


Social Studies Textbook Effects: Evidence From Texas

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Well-informed decisions on curricular materials can be an efficient way to boost student achievement. Prior studies have employed experimental and quasi-experimental designs to investigate the effects of textbooks on mathematics achievement. This is the first study to consider textbook effects in social studies education. Within the context of a textbook adoption cycle in Texas, we use a difference-in-differences approach with district-level administrative data and estimate the effects of adopting a state-approved textbook on social studies achievement. We find no evidence of a practically meaningful adoption effect. We conclude by highlighting the need for further high-quality research in this often-overlooked school subject area.

Keywords: *achievement, curriculum, econometric analysis, quasi-experimental analysis, social studies education, textbooks*

TEXTBOOKS are considered to have a strong influence on what is taught in the classroom and students' opportunity to learn, mediating the relationship between the intended and implemented curricula (Tarr et al., 2008; Valverde et al., 2002). Scholars have documented the prevalence of social studies textbook use in recent decades (Baldi et al., 2001; Levstik, 2008), and survey data from the 2018 National Assessment of Educational Progress provides further evidence that textbook use in social studies education remains common in the United States (National Center for Education Statistics, n.d.).

Researchers have advocated for high-quality studies of social studies textbooks for decades (Levstik, 2008; Wade, 1993), but the empirically rigorous studies on textbook effects to date have focused exclusively on mathematics (Bhatt & Koedel, 2012; Bhatt et al., 2013; Koedel et al., 2017; Pellegrini et al., 2018; Slavin & Lake, 2008; Slavin et al., 2009). Certainly, mathematics test scores are predictive of a range of desired proximal and distal student outcomes (Goldhaber & Özek, 2019). However, beyond the value of fostering this crucial knowledge in its own right, improving knowledge in history and politics is also thought

to have additional, unique civic returns by promoting internal political efficacy and civic engagement (Barton & Levstik, 2004; Delli Carpini & Keeter, 1996; Galston, 2001; Krampen, 2000). Yet, U.S. students' knowledge and skills in social studies and its underlying disciplines are perennially low, both generally and relative to other school subjects such as mathematics and reading (Delli Carpini & Keeter, 1996; Galston, 2001; National Center for Education Statistics, n.d.; Niemi, 2012; Ravitch & Finn, 1988). Fortunately, social studies and civic education have received renewed interest in the past year, as U.S. news media, philanthropies, and prominent public officials (e.g., U.S. Supreme Court Chief Justice John Roberts) have called for increased attention to and improvement of civic education (Sawchuk, 2019, 2020; Walsh, 2019). Given the current attention to civics and social studies, the potential benefits of well-informed textbook decisions for student achievement (Chingos & Whitehurst, 2012; Kirst, 1982), and the lack of empirical evidence regarding the effects of these frequently used curricular resources in the context of social studies education, studying the effects of social studies textbooks in practice is an important line of inquiry.



