Is the Achievement Gap Between Red and Blue States Caused by Government?

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Abstract

In the US, the general consensus is that Democrats exhibit greater support for education, including funding education more generously. Consistent with this fact, students in Democratic states score higher on standardized tests than those in Republican states. I implement two research designs and ask whether a state's partisan orientation (measured through vote shares in presidential elections) causes these differences in test scores through state-level policy. I find no causal impact of state partisanship on test scores. Further, despite the view that Democrats promote equity in education, I do not find that increasing the degree of Democratic lean causally closes achievement gaps between white and black students, male and female students, or rich and poor students. I also do not find heterogeneous effects across demographic sub-groups, grades, or subjects using either of my two research designs.

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1 Introduction

Democrats are generally viewed as providing greater support for education. The 2022 Public Elementary-Secondary Education Finance Data (from the US Census Bureau) indicate that in the 2022-2023 school year states that Joe Biden won in the 2020 presidential election, ("blue" states) spent approximately \$5,200 more per student in K-12 than states that voted Republican, ("red" states) compared to a national average of \$15,600 per student.[1] Further, Open Secrets (an organization that tracks campaign donations) documents that in the 2021-2022 elections for the US House and US Senate, The American Federation of Teachers (one of the largest teachers unions in the US) donated \$24,000 to Republican candidates compared to \$4 million to Democratic candidates.[2] This suggests that unions believe Democrats are more supportive of education and/or working conditions for teachers.

Beyond teachers' unions, ordinary voters have historically believed that Democrats exhibit stronger support for education. Hess (2022) surveyed 1000 voters each year from

[1]See US Census Bureau (2024).
[2]See Open Secrets (2024).

2003-2022 as to which party more strongly supports education. Democrats lead Republicans in this poll by more than 10 percentage points from 2003-2020.[3]

It is unclear, however, to what extent these differences in perceived support for education translate into outcomes, namely performance on standardized test scores. Specifically, does having an electorate with a heavier Democratic lean (state partisanship) causally result in state-level policy environments which increase student performance in math and reading for grades 3-8? The answers to such questions not only increase our understanding of the relationship between political affiliation and education, but are also of particular interest to parents. If a stronger Democratic lean does causally increase test scores, parents could increase their children's test scores simply by relocating from a red to a blue state.

The official Democratic party platform concerning education also highlights their specific commitment to equity in education (Democratic National Committee, 2024). Hill and Jones (2017) uses a regression discontinuity design with gubernatorial elections and finds that states with Democratic governors provide higher levels of funding to areas with a greater share of minority students. If Democratic attitudes towards promoting equity in education also translate into observable educational outcomes, I would expect that differences in student performance on standardized state tests between different demographic groups may be lower in Democratic states.

If state partisanship affects student achievement through policy, school funding is the most plausible channel. The literature is mixed regarding the relationship between education funding and student test scores (e.g., Hanushek, 1997; Jackson and Mackevicius, 2024). Some studies document a positive correlation (e.g., Clark, 2003; Hill and Kiewiet, 2014; Lafortune, Rothstein, and Schanzenbach, 2018) as well as a positive causal impact (e.g. Card and Payne, 2002; Beland and Oloomi, 2015; Jackson, Johnson, and Perisco, 2015; Lee and Polachek, 2018; Jackson, Wigger, and Xiong, 2018; Burner, Hyman, and Ju, 2018; Baron, 2019) between higher funding per student and student performance on standardized tests. If Democratic policy favors education, in particular funding for education, it is therefore possible that greater support for education by Democrats would (i) translate into higher student achievement in areas controlled by Democrats, and (ii) that this impact would operate in part through the causal channel of state-level educational policy.

On the other hand, these differences in student performance, and student performance gaps, may not be due to state policy but due to partisan differences regarding education. As previously mentioned, not all studies find a positive causal impact of school funding on test scores (e.g., Hoxby, 2001; Cellini, Ferreira, and Rothstein, 2010; Martorell, Stange, and McFarlin Jr, 2016). In addition, Hill and Jones (2017) find no effect of partisanship on the white-black achievement gap nor overall achievement using NAEP scores. These partisan differences in education may stem from demographic differences between the two parties. A Pew Research poll (Pew Research Center, 2023) notes that 58% of voters with a bachelor's degree identify as Democrats, and 37% identify as Republican. The literature generally documents a positive correlation between parental education and student achievement (e.g. Björklund and Salvanes, 2011; Fruehwirth and Gagete-Miranda, 2019), as well as a positive correlation between parental education and parental time spent on educational activities with children (e.g. Aguiar and Hurst, 2007; Guryan, Hurst, and Kearney, 2008; Ramey

[3]This advantage declines in the wake of COVID-19 from 2021-2022.

and Ramey, 2009; Dotti Sani and Treas, 2016). Therefore differences in attitudes relating to education, such as time spent helping kids with homework, are likely correlated with partisanship. I refer to these attitudes as "culture". If these differences in culture are more important for test scores than state-level policy, another possible explanation for the observed differences in student performance may be cultural differences rather than differences in state policy.

To determine the degree to which differences in student performance result from state-level policy, I implement two research designs described in Bhattarai, Slichter, and Tatro (2024), where my coauthors and I study the causal effect of partisanship on mortality rates. Both research designs note that state policy is not a function of a given county's characteristics, but of the characteristics of the rest of the state. Therefore the designs utilize quasi-random variation in rest of state partisanship through exploiting two "coincidences" about which state a given county is a part of based on the drawing of state borders. The first coincidence is that for counties on the border between two states, which side of the border a given county is on determines which other counties belong to the same state as the county in question. The second coincidence is that for a given county, state borders determine which other counties are included in the same state as the county of interest, even if these other same-state counties are far away from the county of interest.

I find that state partisanship does not have any causal effect on student achievement. This null effect is robust across comparisons between demographic groups. I do not find any effects of state partisanship on the achievement gaps between whites and blacks, males and females, or rich and poor students. I also do not find heterogeneous effects across student demographic groups, grades, or subjects. It is important to note that while I identify whether state partisanship in the aggregate affects student outcomes (it does not), decomposing this effect into specific state-level policies is beyond the scope of this paper.

Together, these findings improve our understanding of political parties' power and political affiliation on educational outcomes. Greater support for education and equity in education has no causal impact on test score outcomes. An electorate within a state which simply more strongly supports Democratic candidates in presidential elections does not causally increase standardized test scores or reduce achievement gaps among students within that state. This also implies parents cannot increase their children's test scores simply by relocating from a redder to a bluer state. Instead, the results imply differences in standardized test scores between states are most likely explained by differences in individual educational attitudes, which are correlated with political affiliation, and not something state governments are doing.

I also make two econometric contributions to the literature (especially Hill and Jones, 2017). First, my designs identify the effect of overall state partisan lean (which captures the legislative and policy environment broadly) rather than the effect of the governor's party alone. For example, a Democratic governor facing a Republican-controlled legislature faces different constraints than a legislature with a Democratic majority.[4] Second, county-level student achievement data provides the within-state and between-state variation my two designs require, which the state-level NAEP scores do not possess.

[4] State-level political views also differ by state. A Democrat in Alabama may hold very different policy views from a Democrat in California.

The rest of the paper proceeds as follows. I describe the data sources in Section 2 and present baseline results in Section 3. I discuss the far part design in Section 4, and the border county design in Section 5. I include a discussion of heterogeneity in Section 6. I then conclude in Section 7.

2 Data

My main source of data comes from the Stanford Education Data Archive (SEDA) which measures overall achievement and achievement gaps. SEDA provides data at the county-year-grade-subject level using test score information on state standardized tests for students in grades 3-8 on math and reading from 2009–2019. In order to compare student performance across states and across years, SEDA compiles a baseline achievement score for each grade and subject using the average test scores from National Assessment of Educational Progress (NAEP) for students in fourth grade in 2009, 2011, 2013, and 2015. Using this benchmark, SEDA produces measures of student achievement in terms of standard deviations above or below the benchmark. These estimates are available for all students and for each racial, gender, and socioeconomic group. SEDA then estimates achievement gaps as the difference in student achievement between groups. For example, a value of 0.62 for the white-black achievement gap indicates that white students, on average, score 0.62 standard deviations higher than black students for a given grade and subject. I aggregate the SEDA data for overall achievement and three achievement gaps (white-black, male-female, rich-poor) to the county-year level by first averaging across subjects in order to aggregate to the county-year-grade level. I then average over grades 3-8 to aggregate my date to the county-year level.[5]

I combine these data with presidential election data from the MIT Election Lab. I define partisanship as the percentage (0-100) of Republican votes in the most recent presidential election. For example, the partisanship of a county that voted 60% for Trump in 2016 would be 60 from 2017-2020. The county's partisanship is 2016 is based on the 2012 election, as the presidential election occurred in November of 2016.

2.1 Covariates

I also include covariates to use as controls in my analyses. These covariates fall into two broad categories: i) annual own-county characteristics and ii) connected-county characteristics. From the SEDA data I include own county-level racial shares of students for Whites, Asians, Blacks, and Hispanics. I also include the share of students receiving free or reduced lunch, and the share of students designed as English language learners or special education. I also include the share of students residing in an urban and suburban setting, and SEDA's measure of socioeconomic status for all students within a particular county.

The connected-county characteristics (which serve to control for migration and cultural spillovers across county and state lines) are a weighted average of each outcome variable

[5]In Section 6 I discuss results if I average separately for elementary-school (grades 3-5) and middle-school (grades 6-8), in addition to other heterogeneity analyses.

described above in counties defined as being connected to a particular county c.[6] Denote each connected county c'. First, I calculate a "sending counties" variable as the average outcome variable in all counties c' where at least one person migrated from c to c' from 2016-2019, weighted by the number of people who moved. Second, I calculate a "receiving counties" the average outcome variable in all counties c' where at least one person migrated to c from c' from 2016-2019, weighted by the number of people who moved. Third, I calculate a "facebook counties" variable as the average outcome variable in all counties c' where at least one facebook friend connection between c and c', weighted by the number of facebook friend connections.[7]

Note that for each of the three measures I exclude any counties c' within the same state as county c to avoid contamination in these variables by treatment. I obtain the migration data using the US Census's County-to-County Migration Flows from 2016-2019 (US Census Bureau, 2016–2020). I obtain the facebook friend connection data using the Social Connectedness Index (SDI) from Bailey et al. (2018).

I provide summary statistics for all variables in Table 1. I report summary statistics for own-county characteristics in Panel A, followed by sending county characteristics in Panel B, receiving county characteristics in Panel C, and facebook county characteristics in Panel D.

3 OLS results and the endogeneity problem

I begin by estimating the correlation between state-level partisanship and average student achievement, in addition to the correlation between state-level partisanship and achievement groups. For each of these outcomes Y I estimate models of the form

$$Y_{ct} = \beta_0 + \beta_1 StatePart_{s(c)t} + X'_{ct}\Gamma + \epsilon_{ct}, \tag{1}$$

at the county c state $s(c)$ year t level. $StatePart$ measures state partisanship, the percentage of votes for the Republican candidate in the last presidential election, and X represents a vector of the control variables discussed above in Section 2.1.[8] ϵ_{ct} represents cluster-robust standard errors at the state level.

I report the estimates from this model without X in Column 1 of Table 2. Each outcome is measured in standard deviations from the national average. The coefficient on Overall

[6] i.e., for the overall achievement variable I construct three measures of overall achievement in connected counties, where the difference in each of these three measures is the difference in how I define which counties are connected to county c.

[7] Note that these are analogous measures to those constructed in Bhattarai, Slichter, and Tatro (2024).

[8] Specifically, I include the following variables as controls: a cubic of local partisanship, percentage of students within each demographic group (White, Hispanic, Asian, and Black), the percentage of students classified as English learners, enrolled in special education classes, and economically disadvantaged (eligible for free/reduced lunch). I also control for a quadratic of the weighted average of these demographics and the outcome variable (Y_{ct}) in sending, receiving, and facebook-connected counties as described above in Section 2.1. I also include interaction terms between own-county demographics and the same demographic variable in receiving, sending, and facebook-connected counties (e.g., own-county percentage White interacted with the weighted average of percentage White in sending counties). Finally, I also control for percentage of students classified as urban and rural, and SEDA's measure of average socioeconomic status.

Achievement, for example, means that each one-percentage point increase in state partisanship is correlated with a 1/10000th standard deviation decrease in achievement. The same increase in state partisanship is also correlated with a i) $\sim 0.5\%$ of a standard deviation decrease in the White-Black achievement gap and rich-poor achievement gap, and ii) 0.04% of a standard deviation increase in the male-female gap. The correlations imply that relocating across states would not change student test score levels. There is a negative correlation, however, between state partisanship and the achievement gaps between rich and poor students as well as between White and Black students. This implies states with greater Republican lean have smaller achievement gaps relative to states with greater Democratic lean.

It is unlikely that these correlations represent the true causal impact of state policy on educational outcomes. The treatment effect I seek to measure is the impact of state partisanship on local educational outcomes exclusively through state-level policy. State partisanship, however, proxies for broad attitudes towards education, such as parental involvement and support of public education and state testing. I therefore expect confounding between local educational outcomes and state partisanship via local characteristics.

I therefore report estimates of Equation 1 with controls in Column 2 of Table 2 as described above in Section 2.1. Note that with compared to Column 1 the statistical significance of the white-black and rich-poor achievement gaps disappears and the effect sizes are closer to 0.

To better understand the magnitude of these estimates in Column 2, suppose these estimates represent a causal impact of state policy on educational outcomes. Now consider a state that shifts from being a blue state with a republican vote share of approximately 40% to a red state with a republican vote share of approximately 60%. The estimates in column 2 would tell you that this shift would raise overall achievement by 0.026 standard deviations (SD) and have an almost zero impact on achievement gaps. Even the largest reasonable estimates based on these coefficients (i.e., the coefficient plus twice the standard error) would translate into small changes in educational outcomes. For example, the upper end of the coefficient on the White-Black achievement gap would yield a coefficient of approximately 0.0027. Again using the 40% to 60% republican vote share hypothetical, the effect size translates to just 0.054 SD compared to the average White-Black achievement gap of 0.61 SD, or less than 10% of the average White-Black achievement gap. These results imply there is no effect of moving across states on standardized test scores.

In order to assess the degree to which endogeneity remains in my estimates, I evaluate the correlation between local educational outcomes and the average partisanship of other counties within the same state. If the correlation is equally strong between i) local educational outcomes and partisanship of far-away counties within the same state and ii) local educational outcomes and partisanship of nearby counties within the same state, then that would provide empirical evidence the controls in Column 2 are sufficient for addressing endogeneity. If the correlation is stronger for nearby counties than for far away counties, that would suggest that there still exists confounding and the result in Column 2 is biased upward.

I implement this empirical test in Columns 3 and 4 of Table 2. For a given county with N other counties in the same state I place $\frac{N}{2}$ counties into the furthest half of the same state and $\frac{N}{2}$ counties into the nearest half of the same state based on the distance between county centroids.[9] I then instrument state partisanship using the near half of the state, controlling for partisanship in the far part of the state, in Column 3. In Column 4 I instrument state partisanship using the far half of the state, controlling for partisanship in the near part of the state. Columns 3 and 4 also include the controls used in Column 2.

The results in Columns 3 and 4 indicate that I likely do not have remaining endogeneity in my OLS results when I include controls, and that the estimates in Column 2 represent a causal estimate of the impact of state partisanship on overall achievement, achievement gaps, and within-county deviations in student achievement. Nonetheless, given that this context closely aligns with that of my other paper Bhattarai, Slichter, and Tatro (2024), I use two additional empirical strategies, the far part design and the border county design, from that paper to assess the causal impact of state partisanship on educational outcomes. I describe the results using the far part design in the next section, and the results from the border county design in Section 5.

