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Education Governance and Race: An Analysis of School Board Discourse Using Large Language Models

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Despite growing attention to school boards, it is unclear whether they primarily operate as bureaucratic forums, policy-making bodies, or arenas for contentious debate—particularly on issues of race. Recent controversies suggest increasing public engagement and conflict, but little evidence documents how often questions of race arise in board deliberations. This study analyzes over 40,000 meeting minutes from 2018–2022 to examine the prevalence, framing, and drivers of race-related discourse. Using large language models, natural language processing, and human coding, we find that race-related conversations are relatively uncommon but responsive to national events, particularly in politically competitive, suburban districts. Our analysis highlights the variable nature of local governance and the value of meeting minutes and computational tools for understanding this variability.

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In recent years, American school board meetings have seemingly transformed from sleepy, bureaucratic affairs into arenas of contentious debate. In 2021, for example, when more than 250 individuals signed up to speak at a school board meeting in Loudoun County, Virginia, the meeting ended prematurely, with one man arrested, another ticketed for trespassing, and a third receiving a minor injury (Wilder et al., 2021). Similarly, in Palm Beach, Florida, meeting disruptions in one school district became so routine that school board members voted to ban "shouting, heckling, jeering, hissing, booing, engaging in speech that defames individuals or stymies or blocks meeting progress or loud, excessive or prolonged applause that disrupts the meeting" (Kokal, 2023). Race and diversity have been at the center of these controversies, with critical race theory (CRT) emerging as a particularly polarizing issue. Indeed, in October 2021, the National School Board Association released a letter requesting federal law enforcement to protect school board members who had received threats due to "propaganda purporting the false inclusion of critical race theory within classroom instruction and curricula" (NSBA, 2021, p. 1). If such events reflect patterns in U.S. school districts more generally, then there is good reason to believe that we have again reached a moment in national education politics where race has become a major issue and the subject of widespread conflict.

Despite the recent national attention, however, minimal empirical evidence exists concerning how and the extent to which school boards engage in discussions related to race. In this paper, we address this paucity of evidence by systematically collecting and analyzing a novel dataset comprising over 40,000 meeting minutes from 500 school districts across the United States. A significant proportion of school boards' work is completed during public

meetings, where members deliberate on policies, address community concerns, and make decisions. Meeting minutes represent the official record of these meetings—capturing the substance of discussions, the topics covered, voting results, and actions taken. We use these data to examine how U.S. school boards engage with the topic of race, assessing the changes in frequency of race-related discussions, which speakers are involved, the stance these speakers take, and how these patterns have changed from 2018 to 2022, a period of intense social change.

To do so, we applied a combination of large language models (LLMs), natural language processing, and human coding to classify 150-word segments of meetings as containing race-related content, or not. We broadly operationalized "race-related" as any statement where race and ethnicity were referenced, including associated issues such as discrimination, equity, inclusion, multiculturalism, and/or representation. We identified the stance of each statement as either *affirmative*, in favor of equity/diversity initiatives, or *oppositional*, a rejection/critique of these initiatives. We also identified the source of each statement—attributing them to either an *official*, such as school board members or invited speakers, or to the *public*, arising within the public comment section of a meeting. After aggregating from the segment to the meeting level, we subsequently used these measures to assess the frequency and framing of race-related discussions across school boards nationwide, examining variation by school district demographics, geographic region, and local political context.

Our analysis revealed substantial heterogeneity in how school boards address race, though with far less contention than media portrayals may suggest. Most meeting minutes contained no race-related content—75% across the five-year period—and a relatively small subset of districts accounted for the majority of such discussions. For example, 12% of districts never referenced race in five years of meetings minutes, while roughly one-third of districts

produced 80% of all race-related content. Second, when race was discussed, affirmative statements dominated. We found that 24% of school board meetings contained affirmative race-related statements, compared to just 1% that contained oppositional race-related statements. Third, affirmative statements were predominately spoken by officials, while oppositional critiques were more equally distributed between these officials and members of the public. Fourth, discussions of race were most common in highly educated, suburban districts in the Northeast and West, and, in the case of oppositional content, in politically competitive districts.

Finally, we observed heterogeneous responses to broader societal and political debates. Using our five-year panel dataset, we examined changes in school board discourse following policy brutality and racial equity protests in 2020 and the national debates surrounding critical race theory (CRT) in 2021. Affirmative race-related statements increased in 2020, often within in the same higher educated, left-leaning suburban communities, where discussions regarding race were already relatively more frequent. Oppositional content dramatically increased in 2021 and was again most common in suburban and highly educated communities. However, politically competitive districts, which did not necessarily have frequent race-related content before 2020, also took up oppositional content in 2021 with greater frequency than either left-leaning or right-leaning districts.

