

The Formalized Processes Districts Use to Evaluate Mathematics Textbooks

Morgan S. Polikoff*
Shauna E. Campbell
Sarah Rabovsky
University of Southern California

Cory Koedel
University of Missouri

Quynh Tien Le
Los Angeles Unified School District

Tenice Hardaway
Hovanes Gasparian
University of Southern California

*Corresponding author: polikoff@usc.edu

Abstract

Textbooks are a widely used educational intervention that can affect student achievement, and the marginal cost of choosing a more effective textbook is typically small. However, we know little about how textbooks get from the publisher to the classroom. We use a lens of institutional theory and interviews with district leaders in a stratified random sample of 34 California school districts to investigate the ways mathematics textbook adoption practices vary and predict adoption decisions. We find isomorphic, highly formalized adoption processes in most districts. However, we observe some differences along dimensions of district size, technological interest/infrastructure, and English learner concentration. We recommend states produce and update lists of high-quality materials early and often, and that they use a highly rigorous evaluation process. We also recommend states experiment with encouraging similar districts to partner on textbook evaluation and adoption to respond to district demands for information and capacity building around curricula.

Keywords: curriculum, textbooks, school districts, teachers, state policy

In recent years U.S. education scholars have called for increased study of the role of curriculum materials, such as textbooks¹, as a potential policy intervention to improve student learning (Chingos & Whitehurst, 2012; Confrey, 2006; National Research Council, 2004). Textbooks have been the primary curriculum material used by teachers since the mid-1800s, and they remain nearly universal in their reach as a policy instrument—nearly all U.S. teachers report using textbooks on at least a weekly basis (e.g., Ball & Cohen, 1996; Farr & Tulley, 1985; Opfer, et al., 2016; Reys, Reys, & Chavez, 2004), and textbooks are widely used internationally as well (Houang & Schmidt, 2008). Improving student achievement and other desired outcomes through exposure to better textbooks (and other curriculum materials) is an appealing policy intervention; several recent studies show that the choice of one textbook over another, at least in mathematics, can have meaningful effects on student achievement, though we know of no large-scale causal studies on attitudes or other desired outcomes (Agodini & Harris, 2010; Author, 2012; Author, 2017). Moreover, it is well-documented that textbooks vary broadly along other dimensions, such as content coverage, meaning that students may be exposed to different content based on the materials used in their classrooms (Schmidt & McKnight, 2012). Differences in access to high-quality curriculum materials are thought to be so important that families in California successfully filed a civil suit against the state Department of Education arguing for regulation of the quality of adopted materials across the state (*Eliezer Williams, et al., v. the State of California, et al., 2000*).

¹ This analysis focuses primarily on textbooks, which we define as any curriculum material that covers a whole year's instruction. Thus, while some districts in our sample use books that are not bound (e.g., EngageNY), we still consider these textbooks. We also sometimes use the term instructional or curriculum materials, which refers to textbooks but also to any other curriculum material a teacher might use (e.g., an individual lesson downloaded from a website).

A large body of research describes how textbooks are evaluated and selected at the state level. Another body of research focuses on the ways in which teachers implement the materials provided to them. However, there is very little research about the role of local actors, such as school districts, in the textbook adoption process (we are aware of just one paper focused on school districts by Zeringue, et al., 2010). This is a limitation of the literature because districts are generally the unit responsible for which textbooks are adopted and used by students and teachers in U.S. schools². Given districts' central role, policy efforts aimed at improving curriculum adoption decisions must understand and account for their processes. The objective of this study is to contribute to the thin literature on how districts choose curriculum materials.

Now is an especially appropriate time to study school district textbook adoptions for two reasons. First, the curriculum materials market is clearly changing. While textbooks remain prevalent, teachers are increasingly using materials such as open education resources, adaptive learning software, and digital textbooks as well (Marple, et al., 2017; Opfer, Kaufman, & Thompson, 2016). While some of these resources are selected by individual teachers, the extent to which district adoption processes constrain or support the use of these non-traditional resources is unclear. Second, curriculum materials may play an important role in supporting the implementation of the Common Core State Standards (CCSS) and other 'college- and career-readiness' standards. Standards-aligned materials such as textbooks are seen as necessary for providing teachers with consistent messages to successfully implement new standards (Smith & O'Day, 1990). The CCSS represent a shift in both content and pedagogy compared to previous sets of standards (Porter, et al., 2011), as they include both content standards (which generally

² There are some school districts where individual schools make adoption decisions; in California, as in most states, it is far more common for districts to make these decisions.

differ from prior state content standards) and “math practices,” which generally were not present in prior state content standards. We do not know the extent to which districts consider standards alignment³ in their decision-making about new curriculum materials, or whether this has become more important with the CCSS. Many state departments of education already compile lists of vetted, aligned materials, but we do not know whether districts perceive these lists to be sufficient or lacking, or the extent to which districts have their own processes they use to supplement efforts by the state in this regard.

For our study we interview 34 district leaders in California regarding textbook adoptions. We are interested in understanding the factors that drive the adoption of new materials. Understanding existing textbook adoption processes is essential to crafting policy that can result in better materials in the hands of teachers. A thorough understanding of textbook adoptions may offer leverage for identifying and ameliorating curriculum-related inequities (Author, 2013; Kurz, 2011; McDonnell, 1995; Schmidt, et al., 2001). Specifically, we address two main research questions:

- 1) How do California school districts make decisions about which textbooks to adopt in the core subjects?
- 2) How do adoption practices vary according to district size, performance level, or other descriptive variables?

We explore these questions with semi-structured interviews of school district leaders. We selected the majority of our districts using a stratified random sample based on three criteria that we expected to be associated with differences in curriculum material adoptions.

³ In this context, we refer to alignment to mean the extent to which the curriculum materials and standards are in agreement and serve in conjunction with one another to guide the system toward students learning what they are expected to know and do (Author, in press, Webb, 1997).

Using a lens of institutional theory (Meyer & Rowan, 1977), we find that districts adopt certain isomorphic processes for the selection and evaluation of curriculum materials. These processes include the use of district-specific selection criteria to narrow the field of options, the use of an evaluation rubric or toolkit, and the collection of teacher feedback, typically through the piloting of materials. However, district processes also vary in some predictable ways; the differences are primarily driven by characteristics such as the proportion of ELL students and a district's technological infrastructure. We also find that small districts cannot adopt the elaborate, formalized processes that exist in larger districts. We find little evidence that any external, objective evaluation source is consulted in most districts (e.g., just 5 of the 34 districts we interviewed considered reviews of materials from EdReports⁴ and none report being aware of or using evidence on the impact of textbooks on achievement or other student outcomes).

Our work identifies the state-approved curriculum list in California as a powerful leverage point for affecting which curriculum materials are adopted by individual districts, as districts rely heavily on the list. However, challenges we identify that impede the influence of the state list include (a) some districts lack confidence in the state vetting process, and (b) the timeline of waiting for state lists can be problematic, especially if state assessments are to be rolled out before the state list is approved. Our interviews also reveal clear interest among districts, especially smaller districts, in collaboration during the adoption process. Policy effort to help coordinate collaboration among districts that serve similar student populations and likely have similar needs would help to reduce the work burden for individual districts. It could also lead to improved adoptions by facilitating deeper reviews of the various curriculum alternatives.

⁴ EdReports is a nonprofit, grant-funded organization that provides external ratings of the alignment of textbooks to the Common Core and other standards.

Prior Literature

The Impact of Textbooks on Student Achievement

There is a great deal of attention in U.S. schools to improving student achievement and narrowing achievement gaps. Textbooks are seen as one potential intervention to accomplish these goals. There is a large and growing body of research showing that textbooks matter for student learning. One recent experimental study and several recent quasi-experimental studies demonstrate that elementary mathematics textbooks differ in their effects on student achievement. Agodini and Harris (2010) randomly assigned schools to use one of four elementary math curricula. They found achievement impacts as large as 0.17 standard deviations. Using statewide textbook adoption data, studies in Indiana (Author, 2012) and Florida (Author, 2013) have shown textbook impacts of similar magnitudes. In our own work, we have analyzed school-level textbook adoption data in California and found that a commonly adopted elementary math textbook raised student achievement by 0.05 to 0.10 standard deviations relative to three other books, and that the achievement effect persisted across at least the first four years post-adoption (Author, 2017). In that study, textbook effects also appeared to promote educational equity, as the impacts were twice as large for low-income students than those who were not. These effects are especially noteworthy because the marginal cost of choosing one textbook over another is often very low (most textbooks cost about the same amount), so the cost effectiveness of this intervention is quite high (Boser, Chingos, & Straus, 2015).

The precise reasons why textbooks differ in their effects on student learning is not known. One hypothesis is that it is differences in textbook content that matter. Researchers have found evidence that textbooks themselves do vary in their cognitive demand and alignment to the standards (Author, 2015). There is also variation in the content covered both within grade levels

and within subjects (Schmidt & McKnight, 2012). Another hypothesis is that some textbooks are easier to implement or come with more effective professional development. The evaluation performed by Agodini & Harris (2010) suggested that differences in teacher training were correlated with textbook effects, for instance. While more research is needed to understand mechanisms, it is quite clear that textbooks can affect student learning at scale. Of course it is also important to understand the degree to which textbooks and other curriculum materials affect other desired student outcomes—e.g., engagement, interest in the subject area. To our knowledge, non-test outcomes have not been evaluated in the large-scale causal literature.

Textbook effects on student achievement also have important equity implications. Differences in textbook quality were a central component in the *Eliezer Williams, et al., v. the State of California, et al.* civil case, in which the plaintiffs—over one hundred California students—argued that the state failed to provide equitable access to high-quality instructional materials. The settlement of the Williams case included allocation of additional funds for instructional materials in low-achieving schools, indicating that equitable access to high-quality materials is a matter of importance to both families and the courts.