4 Far part design

I begin with the far part design in which I estimate instrumental variable models of the form

$$\begin{aligned} Y_{ct} &= \alpha_0 + \alpha StatePart_{s(ct)t} + \alpha_1 Near_{ct} + X'_{ct}\Psi + \mu_{ct} \\ StatePart_{s(c)t} &= \delta_0 + \delta_1 Far_{ct} + \delta_2 Near_{ct} + X'_{ct}\Sigma + \epsilon_{ct}, \end{aligned} \tag{2}$$

where I divide the rest of counties in the same state $s(c)$ as county c into the near part of the state or the far part of the state, based on distance between county centroids. I then calculate the average partisanship of counties in the near part of the state as $Near_{ct}$ and the average partisanship of counties in the far part of the state as Far_{ct}. The coefficient α_1 represents the causal impact of state partisanship on local educational outcome Y (i.e. Overall achievement and the three achievement gaps) and is the coefficient of interest. This coefficient results from instrumenting $StatePart$ using Far while controlling for $Near$. I focus my attention on results in which I assign half of the other same-state counties into the far part of the state, and the remaining counties to the near part of the state. This cutoff is both intuitive and passes two model tests of the empirical design. I detail these tests and results below in Section 4.2.

4.1 Baseline Results

I report baseline estimates from the far part design in Table 5 using a cutoff of one-half for each educational outcome. These results include year fixed effects but do not include the vector of covariates X. Panel A reports the far part results without any regional controls. Panel B reports the far part results replacing year fixed effects with year by US Census Region fixed effects. Panel C reports the far part results controlling separately for the average partisanship of adjacent states. For comparison, I include the OLS estimates without controls (from Column 1 of Table 2) in Panel D.

[9] When N is odd I assign the median county to the nearest half of the state.

I observe that the estimates in Panel B and Panel C are statistically indistinguishable from each other, with similar standard errors. Controlling for regional effects does not substantially reduce the errors in the estimates for any outcome variable (comparing Panel A to panels B and C). Within a column, the coefficients in all four panels are indistinguishable from each other and only statistically significant in Panel D for two outcome variables. These results are also statistically indistinguishable from the results in Column 2 of Table 2. This provides further evidence that i) OLS with controls may be sufficient to obtain a causal estimate of the effect of state policy on educational outcomes and ii) that causal effect is very small or zero for all outcome variables.

These results imply that state policy driven by partisanship of the electorate does not causally affect educational outcomes. Instead, the observed results from the OLS results most likely reflect correlation rather than causation. The attitudes of the electorate matter for standardized test score outcomes, and these attitudes are correlated with political affiliation in presidential elections. Differences in test scores across states are therefore unlikely to be due to something state governments are doing, and there is nothing to be gained in terms of student test scores by simply relocating from a Republican state to a more Democratic state. These results also imply greater Democratic support for equity in education does not causally reduce achievement gaps amongst students within a state. These results are not sensitive to choices regarding the cutoff or which variables comprise the vector of controls. In Section 4.2.3 below, I describe how I test for, and ultimately demonstrate, the stability of these estimates across different possible model specifications for each possible educational outcome variable.

4.2 Model Tests and Robustness Checks

In this section, I describe the methodology and results from the two validity tests for the far part design. I begin with the neighboring state placebo test and then report results for the balance tests.

4.2.1 Neighboring State Placebo Test

For the neighboring state placebo test I restrict my sample to counties that lie on the border between two states. For each border county I select a county on the other side of the border (therefore in a different state) and calculate the partisanship in the near and far part of the neighboring state using the same set of possible cutoffs I use in my baseline specifications.[10] I then estimate models of the form

$$\begin{aligned} LocalY_{ct} &= \gamma_0 + \gamma_1 BorderStatePart_{s(c)t} + \gamma_2 BorderNear_{s(c)t} + \epsilon_{ct} \\ BorderStatePart_{s(c)t} &= \eta_0 + \eta_1 BorderFar_{s(c)t} + \eta_2 BorderNear_{s(c)t} + \theta_{ct}, \end{aligned} \tag{3}$$

where $LocalY$ emphasizes that the dependent variable is each educational outcome Y within a given county, and $BorderStatePart$ represents state partisanship of the neighboring state. I instrument $BorderStatePart$ using $BorderFar$, or partisanship in the far part

[10] For border counties that lie adjacent to multiple counties, I select a county on the other side of the border randomly. Results are not sensitive to choice of the county in the neighboring state.

of neighboring state, controlling for $BorderNear$, or partisanship in the near part of the state. An estimate in which $\gamma_1 = 0$ would suggest that a particular cutoff does not contain confounding due to regional factors.

I present the results of the neighboring state placebo test in Table 3. I do not include year or year by US Census Region fixed effects, nor do I include the full vector of controls X, in order to assess the validity of cutoffs not conditional on controls. Column titles indicate the proportion of other counties in the same state included in the near part of the state. The "OLS" column (Column 1) reports the results obtained for the OLS regression of $LocalY_{ct}$ on $BorderStatePart_{s(c)t}$ with year fixed effects as a comparison.

I begin by discussing the results in Panel A, in which I do not include any regional controls. Note that all cutoffs return a coefficient not statistically different from zero but with relatively large standard errors for cutoffs smaller than or equal to one-half. For cutoffs at or greater than one-half, the point estimates are closer to zero with smaller standard errors. This suggests that any cutoff equal to or greater than one half likely addresses endogeneity and provides sufficiently small standard errors to have reasonable confidence. When I add regional controls replacing year fixed effects with US Census Region by year fixed effects (Panel B) or use the average partisanship of neighboring states as a proxy for regional culture (Panel C) I observe qualitatively similar results, though with smaller standard errors for a cutoff of one-half. This model test suggests that a preferred specification should use any cutoff greater than or equal to one-half and include regional controls.

4.2.2 Balance Tests

The second validity test for the far part design tests the correlation between the partisanship of the far part of the state (for each given cutoff) and local characteristics. I estimate these correlations by estimating the far part model, described in Equation 2, in which I replace local educational outcomes, Y_{ct}, with local characteristics. Specifically I estimate the correlations for local partisanship, percentage of urban and suburban students, racial shares, socioeconomic variables, and the educational outcomes of connected counties (as defined using Facebook counties, sending counties, and receiving counties). Similar to the Neighboring County Placebo test, I estimate these regressions without year or year by US Census Region fixed effects and without the set of controls X in order to assess unconditional correlations and without accounting for regional culture. I therefore bias my design in favor of finding failures of balance.

The key variable in this balance test is local partisanship. The source of endogeneity is regional confounding in which regional culture influences both regional partisanship, and therefore state partisanship, in addition to local culture and therefore local partisanship. A cutoff which provides balance on local partisanship should therefore also address confounding due to regional factors.

I report the results of the balance tests in Table 4. Column titles again indicate the proportion of other counties classified into the near part of the state. Column 1 ("OLS") reports the OLS regression of the local characteristic indicated by the row title on state partisanship, with year fixed effects. For local partisanship, note that estimates for cutoffs smaller than one-half suggest a failure of balance. I observe balance for the other covariates for most if not all cutoffs. I do observe a failure of balance for the percentage of white students across all cutoffs and I observe a weak failure of balance on the percentage of students receiving free and reduced lunch. Given the number of hypotheses I am testing this result is unsurprising.

4.2.3 Specification Curve

The baseline estimates I include in Table 5 represent one set of estimates for each outcome variable using a particular cutoff and without controls. I now estimate a range of specifications for each educational outcome in which I vary i) the cutoff used for the far part design, ii) whether I include a vector of controls and whether this control vector contains local characteristics, near-part characteristics, or both, and iii) if/how I control for regional culture. All specifications include year fixed effects.[11]

I vary the cutoff by changing the proportion of counties classified into the near part of the state. For example, in Table 5 I assign half of the other counties in the same state to the near part of the state, but I could also assign one-fifth of the other counties to the near part, and thereby assign the remaining four-fifths of the other counties to the far part. I include one-fifth, one-fourth, one-third, two-fifths, one-half, three-fifths, and two-thirds as my potential cutoff values.

I vary whether the vector of controls is empty (omitted), contains demographic information of each county, and/or whether X includes demographic information of the counties included in the near part of the state (for each possible cutoff listed above). I denote the vector of own-county characteristics "Local Controls", which consists of the same controls I include in columns 2 and 4 in Table 2 and list in Section 3.[12] I similarly denote the vector of near-part characteristics "Near Controls", which consists of the weighted average of demographic variables calculated using the counties included in the near part of the state.[13]

I also vary whether I include regional controls within a given specification, and if so, which of two methods I use to proxy for regional cultural attitudes. Method number one is to replace year fixed effects with year by US Census Region fixed effects (my preferred method). Method number two is to calculate the weighted average of state partisanship (based on population) for all neighboring (bordering) states to a county's state $s(c)$.

In order to present these results cohesively for each educational outcome, I present a separate specification curve for each outcome. I include the specification curve for overall achievement in Figure 1. For brevity, I include the other specification curves in Appendix A.[14]

In each figure, the coefficient for each combination of cutoff, sets of variables included in the vector of controls, and regional controls is presented as a dot. The bars around each dot

[11] I do not include county fixed effects as state partisanship is highly persistent (corr=0.95) across election cycles.

[12] I provide a complete list of these variables above in footnote 7.

[13] Specifically, I calculate the weighted average of racial shares, urban and rural, the outcome variable Y_{ct} for receiving, sending, and facebook-connected counties, percentage of students eligible for free/reduced lunch, English learner, and SEDA's average socioeconomic measure for counties included in the near part of the state for a given cutoff.

[14] The analogous specification curves for the White-Black achievement gap is presented in Figure A1, the specification curve for the male-female achievement gap is included as Figure A2, and the specification curve for the rich-poor achievement gap is included as Figure A3.

represent the 95% confidence interval for each estimate. The dots below the figure illustrate the combination of regional controls, the set of variables included in the vector of controls, and the cutoff used to generate a particular estimate and confidence interval. I highlight my preferred estimate in black, in which I use a cutoff of one-half, the control vector includes both local and near-part controls, and I control for census region by replacing year fixed effects with year by US Census Region fixed effects.

I begin by discussing the results regarding overall achievement, as reported in Figure 1. Note that the scale of axis spans from negative two one-hundredths of a standard deviation to one-hundredth of a standard deviation. All estimates are statistically indistinguishable from 0, and all point estimates are qualitatively 0 as well. In addition, the confidence intervals for all estimates are overlapping, indicating that the choice of cutoff or controls does not impact the magnitude nor significance of the estimate.

I observe a qualitatively similar picture using all three achievement gaps (White-Black, male-female, and rich-poor). These specification curves provide an additional piece of evidence that the estimates I obtained in Column 2 of Table 2 most likely represent the causal impact of state partisanship on educational outcomes.[15] I now turn to the border county design as an additional point of comparison to both my OLS results and now the estimates I obtained from the far part design.

5 Border county design

I next turn to the border county design, in which I estimate models of the form

$$\Delta Y_{bt} = \eta_0 + \eta_1 \Delta StatePart_b + \Delta X'_{bt}\Gamma + \epsilon_{bt}, \tag{4}$$

where I index observations by border county pair b in year t, in which each county within a border county pair lies in a different state.[16] The operator Δ represents a first difference operator within a border county pair. For consistency, the difference is defined as a given variable in the more Republican county minus the variable in the less Republican county. For example, $\Delta StatePart$ represents the state partisanship of the more Republican county minus the state partisanship of the less Republican county. ΔX represents the vector of differences in each control included in Column 2 of Table 2. These are the same controls included in the preferred specification of the far part design.

For completeness, I also estimate the combined far part design with border county design from Bhattarai, Slichter, and Tatro, 2024. I therefore estimate models of the form

$$\begin{aligned} \Delta Y_{bt} &= \eta_0 + \eta_1 \Delta StatePart_{bt} + \eta_2 \Delta NearPart_{bt} + X'_{bt}\Gamma + \epsilon_{bt} \\ \Delta StatePart_{bt} &= \psi_0 + \psi_1 FarPart_{bt} + \psi_2 NearPart_{bt} + X'_{bt}\Omega + v_{bt}, \end{aligned} \tag{5}$$

where I instrument the difference in state partisanship $\Delta StatePart$ with the difference in far part partisanship $\Delta FarPart$ controlling for the difference in near part partisanship

[15] I also show my estimates are robust to the exclusion of the largest and smallest states in Appendix Table A4.

[16] For counties which border multiple counties in one or more different states, I randomly choose a border county. My results are not sensitive to this choice of border county.

$\Delta NearPart$ for the two states pertaining to the border county pair b.[17]

5.1 Results

I present the results of my estimation for each educational outcome in Table 6. In columns 1 and 2 I report results for the baseline border county design. Column 1 does not include controls. In Column 2 I include both local and near controls from the preferred specification of the far part design. For each covariate, I take the difference as the value in the redder county minus the value in the bluer county. Columns 3 and 4 are analogous to columns 1 and 2 except that I instrument the difference in state partisanship with the difference in far part partisanship, controlling for the difference in near part partisanship, using a cutoff of one-half. I report standard errors clustered at the state level for all estimates.[18] I observe small and statistically insignificant results for each outcome variable of interest in all four columns.

5.2 Specification Curve

Using the combined far part border county design allows me to estimate a range of specifications in which I modify how I divide same-state counties into the far versus near part of the state. I also vary whether I instrument the difference in state partisanship or estimate the reduced-form border-county design without the instrument. Finally, I vary which variables I include in the vector of controls.

The set of choices I make for the border county specification curve is similar to that from the far part specification curve I describe in Section 4.2.3. I vary the cutoff (one-fifth through two-thirds), and which variables I include in the vector of controls (none, local controls only, near controls only, and both local and near controls).[19] In all specifications, I control for regional culture by including year by US Census Region fixed effects.[20]

I present the specification curves for overall achievement as Figure 2, and include the specification curves for the other educational outcomes in Appendix A. I continue to highlight the preferred specification in black. For the border county design I designate the preferred specification as the combined far part border county design with a cutoff of one half that includes both local and near controls with year by US Census Region fixed effects. In Figure 2, the estimates for all specifications are statistically indistinguishable from each other and remain close to 0. This is true for the rich-poor achievement gap (Figure A6) and the male-female achievement gap (Figure A5). For the White-Black achievement gap (Figure A4), the coefficients are consistently positive but not statistically significant. The upper bound on these estimates implies an effect size of less than 0.015 SD, relative to a baseline White-Black achievement gap of 0.61 SD.

[17] I assess the validity of this design through a balance test (similar to the far part balance test I describe in Section 4.2.2). I discuss this balance test and results in Appendix A.2.

[18] Results are robust to instead clustering at the state-pair level (e.g., all border-county pairs with one county in New York and the other in Pennsylvania share a single cluster).

[19] I use the within-border-county-difference of each demographic variable in the control vector (defined as the variable in the more Republican county minus the variable in the less Republican county).

[20] For border-county pairs in different US Census Regions, I randomly pick which US Census Region to use. My results are not sensitive to which county's US Census Region I use.

6 Heterogeneity

In this section, I investigate to what extent there exists heterogeneity in the effect of state partisanship on student achievement. A precise null effect of state partisanship on the White-Black achievement gap, for example, does not rule out that state partisanship has a statistically significant and equal magnitude on student achievement for White and Black students. Even without accounting for multiple hypothesis testing, I find precise zero effects of state partisanship on student achievement across demographic groups, grades, and subjects using both the far part design and the border county design. For conciseness, I focus on estimates obtained from my preferred specification in each of the two empirical designs. Across all heterogeneity estimates, my preferred specifications rule out effect sizes larger than 0.02 SD (using the absolute value of the coefficient plus twice the standard error).