Taken together, our findings suggest that race-related conversation is a regular, though heterogenous, feature of school board deliberations. Board members can and do discuss race without controversy much of the time; affirmative statements are far more common than oppositional statements. Further, oppositional content is both rare and concentrated in a subset of districts, indicating that media reports highlighting conflict were not inaccurate, but were also not representative of the typical district. Importantly, both affirmative and oppositional discourse

occurred most often in suburban, high-income, and highly educated districts in the Northeast and West. These districts also experienced increases in affirmative content following racial equity protests in 2020 and in oppositional content following national CRT debates in 2021, suggesting that high-income and highly educated suburban communities on the coasts may engage in a distinct style of school board governance characterized by more frequent deliberation over values.

Ultimately, this study makes two key contributions to the literature. First, we bring sizeable empirical data to bear on an issue of significant national interest: the extent to which race-related discourse in school board meetings is changing. To date, this topic has been predominantly examined anecdotally, via insightful but limited accounts. In bringing large-scale data to the question, we provide a valuable descriptive foundation for understanding how school boards address issues of race. Second, we highlight the methodological value of meeting minutes as an underused yet rich data source for studying education governance. These texts offer a window into how educational priorities, values, and conflicts are articulated by school boards – and in their interactions with the public – over time. Our analyses speak to the potential and limitations of these data, while also demonstrating a rigorous approach to LLM-based classification that can be replicated and extended in future research on education governance and discourse.

Background

The Democratic Nature of School Board Governance

Although rules vary by state, school boards typically consist of seven unpaid democratically-elected officials (Tracy & Durfy, 2007). While critics have taken issue with school boards' lack of racial diversity (Diem et al., 2015), and have highlighted the low participation rates in board

elections (Kogan, 2022; Kogan et al., 2021), school boards' capacity to democratically represent local needs is a key argument in their favor (Hess & Meeks, 2010). Indeed, not only are board members democratically elected but their meetings "provide opportunities for local stakeholders to have direct input over policy and/or observe transparent policy deliberation" (J. Collins, 2021, p. 343). With few exceptions, sunshine laws require school board business to be conducted in open meetings (J. E. Collins, 2021; Tracy & Durfy, 2007). These meetings also provide dedicated time for citizen input, although the extent to which members of the public use this opportunity varies (Campbell, 2005).

School Board Activities

Researchers have catalogued the common duties carried out by school boards, including the recruitment and termination of superintendents and staff, curricula approval, financial and contractual oversight, staff negotiation, and the management of contractual services (Ehrensal & First, 2008). Beyond such discrete duties, however, there is limited agreement on school boards' broader role in shaping the education system. The National School Board Association (2023) identifies policy-making and improving student achievement as school boards' key roles. However, education reforms have typically circumvented school boards, preferring schools themselves to be the unit of change—for example, via charter school formation, school choice initiatives, and school accountability reforms (Anderson, 2003; Cohodes & Parham, 2021; B. Jacob, 2017). Others believe school boards' key role is to act as an interface between schools and the public, promoting connection and listening to public concerns (Ehrensal & First, 2008; Hochschild, 2005). While research on how school boards use their power is limited, surveys and case studies suggest that boards spend only three percent of their time on policy development

and oversight (Olson & Bradley, 1992). Indeed, a long-standing critique of school boards is that they are "mired in minutia" (Nowakowski & First, 1989).

Given the power granted to them, however, school boards can still undertake actions to address pressing challenges, including racial inequities. In 2021, for example, in the wake of national protests for racial equity, the National School Board Association (2021) recommended that boards should increase their focus on several areas, including: within-district funding equity across schools, recruiting and retaining teachers of color, selecting culturally responsive curricula, providing professional development opportunities to address teachers' implicit biases, and incorporating restorative justice practices. To date, however, there remains limited empirical research concerning which U.S. school boards discuss race in the course of their duties, nor whether the character and frequency of such discussions have changed in recent years.

School Board Politics, Equity, and Controversy

Blissett and Alsbury provide early insights into how school board members' priorities vary by race and gender, offering a baseline for understanding how issues of equity and representation shape local governance (2018). Analyzing responses to a 2009 survey from 900 board members across 418 school districts, they found that Black board members felt more urgently than white board members about many of issues on which they were asked to respond, but particularly quality of teaching, quality of leadership, and closing achievement gaps (an area where women also expressed greater urgency). Though, to our knowledge, issues of race and equity beyond achievement gaps were not provided as options in that survey, the work of Sampson and Bertrand suggest that board members can be called upon by the public to address systemic and interpersonal forms of racism in their districts. Observing meetings in one majority-white district between 2017 and 2018, they found that parents and community advocates used the

public comment section to share stories of racist comments, activities, and treatment toward Black children (Sampson & Bertrand, 2023). In related work, they documented how advocates strategically broke rules surrounding public comment—such as exceeding time limits or speaking from the audience—as acts of resistance (Sampson & Bertrand, 2022).