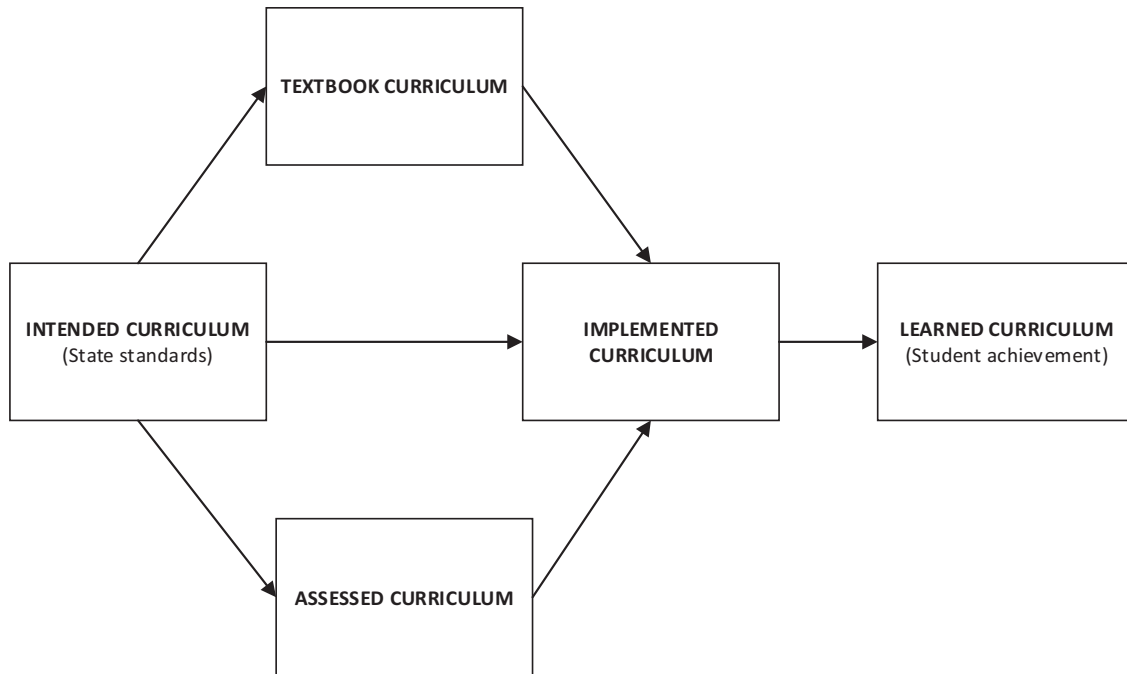


FIGURE 1. *Components of curriculum and the role of the textbook.*

Our study is the first to estimate the effect of social studies textbooks on student achievement. We do so by employing a difference-in-differences approach using district-level panel data in the context of a statewide textbook adoption cycle in Texas. We estimate the effect of districts adopting a state-approved textbook (i.e., a textbook specifically rated as aligned to state standards), relative to an appropriate comparison group (i.e., districts that did not adopt a state-approved textbook) on district-aggregated student achievement in Grade 8 social studies. Whereas prior studies in mathematics focused on the differential effects between specific textbooks (often between adopted textbooks in adoption states), our findings have implications for whether textbook adoption itself (i.e., the state designating which specific textbooks or curricular materials are approved) versus autonomy in choice of curricular materials at the local level is beneficial for student achievement. To our knowledge, no prior study has investigated this in any school subject, and 23 U.S. states and territories (including the three most populous states) finance textbook purchases in this way. We expected that adopting these theoretically more aligned textbooks (vs. not) would lead to a statistically and practically significant, positive effect on student achievement.

Conceptual Framework

As has been noted in prior scholarly writing, “curriculum” is a term used in a variety of ways in research, policy, and practice (Tarr et al., 2008). For purposes of clarity and specificity, we adapted a conceptual model used in prior

research on mathematics textbooks (Tarr et al., 2008), which is displayed in Figure 1. The terminology closely follows prior research on opportunity to learn (see Schmidt & Maier, 2009).

The conceptual model in Figure 1 depicts the relationships between different components of curriculum and the role of the textbook. The intended curriculum is the curricular framework or set of standards developed at the local, state, or national level. The implemented curriculum (also referred to as the enacted curriculum) is what is taught in the classroom. The learned curriculum (also referred to as the achieved curriculum) is what the student learns, typically measured by a standardized achievement test. Two components, in particular, mediate the relationship between the intended curriculum and implemented curriculum: the textbook curriculum and the assessed curriculum. Indeed, different textbooks can have varying content coverage, alignment, depth, and flow (Polikoff, 2015; Schmidt & McKnight, 2012), and evidence from mathematics education suggests that variation in the content of instruction affects student achievement (see Schmidt & Maier, 2009).