State Textbook Adoptions

The first wave of research on curriculum materials rose in the 1980s and focused on the state-level textbook adoptions practiced in 22 states (e.g., English, 1980; Farr & Tulley, 1985; Follett, 1985; Tulley, 1985; Tyson-Bernstein, 1988). Adoption committees composed of educators and laypeople were implemented to evaluate the large numbers of textbooks available. The intention of the adoption committees was to study alignment between curriculum materials and state standards, indicating to local districts that the approved materials satisfied state

expectations. This was thought to not only ease the time and human resource burden on local districts, but also to provide consistency in the quality of materials used in districts.

Researchers studying state-level textbook adoptions at that time were critical of the process and claimed that it ‘perpetuates mediocre textbooks’ (Farr & Tulley, 1985). This work argued that textbook publishers, trying to sell their books to the largest possible number of schools, wrote material that appealed to multiple sets of (often conflicting) state standards. As a result, the content of materials was broad but not deep and was dominated by content expectations in the largest states, California and Texas (e.g., Bowler, 1978; English, 1980, Finn & Ravitch, 2004).

A second wave of textbook research arose during the implementation of standards-based reforms, particularly the No Child Left Behind Act (NCLB). Curriculum materials are seen as an important contributor to successful standards-based reforms, as teachers need materials that reinforce the standards (McLaughlin, 1990; Smith & O’Day, 1990). Some scholars have expressed concern that NCLB—and the pacing guides and scripted lessons it generated—negatively affected the quality of textbooks (Finn & Ravitch, 2004; Reys & Reys, 2006; Schmidt & McKnight, 2012). Publishers rushed to print books aligned to the new standards, but critics argued these volumes sacrificed quality to appeal to a broad market (e.g., Finn & Ravitch, 2004; Schmidt & McKnight, 2012). Furthermore, state adoption committees lacked the time to adequately evaluate materials, the training to use evaluation measures, research-based information about textbooks, and foundational knowledge of education research and pedagogy (Stein, et al., 2001).

School District Adoption Processes

As noted in the introduction, a prominent hole in the extant literature is with respect to the role of school districts in evaluating and adopting curriculum materials. We know of only one unpublished paper on this topic. Zeringue and colleagues (2010) analyzed legislative documents and interviewed over 150 K-12 district leaders in eight states. They identified four phases of a typical adoption cycle: preparing (forming committees, developing rubrics), narrowing (reviewing standards, sampling other districts), evaluating (using rubrics and piloting), and deciding (conducting a formal teacher vote or committee decision). The five factors that mattered most to district leaders in making a final decision were alignment, anticipated level of teacher buy-in, evaluation of “quality” of materials, information from additional sources such as neighboring districts, and the advocacy of curriculum leaders for a specific program.

We aim to build on the Zeringue et al. (2010) study to expand on the thin evidence base on this important topic and update the work for the present era. Many states are moving away from formal statewide textbook adoptions (Gewertz, 2015). The traditional understanding of a state adoption might be disrupted by more flexibility at the district level. Districts also have access to an unprecedented variety of curriculum resources (e.g., digital textbooks, collaborative online platforms such as Teachers Pay Teachers), and new tools and information are available to aid decision-makers in the adoption process (e.g., independent evaluations from EdReports and the What Works Clearinghouse). Finally, there is no evidence to date on district adoption processes post-CCSS. These standards reflect a different content focus and level of cognitive demand than the standards previously adopted in most states (Porter et al., 2011).

Theoretical Framework

We use a lens of institutional theory to study textbook adoptions in the context of organizational behavior and policy. Unlike market-based economic theories that describe

organizational behavior in terms of efficiency, institutional theory emphasizes the importance of the social aspects driving organizational decisions (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). In this framework, institutions can be thought of as the regulative, normative, and cultural-cognitive elements that, along with activities and resources, encourage stability and lend meaning to social life (Scott, 2014).

Institutional theory explains organizational behavior as choices based on socially evaluated institutional legitimacy. Meyer and Rowan (1977) argue that formal organizational structures arise from a desire for institutional legitimacy. Organizations (such as school districts) may adopt standard organizational structures to build legitimacy, particularly for practices that lack inherent objectivity (such as evaluating the quality of curriculum materials). The spread of these structures across organizations is a process termed “diffusion” (much in the same way diffusion refers to the spreading out of particles in, say, a glass of water). Institutions look to one another to inform their practices, creating a tendency—especially among institutions with similar characteristics—to adopt isomorphic organizational structures (i.e., structures similar in form and relation across organizations, such as the typical structure of school boards, superintendents, and assistant superintendents in U.S. school districts).

While classical work in institutional theory that explains the adoption of organizational structures as symbols of legitimacy tends to frame the diffusion of institutional processes in terms of mimicry, emphasizing the homogeneity of the resulting isomorphic structures (e.g., DiMaggio & Powell, 1983; Meyer & Rowan, 1977), more contemporary contributions to institutional theory account for some degree of heterogeneity in the diffusion of institutional processes (e.g., Boxenbaum & Johnson, 2017; Greenwood, Raynard, Kodeih, Micelotta & Lounsbury, 2011; Scott, 2014). Indeed, more recent work in institutional theory posits

isomorphism not as the outcome of diffusion, but rather as the cause of diffusion (Boxenbaum & Johnson, 2017). This conceptualization of isomorphism as a driver of diffusion helps to account for organizational responses to heterogeneity in institutional environments (Boxenbaum & Johnson, 2017).

Defining isomorphism as a mechanism rather than an outcome in the context of heterogeneous institutional environments does not detach it from the goal of garnering institutional legitimacy, however. Isomorphic pressures may not be appropriately responsive to alterations in institutional environments, leaving the legitimacy of an organization at risk (Hoffman, 1997; Turner & Angulo, 2018). Rather, the adjustment of organizational structure, practices, and strategies may be reflective of an effort to maintain legitimacy in the face of changes in regulations, industry norms, or other constraints (Turner & Angulo, 2018). Moreover, organizations themselves can influence institutional environments through “institutional entrepreneurship,” allowing for a closer alignment between institutions and their organizational needs and organizational transformation (Dacin, Goodstein & Scott, 2002; DiMaggio, 1988; Garud, Hardy & Maguire, 2007).

Examining textbook adoptions through this lens of institutional theory, we expect school districts to adopt broadly similar organizational structures and processes to evaluate and select curriculum materials due to the isomorphic diffusion of these structures and processes across school districts, which we expect to be largely subject to similar regulative, normative, and cultural-cognitive pressures (Scott, 2014; Turner & Angulo, 2018). Based on prior research, we expect these processes to include a) formal personnel, such as Assistant Superintendents of Curriculum, to lead the selection and implementation of materials, b) committees of teachers to analyze the available materials and make an adoption recommendation, c) some sort of

‘objective’ or quantifiable measure to determine quality of materials, and d) approval by parents and/or school boards. However, we also anticipate that, despite the many similarities, textbook adoption processes in districts will differ in response to organizational needs that require an adaptation of structures and processes to garner legitimacy. Specifically, we expect that differences in district size, resources, and accountability pressures may cause some heterogeneity in the organizational structures and processes in district textbook adoption and adapt our sampling strategy accordingly.

The size of an organization has been theoretically linked to organizational complexity through the institutional lens (Clark, 2001; Turner & Angulo, 2018). We expect ceremonial structures to be more elaborate in larger, more bureaucratic districts. We explore this factor by using enrollment size as one of the criteria in our sampling.

We also expect more elaborate structures in districts with more resources to devote to the textbook adoption process, which are likely also larger districts (Clark, 2001; Turner & Angulo, 2018). Specifically, we predict that lower levels of district resources make districts more dependent on the state-approved textbook list and less likely to adopt materials that have not been approved by the state. Since the state changed its laws in 2013, California districts have more control over the books they purchase. The state’s list of approved textbooks is now advisory, meaning districts can choose any materials on or off the list, although if they select off-list materials, they must submit documentation that the materials meet the California standards. This process may be burdensome for districts, so we expect districts that adopt off-list materials to have resources that enable them to complete the additional documentation.

However, while districts have more flexibility in adoption decisions than in the past, our data show that the majority of districts still adopted on-list math books as of 2015-2016. This

may reflect the relative importance of the legitimacy afforded to districts through the adoption of textbooks that have already passed the California approval process. Selection of state-approved textbooks by districts may be a particularly important source of legitimacy from the perspective of school boards and parents, especially in the aftermath of the *Williams* case. Therefore, we sampled districts based on whether they reported adopting an on-list or off-list book in the most recent mathematics adoption cycle, in order to probe whether processes or structures differed systematically between schools making these different decisions.

Test-based accountability measures add another layer of policy context to local district decision-making, including decisions about the curriculum materials that will help districts meet accountability standards. State-level accountability measures meaningfully affect school policies and practices (Figlio & Loeb, 2011). We expect accountability measures to affect the institutional environment by placing regulatory pressures on districts to meet accountability measures to maintain legitimacy (Scott, 2014; Turner & Angulo, 2018). This would create changes in the formal structures and processes used by districts to make curriculum decisions, even though California has dramatically relaxed accountability in recent years (the state took a year off from administering assessments during the Common Core transition and has not used formal school accountability measures since 2013-14). We use student achievement levels (average math achievement)—a proxy for the threat of accountability and the urgency to improve school performance—as our third criterion in our sampling.