Following the pandemic, school boards became increasingly visible and politicized arenas. Assessing whether this shift translated into increased electoral participation, Jacob (2024) examined 4,300 board elections between 2018 and 2022 and found that following the onset of the COVID-19 pandemic contests were more likely to be competitive, with higher voter turnout. The work of Shah, Weinschenk, and Yiannas (2024) illustrate some of the issues that explain this shift. Analyzing the population of school board elections in Ohio, these authors identified school board campaigns focused on CRT, pandemic responses, and parental control. These campaigns were most common in right-leaning districts and in districts with a declining white population.

Finally, in the study most similar to ours, Holman et al. (2025) analyzed transcripts of school board meetings posted to YouTube between 2010 and 2023. Using a combination of dictionaries and topic modeling, they found that contentious conversations were most frequent around gender and race, and that such contention was more common in larger, urban, and suburban districts with fewer students of color. To the best of our knowledge, this is the only existing study that provides extensive evidence regarding the prevalence of school board meeting conflicts. Our approach in this paper employs a more nationally representative sample than Holman et al. (2025) and narrows the focus from broadly defined conflict to the specific issue of race, allowing us to more comprehensively characterize when, where, and how, school board and the public engage in race-related issues in their deliberations. Concurrently, we demonstrate the

benefit of using LLMs to harness the insights contained in thousands of previously unexamined meeting minutes.

Study Context

We focus our analysis on a period of intense social change in the United States, from 2018 to 2022. This period includes the widespread protests following the killing of George Floyd and national conversations surrounding CRT. We include 2018 as a baseline year, providing a valuable point of comparison for the particularly tumultuous years that follow. Approximately two and a half years following our starting time point, on May 25, 2020, George Floyd, a 46-year-old Black man was killed by Minneapolis city police. Protests began in Minneapolis the next day (Reuters, 2020), and quickly intensified after the police officers were formally charged. On July 20, 2020, thousands of U.S. workers staged an 8 minute walk-off in a "Strike for Black Lives.". Further protests, including an occupation of the intersection where George Floyd was killed, continued in the following years (Cobb et al., 2024).

Just months after Geoge Floyd's death, in September 2020, Chris Rufo, a conservative activist, argued on national television that publicly funded institutions were inappropriately teaching people to apply CRT to their lives. Soon after, the Trump administration banned forms of diversity training which included "divisive concepts," such as "the United States is fundamentally racist or sexist," or that "an individual, by virtue of his or her race or sex, is inherently racist, sexist, or oppressive, whether consciously or unconsciously" (Exec. Order No. 13950, 2020). By 2021, several states had banned the teaching of CRT in public schools (Schwartz, 2021).

As local institutions responsible for setting district policies, these overlapping events forced school boards to navigate a shifting terrain of public opinion, state mandates, and

community pressures. Thus, by focusing on this period, our study captures how national events filtered down to local decision-making, providing a unique window into the responsiveness of school boards to broader societal forces.

Sample and Data

To systematically examine race-related discussions in school board meetings, we first identified a stratified random sample of 543 U.S. public school districts. We stratified public school districts by two criteria: district size (measured by student enrollment) and 2016 Republican presidential vote share. We separated our sample into quintiles for each criterion, generating 25 strata. Within each stratum, we randomly selected 5% of districts. This design ensured that every district in the U.S. had an equal probability of inclusion in our sample, while also guaranteeing representation from across the political and size spectrum.

For each school district, employees of a third-party data collection service visited the district's website and downloaded all available school board meeting minutes from 2018 to 2022, a process resulting in 40,316 documents. As shown in Table 1, the districts in our sample are larger than the national population with a greater number of suburban districts and fewer rural districts, a result of our stratification procedure, but our sample relatively representative in terms of student demographics. The analytic sample consisted of 500 districts (the 92% of sampled districts where we were able to identify publicly posted meeting minutes): 23% in the Northeast, 37% in the Midwest, 24% in the South, and 17% in the West. Demographically, the average district in our sample serves 25% Black or Hispanic students and 48% of students who receive Free or Reduced-Price Lunch (FRPL). Approximately 41% of the sample districts are rural, 22% in towns, 30% suburban, and 7% urban.

We collected all available meeting minutes, including regular board meetings and special board meetings, for every school board in our sample between 2018 and 2022. We identified approximately 16 documents per district per year, though there are many districts where we were not able to identify meeting minutes for every year. Thus, Table 1 also disaggregates sample characteristics by each of our panel years, demonstrating larger districts are more likely to be present throughout the full panel, as are districts in the Northeast, while other characteristics are largely stable across the panel. In Appendix A, we demonstrate the robustness of our findings to variability across years.

Because meeting minutes were often in PDF format and infrequently photocopied, we applied text extraction and optical character recognition (OCR) using `LayoutParser` (Shen et al., 2021). We linked the data extracted from meeting minutes to several additional data sources. The Common Core of Data provided information on geography, enrollment, and student demographics for each district in our sample and the American Community Survey provided information on the demographics of the surrounding zip code. Harvard's Voting and Election Science Team provided information on the partisanship of the surrounding geographic area, while CRT Forward out of UCLA School of Law (Alexander et al., 2025) provided information on whether the surrounding state adopted anti-CRT legislation by December of 2021. Finally, the Stanford Education Data Archive provided information on district-level student academic outcomes (Reardon et al., 2016).