Current State of Empirical Research

Social studies textbook research has focused on a variety of topics. Most of this literature is concerned with content analysis (Beck et al., 1989; Bromley et al., 2011; Faas, 2011; Marino, 2011; Meyer et al., 2010; Wade, 1993) in addition to comprehensibility (Beck & McKeown, 1991; Beck et al., 1991). However, no prior experimental or quasi-experimental

study focused on the effects of social studies textbooks on student achievement.¹

To our knowledge, all prior empirical studies on the effects of textbooks on student learning focused on the differential effects of mathematics textbooks. Several recent reviews included studies of mathematics textbook effects in elementary and secondary grades (Pellegrini et al., 2018; Slavin & Lake, 2008; Slavin et al., 2009). Inclusion criteria similar across each review were as follows: the study (a) compared a given mathematics program with control classes (those using an alternative program or business as usual), (b) used random assignment or matching with appropriate adjustments for pretest differences, and (c) had a minimum treatment duration of at least 12 weeks. Across these three reviews, the authors argued that there was a lack of evidence that textbooks mattered in terms of the impacts on student achievement. In the updated review of Slavin and Lake (2008), the mean effect size regarding comparisons of elementary textbooks was 0.06 (Pellegrini et al., 2018). At the middle and high school levels, the mean effect size was 0.03 (Slavin et al., 2009). To be clear, all mention of effect sizes in this section are based on student-level distributions of test scores.

Several quasi-experimental studies either have since been published or could have been included in the above reviews focused on the elementary level. For instance, Koedel et al. (2017) investigated potential differential effects of four different elementary mathematics textbooks in the context of a statewide textbook adoption cycle in California. To do so, the authors applied three different empirical strategies: (a) kernel matching, (b) restricted ordinary least squares regression, and (c) remnant-based residualized matching, with schools as the units of analysis. Comparing the most frequently adopted textbook (California Math) to a composite of the three others, the authors found California Math led to statistically significantly higher math achievement for Grade 3 students by about 0.05 to 0.08 of a standard deviation (*SD*). These effects persisted to Grades 4 and 5 and were larger for low-income students. Similar findings using similar methods were also found in the contexts of Indiana (Bhatt & Koedel, 2012) and Florida (Bhatt et al., 2013). The sizes of the effects in Bhatt and Koedel (2012), Bhatt et al. (2013), and Koedel et al. (2017) were not very different from the sizes of the effects in the studies reviewed by Pellegrini et al. (2018), Slavin and Lake (2008), and Slavin et al. (2009). A major difference is how the two groups of authors interpreted the findings. Citing Chingos and Whitehurst (2012), the former focused on the minimal marginal cost of choosing one textbook versus another in practice (i.e., district- or school-level decisions) and determined the size of the effects to be educationally meaningful. The latter group of authors argued that the costs in research and development of reform-oriented mathematics textbooks in past decades had exceeded the benefits (see Slavin & Lake, 2008).

The most recent study on the topic of mathematics textbook effects was also the most unique in terms of scope and method. Blazar et al. (2020) used a school value-added approach with a random sample of schools in each of six states in the United States during the era of the Common Core State Standards (CCSS). No prior study had used a school value-added approach, no prior study had the ability to generalize findings across such a wide geographic area in the United States, and this study was the first to focus on the CCSS era. The authors reported that there was little evidence of systematic differences in achievement growth for schools using different mathematics textbooks. Furthermore, the authors did not find differences in textbook effects in schools where teachers reported higher levels of textbook use or textbook-specific professional development. One interpretation they offer is that in the pre-CCSS era, there may have been more variation in the alignment between textbooks and specific mathematics assessments.

Although there is increasing high-quality evidence on the effects of mathematics textbooks in the United States (albeit with mixed findings), no research exists on this topic outside mathematics education. As highlighted above, mathematics achievement is an important focal outcome, but achievement in social studies and its underlying disciplines is uniquely important for fostering civic attitudes and engagement (Barton & Levstik, 2004; Delli Carpini & Keeter, 1996; Galston, 2001; Krampen, 2000). Focusing resources toward evaluating the effects of social studies textbooks is a crucial step in understanding the impacts of curriculum in this important school subject. Furthermore, no prior study has focused specifically on the differentiation of adopting a state-approved textbook versus not, which is an issue of importance for policy makers given their close involvement with the process in adoption states. Our study begins to fill these gaps.