Recall that the preferred specification for the far part design uses a cutoff of one-half and includes US Census Region-by-year fixed effects (Panel B of Table 5). The preferred specification for the border county design instruments the difference in state partisanship with the difference in far-half partisanship, controlling for near-half partisanship, and includes the full set of near and local controls described in Section 5 (see Column 4 of Table 6). This specification also includes US Census Region-by-year fixed effects. I also include estimates from the baseline border county design with controls for comparison (see Column 2 of Table 6).

I begin by showing that I observe a precise null effect of state partisanship on individual demographic groups using the far part design. I report the estimated effect of state-level partisanship on student achievement using the far part design for each demographic group in Table 7. Each column title indicates the demographic group (e.g., Column 1 reports estimates for student achievement for only White students). All estimates use the far part cutoff of one-half and include year fixed effects and I report cluster-robust standard errors at the state level in parentheses. Panel B, which includes US Census Region fixed effects, reports the preferred specification for each demographic group. Panel D reports the OLS coefficient as a point of comparison.

Using the border county design, I find slightly negative but statistically insignificant results for each demographic group. I report these estimates in Appendix Table A1. Note that not all counties report student achievement for individual demographic groups, and therefore my estimates are likely underpowered for Black and Hispanic student-level achievement. Even taking these results at face value, my standard errors imply effect sizes no larger than approximately two one-hundredths of a standard deviation in student achievement for any individual demographic group. I therefore conclude I do not observe heterogeneity by race, gender, or socioeconomic status.

I observe similar results when separately estimating the effect of state partisanship on achievement and achievement gaps for elementary-school and middle-school students. I define elementary-school as grades 3-5, and middle-school as grades 6-8. I find consistent null effects of state partisanship on achievement gaps and achievement by demographic groups using the far part design, which I report in Table 8. I report these border county results by grade in Appendix Table A2. Ultimately, I again interpret these estimates as null effects.

This pattern of results also holds when I separately estimate the effect of state partisanship for math and reading scores. I report results from the far part design in Table 9, and results from the border county design in Appendix Table A3.

The fact that I observe null effects across grades, demographic groups and subjects further supports the conclusion that there is no impact of state partisanship on student achievement. Using both the far part and border county designs across 10 outcome variables by 2 sets of grades and 2 subjects yields 80 different estimates (in addition to those presented in the specification curves discussed above). I therefore find strong evidence there is no causal effect of state partisanship on test scores.

7 Discussion

I find that state policy has very little to no causal impact on county-level educational outcomes, in particular on overall test scores or achievement gaps defined using average test scores across racial, gender, and socioeconomic gaps. This is unsurprising for a number of reasons. First, educational outcomes are most closely related to decisions made at the school or school-district level, rather than at the state level. My empirical designs identify the effect of state partisanship operating through state-level policy, and cannot estimate the effect of district- and/or school-level decisions. Further, these local policies (e.g., class sizes, teacher hiring and firing decisions) may affect student test scores similarly regardless of the political leanings of the local bureaucrats that implement them.

Second, state-level education policy changes slowly rather than abruptly with swings in state partisanship. This implies the impact of changes in state partisanship on these policies (e.g., funding formulas, teacher certification requirements, curriculum changes, etc.), and therefore student test scores, may be marginal and smaller in magnitude than partisan campaign rhetoric would suggest.

My findings add to the existing literature that non-policy channels, such as cultural differences in attitudes towards education, time spent with children doing homework, etc., likely explain the differences in student test scores, and student test-score gaps between demographic groups, as opposed to differences in state-level education policy. These cultural attitudes are likely correlated with political affiliation. This implies that moving across state lines is unlikely to be a magic bullet for parents seeking to increase their children's test scores. One important caveat is that my sample predates the COVID-era partisan polarization over school closures (and subsequently school curriculum), during which time state-level partisan differences in education policy widened significantly and became more aligned with national political identity. There does not yet exist sufficient data to determine how this post-COVID polarization might affect my estimates and overall conclusion.

References

Aguiar, Mark and Erik Hurst (2007). "Measuring Trends in Leisure: The Allocation of Time Over Five Decades". In: *The quarterly journal of economics* 122.3, pp. 969–1006.

Bailey, Michael et al. (Aug. 2018). "Social Connectedness: Measurement, Determinants, and Effects". In: *Journal of Economic Perspectives* 32.3, pp. 259–80.

Baron, Jason E. (2019). "School Spending and Student Outcomes: Evidence from Revenue Limit Elections in Wisconsin". In: *SSRN*.

Beland, Louis-Philippe and Sara Oloomi (2015). "Party Affiliation and Public Spending". In: *LSU Working Paper Series*.

Bhattarai, Jijee, David Slichter, and Case Tatro (2024). *Is the Mortality Gap Between Red and Blue States Caused by Policy?* Working Paper.

Björklund, Anders and Kjell G. Salvanes (2011). "Chapter 3 - Education and Family Background: Mechanisms and Policies". In: ed. by Eric A. Hanushek, Stephen Machin, and Ludger Woessmann. Vol. 3. Handbook of the Economics of Education. Elsevier, pp. 201–247. DOI: https://doi.org/10.1016/B978-0-444-53429-3.00003-X. URL: https://www.sciencedirect.com/science/article/pii/B978044453429300003X.

Burner, Eric, Joshua Hyman, and Andrew Ju (2018). "School Finance Refors, Teachers' Unions, and the Allocation of School Resources". In: *ED Working Papers*.

Card, David and A Abigail Payne (2002). "School Finance Reform, the Distribution of School Spending, and the Distribution of Student Test Scores". In: *Journal of public economics* 83.1, pp. 49–82.

Cellini, Stephanie Riegg, Fernando Ferreira, and Jesse Rothstein (2010). "The Value of School Facility Investments: Evidence from a Dynamic Regression Discontinuity Design". In: *The Quarterly Journal of Economics* 125.1, pp. 215–261.

Clark, Melissa A. (2003). "Education Reform, Redistribution, and Student Achievement: Evidence From the Kentucky Education Refore Act". In: *Matghematica Policy Research*.

Democratic National Committee (2024). *Where We Stand: Education*. URL: https://democrats.org/where-we-stand/the-issues/education/.

Dotti Sani, Giulia M and Judith Treas (2016). "Educational Gradients in Parents' Child-care Time Across Countries, 1965–2012". In: *Journal of marriage and Family* 78.4, pp. 1083–1096.

Fruehwirth, Jane Cooley and Jessica Gagete-Miranda (2019). "Your Peers' Parents: Spillovers from Parental Education". In: *Economics of Education Review* 73, p. 101910. ISSN: 0272-7757. DOI: https://doi.org/10.1016/j.econedurev.2019.101910. URL: https://www.sciencedirect.com/science/article/pii/S0272775719301219.

Guryan, Jonathan, Erik Hurst, and Melissa Kearney (Sept. 2008). "Parental Education and Parental Time with Children". In: *Journal of Economic Perspectives* 22.3, pp. 23–46. DOI: 10.1257/jep.22.3.23. URL: https://www.aeaweb.org/articles?id=10.1257/jep.22.3.23.

Hanushek, Eric A (1997). "Assessing the Effects of School Resources on Student Performance: An Update". In: *Educational evaluation and policy analysis* 19.2, pp. 141–164.

Hess, Frederick M. (2022). "Democrats Have Lost Public Confidence on Education, but the GOP Hasn't Gained It". In: *American Enterprise Institute*. URL: https://www.aei.

org/research-products/report/democrats-have-lost-public-confidence-on-education-but-the-gop-hasnt-gained-it/.

Hill, Andrew J. and Danel B. Jones (2017). "Does Partisan Affiliation Impact the Distribution of Spending? Evidence from State Governments' Expenditures on Education". In: *Journal of Economic Behavior & Organization*.

Hill, Sarah A. and D. Roderick Kiewiet (2014). "The Impact of State Supreme Court Decisions on Public School Finance". In: *The Journal of Law, Economics, and Organization* 31.1, pp. 61–92.

Hoxby, Caroline M (2001). "All School Finance Equalizations are not Created Equal". In: *The Quarterly Journal of Economics* 116.4, pp. 1189–1231.

Jackson, C Kirabo and Claire L Mackevicius (2024). "What Impacts can we Expect from School Spending Policy? Evidence from Evaluations in the United States". In: *American Economic Journal: Applied Economics* 16.1, pp. 412–446.

Jackson, C. Kirabo, Cora Wigger, and Heyu Xiong (2018). "Do School Spending Cuts Matter? Evidence from the Great Recession". In: *NBER Working Paper Series*.

Jackson, C.K., R.C. Johnson, and C Perisco (2015). "The Effects of School Spending on Educational and Economic Outcomes: Evidence from School Finance Reforms". In: *National Bureau of Economic Research Working Paper*.

Lafortune, Julien, Jesse Rothstein, and Diane Whitmore Schanzenbach (Apr. 2018). "School Finance Reform and the Distribution of Student Achievement". In: *American Economic Journal: Applied Economics* 10.2, pp. 1–26. DOI: 10.1257/app.20160567. URL: https://www.aeaweb.org/articles?id=10.1257/app.20160567.

Lee, Kyung-Gon and Solomon W Polachek (2018). "Do School Budgets Matter? The Effect of Budget Referenda on Student Dropout Rates". In: *Education Economics* 26.2, pp. 129–144.

Martorell, Paco, Kevin Stange, and Isaac McFarlin Jr (2016). "Investing in Schools: Capital Spending, Facility Conditions, and Student Achievement". In: *Journal of Public Economics* 140, pp. 13–29.

Open Secrets (2024). *Teachers Unions PACs Contributions to Candidates, 2021-2022*. URL: https://www.opensecrets.org/political-action-committees-pacs/industry-detail/L1300/2022.

Pew Research Center (2023). "Wide Gender Gap, Growing Educational Divide in Voters' Party Identification". In: URL: %5Curl%7Bhttps://www.pewresearch.org/politics/2018/03/20/wide-gender-gap-growing-educational-divide-in-voters-party-identification/%7D.

Ramey, Garey and Valerie A Ramey (2009). *The Rug Rat Race*. Tech. rep. National Bureau of Economic Research.

US Census Bureau (2024). *2022 Public Elementary-Secondary Education Finance Data*. https://www.census.gov/data/tables/2022/econ/school-finances/secondary-education-finance.html.

US Census Bureau (2016–2020). *County-to-County Migration Flows: 2016-2020 ACS*.

8 Tables and Figures

Table 1: Summary Statistics

	Mean	Std. Dev	Min	Max
Panel A: Local Characteristics				
Overall Achievement	-0.04	0.26	-1.52	0.98
White-Black Achievement Gap	0.61	0.22	-0.39	1.68
Male-Female Achievement Gap	-0.14	0.09	-1.05	0.57
Rich-Poor Achievement Gap	0.54	0.17	-0.71	1.53
Local Partisanship	59.63	14.87	7.19	95.86
State Partisanship	51.52	8.18	30.27	72.79
Share Asian	1.26	2.40	0.00	46.69
Share Black	11.37	19.25	0.00	100.00
Share Free/Reduced Lunch	54.94	16.32	0.00	100.00
Share Hispanic	12.46	17.54	0.00	99.79
Share White	70.30	24.99	0.00	100.00
Share English Language Learner	3.88	5.97	0.00	63.93
Share Special Education	13.63	4.11	0.00	85.12
Share Urban	7.20	19.21	0.00	100.00
Share Suburb	9.88	22.10	0.00	100.00
SES All Students	-0.10	0.74	-4.20	2.08
Panel B: Sending County Characteristics				
Overall Achievement: Sending Counties	-0.00	0.11	-0.69	0.65
White-Black Achievement Gap: Sending Counties	0.56	0.21	0.00	1.61
Male-Female Achievement Gap: Sending Counties	-0.14	0.04	-0.49	0.19
Rich-Poor Achievement Gap: Sending Counties	0.64	0.14	0.00	1.18
Share White: Sending Counties	58.31	14.93	0.00	96.52
Share Asian: Sending Counties	3.10	1.96	0.00	24.20
Share Hispanic: Sending Counties	17.33	9.52	0.00	71.36
Share Black: Sending Counties	14.28	9.57	0.00	88.40
Share Free/Reduced Lunch: Sending Counties	51.20	10.26	0.00	93.99
Share English Language Learner: Sending Counties	6.28	3.27	0.00	28.13
Share Special Education: Sending Counties	12.72	2.56	0.00	20.05
Share Urban: Sending Counties	25.75	13.85	0.00	99.89
Share Suburb: Sending Counties	26.44	14.31	0.00	94.19
SES All Students: Sending Counties	0.07	0.31	-1.57	1.42
Panel C: Receiving County Characteristics				
Overall Achievement: Receiving Counties	-0.01	0.09	-0.59	0.59
White-Black Achievement Gap: Receiving Counties	0.57	0.16	0.00	1.51
Male-Female Achievement Gap: Receiving Counties	-0.14	0.03	-0.77	0.06
Rich-Poor Achievement Gap: Receiving Counties	0.65	0.10	0.00	1.02
Share White: Receiving Counties	58.03	10.96	0.00	94.34
Share Asian: Receiving Counties	3.40	1.80	0.00	38.10
Share Hispanic: Receiving Counties	18.62	7.81	0.00	65.32
Share Black: Receiving Counties	14.69	8.02	0.00	69.25
Share Free/Reduced Lunch: Receiving Counties	52.15	6.68	0.00	93.02
Share English Language Learner: Receiving Counties	6.74	2.69	0.00	26.76
Share Special Education: Receiving Counties	12.87	1.75	0.00	20.04
Share Urban: Receiving Counties	26.93	10.76	0.00	96.56
Share Suburb: Receiving Counties	28.00	11.69	0.00	81.62
SES All Students: Receiving Counties	0.07	0.26	-1.54	1.30
Panel D: Facebook County Characteristics				
Overall Achievement: Facebook Counties	-0.05	0.08	-0.60	0.29
White-Black Achievement Gap: Facebook Counties	0.24	0.11	0.00	0.61
Male-Female Achievement Gap: Facebook Counties	-0.14	0.03	-0.27	0.00
Rich-Poor Achievement Gap: Facebook Counties	0.46	0.07	0.00	0.65
Share Asian: Facebook Counties	1.07	0.40	0.00	3.20
Share Black: Facebook Counties	11.21	9.25	0.00	70.22
Share Free/Reduced Lunch: Facebook Counties	54.74	6.16	0.00	89.39
Share Hispanic: Facebook Counties	10.63	4.69	0.00	45.27
Share White: Facebook Counties	71.58	9.50	0.00	93.83
Share English Language Learner: Facebook Counties	3.45	1.31	0.00	15.81
Share Special Education: Facebook Counties	13.59	1.08	0.00	18.75
Share Urban: Facebook Counties	5.88	2.84	0.00	30.94
Share Suburb: Facebook Counties	7.57	4.48	0.00	42.87
SES All Students: Facebook Counties	-0.09	0.30	-1.48	0.69

Notes: Variables in Panel A come directly from the SEDA data described in Section 2. Variables in panels B-D described in Section 2.1.