Measures

Definition of Concepts

For each meeting, our aim was to determine whether it contained any of the following occurrences: (1) a race-related statement; (2) an affirmative race-related statement; (3) an

oppositional race-related statement; (4) a race-related statement from an official; (5) a race-related statement from the public comment section of the meeting; (6) an affirmative and/or oppositional race-related statement from an official; and (7) an affirmative and/or oppositional race-related statement from the public comment section. (Each of these occurrences are defined below.) To differentiate by speaker and stance, we first segmented all the documents into 150-word segments of text—a size we judged to be large enough to determine speaker and stance while small enough to use LLMs efficiently. Later, we aggregated the segment-level classifications to the meeting level by creating binary variables for whether there are one or more of the previously outlined occurrences (e.g., any affirmative statement from the public).

We broadly define "race-related conversations" as any statement where race and ethnicity—or associated issues such as discrimination, equity, inclusion, multiculturalism, and/or representation—are referenced. Statements about other aspects of identity (such as gender, sex, religion, or disability) are not incorporated into this definition, nor are statements about equity pertaining to non-demographic factors, such as equity in funding between athletics and fine arts, unless race is also specifically mentioned. However, general statements about equity would be coded as race-related unless the speaker is clearly referring to equity on a dimension other than race or ethnicity.

We further characterized each race-related statement according to whether it was uttered during the public comment section of a meeting or by an official (e.g., school board member, superintendent, or invited guest). We also established whether the statement included an affirmative stance concerning race in education or an oppositional critique of such a stance, or both. We use these terms in a very particular sense, where an affirmative stance pertains to any race-related statement other than those which critique equity and multicultural initiatives. Under

this definition, the character of affirmative statements may range from symbolic (such as statements that simply express appreciation for diversity) to action-oriented (such as statements that indicate substantive efforts to increase the hiring of teachers of color). They may range, too, from politically neutral (such as statements acknowledging Black History Month) to politically liberal (such as statements expressing support for the Black Lives Matter movement). Oppositional statements are defined as those which critique and/or disavow racial equity/diversity initiatives or activities. Under this definition, critiques of CRT would be coded as oppositional, as would a statement from a board member stating that CRT is not taught in the district. However, if the board member continued to discuss how the district addresses multiculturalism, the statement would be coded as both affirmative and oppositional. See Table 2 for examples of the above categories.

The Use of Large Language Models (LLMs) in the Categorization of Documents

Generative LLMs are natural language models that have been pre-trained on enormous samples of text to produce 'reasonable continuations' of writing following users' natural language prompts (Reynolds & McDonell, 2021). They achieve this by maximizing the probability of each subsequent term, conditional on the previous terms (Radford et al., 2018). This generative capacity can be used to classify texts by indicating a classification task in a prompt (Radford et al., 2018, 2019). For example, consider a simple prompt, such as: "Classify the following text as race-related (yes) or not (no). Text: [EXCERPT]." When the prompt is followed by an excerpt unrelated to race, the next most likely word—conditional on the terms provided in both the prompt and excerpt—is "no."

While training a classifier model from scratch typically requires thousands of labeled examples to reasonably align with human codes, a generative LLM can be applied to this task

without any labelled examples at all (a process termed "zero-shot learning"). Alternatively, a researcher may provide the LLM with 2 to 10 select examples ("few-shot learning"). When a researcher wishes to provide a larger quantity of examples, they commonly engage in a process termed "fine-tuning," where the LLM undergoes an additional round of training with a smaller, task-specific training dataset. Even in fine-tuning, however, the number of examples provided is typically fewer than one hundred. Researchers may thus apply LLMs to text classification tasks while hand-labeling anything from a few documents to several dozen. However, using an LLM to automatically code a corpus without a larger hand-labeled dataset presents two important limitations. First, there is no guarantee that the chosen prompt wording and/or selected examples are the best approach for maximizing the quality of the LLM output. Second, without a trusted labeled sample, there is no way to know whether the LLM output matches the researchers' understanding of the concepts. For these reasons, we follow a more rigorous process in this paper.

First, we hand-code a subset of our corpus. Second, we split this hand-labelled dataset into distinct training, development, and validation samples. Third, we use the training sample to identify a reasonable LLM model, to systematically select a prompt, and to provide examples via few-shot learning and fine-tuning. Fourth, we use the development sample to select among a few promising approaches. Fifth, we validate our final LLM-based classifiers using the hold-out validation sample.