Social Studies Textbook Adoption in Texas

The Texas Essential Knowledge and Skills (TEKS) are the state curricular standards for all public schools in all subjects and grade levels (K–12). For social studies, the standards at the elementary level take an expanding horizons approach (beginning at the most local level and expanding more broadly), a common approach across the United States (Halvorsen, 2013). Elementary social studies TEKS conclude with courses focused on Texas history in Grade 4 and U.S. history (1565 to the present) in Grade 5. At the middle-grade level, students study people, places, and societies of the contemporary world in Grade 6, Texas history (precolonial to the present) in Grade 7, and the history of the United States from the early colonial period through reconstruction in Grade 8. Although some grade levels place a heavier emphasis on geography or history, for example, each grade level also incorporates the other underlying disciplines

within social studies (history, civics/government, geography, economics, etc.). In high school, the typical sequence is world geography in Grade 9, world history in Grade 10, U.S. history (1877 to present) in Grade 11, and half-year courses in (a) U.S. government and (b) economics with emphasis on the free enterprise system and its benefits. Advanced Placement (AP) and pre-AP courses are also available at many schools.

In 2013, 30 states allowed districts and schools to freely select textbooks and curricular materials at the local level, and 20 states were adoption states. Adoption states typically have advisory state adoptions where school districts and schools select among textbooks approved at the state level, with some flexibility with purchasing off-list curricular materials (Scudella, 2013). Texas is one of the adoption states, where the State Board of Education releases an adoption bulletin including approved textbooks and associated materials (reporting the percentage of TEKS standards covered by the textbook) for guidance. Texas districts do have some freedom with which textbook they would like to use (Texas Education Agency, 2011), but most districts select one of the approved textbooks. We refer to those who select an approved textbook as adopters and those who do not as nonadopters.

Specific to the adoption cycle in this study, the adoption bulletin was released to all Texas districts in November 2014, about 3 years after the state had already begun implementing the new state social studies standards in 2011. Texas districts (i.e., those that chose to do so) began purchasing approved social studies textbooks listed on this adoption bulletin (a choice of five different publishers) in the summer of 2015, to begin using during the 2015–2016 academic year. We leverage the fact that the intended curriculum (state standards) and assessed curriculum remained constant across the years of our panel (both before and after textbook adoption) with the only change being a sudden differentiation in textbooks in the 2015–2016 academic year. In other words, no district was using a state-approved textbook between the 2011–2012 and 2014–2015 school years because such textbooks did not yet exist. Beginning in 2015–2016, some districts began using a state-approved textbook (adopters; the treatment group) and others did not (nonadopters; the comparison group). Those did not (the nonadopters), never adopted an approved textbook during the years of our study. To be clear, after substantial updates to the state standards, all new state-approved textbooks were produced specifically for the newly implemented standards and are not merely new versions of an older textbook.

Data

To identify the analytic sample of districts to be included in the study, we procured textbook adoption data from the Public Information Office of the Texas Education Agency.

These data included all textbook purchases by Texas districts from the 2011–2012 to 2018–2019 school years in all grades and subjects. Variables included titles, transaction dates, district, publisher, subject area, grade, quantity, unit price, and total cost.

Texas currently administers social studies assessments in Grade 8 and once in high school (typically Grade 11). Prior to the start of the study, we chose not to focus on high school due to the tracking of students to Advanced Placement (AP) courses and our analyses being conducted at the district level (i.e., for high school U.S. history, AP students follow a different curriculum and use a different textbook than students in the standard course but still take the same state test, in addition to the AP test).

After restricting the sample to Grade 8 social studies textbook purchases, we identified adopters (districts that purchased a state-approved textbook) and nonadopters (districts that never purchased one of the state-approved textbooks during the years of our panel). Adopters needed to have purchased a state-approved textbook before the start of the 2015–2016 academic year (the first school year using the new textbooks). Nonadopters are districts that chose not to adopt a state-approved textbook (and never did during the years of our sample). If we were unable to identify with certainty whether a district was an adopter or nonadopter, the district was not included in our sample. Last, some districts were dropped due to issues with duplicate district IDs.² Our analytic sample includes 598 school districts, which is equal to approximately 50% of the districts in Texas, on par with sample loss from prior textbook research.