In addition to informing our sampling strategy, institutional theory provides a framework for further exploring similarities and differences in district textbook adoptions along additional dimensions. Our interview questions are designed to probe each district's process, characterize the roles of actors involved, and detail the steps taken to reach a formal decision. Our use of a

stratified random sample allows us to compare and contrast processes across institutions that share similar characteristics. We are also interested in the potential involvement of external stakeholders, who might be engaged in district adoption processes to enhance legitimacy through authority (Weber, 1947). Our interview questions probe on the roles of the important players outside of the traditional public school, such as community members and textbook publishers. We anticipate, for example, that district differences in both internal and external stakeholders, likely related to differences in a districts' student constituencies and local environment, may drive differences in organizational structure and processes, since both stakeholders must socially accept and approve a process for it to become legitimate (Kostova, Roth & Dacin, 2008). While we anticipate some differences in structures and processes based on organizational needs and resources, we also expect many similarities resulting from isomorphic tendencies.

Recent changes in the institutional environment underscore the imperative to consider complexity in district textbook evaluation and adoption processes. For example, the current competitive schooling environment, in which traditional public schools are also being challenged with increasing competition from online, hybrid, magnet, private, and charter schools, may contribute to the creation of even more elaborate structures and processes and encourage traditional public schools to look to one another for guidance.

Ultimately, though, our goal in analyzing district textbook evaluation and adoption processes through an institutional framework is to understand the processes by which districts adopt strategies to make decisions around textbook quality. The post-*Williams* institutional environment has emphasized the necessity of appropriate, high quality instructional materials for all students, but research does not provide a consensus on what good curriculum materials look like, or even how to define or measure quality. Institutional theory, however, suggests that

quality is a socially evaluated determination of legitimacy. Elaborate practices to evaluate curricula give stakeholders the illusion that school districts know what they are doing and have the capacity to spend public dollars wisely. Moreover, these processes may enable stakeholder involvement in the textbook adoption process, allowing for adaptation to the local context to build legitimacy. Thus, we consider the development of districts' definitions of textbook quality to be part of the process of textbook evaluations and adoptions rather than framing textbook quality as an objective outcome.

Background – the California Context

We situate our work in California, the most populous U.S. state and a historic leader in standards-based reform and education policy in the U.S. In decades past California was seen as highly influential for affecting the content of textbooks nationwide (e.g., Finn & Ravitch, 2004). However, its influence in this regard has waned since the creation of the CCSS because of the nearly national nature of those standards (and the fact that each state remains its own decisionmaker when it comes to standards and other education policies).

California adopted the CCSS in 2010 and has remained a CCSS state since then (though the standards have been renamed and have undergone modest modification in 2013). Like many other states (Gewertz, 2015), California follows an 'advisory' textbook adoption model, where the state Department of Education publishes a list of approved materials, but districts are not required to adopt from that list. At the beginning of a textbook adoption cycle, the California Department of Education (CDE) publishes a call for materials, and publishers can choose to submit materials to be evaluated for state adoption. Materials are evaluated by a trained committee using an evaluation toolkit provided by the CDE.

Historically, textbook adoptions have occurred on a 6- to 8-year cycle, with the state providing districts with funding for instructional materials immediately following a state adoption. Recently, as a result of changes in state funding rules, districts may choose materials from the state-approved list or may purchase any other materials provided they meet the requirements of the state standards. No special monies are allocated by the state for these purchases. The most recent list of approved math materials was published January, 2014, although some schools began adopting Common Core-aligned math materials as early as 2012 (and thus did not have the list as a resource). However, most districts waited until after the state list was released to make decisions, with the majority adopting during the 2014-15 or 2015-16 school years.

The data for this project are nested within a larger study of curriculum material adoptions in California and four other states⁵. We have collected data on adopted materials (title, adoption year, and grades used) in math in these states, which we have linked with demographic and student achievement data to investigate questions about the equitable distribution of high-quality materials, the impact of specific textbook series on student achievement (Author, 2017), and trends in the usage of materials. In California we have been able to collect information on adopted textbooks due to a condition of the *Williams* case settlement mentioned above. The plaintiffs, representing students and families in low-income schools, argued that the state was providing insufficient oversight over how resources were allocated to students. The state of California now requires every public school to publish information about the quality and availability of their textbooks on the yearly School Accountability Report Card (SARC) online.

⁵ This material is based upon work supported by the National Science Foundation under Grant No. 1445654, by the WT Grant Foundation, and by an anonymous foundation. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

While the SARC textbook data are a rich source of information for our quantitative work, they are not without their challenges. For instance, there is substantial variation in the quality and completeness of the SARCs. In many cases, schools only report the publisher of a textbook (many publishers produce multiple series), and in other cases, schools only report using ‘sufficient’ materials. Additionally, the SARC data tell us nothing about the extent to which teachers actually use the materials listed, nor about how district decisions were made.

Methods

Sampling

Our larger project is focused on deepening our understanding of effective materials and how they end up in teachers’ classrooms. We recognize, however, that merely producing research on textbook effects on student achievement will do little to improve the quality of materials in classrooms if such information does not matter in adoption decisions. Thus, we seek to understand the evaluation and adoption process itself, to learn how information on textbook quality—measured by impacts on achievement or other desired outcomes—might be used in the adoption process. In California, textbook adoptions occur at the district level; our research design assumes that district curriculum leaders can provide insight into the factors that matter most in evaluating and adopting materials. We conducted semi-structured interviews with these leaders in public school districts across California from fall of 2015 to spring of 2017. By fall 2015, approximately 60% of districts had officially adopted a CCSS-aligned math textbook in grades k-8 (approximately ages 5-14), and by spring 2017, that number had risen to nearly 100%.

We restricted our sample to traditional public schools, excluding charter schools, alternative schools, online schools, etc., because they are exempt from some of the accountability requirements that traditional public schools must meet. We focused our interviews on

mathematics for conceptual and practical reasons. First, math textbooks are used more widely than textbooks in other subjects (e.g., Opfer et al., 2017) and the existing literature on achievement effects has also focused on mathematics. Second, the period of our study was right after the state put out an approved math textbook list, so it was an appropriate time to study math adoptions. That said, in some districts we spoke to, the most recent adoption was in another subject (usually English language arts), so we talked about that adoption instead. In all districts, we probed on the extent to which adoption processes varied across subjects, and we found no evidence in any district that it did.

We identified districts using a stratified random sample at the school level, although interviews were conducted with district leaders, so in essence we sampled districts with probability proportional to the number of schools they had⁶. We chose three sampling criteria on which to stratify. The first criterion was a categorical variable identifying the type of mathematics textbook adoption based on the SARC data. Adoptions were categorized as (1) from the 2014 California approved list, (2) not on the California approved list but still ‘Common Core aligned’⁷, (3) not Common Core aligned (i.e., still using a book from a prior adoption), and (4) not listed on the SARC (e.g., unclear titles, missing data). This allowed us to capture variation across districts related to their choice of adopted materials. Our second criterion was a school size indicator (either above or below the median student enrollment in California). We used school size as one of our criteria because we suspected it might be related to our theoretical framework of institutional theory (e.g., bureaucracies differ according to institution size). Our

⁶ We used school-level data for sample selection because not all districts in the state were uniform-adopting districts, so some districts adopt multiple textbook titles for a given grade/subject.

⁷ We classify a book as ‘Common Core aligned’ if the publisher indicates such, even though many such claims of alignment may be inaccurate (Author, 2015).

third criterion was an achievement measure at the school level (above or below the state median on the most recent state mathematics test). We chose achievement as a sampling criterion as a proxy for accountability pressure, which we expected might affect districts' adoption processes.

We categorized schools according to these three criteria, sorting them into 16 possible cells (four textbook types, two sizes, two performance levels). We used random number generators to sort schools within each cell, and we began recruiting from the top of the list in each cell, replacing as needed. Our goal was to include interviews with district leaders from exactly two districts representing schools in each cell. We used district websites to identify the person most directly responsible for curriculum and instruction in each selected district. We were looking for individuals with a title such as Assistant Superintendent of Curriculum and Instruction, although in smaller districts this person could work as a principal or even teacher at an individual school (see Table 1 for more information about our final sample).

Individuals were contacted via email and asked to participate in an interview with an incentive of an Amazon gift card. If an individual declined or did not respond after three attempts, the district was replaced by the next randomly selected district in the cell. If an individual indicated that someone else in the district was more responsible for textbook adoptions, we targeted that person instead. We continued contacting districts until we had two interviews for each of the 16 cells in our sampling criteria. In total, we contacted over 100 districts before we satisfied the sampling criteria, yielding a response rate of about 30 percent. We added to our sample interviews with two of the largest districts in California, giving us a final sample of 34 districts. These two interviews were included purposively to account for the variation in district size in California; proportionally there are more small districts than large districts, and we wanted to ensure very large districts were represented in our interview data. All

interviews were conducted over the phone, with an average length of 45 minutes, and were recorded for verbatim transcription.

Data

We developed our interview protocol to reflect both the extant literature on textbook adoption and the theoretical framework described above. We asked district leaders to describe the process of vetting and selecting curriculum materials in their district; the role of teachers, parents, and other stakeholders; the influence of textbook publishers; the quality of materials and how quality is evaluated; alignment of materials to the CCSS; and implementation of materials once adopted. The interview questions were iteratively edited by the research team and were grounded in the context of the CCSS. The full interview protocol is available upon request.

The respondents reflect the diversity across California districts. In many districts there is one person who oversees the adoption of new curriculum materials. In larger districts, there may be two or more people in charge. For example, in one district, we spoke to the person in charge of K-5 (age 5-11) curriculum materials adoptions and the person in charge of 6-8 (age 12-14) adoptions. However, in the smallest districts, the person in charge of curriculum adoptions might be the superintendent (who might also be a principal and a teacher), or in one case, a third-grade teacher. Based on our sample, the job of supervising curriculum adoptions has a high turnover rate; more than half of our respondents had been in the position for less than three years.