Human Coding, Model Selection, and Validation

We began the modelling process with a simple random sample of 1,500, 150-word segments from our meeting minutes corpus (which consists of 567,486 segments across 40,316 meeting minutes). Because race-related segments in meeting minutes are rare, we supplemented

this representative sample with a simple random sample of 1,500 segments from the subset of segments in the corpus which contained at least one of 70 race-related terms (and which were not already included in the sample; see Appendix B for a description of how these race-related terms were identified). A team of undergraduate research assistants then viewed these 3,000 segments and classified each segment as either race-related or not race-related—basing their choice solely on the segment content and using the key definitions discussed above. If a segment proved to be race-related, the research assistants further coded the segment's stance (affirmative/oppositional/both) and speaker (public comment/official). Inter-rater reliability for both race-related and affirmative/oppositional was estimated to be 0.75 (Cohen's Kappa), while inter-rater reliability for the speaker was 0.74. According to McHugh (2012), both of these figures indicate moderate reliability.

For model selection and validation, we assessed the relationship between *true positives*, *true negatives*, *false positives*, and *false negatives* for each of our concepts of interest. In these terms, positive and negative refer to whether the model identified a concept's presence in a segment (e.g., race-related or not, oppositional or not, public or official), while true and false indicate whether the human coder agreed. For example, a false positive for a race-related segment indicates that the model identified the segment as race-related while the human coder did not. Using these definitions, we formulate the following equations for accuracy, recall, precision, and F1:

$$Accuracy = \frac{True\ Positives\ +\ True\ Negatives}{False\ Positives\ +False\ Negatives + True\ Positives\ +\ True\ Negatives};$$

Equation 1

$$Recall = \frac{True\ Positives}{True\ Positives + False\ Negatives};$$

Equation 2

$$Precision = \frac{True\ Positives}{True\ Positives + False\ Positives}.$$

Equation 3

$$F1 = \frac{2 * Precision * Recall}{Precision + Recall}$$

Here, accuracy is simply the proportion of segments that the LLM classified correctly for a given concept (e.g., the proportion of segments correctly classified as race-related or not race-related). Recall is the proportion of correctly identified cases from among all positive cases (e.g., the proportion of race-related segments, according to the human coder, that the model also identifies as race-related). Precision is the proportion of correctly identified positive cases among all LLM classified positive cases. In other words, of the segments the LLM identified as race-related, for example, what proportion did the human also classify as race-related? Lastly, F1 is the harmonic mean of precision and recall, and serves as a summary across the two metrics. Note that in cases where a segment is coded as both, we consider the excerpt a positive in calculating precision and recall for both affirmative and oppositional.

We randomly separated our hand-coded segments into training, development, and validation datasets, at a ratio of 20:30:50 stratifying by affirmative, oppositional, both, and not race related. We used the training dataset to, first, select a reasonably priced, high-performing LLM, testing 11 models across four providers (OpenAI, Anthropic, Google, and Meta). The results of this exercise are reported in Appendix C; we narrowed our selection to three potential LLMs: gpt-5-mini from OpenAI (a high-performing but a closed-source proprietary model, which, as of the time of writing cannot be fine-tuned), gpt-4.1-mini (for fine-tuning), and Llama 3.3 from Meta (an open-source and free model but which requires high-performance computing resources.) Then, also within the training dataset, we test the performance of 50 different prompts – created by randomly varying definitions and the explicit inclusion/exclusion criteria included in the

prompt – and, for each of the three models, select the prompt that results in the highest Macro F1 (an average of the affirmative, oppositional, and not race-related F1). Similarly, for few-shot classification, we test 50 combinations of examples, again within the training dataset, and select the combination that results in the highest Macro F1. We repeat this process again to identify the best prompt and model for speaker identification, though testing fewer prompts (just six) and combinations of examples (nine) given there are fewer categories to describe and demonstrate. In Table 3, we present performance metrics estimated within our development dataset for seven approaches: zero-shot classification with our initial starting prompt, zero-shot classification with the empirically selected prompt, and few-shot classification with our empirically selected examples, for each of gpt-5-mini and Llama3.3, plus a fine-tuned model for gpt-4.1-mini. Each prompt tested in the development dataset is provided in Appendix C.

In our development dataset, our best performing model for stance classification was gpt-5-mini with the following empirically selected zero-shot prompt: "We are studying how race is addressed in school board meeting minutes. Classify the follow excerpt from meeting minutes into one of four categories: affirmative, oppositional, both, or NA. An oppositional excerpt is against a racial equity or diversity initiative. An affirmative statement is any excerpt related to race that is not oppositional. General statements about equity would be coded as race-related unless the speaker is clearly referring to equity on a dimension other than race or ethnicity (e.g., sexuality). Title IX and stock anti-discrimination statements, without additional discussion, should not be coded as about race. Statements against critical race theory (CRT) should be classified as oppositional. This includes statements where someone states the district is not teaching CRT, as this is a disavowal of a racial initiative. If an excerpt describes someone

speaking about critical race theory, without context, assume they are opposed to critical race theory. Respond with only affirmative, oppositional, both, or NA. Excerpt:".