We linked the analytic sample of districts with Grade 8 social studies test scores from the 2011–2012 to 2018–2019 school years. The State of Texas Assessments of Academic Readiness Standards (STAAR) social studies assessments are administered each spring and used for state accountability purposes. Test items were developed by content specialists at the Texas Education Agency. The multiple-choice assessment included items on U.S. history; geography and culture; government and citizenship; and economics, science, technology, and society. The assessment (and course), however, was weighted toward U.S. history. As mentioned above, the U.S. historical context for the Grade 8 course is focused on the early colonial period through reconstruction. Internal consistencies for the assessments were high with KR–20 alpha at .90 or above in each year of our panel. We z-standardized achievement by year (using the distribution of scores at the district level), due to changes in numbers of items across years and to handle additional year-to-year idiosyncrasies in the assessment.

Additional covariate data come from the Common Core of Data at the National Center for Education Statistics. We included district-level information on the percentage of students receiving free or reduced-price lunch, the racial/ethnic makeup of the district, the percentage of English language

TABLE 1
Observed Characteristics of Adopter and Nonadopter Districts

Characteristic	Full sample	Adopters	Nonadopters
% Black	8.567	7.978	9.688
% Hispanic	42.757	44.373	39.682
% ELL	9.698	10.157	8.827
% FRPL	59.481	60.679	57.199
Pupil–teacher ratio	13.161	13.138	13.206
Total enrollment/100	52.671	67.596	24.271
% Charter	10.491	5.147	20.659
<i>n</i> (districts)	598	392	206

Note. Statistics are combined over 100 multiply imputed data sets. Black = Black, not Hispanic; ELL = English language learner; FRPL = free or reduced-price lunch.

learners, the total student enrollment, the pupil–teacher ratio, and the percentage of charter schools within a district.

Our panel includes all districts identified as either adopters or nonadopters, according to the definitions outlined above, where either covariate or outcome data were available. We then utilized multiple imputation, considering all variables used in our study, to maintain a strongly balanced panel and the maximum number of districts. Although listwise deletion is still the conventional approach in social science research, most methodologists agree that multiple imputation and full information maximum likelihood estimation are far more effective at handling missing data than traditional approaches such as listwise or pairwise deletion (Allison, 2001; Enders, 2010; Graham, 2009; Little & Rubin, 2002). In this study, missingness on individual variables ranges from approximately 2% to 6%; however, by avoiding listwise deletion, we retained a significant proportion of the districts in the state and a strongly balanced panel. We employed the Markov chain Monte Carlo method in Stata 16 to multiply impute 100 data sets. All variables and interactions used in the analytic models in this study were included in the imputation model (in wide format, with one observation per district).

Table 1 displays descriptive statistics, combined appropriately (Rubin, 1987) over the 100 multiply imputed data sets. As several characteristics vary across time, we display averages across all years, with each district equally weighted given the balanced panel. Most characteristics are similar between adopter and nonadopter districts, but some descriptive differences between the groups are evident. Nonadopter districts had fewer students, on average, and included a higher proportion of charter schools than adopter districts. That districts with higher proportions of charter schools were less likely to adopt state-approved textbooks is to be expected, given the inherent flexibility that charters have with curricular decisions. Our analyses condition on these differences, in addition to further

adjustments (e.g., district fixed effects), described in the following section.

Empirical Strategy

Whereas prior studies on the effects of mathematics textbooks used various experimental and quasi-experimental designs such as randomized controlled trials, matching techniques, and value-added models, the context of the specific adoption cycle in this study was well-suited to a difference-in-differences (DD) approach (Angrist & Pischke, 2009). As mentioned previously, we exploit the fact that no Texas district was using a state-approved textbook during the first four years of statewide implementation of the new social studies standards. We then observe a differentiation in textbooks beginning in year five of our panel. Districts either began using one of the previously described state-approved textbooks (treatment group) or did not.

To answer the question of whether adopting an approved textbook had an impact on student achievement, we estimated the following model:

$$Y_{dt} = \beta_0 + \beta_1 ADOPT_{dt} + \beta_2 X_{dt} + \gamma_t + \mu_d + \varepsilon_{dt}$$

where Y_{dt} is the average student test score for district d in year t , $ADOPT_{dt}$ is a dummy variable equal to 1 for observations of district d in year t in which the district used an approved textbook (and zero otherwise; nontreated districts have zeros in all periods), β_1 describes the average causal effect of adopting one of the approved textbooks relative to not adopting any of them (difference-in-differences), X_{dt} is a vector of observed covariates varying within districts over time (those included in Table 1), γ_t represents year dummies (year effects constant across all districts), μ_d represents district fixed effects (which include district characteristics that are roughly constant over the eight year period of our study), and ε_{dt} is the error term.