Table 2: Initial OLS Results: Achievement

	(1) OLS	(2) OLS Controls	(3) IV: Near Half	(4) IV: Far Half
Overall Achievement	-0.0001	0.0013	0.0004	0.0021
	(0.0026)	(0.0018)	(0.0022)	(0.0021)
White-Black Achievement Gap	-0.0051***	-0.0001	0.0003	0.0013
	(0.0013)	(0.0014)	(0.0025)	(0.0018)
Male-Female Achievement Gap	0.0004	0.0002	0.0007	0.0002
	(0.0009)	(0.0008)	(0.0010)	(0.0009)
Rich-Poor Achievement Gap	-0.0045***	0.0004	0.0007	0.0004
	(0.0008)	(0.0007)	(0.0012)	(0.0009)

Notes: The dependent variable is indicated by the row title. Controls include a cubic control for own-county partisanship, quadratic controls for own-county racial shares of Whites, Blacks, Asians, and Hispanics, and quadratic controls for the average of the dependent variable for counties sending and receiving migrants to a given county and Facebook-connected counties. Controls also include own-county racial shares interacted with (i) sending counties' average racial shares (ii) receiving counties' average racial shares and (iii) Facebook-connected counties' average racial shares, in addition to controlling for urbanicity. All columns include year fixed effects. Columns 2-4 include year by US Census Region fixed effects. Columns 3-4 instrument state partisanship using partisanship in the half of the state denoted by the column title controlling for the other half of the state. The F-statistic for the first stage of Column 3 is approximately 298, and the F-statistic for the first stage of Column 4 is approximately 466. I divide the rest of the counties within the same state as a given county based on the distance between county centroids, with the half of counties furthest from a given county defined as the far half of the state, and the remaining counties defined as the near half of the state. In the case of an odd number of rest of state counties, the near half of the state has one more county than the far half of the state. Cluster-robust standard errors at the state level are reported in parentheses. $p < 0.1^{*} p < 0.05^{**} p < 0.01^{***}$.

Table 3: Far Half Placebo Border County Results Summary

	(1) OLS	(2) 1/5	(3) 1/4	(4) 1/3	(5) 2/5	(6) 1/2	(7) 3/5	(8) 2/3
Panel A: No Controls								
Overall Achievement	-0.0036*	-0.0990	-0.0408	-0.0430	-0.0254	-0.0385	-0.0289	-0.0278
	(0.0017)	(2.1475)	(0.5312)	(0.4251)	(0.1924)	(0.3554)	(0.0665)	(0.0748)
White-Black Gap	-0.0052***	-0.0551	-0.0573	-0.0606	-0.2088	-0.0611	-0.0380	-0.0277
	(0.0010)	(0.1079)	(0.1151)	(0.1547)	(1.9601)	(0.1376)	(0.0543)	(0.0307)
Male-Female Gap	-0.0004	0.0010	-0.0167	-0.0045	0.0133	0.0038	-0.0013	-0.0024
	(0.0005)	(0.0708)	(0.1169)	(0.0537)	(0.1552)	(0.0188)	(0.0086)	(0.0124)
Rich-Poor Gap	-0.0022**	-0.0308	-0.0275	-0.0356	-0.0438	-0.0216	-0.0126	-0.0116
	(0.0007)	(0.0932)	(0.0726)	(0.1017)	(0.1623)	(0.0435)	(0.0158)	(0.0171)
Panel B: Census Region								
Overall Achievement	-0.0036*	-0.0990	-0.0408	-0.0430	-0.0254	-0.0385	-0.0289	-0.0278
	(0.0017)	(2.1475)	(0.5312)	(0.4251)	(0.1924)	(0.3554)	(0.0665)	(0.0748)
White-Black Gap	-0.0052***	-0.0551	-0.0573	-0.0606	-0.2088	-0.0611	-0.0380	-0.0277
	(0.0010)	(0.1079)	(0.1151)	(0.1547)	(1.9601)	(0.1376)	(0.0543)	(0.0307)
Male-Female Gap	-0.0004	0.0010	-0.0167	-0.0045	0.0133	0.0038	-0.0013	-0.0024
	(0.0005)	(0.0708)	(0.1169)	(0.0537)	(0.1552)	(0.0188)	(0.0086)	(0.0124)
Rich-Poor Gap	-0.0022**	-0.0308	-0.0275	-0.0356	-0.0438	-0.0216	-0.0126	-0.0116
	(0.0007)	(0.0932)	(0.0726)	(0.1017)	(0.1623)	(0.0435)	(0.0158)	(0.0171)
Panel C: Nbr State Partisanship								
Overall Achievement	0.0009	0.0130	0.0119	0.0144	0.0147	-0.0017	-0.0125	-0.0278
	(0.0013)	(0.0284)	(0.0286)	(0.0329)	(0.0355)	(0.0254)	(0.0208)	(0.0748)
White-Black Gap	-0.0042**	-0.0257	-0.0281	-0.0300	-0.0437	-0.0435	-0.0302	-0.0277
	(0.0012)	(0.0255)	(0.0290)	(0.0366)	(0.0797)	(0.0646)	(0.0333)	(0.0307)
Male-Female Gap	-0.0001	0.0015	-0.0017	0.0002	0.0029	0.0026	-0.0005	-0.0024
	(0.0004)	(0.0108)	(0.0103)	(0.0102)	(0.0120)	(0.0089)	(0.0061)	(0.0124)
Rich-Poor Gap	-0.0017*	-0.0095	-0.0097	-0.0134	-0.0131	-0.0123	-0.0087	-0.0116
	(0.0007)	(0.0123)	(0.0120)	(0.0162)	(0.0169)	(0.0145)	(0.0080)	(0.0171)
First Stage F-Stat		.28	.246	.141	.011	.173	.443	.778

Notes: The dependent variable for each row is indicated by the row title for counties on the border between two states. All columns include year fixed effects. The main independent variable is neighboring state partisanship. Column 1 reports the OLS estimate. Columns 2-8 instrument neighboring state partisanship with partisanship in the far part of the neighboring state, controlling for partisanship in the near part of the neighboring state. The column titles in columns 2-8 indicate the proportion of counties included in the near part of the neighboring state. In cases where the number of counties in the near part is not an integer I include an extra county in the near part of the neighboring state. Panel A does not include additional regional controls. Panel B includes US Census Region by year fixed effects, and Panel C separately includes the average partisanship of the neighboring states as a given county. I report clustered robust standard errors at the state level in parentheses. First Stage F-stat represents the F statistic for the first stage from Panel B. All panels use the same instrument, and thus F-statistics are representative for all 3 panels. $p < 0.1^{*} p < 0.05^{**} p < 0.001^{*}$**.

Table 4: Far Half Balance Test Table

	(1) OLS	(2) 1/5	(3) 1/4	(4) 1/3	(5) 2/5	(6) 1/2	(7) 3/5	(8) 2/3
Local Characteristics								
Local Partisanship	0.8983***	0.2198**	0.2213**	0.1848*	0.1759*	0.0756	-0.0428	-0.1232
	(0.0804)	(0.0681)	(0.0783)	(0.0846)	(0.0886)	(0.1074)	(0.1512)	(0.1906)
Percentage Urban	-0.2689**	-0.0838	-0.0686	-0.0685	-0.0495	0.0345	0.1061	0.1583
	(0.0827)	(0.0887)	(0.0880)	(0.0892)	(0.0919)	(0.0902)	(0.0890)	(0.1041)
Percentage Subruban	-0.5804***	0.0732	0.0525	0.0176	-0.0153	0.0256	0.0454	-0.0014
	(0.1138)	(0.1430)	(0.1384)	(0.1390)	(0.1464)	(0.1709)	(0.1828)	(0.2362)
Percentage White	-0.0249	-0.5565	-0.5415	-0.5929	-0.6656*	-0.8746**	-1.2781***	-1.4712***
	(0.2884)	(0.3000)	(0.2986)	(0.3054)	(0.3087)	(0.3299)	(0.3787)	(0.4329)
Percentage Black	0.2091	0.6245*	0.6066*	0.6192*	0.6539*	0.7257*	0.9009*	1.0298*
	(0.1900)	(0.2554)	(0.2477)	(0.2543)	(0.2565)	(0.2872)	(0.3566)	(0.4370)
Percentage Hispanic	-0.1865	-0.1325	-0.1190	-0.1035	-0.0522	0.0129	0.2021	0.2770
	(0.2277)	(0.2152)	(0.2195)	(0.2156)	(0.2128)	(0.2192)	(0.2436)	(0.2618)
Percentage Asian	-0.0837***	-0.0233	-0.0266	-0.0255	-0.0243	-0.0174	-0.0127	-0.0195
	(0.0225)	(0.0177)	(0.0178)	(0.0183)	(0.0176)	(0.0185)	(0.0195)	(0.0245)
Percentage Free Reduced Lunch	0.4814**	0.3442*	0.3398*	0.3687*	0.4079**	0.3941*	0.4952*	0.5754*
	(0.1377)	(0.1611)	(0.1569)	(0.1565)	(0.1565)	(0.1759)	(0.2085)	(0.2460)
Percentage English Language Learner	-0.0711	-0.0372	-0.0344	-0.0271	-0.0111	0.0077	0.0216	0.0432
	(0.0657)	(0.0678)	(0.0683)	(0.0701)	(0.0715)	(0.0762)	(0.0820)	(0.0913)
Socioeconomic Status	-0.0170*	-0.0127	-0.0125	-0.0134	-0.0140	-0.0098	-0.0126	-0.0149
	(0.0065)	(0.0075)	(0.0075)	(0.0075)	(0.0077)	(0.0081)	(0.0100)	(0.0125)
Sending Counties Characteristics								
Overall Achievement: Sending Counties	-0.0021***	-0.0015	-0.0012	-0.0013	-0.0017*	-0.0020*	-0.0025**	-0.0033**
	(0.0006)	(0.0008)	(0.0007)	(0.0007)	(0.0008)	(0.0009)	(0.0009)	(0.0011)
White-Black Achievement Gap: Sending Counties	-0.0043***	0.0003	0.0005	0.0006	0.0006	0.0008	0.0009	0.0013
	(0.0012)	(0.0011)	(0.0012)	(0.0012)	(0.0012)	(0.0013)	(0.0014)	(0.0018)
Male-Female Achievement Gap: Sending Counties	0.0003	-0.0001	-0.0001	-0.0001	-0.0002	-0.0001	-0.0002	-0.0003
	(0.0003)	(0.0003)	(0.0003)	(0.0003)	(0.0003)	(0.0003)	(0.0003)	(0.0004)
Rich-Poor Achievement Gap: Sending Counties	-0.0023***	0.0002	0.0004	0.0005	0.0004	0.0007	0.0006	0.0008
	(0.0005)	(0.0006)	(0.0007)	(0.0007)	(0.0007)	(0.0009)	(0.0010)	(0.0011)
Receiving Counties Characteristics								
Overall Achievement: Receiving Counties	-0.0023***	-0.0018*	-0.0017*	-0.0018*	-0.0021**	-0.0022**	-0.0029**	-0.0034**
	(0.0006)	(0.0008)	(0.0007)	(0.0007)	(0.0008)	(0.0008)	(0.0009)	(0.0011)
White-Black Achievement Gap: Receiving Counties	-0.0034***	0.0005	0.0006	0.0007	0.0005	0.0011	0.0015	0.0024
	(0.0009)	(0.0009)	(0.0010)	(0.0010)	(0.0010)	(0.0011)	(0.0013)	(0.0016)
Male-Female Achievement Gap: Receiving Counties	0.0001	-0.0002	-0.0002	-0.0002	-0.0002	-0.0001	-0.0002	-0.0003
	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0003)	(0.0003)	(0.0003)	(0.0004)
Rich-Poor Achievement Gap: Receiving Counties	-0.0017***	0.0000	0.0001	0.0002	0.0001	0.0004	0.0004	0.0010
	(0.0004)	(0.0004)	(0.0005)	(0.0005)	(0.0005)	(0.0006)	(0.0007)	(0.0008)
Facebook Counties Characteristics								
Overall Achievement: Facebook Counties	-0.0021*	-0.0024*	-0.0023*	-0.0022*	-0.0023*	-0.0024	-0.0029*	-0.0032
	(0.0009)	(0.0011)	(0.0011)	(0.0011)	(0.0011)	(0.0013)	(0.0015)	(0.0018)
White-Black Achievement Gap: Facebook Counties	-0.0019	0.0014	0.0013	0.0012	0.0014	0.0017	0.0021	0.0025
	(0.0014)	(0.0013)	(0.0013)	(0.0013)	(0.0014)	(0.0015)	(0.0017)	(0.0020)
Male-Female Achievement Gap: Facebook Counties	-0.0000	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0007	-0.0008
	(0.0004)	(0.0003)	(0.0003)	(0.0004)	(0.0004)	(0.0004)	(0.0005)	(0.0006)
Rich-Poor Achievement Gap: Facebook Counties	-0.0021**	-0.0004	-0.0003	-0.0002	0.0001	0.0005	0.0007	0.0009
	(0.0006)	(0.0007)	(0.0007)	(0.0007)	(0.0008)	(0.0009)	(0.0011)	(0.0012)
First Stage F-Stat		900	732	553	475	297	118	77

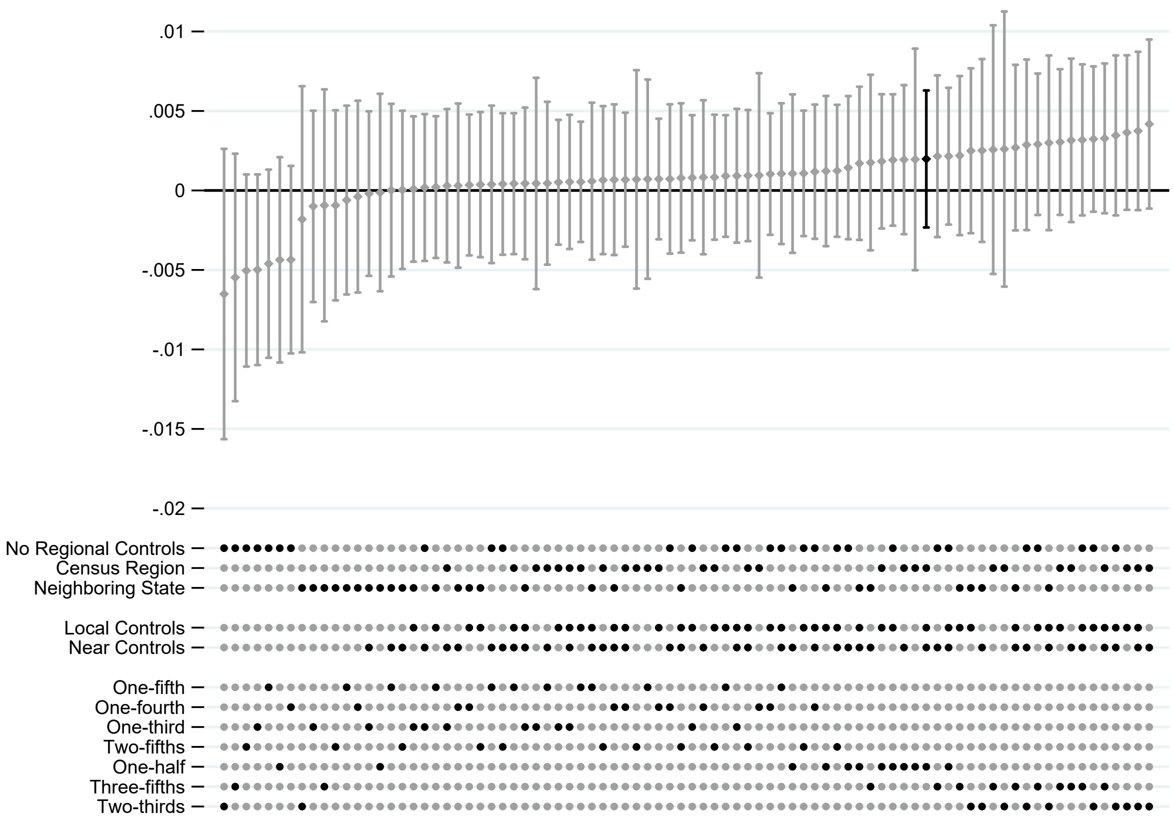
Notes: Row titles represent the dependent variable estimated using Equation 2. I describe the covariates included in Section 2. All columns include year fixed effects. The main independent variable is neighboring state partisanship. Column 1 reports the OLS estimate. Columns 2-8 instrument state partisanship with partisanship in the far part of the state, controlling for partisanship in the near part of the state. The column titles in columns 2-8 indicate the proportion of counties included in the near part of the state. In cases where the number of counties in the near part is not an integer I include an extra county in the near part of the state. I report F-statistics from the first stage for each cutoff in the bottom row. Panel A does not include additional regional controls. Panel B includes US Census Region dummies, and Panel C separately includes the average partisanship of the neighboring states as a given county. I report clustered robust standard errors at the state level in parentheses. $p < 0.1^{*} p < 0.05^{**} p < 0.01^{***}$.