Our best performing model for speaker classification was a few-shot classification approach with gpt-5-mini and the following empirically selected zero-shot prompt: "Read the following extract from a school board meeting minutes and pay close attention to the part that is about race. Does that portion likely come from the public comment section of the meeting? When an excerpt contains a mix of public comment and official content, check whether the race-related discussion occurs within the public comment section. Respond only yes or no. Excerpt:", alongside five examples (available in Appendix C).

These were the models and prompts we tested in validation data and applied to the remaining unlabeled excerpts. Performance results for the validation sample are shown in Table 4. The model identified 97% of statements that a research assistant had coded as race-related (recall). Of the statements the model identified as race-related, a research assistant agreed 95% of the time (precision). In classifying statements as affirmative or not (where *not affirmative* includes both oppositional statements and statements that are not race-related), recall and precision was 95%. In classifying statements as oppositional, recall was 90% and precision was 87%. Among all race-related segments, the model could distinguish between public comment and official comment with an accuracy of 97%. A small, anonymized sample of 120 segments (30 affirmative, 30 oppositional, and 60 not about race) is available in the online supplemental materials.

We applied the LLMs to our full corpus of meeting minute segments, such that each segment was associated with a series of binary measures: race-related, affirmative, oppositional, public comment, and official comment. (The last four are only indicated if the segment is

previously classified as race-related). We also generated indicators of affirmative-public comment, affirmative-not public comment, oppositional-public comment, and oppositional-not public comment by interacting LLM indicators of stance and speaker. We aggregated these indicators to the meeting level, creating binary indicators of whether there was any affirmative or oppositional race-related conversation from each speaker type within a given meeting.

Finally, to contextualize the resulting frequencies, we also conduct a more informal exploration of the frequency with which several non-race related topics occur in meetings. To do so, we sample 500 meetings from 50 randomly selected districts (10 meetings per district). Then, using LLM-based zero-shot classification, we identified discussions of academics, attendance, pandemic policies, facilities, finance, and personnel. This analysis provides a useful, albeit less rigorous and unvalidated, point of comparison for our race-related analyses.

Limitations of Meeting Minutes

Thanks to open meetings laws, and our stratified sample, our collection of meeting minutes provided a large, generalizable corpus. However, while school boards are required to publicly post meeting minutes, they are not required to take extensive notes on their discussions (although many do). We thus cannot routinely expect to find in-depth, detailed accounts of speakers' meeting contributions—raising questions about minutes' reliability as a source of information on meeting activities. To assess the scale of this potential drawback, we supplemented our primary sample with meeting transcripts from the LocalView database (see Barari & Simko, 2023). These are automated transcripts from a non-representative sample of 118 U.S. school districts that upload video recordings of their school board meetings to YouTube. See the final column of Table 1 for the characteristics of this sample. We then compared verbatim transcripts of these recorded meetings—which document almost every word spoken—

to our primary meeting minutes data. The results of this exercise are in Appendix D. Race-related discussions were indeed more prevalent in the video transcript sample than the minutes sample (for example, in 2021, 68% of transcripts contained race-related content compared to 27% of meeting minutes) likely stemming from both the difference in medium and respective sample characteristics. However, the two data sources nevertheless exhibited similar trends regarding the prevalence of race-related content over time and the relationship between prevalence and district characteristics. In Appendix E, we draw more direct comparisons of mediums by analyzing a small subset of meetings where both transcripts and minutes are available. There, we find that minutes most reliably capture race-related discussions when the discussion is sustained (across multiple 150-word segments in the transcript) and when the minutes document contains a larger word count. Taken together, our analyses suggest that word count may be a useful proxy for meeting quality, and that conclusions should be more tempered when documents are short or when conclusions require identifying brief or one-off instances of a topic.

Analysis

We began our analysis with a series of simple descriptive statistics, calculating averages and percentiles for our metrics (race-related, stance, and speaker) for all districts across the five-year study period. To assess the relationship between the prevalence (and character) of race-related meeting conversation and national events, we first plotted a series of graphs for all districts demonstrating changes in meeting content over time, disaggregated by district politics. We also estimated a series of equations:

$$Y_d = \beta_0 + \beta_1 X_d + \delta_1 BaselineWords_d + \varepsilon_e,$$

Equation 4

where Y_d is one of three measures of interest: (1) $Y_{2018,d}$ the proportion of 2018 meetings within a district featuring affirmative race-related content from an official speaker (school board member, administrator, or invited guest); (2) $Y_{2021-2018,d}$ the change in this proportion between 2018 and 2021; and (3) $Y_{2021,d}$, the proportion of meetings within a district with oppositional race-related public comments in 2021. X_d represents one of several district characteristics, including urbanicity, student demographics, geography (each measured in 2018), and political affiliation (measured in 2016). The variable $BaselineWords_d$ served as a proxy for the baseline level of detail in meeting minutes and is defined as the median number of words in a district's first three meetings. This measure allows us to account for reporting quality while preserving variation in meeting length that reflects substantive increases in content. This control is particularly important given findings in Appendix E (discussed previously) where we assess the relationship between word count and meeting classification.