TABLE 2

Effect of Adopting a State-Approved Textbook on District-Aggregated Student Achievement

Characteristic	Coefficient	SE	95% CI
Adoption effect	-0.020	0.055	[-0.127, 0.088]
% Black	-0.015	0.015	[-0.046, 0.015]
% Hispanic	-0.009	0.010	[-0.028, 0.011]
% ELL	-0.012	0.012	[-0.036, 0.013]
% FRPL	0.002	0.002	[-0.002, 0.007]
Pupil-teacher ratio	-0.039*	0.018	[-0.076, -0.003]
Total enrollment/100	-0.002	0.002	[-0.005, 0.001]
% Charter	0.009	0.011	[-0.012, 0.030]

Note. N (district-years) = 4,784. Effect sizes are based on the district-level distribution of test scores. Model includes both year effects and district fixed effects. Results are combined over 100 multiply imputed data sets. Black = Black, not Hispanic; ELL = English language learner; FRPL = free or reduced-price lunch.

* $p < .05$.

Identification is achieved by the fact that our sample includes a sufficient number of districts that do not adopt any of the approved textbooks (i.e., the availability of a non-treated comparison group), by the inclusion of important time-varying controls, and by the inclusion of year and district fixed effects. The time-variant controls we included were chosen, in part, based on recent research that investigated the processes of California district choices for mathematics textbooks (Polikoff et al., 2020), in addition to covariates that control for district compositional differences that are correlated with achievement and may have an impact on textbook choice. District fixed effects control for all time-constant unobserved differences between districts. Including district fixed effects amounts to studying the consequences of adopting an approved textbook within districts. Controlling for general time effects partials out yearly changes in achievement that are common across districts.

Additionally, we test for parallel trends by estimating the event study version of the model (Angrist & Pischke, 2009), which takes the following form:

$$Y_{dt} = \beta_0 + \sum_{\tau=0}^3 \delta_{-\tau} ADOPT_{d,t-\tau} + \sum_{\tau=1}^4 \delta_{+\tau} ADOPT_{d,t+\tau} + \beta X_{dt} + \gamma_t + \mu_d + \varepsilon_{dt}$$

There were four pretreatment years in our panel ($\tau = 1, 2, 3, 4$) and four posttreatment years ($\tau = 0, 1, 2, 3$). The coefficients $\delta_0, \delta_{-1}, \delta_{-2}$, and δ_{-3} measure the effects of adopting a state-approved textbook in the year of adoption ($\tau = 0$), one year after adoption ($\tau = 1$), two years after adoption ($\tau = 2$), and three years after adoption ($\tau = 3$), displaying the time structure of effects caused by the adoption. The coefficients δ_{+1} to δ_{+4} measure whether there was, in the years before treatment, a significant difference between districts that adopted a state-approved textbook and those that did not (violating the parallel trends assumption). Prior research

finds that differential effects between adopted math textbooks are as large in the first year as they ever are (Koedel et al., 2017), which implies no learning curve. However, our event study analysis also provides year by year evidence as to whether the effects of adopting an approved textbook were delayed.

Results

Table 2 displays the DD results. As displayed, the estimated adoption effect (i.e., comparing the difference in achievement before and after statewide adoption for districts that adopted an approved textbook vs. nonadopters) was $d = -0.020$ with a 95% confidence interval of $[-0.127, 0.088]$. Important to note, test scores were standardized based on the district-level distribution of scores, given student-level information for the districts in our sample was unavailable. In the population of Texas districts, the SD at the district level is between 20% and 30% of the SD at the student level. Therefore, any effect within the confidence interval we estimated would be quite small.