Table 5: Far Part Baseline Results

	(1) Overall	(2) White-Black Gap	(3) Male-Female Gap	(4) Rich-Poor Gap
Panel A: No Controls				
State Partisanship	-0.0044	0.0002	-0.0003	0.0010
	(0.0033)	(0.0017)	(0.0012)	(0.0012)
N	32071	14171	30651	29113
R^2	0.0295	0.0632	0.0276	0.0559
Stage 1 F Stat.	281	293	245	238
Controls	N	N	N	N
Panel B: Regional Controls				
State Partisanship	0.0020	0.0007	0.0004	0.0001
	(0.0036)	(0.0016)	(0.0014)	(0.0012)
Obs	32071	14171	30651	29113
R^2	0.1477	0.1036	0.0841	0.0867
Stage 1 F Stat.	287	330	267	257
Controls	Y	Y	Y	Y
Panel C: Nbr State Partisanship				
State Partisanship	-0.0001	0.0017	0.0001	0.0006
	(0.0032)	(0.0018)	(0.0014)	(0.0013)
Obs	32071	14171	30651	29113
R^2	0.0775	0.0643	0.0299	0.0577
Stage 1 F Stat.	208	231	182	177
Controls	Y	Y	Y	Y
Panel D: OLS Results				
State Partisanship	-0.0050	-0.0061***	-0.0003	-0.0035***
	(0.0025)	(0.0012)	(0.0010)	(0.0009)
Obs	32071	14171	30651	29113
R^2	0.0298	0.0681	0.0273	0.0399

Notes: The dependent variable is indicated by the column title. All estimates represent IV regressions in which I instrument state partisanship with partisanship in the far half of the state, controlling for partisanship in the near half of the state. I divide all other counties in the same state as a given county based on the distance between county centroids, with the counties in the nearest half defined as the near part of the state, and the remaining counties defined as the far half of the state. In the case of an odd number of rest of state counties, I include an additional county in the near part. All panels and columns include year fixed effects. Panel B includes US Census Region fixed effects. Panel C separately controls for the average of state partisanship in adjacent states. Cluster-robust standard errors at the state level are reported in parentheses. $p < 0.1^{*} p < 0.05^{**} p < 0.01^{***}$.

Figure 1: Far Part Specification Curve: Overall Achievement



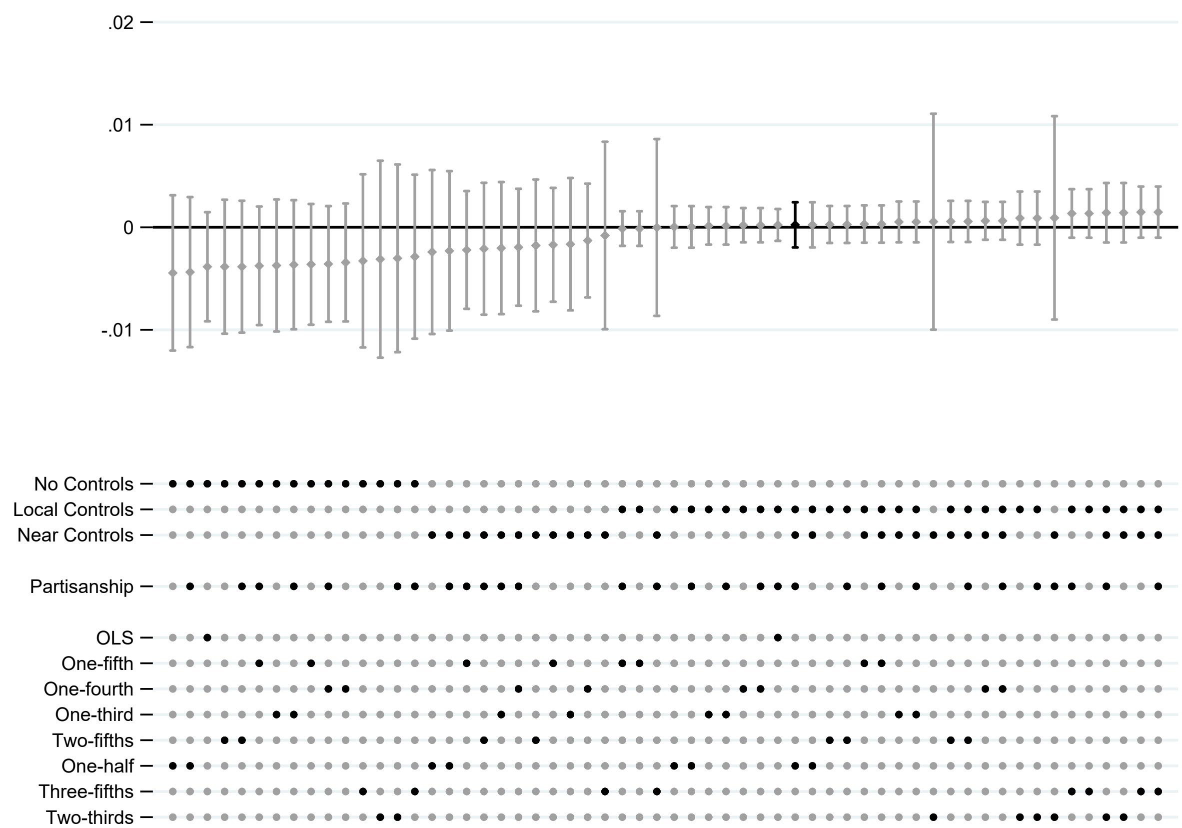
Notes: Each dot represents an estimate for a given specification of the border county design, with bars representing the 95% confidence interval. My preferred estimate from the far part design is highlighted in black, which includes differences in local and near characteristics, the difference in local partisanship, and instruments the difference in rest of state partisanship with the difference in far half partisanship. All specifications include year fixed effects and use robust standard errors clustered at the state level.

Table 6: Border County Results

	(1) OLS No Controls	(2) OLS Controls	(3) IV No Controls	(4) IV Controls
Overall Achievement	-0.0027	0.0004	-0.0036	-0.0002
	(0.0030)	(0.0007)	(0.0040)	(0.0010)
Obs	5910	5366	5910	5122
R^2	0.0089	0.5883		
Stage 1 F Stat.			125	196
Controls	N	Y	N	Y
White-Black Achievement Gap	0.0027	0.0006	0.0043	0.0036
	(0.0018)	(0.0020)	(0.0035)	(0.0032)
Obs	1830	1663	1830	1548
R^2	0.0089	0.4287		
Stage 1 F Stat.			109	150
Controls	N	Y	N	Y
Male-Female Achievement Gap	0.0003	-0.0000	0.0002	-0.0006
	(0.0009)	(0.0005)	(0.0012)	(0.0006)
Obs	5522	5037	5522	4810
R^2	0.0031	0.2039		
Stage 1 F Stat.			113	165
Controls	N	Y	N	Y
Rich-Poor Achievement Gap	0.0005	-0.0000	0.0015	0.0002
	(0.0008)	(0.0005)	(0.0011)	(0.0008)
Obs	5135	4672	5135	4441
R^2	0.0114	0.3739		
Stage 1 F Stat.			111	121
Controls	N	Y	N	Y

Notes: The dependent variable in all columns indicated by the row title. I define rest of state partisanship as state partisanship excluding a particular county. I define the differences of all variables as the variable in the more Republican (redder) minus the variable in the less Republican (bluer) county based on the percentage of votes for the Republican candidate in the most recent presidential election. Column 1 represents results from estimating the baseline border county design. Column 2 adds controls for the difference in local partisanship and for differences in local covariates. Column 3 represents results from instrumenting the difference in rest of state partisanship with the difference in far half partisanship, controlling for the difference in near half partisanship. My preferred estimate may be found in column 4. In Column 4 I estimate Column 3 with controls for local and near-half characteristics. Columns 1 and 3 include year fixed effects, and columns 2 and 4 include year by US Census Region fixed effects. $p < 0.1^{*} p < 0.05^{**} p < 0.01^{***}$.

Figure 2: Border County Specification Curve: Overall Achievement



Notes: Each dot represents an estimate for a given specification of the border county design, with bars representing the 95% confidence interval. My preferred estimate from the border county design is highlighted in black, which includes differences in local and near characteristics, the difference in local partisanship, and instruments the difference in rest of state partisanship with the difference in far half partisanship. All specifications include year by US Census Region fixed effects and use robust standard errors clustered at the state level.

Table 7: Far Part Results By Group

	(1) White	(2) Black	(3) Hispanic	(4) Male	(5) Female	(6) Poor	(7) Rich
Panel A: No Controls							
State Partisanship	0.0005	-0.0058	0.0009	-0.0040	-0.0038	-0.0025	-0.0010
	(0.0027)	(0.0035)	(0.0032)	(0.0037)	(0.0031)	(0.0027)	(0.0024)
N	30905	14689	16460	31116	31025	31037	29768
R^2	0.0510	0.0433	0.0224	0.0284	0.0325	0.0238	0.0475
Stage 1 F Stat.	269	307	422	253	253	248	255
Controls	N	N	N	N	N	N	N
Panel B: Regional Controls							
State Partisanship	0.0032	-0.0041	0.0004	0.0024	0.0020	0.0015	0.0020
	(0.0031)	(0.0039)	(0.0030)	(0.0039)	(0.0033)	(0.0029)	(0.0026)
Obs	30905	14689	16460	31116	31025	31037	29768
R^2	0.0762	0.0668	0.0894	0.1511	0.1339	0.1132	0.0870
Stage 1 F Stat.	277	347	452	269	270	269	264
Controls	Y	Y	Y	Y	Y	Y	Y
Panel C: Nbr State Partisanship							
State Partisanship	0.0013	-0.0043	0.0002	0.0006	0.0004	0.0001	0.0010
	(0.0030)	(0.0042)	(0.0039)	(0.0035)	(0.0030)	(0.0027)	(0.0026)
Obs	30905	14689	16460	31116	31025	31037	29768
R^2	0.0518	0.0500	0.0246	0.0788	0.0824	0.0518	0.0614
Stage 1 F Stat.	199	238	372	188	187	185	188
Controls	Y	Y	Y	Y	Y	Y	Y
Panel D: OLS Results							
State Partisanship	-0.0051*	-0.0048	0.0014	-0.0053	-0.0050*	-0.0006	-0.0038*
	(0.0022)	(0.0025)	(0.0023)	(0.0028)	(0.0023)	(0.0021)	(0.0019)
Obs	30905	14689	16460	31116	31025	31037	29768
R^2	0.0436	0.0439	0.0225	0.0295	0.0336	0.0177	0.0479

Notes: The dependent variable is student achievement for the demographic group indicated by the column title. Poor students are those identified as economically disadvantaged. All estimates represent IV regressions in which I instrument state partisanship with partisanship in the far half of the state, controlling for partisanship in the near half of the state. I divide all other counties in the same state as a given county based on the distance between county centroids, with the counties in the nearest half defined as the near part of the state, and the remaining counties defined as the far half of the state. In the case of an odd number of rest of state counties, I include an additional county in the near part. All panels and columns include year fixed effects. Panel B includes US Census Region fixed effects. Panel C separately controls for the average of state partisanship in adjacent states. Cluster-robust standard errors at the state level are reported in parentheses. ¡0.1$^{*}p < 0.05^{**}p < 0.01^{***}$.

Table 8: Far Part Results By Grade

	(1) Overall	(2) White-Black Gap	(3) Male-Female Gap	(4) Rich-Poor Gap	(5) White	(6) Black	(7) Male	(8) Female	(9) Rich	(10) Poor
Panel A: Grades 3-5										
State Partisanship	0.0019	0.0004	0.0000	0.0003	0.0034	-0.0049	0.0021	0.0020	0.0020	0.0012
	(0.0041)	(0.0018)	(0.0016)	(0.0013)	(0.0035)	(0.0047)	(0.0045)	(0.0038)	(0.0030)	(0.0034)
N	24225	10427	23041	21682	23191	10840	23367	23338	22120	23396
R^2	0.1177	0.0929	0.0380	0.0816	0.0648	0.0573	0.1147	0.1142	0.0791	0.0857
Stage 1 F Stat.	193	292	193	187	187	308	193	194	190	188
Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Panel B: Grades 6-8										
State Partisanship	0.0016	0.0003	0.0009	-0.0002	0.0030	-0.0046	0.0021	0.0014	0.0016	0.0014
	(0.0035)	(0.0018)	(0.0015)	(0.0012)	(0.0030)	(0.0039)	(0.0039)	(0.0032)	(0.0026)	(0.0027)
Obs	23878	10335	22723	21541	22899	10769	23085	23002	22063	23002
R^2	0.1758	0.1145	0.1183	0.0765	0.0884	0.0812	0.1874	0.1505	0.0969	0.1385
Stage 1 F Stat.	209	290	201	198	205	305	202	207	202	202
Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Notes: The dependent variable is indicated by the column title. Rich and Poor indicates whether a student is labeled as economically disadvantaged. Panel A reports estimates for elementary-school (grades 3-5) and Panel B reports estimates for middle-school (grades 6-8). All estimates represent IV regressions in which I instrument state partisanship with partisanship in the far half of the state, controlling for partisanship in the near half of the state. I divide all other counties in the same state as a given county based on the distance between county centroids, with the counties in the nearest half defined as the near part of the state, and the remaining counties defined as the far half of the state. In the case of an odd number of rest of state counties, I include an additional county in the near part. All panels and columns include year by US Census Region fixed effects. Cluster-robust standard errors at the state level are reported in parentheses. $p < 0.1^{*} p < 0.05^{**} p < 0.01^{***}$.