Threats to Validity

There are at least two threats to validity we think are important to note. First, while we intended to select schools based on an entirely random stratified sample, we did purposefully include two districts to capture variation in district size. We think the inclusion of these two large districts, the largest in our sample, is important to reflect the diverse nature of California

districts. Considering our theoretical framework of institutional theory, we thought it particularly important to include districts serving large numbers of students with layers of bureaucracy and multiple personnel responsible for the adoption of curriculum materials. In any case, the results we describe below do not meaningfully differ if we exclude the two largest districts.

A second validity threat in our study is with regard to bias associated with who chose to respond to our invitation. It is possible that the district leaders who responded (or the districts they represent) differ from the district leaders who did not respond. An analysis of district demographics, size, and urbanicity (available upon request) suggests the participating districts are heterogeneous in their characteristics and do not meaningfully differ on observable characteristics from those that did not agree, but it may be that they differ on unobservable characteristics or that the district leaders themselves differ in some way. While our work therefore represents a wide range of California districts, generalizations to all districts in the state or districts or schools in other states or countries should be made cautiously.

Analysis

We analyzed our interview transcripts in NVivo using a combination of *a priori* and emergent codes (Creswell, 2009). We began with a predetermined set of codes that reflected the general topics and questions raised in our interview protocol. Two independent raters coded each interview using these codes for coarse-grained analysis. Raters then discussed their findings, noting similarities and discrepant events in the coding process, using these findings to create a more fine-grained set of emergent codes. The raters then re-analyzed the data in an iterative process using the emergent codes. The coders used a data matrix to capture the frequency of certain elements of the curriculum materials adoption process (Miles & Huberman, 1994). The data matrix allows for visual representation of the important elements. Each row

represents one case or district, and each column an element of the adoption process that occurred across multiple sites (e.g., forming a committee; attending a county publisher fair). The data matrix allows for a tabular representation of a large set of qualitative data with long responses. Each cell in the table represents the presence or absence of the adoption element, or in some cases, a quote illustrating the process.

Results

The purpose of the interviews is to understand the processes involved in the evaluation and adoption of mathematics curriculum materials. District leaders describe similar processes of evaluating and adopting materials, which we attribute to institutional isomorphism. Between-district differences in evaluation processes exist largely because of specific district characteristics, namely the percentage of ELL students, district size, and access to technology. Small districts are particularly constrained from adopting the legitimizing ceremonial practices seen in larger districts due to lack of personnel resources.

Our interviews suggest the adoption process in each district is broken down into two main stages: an initial ‘winnowing’ phase that narrows the pool of potential textbooks, and an evaluation stage that includes a closer look at select materials. Within both stages, we see evidence of districts adopting isomorphic practices, as well as differences attributable to individual district characteristics. Table 2 contains illustrative quotes and details from five districts in our sample, which were chosen to illustrate the full range of district sizes and adoption processes. We use the same numbering scheme for the districts in Table 2 as in Table 1 for convenience. We refer to these example districts and others to describe our results.

Winnowing: The Process of Narrowing the Pool of Potential Textbooks

Isomorphism in the winnowing process. Districts do not have time to evaluate every program on the list of CDE-approved curricula. District leaders also recognize quickly that certain programs will not meet the needs of their students and can be excluded from evaluation. The CDE approved seven series for elementary mathematics, fifteen series in middle grades, and ten titles for Algebra 1. Every district leader we interviewed identified selection criteria based on the needs of the district that were used to narrow the pool of viable candidates. The selection criteria are generally easily observable characteristics – examples include ELL accessibility or a digital platform – that enable districts to quickly limit the number of textbooks to a manageable number (usually two or three) to evaluate in depth. The winnowing phase is usually completed by district personnel with at most a small subgroup of teacher leaders.

The general process for winnowing the viable candidates looks similar regardless of district size, though district leaders in larger districts feel different constraints from those in small districts. In the small District 3, a committee of subject-area specialists and teacher representatives from each grade examined state-approved materials at the county office of education⁸. They used a state-created rubric to reduce the number of potential textbooks that would be piloted in schools. In District 34, the largest in our sample, the process was similar, except that the committee included six district-level administrators, two district-level instructional leaders, and coordinators focusing on both special education and multilingual/multicultural education. Table 2 contains illustrative quotes and information about the adoption process, including the influence of the state-approved list and the specific members of the evaluation committee. The districts are ordered from largest (District 34) to smallest

⁸ California is divided into 58 county offices of education. County offices oversee operations of multiple districts, performing administrative and managerial tasks related to curriculum, budget, professional development, and alternative education placements.

(District 6). Looking across the row describing the involvement of committee members, we see that the larger districts more purposefully select individuals representing specific interests, such as special education teachers and coaches in charge of math departments.

Even in districts that do not adopt off the state list, the process is similar. In a mid-sized district (District 13) that eventually adopted an off-list book, the process began by bringing in publishers of both on- and off-list materials to make short presentations to teacher representatives, resulting in the selection of two books for piloting based on evaluation against a rubric. The only exception we found to this general structure was in the two districts that decided to create their own materials rather than adopting an existing book; in these districts, the decision to create materials came from district leadership and preempted examination of available books.

Heterogeneity in the winnowing process. There is also heterogeneity in the processes that districts use to narrow the field of possible textbooks. Some of these differences are related to the criteria that we used to stratify our sample, while other unexpected differences appeared in our coding. The three main differences we saw in the winnowing process were 1) the choice to limit evaluations to CDE-approved books or to consider off-list materials, 2) the timing of the adoption, and 3) the influence of certain district characteristics (in particular, a high proportion of ELL students and a reliable technology infrastructure).

Our sampling criteria included an indicator for the type of material adopted (on-list or off-list) because we expected that districts adopting off-list materials might have different evaluation criteria and processes than districts adopting on-list books. In general, we did not find that the winnowing processes differed between these two types of districts; what differed were district leaders' attitudes toward the state-approved list. Some district leaders expressed the opinion that materials on the state-approved list were fully aligned to the standards and thus

represented an adequate selection set in order to make the first cut: “The state review takes into account the articulation between the grade levels, whether it has enough content on each of the standards. I mean that’s the purpose of the state review (District 30).” In contrast, in districts that decided to evaluate off-list materials, leaders often cited concerns about the quality and rigor of the CDE evaluation process. Five district leaders explicitly described concerns that the CDE evaluation ‘set the bar too low,’ meaning that the criteria were not rigorous enough. For example, a District 31 leader who participated in the statewide adoption process said, ‘At the state level, it was all about [the standard] being there, not necessarily the quality of how it met the criteria. . . . it was more like a checklist.’ Many other district leaders implicitly suggested the CDE rubric was inadequate for judging alignment because they found it necessary to complete another alignment evaluation in the district.

Another factor that varied across districts was the timing of the decision to adopt. Some districts decided to adopt materials early, when the first editions of CCSS-aligned textbooks were published (i.e., before the state even put out a list). For these districts, the most pressing consideration was getting standards-aligned materials into teachers’ hands.

[The teachers] were desperate to use the materials because moving to the Common Core they hadn’t taught that before. We had a lot of training in the Common Core, and what the standards were . . . It’s the how to that’s kind of missing. At least the materials gave them a how to . . . so that they weren’t just trying to figure it out on their own. (District 3)

But districts that adopted materials in the early years of the Common Core rollout had a limited selection. Publisher materials were scant, and the state approved list was not yet published.

Many districts intentionally waited to adopt materials that were state-approved or simply better aligned, often noting that publishers rushed getting their books to meet the strict timeline

for CDE approval. One district leader felt that, ‘at the time when materials were coming out, back in the beginning days of Common Core, they were just retooled versions of the old standards’ (District 25). We heard a variation on this refrain from 19 districts—publishers had simply ‘slapped a new cover on an old book’ and labeled it CCSS aligned.

...we looked at math materials, and we were very disappointed in what we saw. Most of the publishers had just taken the regular programs and thrown in a couple of Common Core words ... but there was no real change in the instructional materials. (District 33)

While some district leaders regretted the adoption decisions that had been made during an early adoption, leaders in districts that adopted late were generally happy with their decision to wait for better materials: “We tend to be a district that adopts at the end of the cycle rather than the beginning, because we really wanna take our time (District 22).” They also used the opportunity to gather information from other districts that made the decision to adopt early.

Then we have the ability to let a district adopt, and then talk to the teachers. Call 'em up on the phone say, ‘You've had it for the year, how did you like it?’ Currently, we're looking at that with language arts, and everybody jumped into something called [textbook title]⁹, and now we're starting to see people wishing they'd got [a different textbook]. (District 6)

In short, the perceived preparedness of publishers to provide materials aligned to the CCSS was a theme in many of our interviews. Leaders were hesitant about investing time and money into an adoption process if none of the materials were adequate, and some districts forewent adoptions altogether until materials had been vetted by other districts.

⁹ Textbook titles and publishers have been blinded in district leader quotes to ensure anonymity. District textbook adoptions are available in Table 1.

A final factor affecting the winnowing process is the constraint imposed by district characteristics. The two most influential characteristics we observed were the percentage of English language learners and the technological capabilities of the district. One leader of a district with a high proportion of ELL students felt that there were only two programs with sufficient ELL support on the state list. These were the only two programs that were evaluated in that district. Technology also arose as an important selection criterion in materials adoptions. Districts without a reliable technology infrastructure (bandwidth, one-to-one devices, etc.) felt they could not adopt a curriculum with a heavy digital component. In contrast, some districts were so heavily invested in technology that they only considered heavily digital programs. However, district leaders felt ambivalent about the available technology from major publishers and only wanted to invest in technology that was meaningfully articulated with the standards.

