.g., Atkeson and Partin 2001). Teachers and counselors have the appropriate background for a position on the school board, and therefore are favored above others. We deem this as evidence that voters use the functional competence of candidates in determining vote choice. While this may not be the type of decision making process that Downs (1957) would see as rational, indeed these factors could have perverse effects. For example, teachers on the local school board could be overly focused on providing themselves or friends with private benefits, such as wage increases at the expense of educational reforms. However, given almost no information on these races, we argue that the use of occupational cues presents the voter as "thinking," and carefully considering the information that is available and presented to them. In this way, voters are not fools: they discriminate across information and select candidates in ways that are tied to the particular office, even if they do not bear the necessary information costs to determine which candidate is most consistent with their own policy beliefs or whether candidates are accountable for policy failures and successes.

Our argument is that the closer the tie between the office and the candidate's experience, the greater the boost in election support. And though our study focuses on the link between candidate qualifications and vote choice in local school board elections—and hinges on the idea that there are certain professional backgrounds correspond closest to serving on the local school board—we suggest that there are many more electoral contexts where voters could use occupation cues in such a way. For many down-ballot, low-information elections, there is a call for a particular skillset. For example, as noted earlier, candidates fit for the job of State Treasurer or Auditor are likely to have a background in finance. Similarly, qualified candidates for County Sheriff are likely to have worked in law enforcement, and strong

candidates for County Tax Assessor are likely to have tax experience. The claim we wish to make is that it is exactly these low-information contexts where information about the professional experience and qualifications of candidates, and the relevance of those experiences for the particular office in question, is both available *and* useful. Voters know much less about these candidates, and yet occupation cues appear to be particularly relevant for choosing among a set of candidates.

Finally, in light of our normatively appealing findings, our work also speaks to possible ballot reforms. California is a leader in providing additional information to voters about candidates for office. Many other countries also provide such information on the ballot. Our election study demonstrates that such information, at least in school board elections, provides valuable data that is used by voters in their decision-making process. Because ballots are the last opportunity for a candidate to communicate with a voter and because the ballot in some of these low information contests may be the only information that a voter receives about a candidate, these types of cues, all else equal, may be important for voters to make more competent, and more informed, decisions than they otherwise might. Therefore, one implication of our research is that other jurisdictions should consider ballot reforms that directly expand information—beyond simply party and incumbency—on the ballot.

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Appendix

See Tables 2 and 3 and Fig. 4.

Table 2 Descriptive Statistics

	Mean	SD	Minimum–maximum
Vote share	25.65	15.61	0–100
"High" educator	0.16	0.37	0–1
"Medium" educator	0.01	0.11	0–1
"Low" educator	0.00	0.04	0–1
Business owner	0.11	0.31	0–1
Attorney	0.02	0.15	0–1
Incumbent	0.34	0.47	0–1
Latino	0.15	0.36	0–1
Female	0.28	0.45	0–1
Candidates/seat	2.24	0.92	0.5–12

Table 3 Effect of working in education on vote share—excluding unopposed candidates

	β (s.e.)
"High" education	4.67*** (0.24)
"Medium" education	3.06*** (0.69)
"Low" education	1.08 (1.73)
Business owner	1.14*** (0.26)
Attorney	− 0.40 (0.49)
Incumbent	6.30*** (0.19)
Latino	− 0.15 (0.23)
Female	0.93*** (0.18)
Candidates/seats	− 3.42*** (0.08)
Constant	31.71*** (0.38)
Year fixed effects	Yes
Observations	29,778
Adjusted R^2	0.12
RSE	13.76

Standard errors clustered by election are in parentheses

*** $p < 0.001$ (two-tailed)

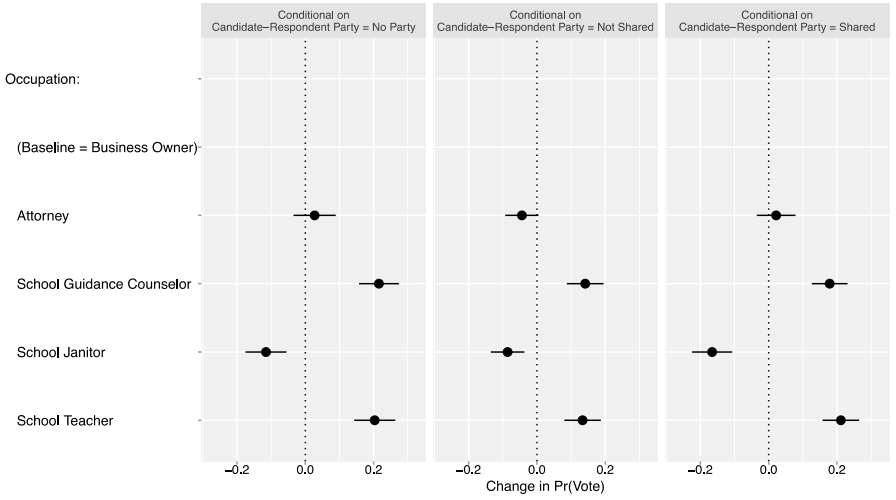

Fig. 4 Effect of effect of working in education on vote choice—conditional on shared candidate-respondent party

Survey Instrument

What year were you born (e.g., 1980)?

What is your gender?

– Male
– Female

– Other [Please Specify]

What racial or ethnic group best describes you?

– White
– Black or African-American
– Asian
– Hispanic or Latino
– Other [Please Specify]

To the best of your knowledge, what was your total family income before taxes in 2016?

– Below $21,000
– $21,000–$41,999
– $42,000–$59,999
– $60,000–$79,999
– $80,000–$99,999
– $100,000 or more
– Don't know

What is the highest level of school you have completed or the highest degree you have received?

– Less than high school
– High school graduate—high school diploma or equivalent (for example: GED)
– Some college but no degree
– Associate degree in college—occupational/vocational program
– Associate degree in college—academic program
– Bachelor's degree (for example: BA, AB, BS)
– Graduate degree (for example: MA, MS, MEng, MBA, MD, DVM, JD, Phd)
– Other [Please Specify]

Generally speaking, do you usually think of yourself as a Democrat, Republican, an independent, or what?

– Democrat
– Republican
– Independent
– Other [Please Specify]

(if Democrat or Republican was selected)—Would you say that is strong or weak?

– Strong
– Weak

(if Independent was selected)—Would you say that you lean toward one of the parties?

- Lean Democrat
- Lean Republican
- Neither

We hear a lot of talk these days about liberals and conservatives. Here is a seven-point scale on which political views that people might hold are arranged from extremely liberal to extremely conservative. Where would you place yourself on this scale or haven't you thought much about this?

- Extremely liberal
- Liberal
- Slightly liberal
- Moderate; middle of the road
- Slightly conservative
- Conservative
- Extremely conservative
- Haven't thought much about this

Conjoint Attributes

Gender:

- Female
- Male

Incumbency Status:

- No
- Yes

Occupation:

- Attorney
- Business Owner
- School Guidance Counselor
- School Janitor
- School Teacher

Party:

- Democrat
- No Party
- Republican

Race:

- Asian
- Black or African-American
- Hispanic or Latino
- White

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