Table 9: Far Part Results By Subject

	(1) Overall	(2) White-Black Gap	(3) Male-Female Gap	(4) Rich-Poor Gap	(5) White	(6) Black	(7) Male	(8) Female	(9) Rich	(10) Poor
Panel A: Math										
State Partisanship	0.0015	0.0012	0.0002	0.0005	0.0033	-0.0073	0.0020	0.0016	0.0014	0.0006
	(0.0050)	(0.0022)	(0.0016)	(0.0013)	(0.0046)	(0.0054)	(0.0054)	(0.0045)	(0.0040)	(0.0042)
N	24144	10552	22999	21843	23184	10945	23342	23296	22380	23316
R^2	0.1320	0.1448	0.0968	0.0922	0.0686	0.0566	0.1406	0.1099	0.0818	0.0875
Stage 1 F Stat.	191	273	191	187	188	285	189	190	191	186
Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Panel B: Reading										
State Partisanship	0.0021	0.0003	-0.0006	-0.0001	0.0031	-0.0022	0.0020	0.0026	0.0021	0.0019
	(0.0034)	(0.0016)	(0.0019)	(0.0013)	(0.0025)	(0.0038)	(0.0039)	(0.0031)	(0.0025)	(0.0028)
Obs	24172	10666	23088	21879	23261	11053	23461	23375	22373	23325
R^2	0.1467	0.0672	0.0742	0.0766	0.0723	0.0834	0.1376	0.1491	0.0804	0.1193
Stage 1 F Stat.	200	268	200	194	195	281	198	200	198	197
Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Notes: The dependent variable is indicated by the column title. Rich and Poor indicates whether a student is labeled as economically disadvantaged. Panel A reports estimates for math scores and Panel B reports estimates for reading scores. All estimates represent IV regressions in which I instrument state partisanship with partisanship in the far half of the state, controlling for partisanship in the near half of the state. I divide all other counties in the same state as a given county based on the distance between county centroids, with the counties in the nearest half defined as the near part of the state, and the remaining counties defined as the far half of the state. In the case of an odd number of rest of state counties, I include an additional county in the near part. All panels and columns include year by US Census Region fixed effects. Cluster-robust standard errors at the state level are reported in parentheses. $p < 0.1^{*} p < 0.05^{**} p < 0.01^{***}$.

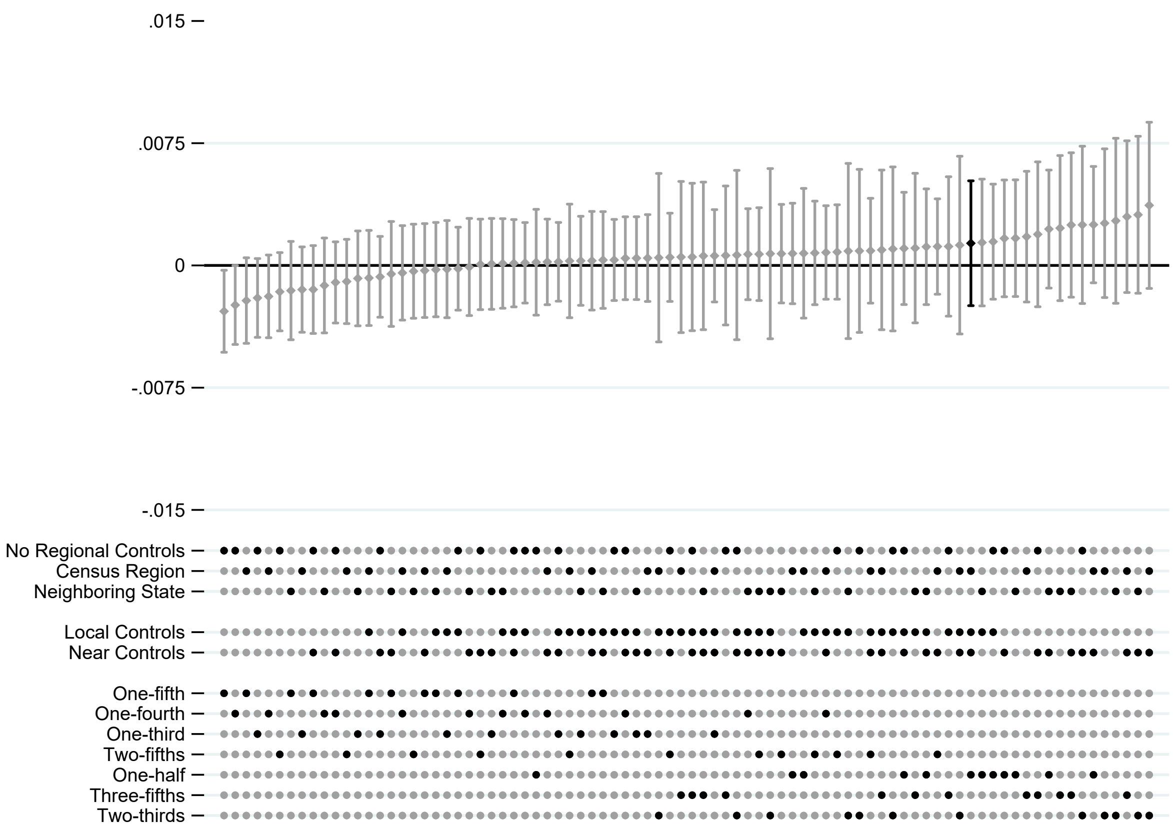
A Appendix A: Additional Tables & Figures

Below I include the specification curves for the far part design and the border county design. Figure titles indicate both whether the specification curve shows estimates from the far part design or the border county design and the particular educational outcome. I describe the specification curves for the far part design in Section 4.2.3 and the specification curves for the border county design in Section 5.2.

Within each specification curve, the estimate for each specification is represented as a grey diamond, with 95% confidence intervals as the bars. The estimate and confidence interval for the preferred specification in each design is shaded in black. Below the graph are the indicators for the choices made in each specification, collected into three groups, with the colored in dots representing the chosen options for that specific specification. For example, below in Figure A1, the preferred specification controls for regional effects using Census Region dummies, with Local Controls and Near Controls, and uses a cutoff of One-half.

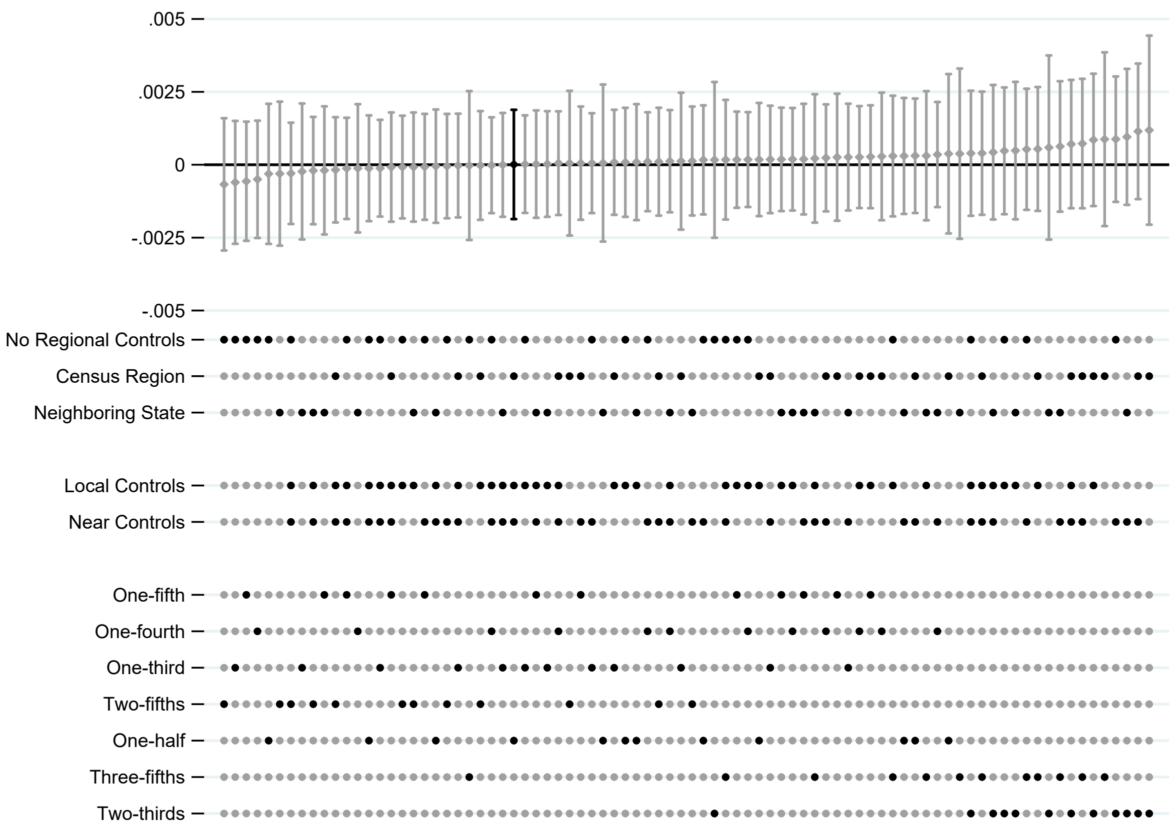
For the border county specification curves, the option Partisanship indicates whether the controls included the difference in local partisanship within a border county pair. OLS indicates a specification using the border county design without the far part instrumental variable, and the cutoffs indicate which particular cutoff was used in the combined far part border county design.

Figure A1: Far Part Specification Curve: White-Black Achievement Gap



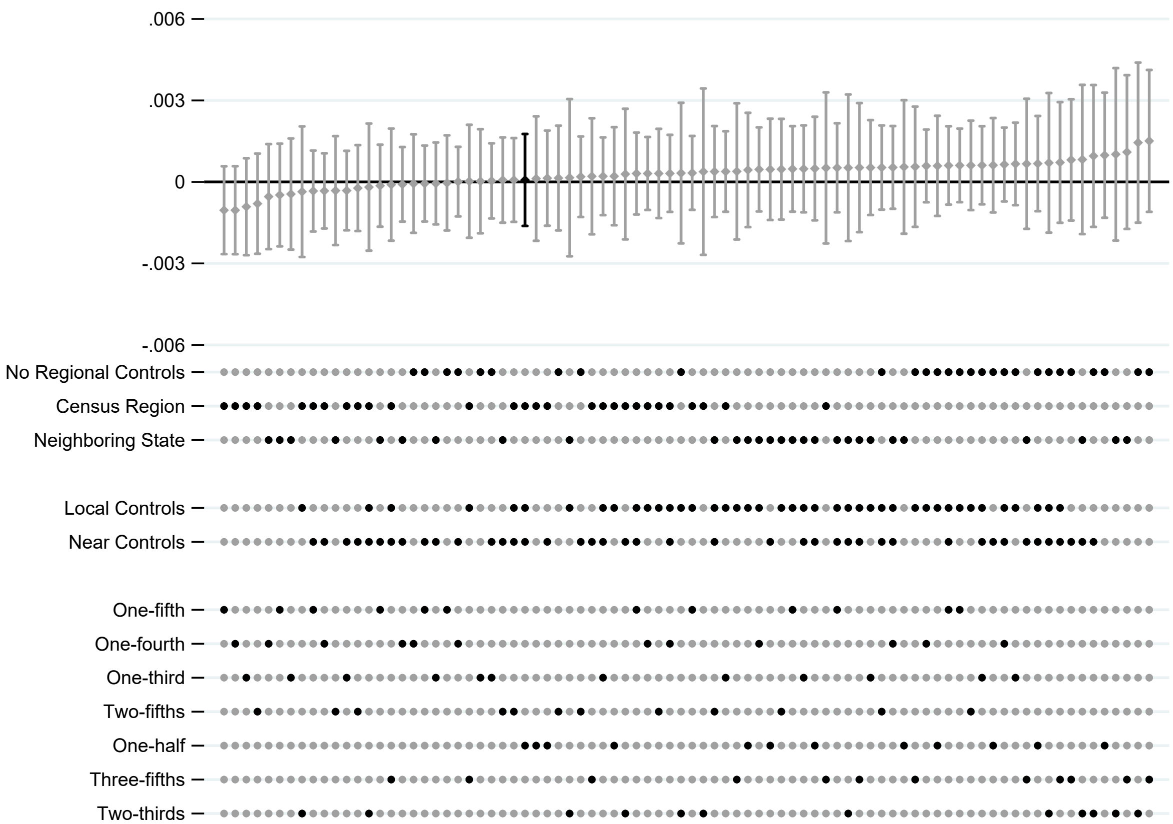
Notes: Each dot represents an estimate for a given specification of the far part design with the White-Black achievement gap as the dependent variable. Bars represent the 95% confidence interval. My preferred estimate from the far part design is highlighted in black, which uses a cutoff of one-half and includes local and near controls. This specification includes US Census Region dummies as regional controls. All specifications include year fixed effects and use robust standard errors clustered at the state level.

Figure A2: Far Part Specification Curve: Male-Female Achievement Gap



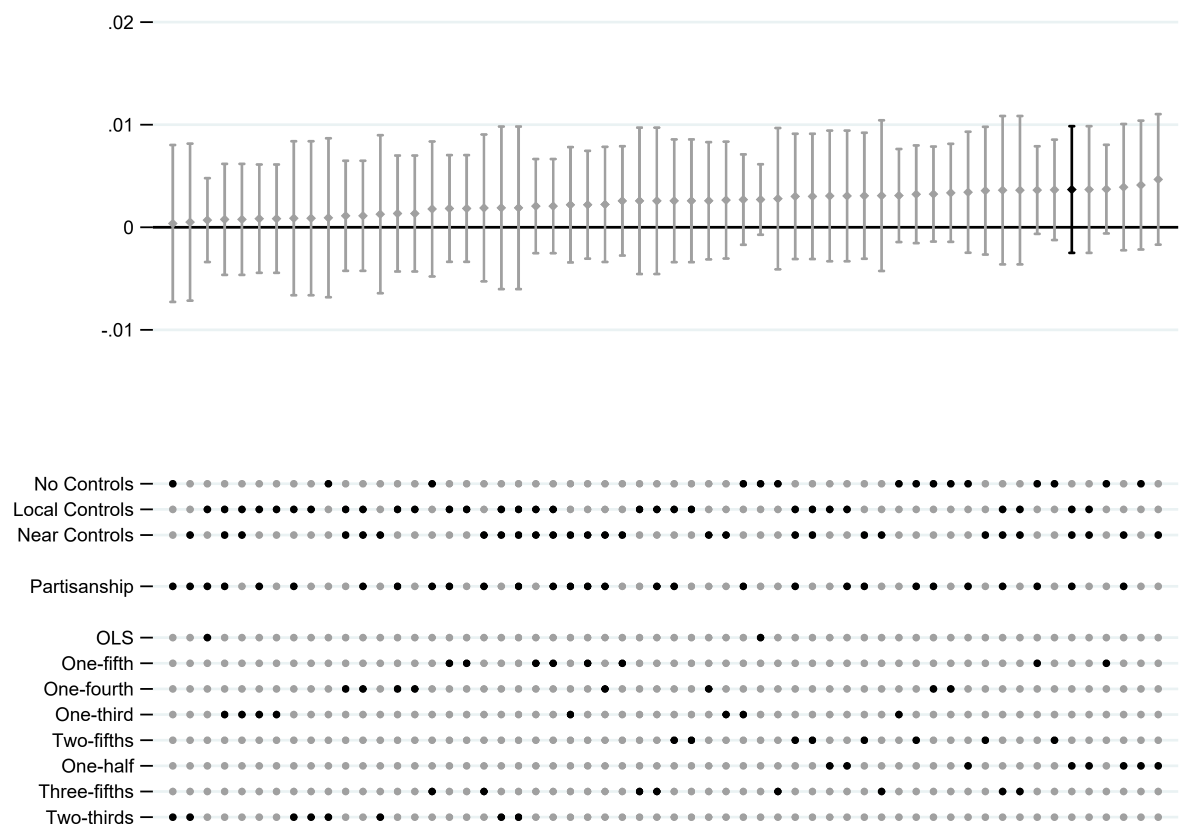
Notes: Each dot represents an estimate for a given specification of the far part design with the male-female achievement gap as the dependent variable. Bars represent the 95% confidence interval. My preferred estimate from the far part design is highlighted in black, which uses a cutoff of one-half and includes local and near controls. This specification includes US Census Region dummies as regional controls. All specifications include year fixed effects and use robust standard errors clustered at the state level.