Then the other thing we're looking at is how is technology used in the program. Is it stand-alone? Is it embedded in a way that guides students to purposely use the technology during the learning process, or is it a separate thing? Does it allow the teacher to turn the whole process over to the kids, and the teacher doesn't really get involved, or is it a collaborative process and an ongoing—in other words, is it very purposeful? (District 33)

Evaluating: The Elaborate Process of Selecting a Textbook

Isomorphism in the evaluation process. Once district leaders have winnowed the pool of potential materials for adoption, the evaluation process begins. Every district leader interviewed, regardless of district characteristics, described some sort of evaluation criteria—quantitative, qualitative, or both—using data collected from multiple sources who had viewed the materials. The processes vary in complexity and formality, but the same basic principles apply across districts. Districts form adoption committees composed of teachers, content-area

experts, school leaders, and district personnel. The committees evaluate two or three potential curricula using some sort of agreed-upon criteria to represent ‘quality.’ Measures of quality reflect the needs of the district rather than an objective definition of high-quality textbooks, because there is no consensus on what makes a curriculum high-quality. Some districts have the ability to pilot materials, and in nearly all districts teacher input is the greatest factor in the adoption decision. The local school board gives a final seal of approval once materials are selected, but the school board did not overrule a decision in any of the districts we interviewed (the school board votes are seen as pro forma). Again, Table 2 contains examples of the evaluation process from five diverse districts.

Heterogeneity in the evaluation process. While the basic process is the same across districts, there are some important differences, and almost all of these occur predictably along the dimension of district size. Small districts lack the resources of larger districts, limiting their ability to pilot and evaluate extensively. While larger districts typically have complex evaluation rubrics and criteria in place, small districts do not rely as heavily on ceremonial, legitimizing processes due to resource constraints. Small districts are limited by the amount of time it takes to conduct evaluations and pilots, the cost of long-term evaluations, and the ability to communicate and negotiate with publishers. In larger districts there is usually a district employee that specifically leads the evaluation process, but smaller districts do not have someone in this role. They rely on principals, superintendents, and teachers to oversee the selection of curriculum materials. In an extreme case, in a small district with only two elementary schools, a third-grade teacher became the self-selected person in charge of curriculum adoptions because there was no one else to fill the role.

In large districts, one or more committees of district personnel usually lead the evaluation, including instructional coaches and a sample of representative teachers selected by the district. Smaller districts typically do not have personnel to specifically handle textbook adoptions and instead involve all or most of their teachers. Table 2 shows examples of the makeup of adoption committees. Note that larger districts might use committees at two separate stages, and teachers are only involved in the final stage.

One surprising finding was the influence of the county office of education in formalizing and facilitating the evaluation process. All districts rely on the county office of education as an intermediary between the state and local levels, but the county office serves a different function depending on district size. In larger districts, the county office organizes publisher fairs, adapts the CDE evaluation rubric for easier use, and conducts trainings and professional development. In smaller districts, the county office facilitates collaboration among other small districts in the area for adoption and professional development (in some cases, the county office even facilitates a county-wide textbook adoption, which small district leaders say is necessary given the high student mobility in these mostly rural areas). Examples of the role of the county office of education are evident in the quotes in Table 2. District 32 uses the county office's toolkit as an evaluation resource, while District 6 relies on the county office as a means of connecting to other districts. Lacking the resources to bring publishers to their small, rural district, the district leader instead gathers information at county meetings.

The central element of the evaluation process is the rubric or other tool used to rate the 'quality' of materials. Definitions of quality vary by district and reflect the perceived needs of the district's student population as well as the resources available to the district. These procedures also make the process more efficient and manageable: middle school math textbooks

can be over a thousand pages long; there is simply not enough time to evaluate an entire volume closely, let alone multiple volumes. Therefore, rubrics and other quantifiable evaluation criteria are seen as necessary to legitimize the quality of the chosen textbook.

Some districts use measures such as the textbook's index or scope and sequence as crude indicators of alignment to the standards. The CDE publishes an alignment toolkit to aid district leaders in their evaluations, but the district leaders we interviewed said this tool was too long and dense to use in its entirety. Instead, they relied on evaluation rubrics adapted by the county, online tools, or internally developed alignment tools. Other districts use processes like curriculum mapping, standards tracing, or highlighting the essential standards:

We look through, obviously, the appendix...and find that there are the standards in there. Then ...we choose multiple standards to do a... standards trace.... [I]n the index, they'll show the standard and then what pages it's addressed on. ... Then you go look. You start seeing, how is that standard addressed? As you look at it, you find out, is it fully addressing that standard? It's a pretty arduous process, but it's one that's worthwhile.

(District 11)

This district leader makes the important point that examining alignment is a challenging task, but it is one that is performed out of necessity in districts that do not think the CDE's evaluations are adequate. The formalized process of evaluating alignment internally lends a legitimacy to the evaluation and is used to justify the adoption of one textbook over another. Not all districts have the capacity to complete an internal evaluation, so the processes used reflect the capabilities and the context of the district. Table 2 illustrates the variation in formality of evaluations across districts. The two larger districts prioritized objective and quantitative measures of 'quality,' using tools like a checklist of criteria to meet the needs of all students. In the smallest districts,

leaders often did not use any formalized tool for evaluating materials. Instead, all teachers involved in the use of the materials under consideration had a chance to look through them.

Leaders from some districts talk about the flow and the feel of the text. ‘The only way to know is to use it,’ said one principal-superintendent-teacher in a small, rural district (District 6). This district leader described the context of the school and the limitations of a textbook adoption:

[It’s a] little tiny school [where] everyone wears a lot of hats. Everyone is—the lady that has the second/third grade room is the department head of second grade, and third grade, and etcetera. We can’t pilot. We can look at what other districts are doing easily, ... and say, ‘What are you doing?’

Lacking a rubric, one leader told us, ‘I think it’s just a matter of getting it in your hand and kind of looking at it and seeing if it’s gonna be what’s gonna be good for your kids or what they’re gonna get the most benefit from. It’s kind of subjective’ (District 7). Small district leaders did not feel hindered by the lack of formal adoption criteria. In smaller districts, leaders also feel comfortable letting individual teachers use different curricula for different groups of students. In the smallest districts that we interviewed, teachers have fewer than ten students in a class, and that could include multiple grade levels. In districts of this size, students essentially have individualized learning options because teachers have the flexibility to do that.

In the end, the formalized evaluation procedure does not reliably work to select the highest quality materials. The procedure does try to find the program that will appeal to the largest number of teachers with the least amount of disruption. District leaders describe how ultimately, it comes down to a teacher vote. The guiding principle is to find a curriculum that meets consensus.

We're gonna have to come to consensus on something. ... Consensus doesn't mean that it's everybody's favorite curriculum. It means that on balance, after discussing, everyone decides they can live with it—that it's the best choice for the majority of the people given the criteria that you're looking at it and all the factors that you're considering. (District 9)

In some cases, one dominant group of teachers could sway others' opinions. In some districts, teachers wanted the program that was most familiar to them, even though district leaders did not think it was the highest-quality option. Thus the formalization and legitimization of the evaluation process does not necessarily lead to the best choice.

Discussion

Guided by institutional theory, we used interviews to gain an understanding of how districts make decisions about the adoption of curriculum materials in the CCSS era. Interview selections were made using a stratified random sample, augmented with two large, purposefully selected districts, to obtain diversity in characteristics we thought would be associated with adoption decisions, based on prior literature and theory.

Our findings indicate some support for our predictions based on an institutional perspective. For the most part, districts use similar processes in evaluating and adopting textbooks. Generally, when we do see divergence from isomorphic processes, the differences can arguably be explained by district characteristics that suggest either differing levels of district resources, enabling the adoption of more complex organizational structures and processes, or differing institutional environments and corresponding differences in organizational needs. Contemporary work in institutional theory perceives the resulting differences in district textbook adoption processes as organizational efforts to garner legitimacy in defining and adopting high quality textbooks. Below, we highlight our main findings, generally aligning with our earlier

predictions. Additionally, we provide a discussion of how we might interpret a misalignment between our findings and our earlier prediction around accountability, which points to the importance of considering multiple policy and implementation effects on institutional environment.

Grounding our research in institutional theory, we expected to find that districts would adopt elaborate ceremonial practices to formalize and legitimize their textbook adoption processes. We see that this is largely the case in large districts but less so in small districts. Larger districts tend to employ the most elaborate, multi-layered, and ‘objective’ approaches to curriculum materials evaluations. These districts use multiple levels of committees to make selection decisions, including individuals representing many groups of stakeholders. Larger districts also divide the function of the curriculum leader into multiple roles; e.g., with separate individuals responsible for adoptions in each grade band. In these large districts only a small proportion of individuals have a voice in the evaluation of curriculum materials.

In smaller districts, the ceremonial processes for curriculum adoptions still exist, but they are less formalized. In these districts, individuals in charge of materials adoptions usually perform multiple other roles within the district, such as superintendent, principal, or teacher. Furthermore, all or most of the educators who will use the adopted materials have a potential voice in the adoption. In small districts, the measures used tend to be less quantifiable and more based on the ‘feel’ or ‘flow’ of the materials, or other subjective measures. These districts are also more constrained by material and personnel resources, such as piloting challenges and difficulty in getting professional development support from publishers

Research suggests that American textbooks are often lacking in quality and poorly aligned to standards (Author, 2015; Finn & Ravitch, 2004; Schmidt & McKnight, 2012). Some

independent agencies such as EdReports provide evaluations of curricula, but these reports may not be available before a district makes an adoption decision and may not be used even if they are available (for example, only five of the districts we interviewed mentioned EdReports when we asked about external sources of information). Moreover, even district leaders who consulted EdReports lamented the small number of programs that were rated as being sufficiently aligned to the CCSS. In the absence of objective measures of quality, the state list often guides district selections, and district-level evaluations of curriculum materials take on an air of legitimacy through rubrics and processes that provide a proxy for ‘quality’ in textbooks. What constitutes quality for one district might not for another. The institutionalized procedures used for evaluations reflect local context and needs. Factors such as district size, access to technology, student demographics, perceived teacher buy-in, and the textbook’s appearance are all proxy measures for quality. District leaders gather information from other sources--usually nearby districts with similar characteristics--when their adoption timeline gives them this flexibility.