Given our outcomes of interest are proportions and heavily skewed with many zeros, Appendix F confirms the robustness of our findings to a logistic specification. And, to assess which characteristics explained the greatest amount of variation in racial discourse, after adjusting for other characteristics (such as attempting to separate the variation in urbanicity from the variation in vote share), Appendix G contains the results of a conditional model that included the full set of analyzed district characteristics.

Results

Overall Prevalence and Trends

We find that school boards do indeed engage in issues of race in a substantial proportion of meetings; on average, 24% of the 40,316 minutes in our sample contain at least one segment

with race-related content. See Table 5. The vast majority of the time, this content is affirmative in nature and generated by officials rather than members of the public; oppositional content occurs in just 1% of meeting minutes and affirmative public content in just 3%. Affirmative references rose steadily from 0.21 in 2018 to a peak of 0.27 in 2021, before declining slightly in 2022 (0.25). In contrast, oppositional race-related content was rare during the first two years of observation (neglible in 2018–2019) but began to appear around 2020, reaching a peak of 0.03 in 2021 and subsiding slightly in 2022 (0.02).

Patterns are similar when disaggregated by speaker. Affirmative discussions were far more common among board officials than among public speakers, with the share of meetings containing affirmative statements from officials increasing from 0.20 in 2018 to 0.26 in 2021. Public speakers also engaged in affirmative discussions, though at much lower levels (0.02 in 2018; 0.04 in 2021). Oppositional content was rare but generated by both officials and the public in 2021 (proportion of 0.01 and 0.02, respectively). Overall, affirmative discussions were both more prevalent and more consistent, while oppositional content remained rare but substantially increased overtime.

To contextualize these values, Table 6 provides rough estimates of the proportion of meetings containing discussions of academics, attendance, pandemic policies, facilities, finance, and personnel. Finance and personnel were consistent points of discussion, occurring in 84% and 79% of meetings respectively. Sports and athletics were discussed in just over half of all minutes, Attendance and academics discussed in approximately 40%, and pandemic policies in about a third. All of these topics of conversation were more frequent than those related to race (24%), but a frequency of almost one quarter of meetings still represents a substantial share of meetings, comparable in magnitude to other major topics.

Additionally, Appendix G provides some additional insight into the content of the race-related discussions by assessing the frequency with which specific racial groups are invoked in affirmative segments (e.g., Black, Hispanic), which previous work suggests may be important for encouraging meaningful change (Green et al., 2023). There, we show that, of the race terms counted, "black" is most commonly occurring, appearing in 10% of affirmative segments and nearly doubling between 2018 and 2020 (0.07 to 0.13). More commonly though, general terms like "equity" (in 33% of affirmative content) and diversity are invoked (in 16%).

The Relationship between Race-Related Discussions and District Politics

While these averages convey overall trends, they mask substantial variation across districts. Figure 1 visualizes the distribution of race-related content across districts each year. The figure demonstrates that the frequency of affirmative race-related content in the median district rises modestly overtime, with upper quartiles extending higher in 2020 and 2021. However, there are also outliers where affirmative content appeared in nearly all meetings, indicating that some school boards consistently prioritized race-related discussions. The distribution for oppositional content is even more skewed. The median district in every year had no oppositional content, but the number of outlier districts with such discussions increased sharply in 2021, suggesting that oppositional themes became an important topic for a small subset of boards.

Figure 2 disaggregates the relative frequency of affirmative and oppositional race-related discussions by speaker type, time period, and community politics, demonstrating substantial heterogeneity across these dimensions. The left-hand panel depicts affirmative content. Left-leaning districts (defined as those with a Republican 2016 presidential vote share below 0.45) discussed race most frequently across the study period. In these blue districts, official affirmative

content rose steadily from 2018 to 2022, with seasonal fluctuations, while affirmative public comments increased sharply during the summer of 2020 (from roughly 5% to 9% of meetings) and remained elevated through spring 2022. In politically competitive ("purple") districts, official affirmative content rose in fall 2020 (from 24% to 29% of meetings) and remained higher through summer 2022. Public comments in these districts followed a similar pattern. In contrast, red districts (Republican vote share above 0.55) exhibited the lowest levels of affirmative content and few discernible temporal patterns. This is particularly true for affirmative public comments which remained rare throughout the period.