Figure A3: Far Part Specification Curve: Rich-Poor Achievement Gap



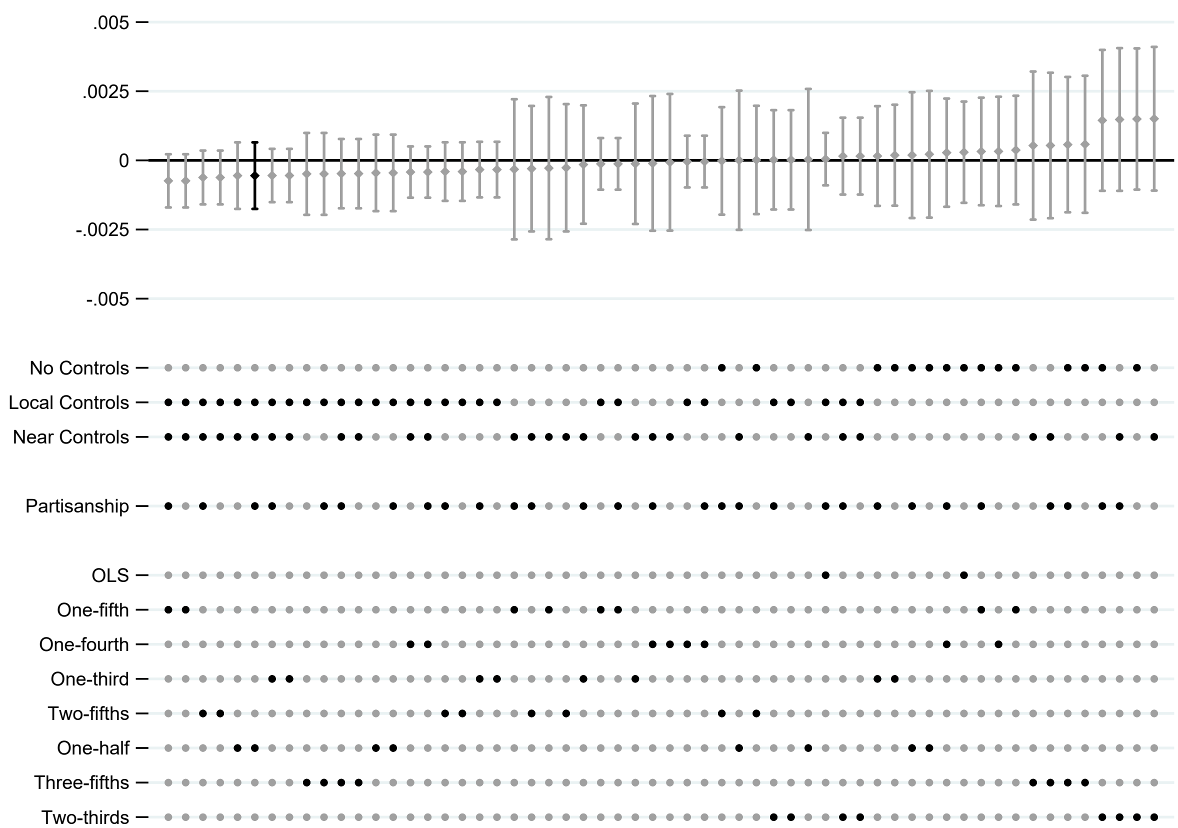
Notes: Each dot represents an estimate for a given specification of the far part design with the rich-poor achievement gap as the dependent variable. Bars represent the 95% confidence interval. My preferred estimate from the far part design is highlighted in black, which uses a cutoff of one-half and includes local and near controls. This specification includes US Census Region dummies as regional controls. All specifications include year fixed effects and use robust standard errors clustered at the state level.

Figure A4: Border County Specification Curve: White-Black Achievement Gap



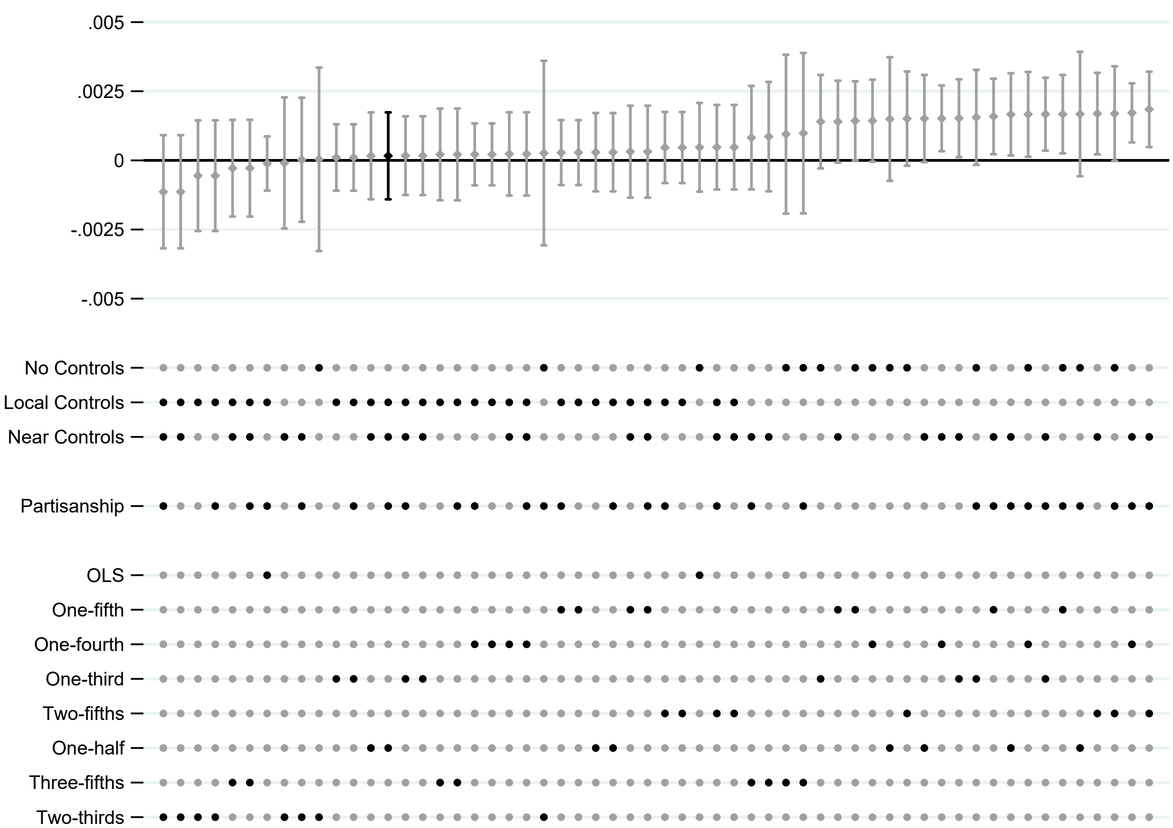
Notes: Each dot represents an estimate for a given specification of the border county design, using the White-Black achievement gap as the dependent variable. Bars represent the 95% confidence interval. My preferred estimate is highlighted in black, which includes differences in local and near characteristics, the difference in local partisanship, and instruments the difference in rest of state partisanship with the difference in far half partisanship. All specifications include year by US Census Region fixed effects and use robust standard errors clustered at the state level.

Figure A5: Border County Specification Curve: Male-Female Achievement Gap



Notes: Each dot represents an estimate for a given specification of the border county design, using the male-female achievement gap as the dependent variable. Bars represent the 95% confidence interval. My preferred estimate is highlighted in black, which includes differences in local and near characteristics, the difference in local partisanship, and instruments the difference in rest of state partisanship with the difference in far half partisanship. All specifications include year by US Census Region fixed effects and use robust standard errors clustered at the state level.

Figure A6: Border County Specification Curve: Rich-Poor Achievement Gap



Notes: Each dot represents an estimate for a given specification of the border county design, using the rich-poor achievement gap as the dependent variable. Bars represent the 95% confidence interval. My preferred estimate is highlighted in black, which includes differences in local and near characteristics, the difference in local partisanship, and instruments the difference in rest of state partisanship with the difference in far half partisanship. All specifications include year by US Census Region fixed effects and use robust standard errors clustered at the state level.

Table A1: Border County Results By Group

	(1) OLS No Controls	(2) OLS Controls	(3) IV No Controls	(4) IV Controls
White	-0.0015	0.0005	-0.0015	-0.0003
	(0.0029)	(0.0008)	(0.0039)	(0.0012)
Obs	5617	5090	5617	4860
Stage 1 F Stat.			117	189
Controls	N	Y	N	Y
Black	-0.0048	0.0013	-0.0134**	-0.0052
	(0.0039)	(0.0028)	(0.0052)	(0.0042)
Obs	1980	1803	1981	1687
Stage 1 F Stat.			114	264
Controls	N	Y	N	Y
Hispanic	-0.0014	0.0002	-0.0045	0.0031
	(0.0025)	(0.0016)	(0.0032)	(0.0019)
Obs	2013	1811	2013	1654
Stage 1 F Stat.			152	270
Controls	N	Y	N	Y
Male	-0.0020	0.0004	-0.0029	-0.0002
	(0.0034)	(0.0008)	(0.0045)	(0.0012)
Obs	5663	5165	5663	4935
Stage 1 F Stat.			119	193
Controls	N	Y	N	Y
Female	-0.0021	0.0003	-0.0030	0.0001
	(0.0027)	(0.0007)	(0.0035)	(0.0010)
Obs	5606	5114	5606	4887
Stage 1 F Stat.			116	174
Controls	N	Y	N	Y
Poor	-0.0021	0.0006	-0.0029	-0.0004
	(0.0026)	(0.0008)	(0.0030)	(0.0012)
Obs	5700	5173	5700	4932
Stage 1 F Stat.			120	148
Controls	N	Y	N	Y
Rich	-0.0013	0.0007	-0.0015	-0.0001
	(0.0022)	(0.0007)	(0.0029)	(0.0011)
Obs	5256	4781	5256	4548
Stage 1 F Stat.			114	174
Controls	N	Y	N	Y

Notes: The dependent variable in all columns indicated by the row title. Rich and Poor refer to whether or not a student is labeled as economically disadvantaged. I define rest of state partisanship as state partisanship excluding a particular county. I define the differences of all variables as the variable in the more Republican (redder) minus the variable in the less Republican (bluer) county based on the percentage of votes for the Republican candidate in the most recent presidential election. Column 1 represents results from estimating the baseline border county design. Column 2 adds controls for the difference in local partisanship and for differences in local covariates. Column 3 represents results from instrumenting the difference in rest of state partisanship with the difference in far half partisanship, controlling for the difference in near half partisanship (and no other controls). My preferred estimate may be found in column 4. In Column 4 I estimate Column 3 with controls for differences in local and near-half characteristics. Columns 2 and 4 include year fixed effects. First-stage F statistic is common for all outcome variables and reported as First-stage F-stat. $p < 0.1^{*} p < 0.05^{**} p < 0.01^{***}$.

Table A2: Border County Results By Grade

	OLS: Controls		IV: Controls	
	(1) Grades 3-5	(2) Grades 6-8	(3) Grades 3-5	(4) Grades 6-8
Overall Achievement	0.0005	-0.0001	-0.0004	-0.0005
	(0.0009)	(0.0007)	(0.0014)	(0.0009)
Obs	3065	2994	2928	2868
Stage 1 F Stat.			183	175
White-Black Achievement Gap	0.0010	0.0014	0.0055	0.0024
	(0.0021)	(0.0021)	(0.0034)	(0.0034)
Obs	895	918	838	856
Stage 1 F Stat.			137	131
Male-Female Achievement Gap	-0.0005	-0.0000	-0.0010	-0.0011
	(0.0005)	(0.0007)	(0.0006)	(0.0007)
Obs	2853	2789	2731	2674
Stage 1 F Stat.			162	159
Rich-Poor Achievement Gap	-0.0006	0.0005	-0.0008	0.0011
	(0.0009)	(0.0006)	(0.0010)	(0.0010)
Obs	2614	2583	2484	2461
Stage 1 F Stat.			114	106
White Achievement	0.0001	-0.0001	-0.0006	-0.0012
	(0.0009)	(0.0008)	(0.0015)	(0.0010)
Obs	2880	2820	2761	2702
Stage 1 F Stat.			183	179
Black Achievement	0.0008	-0.0005	-0.0009	-0.0004
	(0.0011)	(0.0008)	(0.0016)	(0.0009)
Obs	2943	2858	2809	2735
Stage 1 F Stat.			140	136
Male Achievement	0.0003	0.0002	-0.0006	-0.0005
	(0.0011)	(0.0010)	(0.0015)	(0.0010)
Obs	2916	2862	2793	2744
Stage 1 F Stat.			179	180
Female Achievement	0.0006	-0.0001	0.0001	0.0002
	(0.0010)	(0.0007)	(0.0015)	(0.0009)
Obs	2906	2846	2784	2730
Stage 1 F Stat.			158	155
Rich Achievement	0.0002	0.0001	-0.0008	-0.0006
	(0.0010)	(0.0008)	(0.0013)	(0.0010)
Obs	2680	2670	2549	2547
Stage 1 F Stat.			167	165
Female Achievement	0.0008	-0.0005	-0.0009	-0.0004
	(0.0011)	(0.0008)	(0.0016)	(0.0009)
Obs	2943	2858	2809	2735
Stage 1 F Stat.			140	136

Notes: The dependent variable in all columns indicated by the row title. Columns 1 and 3 report results for elementary-school students (grades 3-5) and columns 2 and 4 report results for middle-school students (grades 3-8). Rich and Poor refer to whether or not a student is labeled as economically disadvantaged. I define rest of state partisanship as state partisanship excluding a particular county. I define the differences of all variables as the variable in the more Republican (redder) minus the variable in the less Republican (bluer) county based on the percentage of votes for the Republican candidate in the most recent presidential election. Columns 2 and 3 include controls for the difference in local partisanship and for differences in local covariates. Columns 3 and 4 represent results from instrumenting the difference in rest of state partisanship with the difference in far half partisanship, controlling for the difference in near half partisanship. Columns 3 and 4 include controls for local and near-half characteristics. All columns include year fixed effects. First-stage F statistic is common for all outcome variables and reported as First-stage F-stat. $p < 0.1^{*} p < 0.05^{**} p < 0.01^{***}$.