One measure of quality, alignment to the Common Core, is met with skepticism from district leaders. Leaders overwhelmingly expressed the feeling that textbooks, especially in the first years of Common Core adoption, were nominally but not substantively aligned to the standards. Interestingly, the ceremonial processes in place at the state level—the evaluation procedures meant to ensure alignment—are inadequate in the eyes of many district leaders. Multiple district leaders noted that the criteria for approval on the CDE adopted materials list was setting a low bar to measure alignment, and most districts conduct some kind of internal alignment analysis. Still, these internal alignment analyses are typically superficial and the large majority of districts end up choosing from the state list.

Accountability measures did not matter to districts in the ways we predicted. We expected to hear district leaders in low-performing districts describe different processes than those in high-performing districts; however, we saw no clear pattern. The one place accountability came up in our interviews was in smaller districts, where leaders often said they were less concerned about the pressures of accountability, because the state did not interfere with them. These findings were surprising because research on curriculum use during the No Child Left Behind era indicates that accountability was a factor in how districts consider and use curriculum materials (e.g., Booher-Jennings, 2006; Finn & Ravitch, 2004; Jacob, 2005). District leaders did express a need for materials to be aligned to the CCSS, and they also noted that they wanted materials that correlated with the types of questions on the upcoming accountability tests, but these answers did not differ systematically based on district performance levels. Together, these findings may reflect a limited effect of accountability policies on current institutional environments, perhaps reflective of a shift in concern from accountability measures, which have been recently deemphasized in state policies, to a focus on changes in curriculum standards, which apply across districts. Thus, while we had predicted differences based on standardized test measures, it appears that this measure is not currently a driving force in differences in organizational needs. These findings underscore the importance of considering the combined, rather than isolated, effects of simultaneous policies, as well as their implementation, on institutional environments when applying an institutional lens.

District leaders in California are balancing many changes: in the resources available to them, the pedagogical strategies demanded by new standards, increasing numbers of ELLs, new state testing and accountability regimes, and students and teachers with differing levels of comfort with technology. They often receive conflicting sets of demands from the state, county,

teachers, principals, students, and community members. They are charged with leading the selection of the best materials for their diverse students. As one district leader explained:

How do I navigate all those choices—the need to really come up with a really good working structure for adopting the curriculum that will be politically savvy and bring in all the groups and get buy-in and get people moving in the direction that’s really the best teaching ... and really get instruction moving in a way that’s benefiting all of our kids in our district. Just getting there is daunting when I have to figure out how can I quickly figure out the framework when [it’s] like 1,000 pages. (District 9)

Given the challenges associated with selecting curriculum materials, and all of the external pressures, it is not surprising that district leaders turn to isomorphic and ceremonial practices to make decisions. While the elaborate processes do not predict differences in materials adoptions, the processes seem to be important for establishing the legitimacy of the ultimate selection.

Implications for Policy

Our interviews suggest several implications for policymaking around the issue of curriculum materials adoptions. One takeaway is that teachers represent a majority opinion in textbook evaluations. However, nearly all of the district leaders in our sample felt that resource constraints limited the ways teachers could meaningfully contribute to the textbook evaluation process. In order to make informed decisions, teachers need training on the standards themselves, as well as on the evaluation of textbook alignment and quality. Many leaders mentioned that the lack of high-quality teacher professional development around textbook evaluations was the biggest obstacle in the adoption process. A recommendation based on our study is that textbook adoption cycles build time for teachers to be trained in the standards and evaluation criteria.

This recommendation is supported by research on the role of teacher professional networks in successful implementation of new policies (e.g., Coburn, et al., 2012). Coburn and colleagues (2012) studied the role of teacher professional communities as social networks and found that networks with strong ties, interactions, and teacher expertise were associated with sustainability of new pedagogical strategies, even as administrative support weakened. We expect that sustained professional networks on the evaluation of textbooks—building internal expertise and affording multiple opportunities for interaction—can support the textbook evaluation and adoption process. Such professional learning may also support more effective curriculum implementation, though we did not study implementation here.

Another theme in our interviews was the need for high-quality, reliable, independent information about textbooks. Over half of our interviewees questioned whether CCSS-aligned textbooks were authentically aligned to the content and pedagogy of the standards. A few interviewees expressed interest in learning about the results of our achievement-based efficacy research. There is undoubtedly interest in other criteria or outcomes as well, including the cultural appropriateness of the books and the impacts on non-test outcomes. Policymakers could heed the request for better information by providing clear, concise, actionable, and relevant information about the textbooks along as many dimensions as possible. This is also an area where organizations promoting policy-relevant research and dissemination can contribute. To be sure, educators will still seek the professional autonomy to make the best decisions for the children they teach (Yeigh et al., 2017), but providing more, and more trusted information can help them make more informed decisions. States are well positioned to provide this information.

District leaders also described how they used local networks to discuss curriculum efficacy with other nearby districts. Policymakers at the state or county level could facilitate and

promote information-sharing between districts with similar characteristics to make this process more efficient. One of the surprising findings was the importance of the county office of education in textbook adoptions, driven in part by districts' interest in collaborating with each other. Beyond relying informally on county offices to facilitate collaborations, interventions that are more proactive in fostering this type of behavior merit consideration. For example, consider a group of ten small districts with similar student populations. Although each district individually might lack the resources to devote considerable staff time to the adoption process, an intervention that provided a relatively small amount of centralized money could be used to support a cross-district team to evaluate curriculum materials. Such an intervention would reduce redundant work and potentially provide a deeper understanding of curriculum choices to participating districts, contextualized appropriately for the collaborative.

We conclude that there are opportunities to help districts make more informed decisions about textbook adoptions. These largely revolve around the state providing clear ratings of textbook quality as early as possible, and encouraging districts to collaborate where appropriate. Recent work in Louisiana suggests that state's efforts to get better materials adopted is paying off, with more districts adopting top-tier math and English language arts materials (as rated by the state) and more teachers demonstrating knowledge of the standards (Kaufman, Thompson, & Opfer, 2016). Still, we expect that without forced centralization there will always be a great deal of district-to-district variation in adoption choices. And without more evidence about which materials work, why, and for whom, districts will continue to be hampered in their ability to make these critical curricular decisions.

References

- Agodini, R., & Harris, B. (2010). An experimental evaluation of four elementary school math curricula. *Journal of Research on Educational Effectiveness*, 3(3), 199-253.
- Booher-Jennings, J. (2006). Rationing education in an era of accountability. *Phi Delta Kappan*, 87(10), 756-761.
- Boser, U., Chingos, M., & Straus, C. (2015). *The hidden value of curriculum reform*. Washington, DC: Center for American Progress.
- Bowler, M. (1978). Textbook publishers try to please all, but first they woo the heart of Texas. *The Reading Teacher*, 31(5), 514-518.
- Boxenbaum, E., & Jonsson, S. (2017). Isomorphism, diffusion and decoupling: Concept evolution and theoretical challenges. *The Sage handbook of organizational institutionalism*, 2, 79-104.
- Chingos, M. M., & Whitehurst, G. J. (2012). *Choosing blindly: Instructional materials, teacher effectiveness, and the Common Core*. Washington, DC: Brookings Institution.
- Clark, B. (2001). The entrepreneurial university: New foundations for collegiality, autonomy, and achievement. *Higher Education Management*, 13(2), 9-43.
- Coburn, C. E., Russell, J. L., Kaufman, J. H., & Stein, M. K. (2012). Supporting sustainability: Teachers' advice networks and ambitious instructional reform. *American Journal of Education*, 119(1), 137-182.
- Confrey, J. (2006). Comparing and contrasting the National Research Council report on evaluating curricular effectiveness with the What Works Clearinghouse approach. *Educational Evaluation and Policy Analysis*, 28(3), 195-213.
- Creswell, J. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: SAGE.
- Dacin, M., Goodstein, J., & Scott, W. (2002). Institutional theory and institutional change: Introduction to the special research forum. *Academy of Management Journal*, 45(1), 43-56.
- DiMaggio, P. (1988). Interest and agency in institutional theory. In L. Zucker (Ed.), *Institutional patterns and organizations: Culture and environment* (pp. 3-32). Cambridge, MA: Ballinger.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American sociological review*, 147-160.

- English, R. (1980). The politics of textbook adoption. *The Phi Delta Kappan*, 62(4), 275-278.
- Farr, R., & Tulley, M. A. (1985). Do adoption committees perpetuate mediocre textbooks? *The Phi Delta Kappan*, 66(7), 467-471.
- Figlio, D., & Loeb, S. (2011). School accountability. In E. Hanushek, S. Machin, & L. Woessman, (Eds.), *Handbook of the economics of education* (pp. 383-421). Amsterdam, Elsevier.
- Finn, C. E., & Ravitch, D. (2004). *The mad, mad world of textbook adoption*. Washington, DC: Thomas B. Fordham Institute.
- Follett, R. (1985). The school textbook adoption process. *Publishing Research Quarterly*, 1(2), 19-23.
- Garud, R., Hardy, C., & Maguire, S. (2007). Institutional entrepreneurship as embedded agency: An introduction to the special issue. *Organization Studies*, 28(7), 957-969.
- Gewertz, C. (2015, February 18). States shedding power to adopt class materials. *Education Week*, 34(21), 1.
- Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E. R., & Lounsbury, M. (2011). Institutional complexity and organizational responses. *Academy of Management annals*, 5(1), 317-371.
- Hoffman, A. (1997). *From heresy to dogma: The changing landscape of corporate power in the age of flexibility*. Palo Alto, CA: Stanford University Press.
- Houang, R. T., & Schmidt, W. H. (2008). *TIMSS international curriculum analysis and measuring educational opportunities*. Paper presented at the 3rd IEA International Research Conference.
- Jacob, B. A. (2005). Accountability, incentives and behavior: The impact of high-stakes testing in the Chicago Public Schools. *Journal of Public Economics*, 89(5), 761-796.
- Kane, T. J. (2016). Never judge a book by its cover: Use student achievement instead. *Education Next*.
- Kaufman, J. H., Thompson, L. E., & Opfer, V. D. (2016). *Creating a coherent system to support instruction aligned with state standards: Promising practices of the Louisiana Department of Education*. Santa Monica, CA: RAND.
- Kostova, T., Roth, K., & Dacin, M. T. (2008). Institutional theory in the study of multinational corporations: A critique and new directions. *Academy of management review*, 33(4), 994-1006.