Table 3 presents the results of the event study version of the model. As is displayed in Table 3, none of the four coefficients for the adoption leads were statistically significant, providing evidence against systematic differences across treatment groups prior to treatment, albeit with larger confidence intervals. An alternative interpretation is that there was no evidence of anticipatory effects. Regarding the year of adoption and adoption lags, the coefficients were also not statistically significant, which coincides with the lack of significant effects estimated in the DD specifications.

Discussion

To our knowledge, our article provides the only evidence (in any subject area) on the effects of adopting a state-approved textbook (vs. not). Prior research focused on the

TABLE 3
Event Study Estimates

Characteristic	Coefficient	SE	95% CI
Adoption leads and lags:			
Adoption _{t+3}	-0.025	0.115	[-0.250, 0.200]
Adoption _{t+2}	-0.145	0.114	[-0.369, 0.079]
Adoption _{t+1}	0.095	0.117	[-0.135, 0.325]
Adoption _{t0}	0.223	0.173	[-0.117, 0.563]
Adoption _{t-1}	-0.072	0.081	[-0.231, 0.088]
Adoption _{t-2}	-0.062	0.083	[-0.224, 0.100]
Adoption _{t-3}	0.010	0.088	[-0.163, 0.183]
Adoption _{t-4}	0.195	0.133	[-0.065, 0.455]
% Black	-0.015	0.013	[-0.040, 0.011]
% Hispanic	-0.009	0.008	[-0.025, 0.007]
% ELL	-0.012	0.010	[-0.032, 0.009]
% FRPL	0.002	0.002	[-0.002, 0.007]
Pupil-teacher ratio	-0.040**	0.015	[-0.070, -0.010]
Total enrollment/100	-0.002	0.001	[0.005, 0.001]
% Charter	0.009	0.010	[-0.010, 0.029]

Note. *N* (district years) = 4,784. Effect sizes are based on the district-level distribution of test scores. Model includes both year effects and district fixed effects. Results are combined over 100 multiply imputed data sets. Black = Black, not Hispanic; ELL = English language learner; FRPL = free or reduced-price lunch.
***p* < .01.

differential effects between adopted mathematics textbooks (or alternatively on the effects of reform-oriented textbooks vs. business as usual) had mixed findings and conclusions (Bhatt & Koedel, 2012; Bhatt et al., 2013; Blazar et al., 2020; Koedel et al., 2017; Pellegrini et al., 2018; Slavin & Lake, 2008; Slavin et al., 2009). As mentioned above, much of the debate in the mathematics textbook effect literature centers around the interpretations of the magnitude of textbook effects and the extent that effects were systematic. While it indeed may be true that small effects are practically meaningful when considering the differential effects between adopted textbooks (i.e., a choice between textbooks that are intended to be aligned to the curriculum but with different approaches), the context of comparing adopters and non-adopters is a different scenario. Given the time and resources spent by the textbook developers, the State Board of Education, school districts, and the public on the adoption process, an average treatment effect within the confidence interval we estimated in this study would be a very small return. However, we would be remiss not to point out the controversies around the standards and the aligned textbooks (see, e.g., Kopplin, 2014). The extent that our findings generalize outside Texas is an empirical question.

Although we did not find evidence of practically meaningful effects for adopting a state-approved social studies textbook in Texas, further research is needed before having a comprehensive understanding of the influence of social studies textbooks. Beyond Texas, at least four other states collect data on textbook adoption and administer a test in

social studies (or an underlying discipline) in at least one grade: Florida, Indiana, Louisiana, and New Mexico. These states should be sites for further inquiry. In addition, future research should also focus on the effects of open-access curricular resources, which are becoming increasingly more common in recent years (e.g., iCivics or Generation Citizen). Evidence on the effects of social studies education and related school subjects is far too limited, and the field should invest more resources into understanding this crucial area.

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Notes

1. Little et al. (2007) conducted a quasi-experimental study focusing on the effects of an advanced social studies curricular intervention. However, the study was not focused on textbook effects.

2. The only ID available across all data sources was the district name. A few districts in Texas have the same name. The Texas

Education Agency also had an abbreviated district name in STAAR data sets resulting in further duplicates (e.g., various Harmony Science Academies in different cities).

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