Table A3: Border County Results By Subject

	OLS: Controls		IV: Controls	
	(1)	(2)	(3)	(4)
	Math	Reading	Math	Reading
Overall Achievement	-0.0007	-0.0002	-0.0007	-0.0008
	(0.0009)	(0.0006)	(0.0012)	(0.0010)
Obs	4691	4636	4439	4375
Stage 1 F Stat.			356	369
White-Black Achievement Gap	-0.0003	0.0007	0.0019	0.0038
	(0.0018)	(0.0017)	(0.0029)	(0.0026)
Obs	1538	1454	1410	1307
Stage 1 F Stat.			261	240
Male-Female Achievement Gap	0.0007	-0.0002	-0.0002	-0.0009
	(0.0004)	(0.0006)	(0.0006)	(0.0009)
Obs	4357	4320	4126	4073
Stage 1 F Stat.			283	304
Rich-Poor Achievement Gap	-0.0014*	-0.0009	-0.0005	0.0005
	(0.0006)	(0.0005)	(0.0007)	(0.0007)
Obs	4024	3948	3786	3703
Stage 1 F Stat.			213	233
White Achievement	-0.0008	-0.0003	-0.0014	-0.0005
	(0.0009)	(0.0007)	(0.0011)	(0.0009)
Obs	4397	4347	4168	4093
Stage 1 F Stat.			396	395
Black Achievement	-0.0005	0.0001	-0.0012	-0.0013
	(0.0012)	(0.0007)	(0.0015)	(0.0010)
Obs	4509	4455	4258	4200
Stage 1 F Stat.			263	273
Male Achievement	-0.0003	-0.0002	-0.0011	-0.0011
	(0.0010)	(0.0008)	(0.0014)	(0.0011)
Obs	4455	4446	4222	4192
Stage 1 F Stat.			352	366
Female Achievement	-0.0008	-0.0003	-0.0006	-0.0008
	(0.0011)	(0.0007)	(0.0012)	(0.0012)
Obs	4430	4391	4199	4143
Stage 1 F Stat.			303	313
Rich Achievement	-0.0016	-0.0007	-0.0019	-0.0006
	(0.0011)	(0.0007)	(0.0014)	(0.0009)
Obs	4127	4033	3887	3783
Stage 1 F Stat.			325	349
Female Achievement	-0.0005	0.0001	-0.0012	-0.0013
	(0.0012)	(0.0007)	(0.0015)	(0.0010)
Obs	4509	4455	4258	4200
Stage 1 F Stat.			263	273

Notes: The dependent variable in all columns indicated by the row title. Columns 1 and 3 report results for math scores and columns 2 and 4 report results for reading scores. Rich and Poor refer to whether or not a student is labeled as economically disadvantaged. I define rest of state partisanship as state partisanship excluding a particular county. I define the differences of all variables as the variable in the more Republican (redder) minus the variable in the less Republican (bluer) county based on the percentage of votes for the Republican candidate in the most recent presidential election. Columns 2 and 3 include controls for the difference in local partisanship and for differences in local covariates. Columns 3 and 4 represent results from instrumenting the difference in rest of state partisanship with the difference in far half partisanship, controlling for the difference in near half partisanship. Columns 3 and 4 include controls for local and near-half characteristics. First-stage F statistic is common for all outcome variables and reported as First-stage F-stat. $p < 0.1^{*} p < 0.05^{**} p < 0.01^{***}$.

A.1 Robustness of Far Half Results to Particular States

I show my results are not sensitive to or driven by particular states along with respective first-stage F-statistics. In Table A4 below, I show my preferred far half specification in Column 1 for each outcome variable. The preferred specification instruments state partisanship with partisanship in the far half of the state, controlling for partisanship in the near half of the state. I include the same set of controls as Panel B of Table 5, including US Census Region dummies. I then separately remove different sets of states which may be driving my results. First, I remove the largest states which may be overrepresented in my sample due to population or the number of counties. In Column 2, I exclude the 5 largest states (based on the 2020 US Census) of California, Texas, New York, Florida, and Pennsylvania. In Column 3, I exclude the 5 largest states based on land area (Texas, California, Montana, New Mexico, and Arizona). I exclude the 5 states with the greatest number of counties (Texas, Georgia, Virginia, Kentucky, and Missouri). Finally, I also account for the possibility that the states with the fewest counties could be driving the null result. I therefore exclude the 5 states with the least number of counties (Delaware, Rhode Island, Connecticut, New Hampshire, and Vermont) in Column 5. My results do not differ significantly across these specifications for any outcome.

Table A4: Far Part Results: Geographical Robustness

	(1) Initial Results	(2) Top 5 Pop.	(3) Top 5 Area	(4) Top 5 Num Counties	(5) Bot 5 Num Counties
Overall Achievement	0.0019	0.0009	0.0000	0.0028	0.0020
	(0.0022)	(0.0022)	(0.0023)	(0.0025)	(0.0022)
Stage 1 F Stat.	326	238	289	230	317
White-Black Achievement Gap	0.0006	0.0015	0.0011	-0.0024	0.0006
	(0.0020)	(0.0024)	(0.0021)	(0.0025)	(0.0021)
Stage 1 F Stat.	499	396	608	363	481
Male-Female Achievement Gap	0.0002	0.0008	0.0003	0.0010	0.0002
	(0.0010)	(0.0009)	(0.0010)	(0.0011)	(0.0010)
Stage 1 F Stat.	305	214	264	200	300
Rich-Poor Achievement Gap	0.0002	-0.0002	0.0003	-0.0007	-0.0007
	(0.0009)	(0.0010)	(0.0009)	(0.0009)	(0.0009)
Stage 1 F Stat.	289	210	252	204	204

Notes: The dependent variable is indicated by the row title. The column title indicates which states are excluded from the analysis. Column 1 represents the baseline results using all states. Column 2 excludes the 5 largest states by population according to the 2020 US Census (California, Texas, New York, Florida, and Pennsylvania). Column 3 excludes the 5 largest states by land area (Texas, California, Montana, New Mexico, and Arizona). Column 4 excludes the 5 states with the greatest number of counties (Texas, Georgia, Virginia, Kentucky, and Missouri). Column 5 excludes the 5 states with the least number of counties (Delaware, Rhode Island, Connecticut, New Hampshire, and Vermont). First Stage F-statistic included for each regression. Controls include a cubic control for own-county partisanship, quadratic controls for own-county racial shares of Whites, Blacks, Asians, and Hispanics, and quadratic controls for the average of the dependent variable for counties sending and receiving migrants to a given county and Facebook-connected counties. Controls also include own-county racial shares interacted with (i) sending counties' average racial shares (ii) receiving counties' average racial shares and (iii) Facebook-connected counties' average racial shares, in addition to controlling for urbanicity. All columns include year fixed effects and US Census Region fixed effects. All regressions instrument state partisanship using partisanship in the half of the state controlling for the other half of the state. We divide the rest of the counties within the same state as a given county based on the distance between county centroids, with the half of counties furthest from a given county defined as the far half of the state, and the remaining counties defined as the near half of the state. In the case of an odd number of rest of state counties, the near half of the state has one more county than the far half of the state. Cluster-robust standard errors at the state level are reported in parentheses. $p < 0.1^{*} p < 0.05^{**} p < 0.01^{***}$.

A.2 Border County Robustness: Balance Tests

I empirically test the robustness of my border county design (and combined far part border county design) using a balance test similar to the one I conduct for the far part design in Section 4.2.2. Specifically, I estimate the border county designs above in which I replace the difference in achievement outcomes (ΔY_{bt}) with differences in the same demographic variables I used for the far part balance test. Here the key variable for the validity of the border county design is whether the estimated correlation between differences in local partisanship and differences in state partisanship.

For the purpose of the balance test I alter the definition of sending, receiving, and facebook-connected counties. I exclude connected counties within the same state as either border county. As an example, consider a New York-Pennsylvania border-county pair. When calculating demographics of sending, receiving, and facebook-connected counties for the New York county, I exclude all in Pennsylvania (in addition to other counties in New York).

I report results for the border county design in Appendix Table A5. Local partisanship is balanced across all potential cutoffs, confirming the validity of the far part instrument within border-county pairs. The balance test passes for all other local characteristics (except for percentage white, similar to in the far part balance test presented in Table 4). I observe a failure of balance in select connected-county variables (e.g., the rich-poor achievement gap in sending and receiving counties). This failure of balance provides additional justification for including these connected-county variables in my preferred specifications.

Table A5: Border County Balance Test Results

	(1) OLS	(2) 1/5	(3) 1/4	(4) 1/3	(5) 2/5	(6) 1/2	(7) 3/5	(8) 2/3
Local Partisanship	0.0835*	0.0500	0.0469	0.0240	0.0378	0.0212	-0.0145	0.0387
	(0.0309)	(0.0367)	(0.0367)	(0.0381)	(0.0358)	(0.0439)	(0.0524)	(0.0571)
Obs	6755	6721	6721	6754	6754	6754	6754	6721
Percentage Urban	0.2518	0.2734	0.2968*	0.2181	0.2151	0.2319	0.1718	0.1432
	(0.1572)	(0.1494)	(0.1451)	(0.1695)	(0.1667)	(0.2048)	(0.2410)	(0.2585)
Obs	6743	6710	6710	6743	6743	6743	6743	6710
Percentage Suburban	0.0144	0.1851*	0.2378*	0.2984**	0.2580*	0.1915	0.1562	0.0346
	(0.1005)	(0.0891)	(0.0960)	(0.1147)	(0.1278)	(0.1784)	(0.1894)	(0.2492)
Obs	6743	6710	6710	6743	6743	6743	6743	6710
Percentage White	-0.0609	-0.1436	-0.1678	-0.2250*	-0.2205*	-0.3712*	-0.4325*	-0.3766*
	(0.0771)	(0.0908)	(0.0933)	(0.1109)	(0.1098)	(0.1562)	(0.1923)	(0.1826)
Obs	6741	6708	6708	6741	6741	6741	6741	6708
Percentage Black	0.0479	0.0245	0.0413	0.0309	0.0393	0.0671	0.0524	0.0427
	(0.0560)	(0.0556)	(0.0493)	(0.0537)	(0.0638)	(0.0850)	(0.1043)	(0.1163)
Obs	6741	6708	6708	6741	6741	6741	6741	6708
Percentage Hispanic	-0.0701	-0.0179	-0.0157	0.0300	0.0310	0.0675	0.0535	0.0713
	(0.0639)	(0.0636)	(0.0659)	(0.0695)	(0.0711)	(0.0856)	(0.0994)	(0.1116)
Obs	6741	6708	6708	6741	6741	6741	6741	6708
Percentage Asian	0.0062	0.0193	0.0145	0.0222	0.0157	0.0120	0.0081	-0.0035
	(0.0103)	(0.0115)	(0.0104)	(0.0116)	(0.0119)	(0.0156)	(0.0165)	(0.0176)
Obs	6741	6708	6708	6741	6741	6741	6741	6708
Percentage Free Reduced Lunch	0.0364	0.0142	0.0373	0.0517	0.0838	0.1589	0.2152	0.2373
	(0.0937)	(0.1070)	(0.1139)	(0.1317)	(0.1365)	(0.1698)	(0.2090)	(0.2299)
Obs	6741	6708	6708	6741	6741	6741	6741	6708
Percentage English Language Learner	0.0212	0.0374	0.0286	0.0469	0.0334	0.0323	0.0227	-0.0142
	(0.0271)	(0.0335)	(0.0339)	(0.0334)	(0.0322)	(0.0358)	(0.0360)	(0.0345)
Obs	6743	6710	6710	6743	6743	6743	6743	6710
Socioeconomic Status	-0.0017	0.0006	-0.0005	-0.0011	-0.0012	-0.0030	-0.0027	-0.0014
	(0.0043)	(0.0048)	(0.0048)	(0.0054)	(0.0055)	(0.0068)	(0.0079)	(0.0085)
Obs	6130	6100	6100	6130	6130	6130	6130	6100
Overall Achievement: Sending Counties	-0.0003	-0.0004	-0.0001	-0.0002	-0.0003	-0.0006	-0.0009	-0.0009
	(0.0007)	(0.0007)	(0.0008)	(0.0009)	(0.0009)	(0.0010)	(0.0011)	(0.0011)
Obs	6743	6710	6710	6743	6743	6743	6743	6710
White-Black Achievement Gap: Sending Counties	0.0005	-0.0003	-0.0007	-0.0006	-0.0008	-0.0023	-0.0029	-0.0037
	(0.0015)	(0.0016)	(0.0017)	(0.0017)	(0.0017)	(0.0017)	(0.0017)	(0.0020)
Obs	6743	6710	6710	6743	6743	6743	6743	6710
Male-Female Achievement Gap: Sending Counties	-0.0000	-0.0001	-0.0001	-0.0001	0.0001	0.0000	-0.0001	-0.0002
	(0.0003)	(0.0004)	(0.0004)	(0.0004)	(0.0004)	(0.0005)	(0.0004)	(0.0005)
Obs	6743	6710	6710	6743	6743	6743	6743	6710
Rich-Poor Achievement Gap: Sending Counties	-0.0005	-0.0010	-0.0014	-0.0015	-0.0019*	-0.0030**	-0.0036**	-0.0045***
	(0.0007)	(0.0007)	(0.0008)	(0.0009)	(0.0009)	(0.0010)	(0.0011)	(0.0013)
Obs	6743	6710	6710	6743	6743	6743	6743	6710
Overall Achievement: Receiving Counties	0.0011	0.0012	0.0011	0.0011	0.0011	0.0006	0.0004	0.0005
	(0.0010)	(0.0011)	(0.0012)	(0.0012)	(0.0013)	(0.0015)	(0.0015)	(0.0017)
Obs	6743	6710	6710	6743	6743	6743	6743	6710
White-Black Achievement Gap: Receiving Counties	-0.0000	0.0000	-0.0002	-0.0002	-0.0003	-0.0004	-0.0004	-0.0003
	(0.0004)	(0.0005)	(0.0005)	(0.0005)	(0.0005)	(0.0006)	(0.0007)	(0.0008)
Obs	6743	6710	6710	6743	6743	6743	6743	6710
Male-Female Achievement Gap: Receiving Counties	-0.0000	-0.0001	-0.0001	-0.0000	-0.0001	-0.0002	-0.0005	-0.0009
	(0.0006)	(0.0007)	(0.0007)	(0.0007)	(0.0007)	(0.0008)	(0.0009)	(0.0009)
Obs	6743	6710	6710	6743	6743	6743	6743	6710
Rich-Poor Achievement Gap: Receiving Counties	-0.0010	-0.0009	-0.0010	-0.0012*	-0.0012*	-0.0013*	-0.0010	-0.0007
	(0.0005)	(0.0006)	(0.0005)	(0.0006)	(0.0006)	(0.0006)	(0.0007)	(0.0008)
Obs	6743	6710	6710	6743	6743	6743	6743	6710
Overall Achievement: Facebook Counties	-0.0002	-0.0004	-0.0002	-0.0004	-0.0005	-0.0009	-0.0017	-0.0018
	(0.0008)	(0.0008)	(0.0009)	(0.0009)	(0.0010)	(0.0011)	(0.0011)	(0.0011)
Obs	6743	6710	6710	6743	6743	6743	6743	6710
White-Black Achievement Gap: Facebook Counties	0.0005	-0.0001	-0.0004	-0.0002	-0.0003	-0.0012	-0.0017	-0.0018
	(0.0009)	(0.0009)	(0.0010)	(0.0011)	(0.0012)	(0.0015)	(0.0016)	(0.0018)
Obs	6743	6710	6710	6743	6743	6743	6743	6710
Male-Female Achievement Gap: Facebook Counties	-0.0003	-0.0003	-0.0003	-0.0004	-0.0002	-0.0003	-0.0005	-0.0007
	(0.0004)	(0.0004)	(0.0004)	(0.0004)	(0.0004)	(0.0005)	(0.0005)	(0.0005)
Obs	6743	6710	6710	6743	6743	6743	6743	6710
Rich-Poor Achievement Gap: Facebook Counties	0.0002	-0.0002	-0.0005	-0.0005	-0.0006	-0.0011	-0.0012	-0.0013
	(0.0007)	(0.0006)	(0.0007)	(0.0008)	(0.0008)	(0.0010)	(0.0012)	(0.0013)
Obs	6743	6710	6710	6743	6743	6743	6743	6710

Notes: Row titles represent the difference in the dependent variable within a border-county pair estimated using Equation 4. I calculate the difference in a variable as the variable in the more Republican county minus the variable in the less Republican county. I describe the covariates included in Section 2. The main independent variable is the difference in state partisanship within a border-county pair calculated using all other counties within the same state ("rest-of-state partisanship"). Column 1 reports the OLS estimate. Columns 2-8 instrument the difference in rest-of-state partisanship with the difference in partisanship of the far part of the state, controlling for difference in partisanship of the near part of the state. The column titles in columns 2-8 indicate the proportion of counties included in the near part of each state. In cases where the number of counties in the near part is not an integer I include an extra county in the near part of the state. I report clustered robust standard errors at the state level in parentheses. $p < 0.1^{*} p < 0.05^{**} p < 0.01^{***}$.