- Kurz, A. (2011). Access to what should be taught and will be tested: Students' opportunity to learn the intended curriculum. In *Handbook of accessible achievement tests for all students* (pp. 99-129). New York, NY: Springer.
- Marple, S., Bugler, D., Chen-Gardini, M., Burr, E., & Finkelstein, N. (2017). *Why and how teachers choose to supplement adopted materials: Selecting instructional materials*. WestEd.
- McDonnell, L. M. (1995). Opportunity to learn as a research concept and a policy instrument. *Educational Evaluation and Policy Analysis*, 17(3), 305-322.
- McLaughlin, M. W. (1990). The Rand change agent study revisited: Macro perspectives and micro realities. *Educational Researcher*, 19(9), 11-16.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), 340-363.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage.
- National Research Council. (2004). *On evaluating curricular effectiveness: Judging the quality of K-12 mathematics evaluations*. Washington, D.C.: National Academies Press.
- Opfer, V. D., Kaufman, J. H., & Thompson, L. E. (2016). *Implementation of K-12 state standards for mathematics and English language arts and literacy*. Santa Monica, CA: RAND Corporation.
- Porter, A., McMaken, J., Hwang, J., & Yang, R. (2011). Common Core standards: The new U.S. intended curriculum. *Educational Researcher*, 40(3), 103-116.
- Reys, B. J., Reys, R. E., & Chavez, O. (2004). Why mathematics textbooks matter. *Educational Leadership*, 61(5), 61-66.
- Reys, B. J., & Reys, R. E. (2006). The development and publication of elementary mathematics textbooks: Let the buyer beware!. *Phi Delta Kappan*, 87(5), 377-383.
- Schmidt, W. H., & McKnight, C. C. (2012). *Inequality for all: The challenge of unequal opportunity in American schools*. New York, NY: Teachers College Press.
- Schmidt, W. H., McKnight, C. C., Houang, R. T., Wang, H., Wiley, D. E., Cogan, L. S., & Wolfe, R. G. (2001). *Why schools matter: A cross-national comparison of curriculum and learning*. San Francisco, CA: Jossey-Bass.
- Scott, W. (2014). *Institutions and organizations : ideas, interests and identities* (Fourth edition.). Thousand Oaks, California: SAGE Publications, Inc.

- Smith, M. S., & O'Day, J. (1990). Systemic school reform.
- Stein, M., Stuen, C., Carnine, D., & Long, R. M. (2001). Textbook evaluation and adoption. *Reading & Writing Quarterly*, 17(1), 5-23.
- Tulley, M. A. (1985). A descriptive study of the intents of state-level textbook adoption processes. *Educational Evaluation and Policy Analysis*, 7(3), 289-308.
- Turner, L. A., & Angulo, A. J. (2018). Risky Business: An Integrated Institutional Theory for Understanding High-Risk Decision Making in Higher Education. *Harvard Educational Review*, 88(1), 53-80.
- Tyson-Bernstein, H. (1988). The academy's contribution to the impoverishment of America's textbooks. *Phi Delta Kappan*, 70(3), 192-98.
- Webb, N. L. (1997). *Criteria for alignment of expectations and assessments in mathematics and science education (Research Monograph No. 6)*. Washington, DC: Council of Chief State School Officers.
- Weber, M. (1947). Legitimate authority and bureaucracy. *The theory of social and economic organisation*, 328-340.
- Yeigh, M. J., Villagomez, A., Lenski, S. J., McElhone, D., & Larson, M. L. (2017) Teachers' professional judgment in contrast with policy mandates: Instructional material adoption and students' needs. *Northwest Journal of Teacher Education*, 12(2).
- Zeringue, J. K., Spencer, D., Mark, J., Schwinden, K., & Newton, M. A. (2010). *Influences on mathematics textbook selection: What really matters*. Paper presented at the NCTM Research Pre-session, San Diego, CA.

Table 1

District Characteristics and Adopted Math Textbooks for District Leader Sample

| <u>District</u> | <u>Interviewee</u> | <u>Enrollment</u> | <u>Achievement level</u> | <u>Adopted Math Books</u> | <u>Adoption Year</u> |
|-----------------|--|-------------------|--------------------------|---|----------------------|
| 1 | Superintendent | Small | low | Eureka Math | 2015-16 |
| 2 | Superintendent-Principal and Math Teacher | Small | high | Math Expressions(K-5); Big Ideas(6-8) | unknown |
| 3 | District Superintendent | Small | low | enVision | unknown |
| 4 | Superintendent | Small | low | Houghton Mifflin(K-5); Pearson Prentice Hall, California series(6-8); CPM Algebra Connections(8) | 2015-16 |
| 5 | Superintendent of 2 districts | Small | high | enVision(K-5); Big Ideas(6-8) | 2014-15 |
| 6 | Superintendent | Small* | low | My Math(K-6); CPM(7-8); Edgenuity (supplemental) | 2014-15 |
| 7 | Third Grade Teacher | Small* | high | Eureka; My Math ; Singapore Math; Big Ideas (6-8) | unknown |
| 8 | Director of Curriculum Instruction and Assessment | Small* | low | i3 by SRA | 2013-14 |
| 9 | Director of Curriculum and Instruction | Medium | high | GO! Math (K-2); enVision(3-5); CPM(6-8) | 2014-15 |
| 10 | Assistant Superintendent | Medium | high | Engage NY(K-5); Utah Math(6-8) | 2014-15 |
| 11 | Coordinator of Curriculum, Instruction, Assessment, and LCAP | Medium | high | Math in Focus ; Glencoe; Pearson CA Algebra 1 | 2014-15 |
| 12 | Assistant Superintendent of Educational Services | Medium | high | Swun Math (K-5); Glencoe (6-8); Houghton Mifflin Integrated Math (7-8) | 2014-15 |
| 13 | Director of Curriculum Instruction and Assessment. | Medium | low | Pearson Investigations(K-5); CPM(6-8); enVision (supplemental) | 2014-15 |

| | | | | | |
|----|---|---------|------|---|---------|
| 14 | Associate Superintendent of Educational Services | Medium | high | GO! Math | 2014-15 |
| 15 | Director of Curriculum, Instruction and Assessment | Medium* | high | My Math | unknown |
| 16 | Director of Curriculum and Instruction | Medium* | high | Math Expressions(K-5); Big Ideas(6-8) | 2015-16 |
| 17 | Assistant Superintendent for Curriculum and Instruction | Medium* | high | enVision | unknown |
| 18 | Assistant Superintendent for Educational Services | Large | high | Engage NY | 2015-16 |
| 19 | Director of Curriculum and Instruction | Large | low | Eureka(K-5); Carnegie Math(6-8); internally developed units of study | 2014-15 |
| 20 | Director of Curriculum and Instruction; Director of Secondary Education (grades 6-12) | Large | low | enVision ; Pearson International Math | 2015-16 |
| 21 | Assistant Superintendent of Elementary Education | Large | low | Engage NY(K-6); CPM 6-8 | unknown |
| 22 | Director of Preschool/Elementary Education | Large | high | Math Expressions | 2015-16 |
| 23 | Assistant Superintendent of Educational Services | Large | high | My Math | 2015-16 |
| 24 | Director of Curriculum | Large | high | enVision ; Bridges in Mathematics; McDougal Littell; Holt | 2014-15 |
| 25 | Assistant Superintendent of Education Services | Large | low | My Math(K-6); McGraw-Hill California Math(6-8); McGraw-Hill Pre-Algebra(7) | 2015-16 |

| | | | | | |
|----|--|------------|------|--|---------|
| 26 | Assistant Director of Elementary Education | Large | low | MyMath ; Glencoe California Math | unknown |
| 27 | Chief Academic Officer | Large | low | Carnegie | 2014-15 |
| 28 | Director of Curriculum and Instruction | Large | high | Math Expressions; SpringBoard | 2014-15 |
| 29 | Executive Director for Curriculum and Professional Development | Large | low | teacher-created units of study | 2014-15 |
| 30 | Deputy Superintendent for Educational Services | Large* | high | enVision; GO! Math ; ST Math (supplemental) | 2015-16 |
| 31 | Director of Curriculum and Instruction | Large* | low | Eureka; Springboard (supplemental) | 2014-15 |
| 32 | Assistant Superintendent, Curriculum & Instruction - Pre-Gr. 5 | Very large | high | Math Expressions(K-5); GO! Math (6-8) | 2015-16 |
| 33 | Executive Director, Secondary Education | Very large | high | units of study | unknown |
| 34 | Elementary Math Coordinator | Very large | low | My Math | 2015-16 |

Note. District names have been blinded. Small districts have < 1000 students; medium districts have 1000-10,000; large districts have 10,000-50,000; very large districts have >50,000 students. Book titles in bold are on the state-approved list. Adoption year is the most recent adoption year for any district K-8 mathematics textbooks; some listed books may have been adopted in earlier years.

*These districts only serve elementary and middle school students.

| | | | | | |
|---|--|--|--|--|--|
| District Number | 34 | 32 | 28 | 3 | 6 |
| District Size (Student Enrollment) | Very Large (50,000 or above) | Very Large (50,000 or above) | Large (10,000-50,000) | Small (1,000 or fewer) | Small (1,000 or fewer) |
| Interviewee | Elementary Math Coordinator | Assistant Superintendent of Curriculum & Instruction (Pre-Gr. 5) | Director of Curriculum and Instruction | Superintendent | Superintendent/Principal/Teacher |
| Committee Members | <p>First review committee:</p> <ul style="list-style-type: none"> • 2 coordinators from Division of Instruction and • 6 representatives from “local” districts • Coordinator of special education • Representative from multi-lingual/multi-cultural education <p>Second review committee:</p> <ul style="list-style-type: none"> • Teachers • Union representatives • Administrators | <p>First review committee:</p> <ul style="list-style-type: none"> • Educators and district employees <p>Second review committee (25 people):</p> <ul style="list-style-type: none"> • Teachers • Principals • Spanish immersion teachers • Special education teachers • Technology experts • Teachers on special assignment | <p>First review committee:</p> <ul style="list-style-type: none"> • Teacher from each site <ul style="list-style-type: none"> • Director of elementary and secondary education • Union representative • Assistant superintendent of instruction • Program manager • Secondary ELA coach <p>Second review committees (organized by grade groups):</p> <ul style="list-style-type: none"> • Grades K-5 • Grades 6-8 • Algebra 1 | <ul style="list-style-type: none"> • Reading or math specialist • Representatives from each grade group | None (all teachers involved in selection) |
| Role and Perception of the State-Approved List | <i>"We were instructed to select off the state list by our Chief Academic Officer... We were not allowed to select anything that was not on the state list. The state does the adoption. We do the selecting."</i> | <i>"We were told in the toolkit training that we either selected from the list, or we came up with an alternative approach...but it would need to meet all the requirements as set forth by the state. ...We know that if it's state-approved, that it's been vetted to make sure it teaches the standards."</i> | <i>"The director...looked at what's [on the state adoption list]. ...From there we will bring it back to our committee first ...We try to look at just three textbooks...so we're not looking at eight of them in depth."</i> | <i>"We went through that entire process ... and when we got down to decision making time, there was not a textbook that was that met the toolkit requirements. ... most of them were just a makeover of what the publishers had done in the past and they really weren't dramatically different.... conceptually based ... [or] aligned to the Common Core in a meaningful way."</i> | <i>"There used to be harder deadlines as to when we would have to buy, but right now... we can wait. We can sit and watch, and see what happens...."</i> |
| Publisher Involvement | None until books are adopted (publishers provide non-mandatory teacher training) | <i>"The committee determined which program types to pilot, and then examined, at a big curriculum fair, all the different publishers that were state-approved, and then walked away from that fair with...finalists to be considered for the pilots. Then we had those finalists come to the district office and present to the committee....From there, we selected two....to pilot."</i> | <i>"We went to a book fair, curriculum fair, at our county office. Publishers are there.... [they] were invited to do a presentation for each group. ... [W]e give a whole day devoted to publishers talking about what's in front of us, the curriculum... they give us the foundation we need, in order ... to make the right decision."</i> | <i>"The publishers were involved in that they...have publishing fairs. We don't hold one here because we're so small, but they hold them in the valley. We send our team to the publisher's fair."</i> | <i>"We don't get the reps up here....We sometimes encounter those people down at the county seat. ... It's rare when we'll see what the city school sees, where they'll have four or five different publishers to look at all the material."</i> |
| Toolkit/Rubric | <i>"We choose an assessment instrument that we then adapted for our use. It was the Chief State School Officer's Rubric. We edited it, turned it into an Excel document that would allow us to tally easily..."</i> | Developed by county office of education based on state toolkit | <i>"[T]he evaluation ... is based on five different components: (1) alignment with content standards; (2) program organization; (3) assessment; (4) universal access to include EL, special education and gifted and talented education; (5) instructional planning and support."</i> | <i>"[T]he state framework comes out, and then publishers write to the criteria in the state framework. Then so the toolkit is based on the criteria in the state's framework."</i> | None |

| | | | | | |
|--|---|---|--|--|--|
| Training | <p>"We met with our local district math coordinators to go through [the evaluation rubric] and literally do a training on it before we entered into the review process, which took about a week of eight to ten hour days."</p> | <p>"[O]ur committee was trained by the county in what the toolkit is and what the process is."</p> | <p>"They reviewed the current math data... They evaluated the new math framework. ... They also... reviewed and discussed the publishers' criteria. Also... they participated in the Smarter Balanced Training Test, ... cuz that was first year of SBAC, in order to orientate them to what the new assessments were going to look like."</p> | <p>"[T]he county facilitates bringing together a team of teachers from every such district and they go through training of the toolkit. Then, once they're very familiar with the toolkit, and what to look for in the textbook, then they start looking at the text."</p> | None |
| Evaluation Process and Criteria | <p>"We broke into grade level specific groups. We had each grade level specific group look at least at two publisher resources. Then we took all those rankings and compiled them. [My partner] and I did the initial cut on the alignment of the lessons to the standards just in a very simple counting the lessons, matching it to the standards, finding a percentage. ... [O]ne of the things that ranked very high... was the amount of assessment choices available to the teacher."</p> | <p>"The key pieces that we were—I believe these are directly from the rubric. There was a balance between informational literary text, clearly articulated support for foundational skills, scaffolding for all learners. There are like 10 different pieces that we evaluated for both programs. Then teachers shared pros and cons... The next is that it allows differentiation for all learners so that it's rigorous, but there's scaffolding opportunities to provide all kids with access to the materials. That it provides for intervention opportunity as well as extension. That it integrates content areas. Really, one of the last factors that we intentionally don't let drive it is price"</p> | <p>"[T]he teachers shared out their findings from their evaluations of all potential texts, regarding how well the texts introduced and supported the California State Standards.... [T]heir evaluation on assessments...both formative—so quizzes, quick checks, chapter tests, and also summative SBAC-like tests were evaluated for thoroughness. [They also evaluated] universal access, intervention, English learner support, use of the manipulatives, the ease of the material, and the overall impression."</p> | <p>"The things that are really important to our district are alignment to the standards. Not just a superficial alignment to the standards. ... What we find when we look at textbooks is that sometimes they say that it, the lesson addresses a particular standard, but when you look at it carefully, you can see how well or how deeply it addresses that standard....In our district, we have a larger EL population than a lot of other districts in our county, so the EL materials [are] really important. ...[Y]ou'll pick certain standards and you look at those standards across different publishers."</p> | <p>"[T]he only way is to use them. Then they tell you, 'I hate this,' or, 'I like this.' ... We're finding problems with every—all the printed curriculum. You get one of those, it's a real show-stopper. ... especially when you have a parent sitting at a parent-conference going, 'Let's go to Problem 12, Lesson 4,' and you go, 'Oh, god, that's wrong, we steer everybody around it.' They go, 'I'm a taxpayer. I'm paying a lot of money.'"</p> |
| Piloting | None | <p>"We selected an even balance of primary and upper grade teachers.... We made sure that every site was represented. ... We separated it into equal periods of time, 35 full instructional days each. The exact same number of instructional days, same amount of training for each program, ... We had the pilot teachers come together after the last pilot was over ... sharing all of their input on both programs, ... and then worked to develop consensus following a consensus procedure that is supported by our union."</p> | None | <p>"There's a repository of text [at the county office]. ... They compare them to the criteria in the toolkit, and then they make a recommendation for the three or four—usually two or three, sometimes four print publishers. Then, at the school level, we order those. Then they're piloted."</p> | None |
| Adoption Decision | <p>"We went through a rigorous process to rank eligible programs based on local district and central district first cuts, then teacher committee with administrators and union representative second cuts, and then we presented the ranked list to the board. The board then voted to select the first ranked program."</p> | <p>"For grades K through three, there was clear consensus for one program, and in grades four through five, they could not come to consensus...The findings from the teachers then went to the committee. The committee, as per the toolkit, is the tiebreaker...The committee's recommendation was to adopt two programs... It now goes to our...Instructional Materials Review Committee...We have board members, ... principals, ... community members, ... teachers [on that committee]... That committee now is looking at all the materials, considering the recommendation."</p> | <p>"They come back for the last meeting....[E]ach individual member had the choice to vote for one of the three texts or to continue an additional year using the current program."</p> | <p>"It's really about teacher discussion more than it is administrative discussion....We have gone with the committee's recommendation...since I've been here, for ELA and for math."</p> | <p>"On the site council, we have five stakeholders—community stakeholders, sometimes parents, sometimes grandparents. They get a chance to look at it, but I notice that they kinda glaze over when we show 'em some giant curriculum with three, or four books, and we're showin' the online stuff...[I]t's hard for them to even imagine that half your curriculum is out on the Cloud."</p> |
| Technology | Not a factor in evaluation | <p>"Both of the programs that we're recommending for adoption have digital supplemental materials. We are not adopting digital textbooks...because of the access issue. As a district, we do not have the funding to provide equitable support to all the sites. ... We cannot pay for the devices that would be necessary to go digital."</p> | <p>"[S]ome textbooks were removed...for the following reason. The program ...was 100 percent digital, so we cannot do that here. ... To me that's the biggest obstacle right now. We as a district are not at capacity where we can handle curriculum that is 100 percent technology..."</p> | <p>"[W]e always purchase a technology component."</p> | <p>"[W]e just adopted...one of the many online, all-encompassing [programs]—and I'm hoping that our eighth graders will leave [the traditional textbook], and go straight to [the online program's] version of math. Which would be an interesting thing for the publishers, because they're gonna quit selling books... 'cuz everybody's online."</p> |