Patterns in oppositional content are more stark, albeit on a smaller scale. Notably, the greatest jump in oppositional comment occurs in purple districts, among public speakers, in the summer of 2021 (from half a percent of meetings to 5% of meetings), lining up with the timeline surrounding CRT debates. Blue districts and red districts also see a jump during the same period, as does official content, though to a lesser extent. Earlier in the time period, in the summer of 2020, we also see a jump in oppositional content from the public in left-leaning districts. We anecdotally explored these patterns through taking a random sample of 15 excerpts from each of these time periods. Qualitative observation suggests that oppositional content from the public in 2020 was often in response to debates around the role of school resource officers in schools, while oppositional content in 2021 typically focused on CRT.

Formal tests of patterns in district characters revealed further details about the relationship between district subgroups and national trends. Using a district level dataset, and a series of regressions described in Equation 4, we examined the following three variables: (1) the proportion of 2018 meetings within a district featuring affirmative race-related content from official speakers (speaking to officials' baseline commitments); (2) the change in the previous

variable between 2018 and 2021(whereby officials might be responding to the moment of heightened racial awareness); and (3) the proportion of 2021 meetings within a district with oppositional public comments (whereby the public might be responding to national debates surrounding CRT). Figure 3 shows the coefficients from these models, with standardized continuous independent variables in the right-hand panel, so coefficients represent the change in the outcome associated with a one–standard deviation increase in the characteristic. Regression results can be found in table form in Appendix H, alongside estimates from the conditional model.

Speaking to baseline patterns in 2018, after controlling for baseline meeting length, we find that board officials in districts serving higher proportions of students of color (both in comparison to other districts and relative to their surrounding communities) as well as those in urban and suburban areas and in the Northeast and West, discussed race affirmatively with the greatest frequency. For example, urban and suburban districts mentioned race in 9 percentage points more meetings than rural and town districts. Similarly, districts in the Northeast discussed race 9 percentage points more often, and those in the West 12 percentage points more often, than those in the South. Affirmative race-related discussions were also most common in communities that were more left-leaning, highly educated, and higher income. Many of these same characteristics predicted a growth in affirmative official race-related content following the racial equity protests of 2020. Urban and suburban districts in the Northeast, with highly educated left-leaning communities saw the greatest increase between 2018 and 2021. Finally, we find that the public was most likely to make oppositional statements in suburban districts with higher student achievement, in higher educated and higher income communities where the absolute margin of victory in the 2016 presidential election was smaller. Interestingly, districts in states with K-12

anti-CRT legislation or executive directives are less likely to experience oppositional public comment.

Frequency of Race-Related Discussions in LocalView Transcripts

Finally, in Figure 3, we present key findings drawn from our analysis of LocalView transcripts, placed in direct comparison with the same analyses applied to meeting minutes (see Appendix D for additional comparisons). The figure plots the average proportion of district transcripts and minutes containing affirmative and oppositional content, disaggregated by community partisanship and season. Four main observations emerge. First, the prevalence of both affirmative and oppositional content is substantially higher in LocalView transcripts than in meeting minutes. Estimates of affirmative content in transcripts, for example, are often twice as large as those observed in the minutes sample. Part of this gap likely reflects differences in sample composition—LocalView includes a larger share of urban districts and districts serving higher proportions of students of color—but analyses in Appendix E indicate that much of the difference is attributable to the medium itself. Examining a subsample of district meetings for which both transcripts and minutes are available, we find that brief, offhand remarks about race are rarely captured in meeting minutes. However, when transcripts contain more than two race-related segments, the minutes are typically coded as race-related as well. Thus, our minutes results primarily reflect sustained discussions rather than short, incidental comments about race.

Second, acknowledging this interpretation, we find a high prevalence of affirmative race-related discussion across the full LocalView sample. Blue districts (n=47) include affirmative content in roughly 80 percent of transcribed meetings in any given season, purple districts (n=24) in around 70 percent with fluctuations, and even red districts (n=45) include affirmative content

in 40–80 percent of meetings depending on the season. This suggests that while sustained conversations about race appear in a minority of minutes, brief references to race are common.

Third, the oppositional panel for LocalView transcripts indicates that oppositional themes in 2021 are more widespread than meeting minutes alone would suggest. For instance, the average purple district includes at least one oppositional remark in about 20 percent of its meetings in the summer of 2021, a substantial portion of meetings, with blue and red districts only slightly lower.

Fourth, despite these differences in magnitude, temporal trends and the relative ordering across district groups are similar across the two sources. This suggests that meeting minutes can serve as a reliable tool for identifying broad patterns and shifts in discourse over time, while the interpretation of absolute levels or frequencies should be interpreted as capturing the most extensive and/or well-reported discussions.

Discussion

Theoretically, the decentralized nature of the United States K-12 education system is designed to encourage "the greatest participation by those most directly concerned" (*San Antonio Independent School District v. Rodriguez*, 1973). In this sense, elected school board members, and public citizens who participate in open school board meetings, are expected to discuss substantive issues so that school district decision-making reflects local values and preferences (White, 2023). On the other hand, such localized control permits substantial variation regarding whether and how school districts consider key social issues, including racial equity and diversity initiatives. While some districts may make racial equity a core goal, using equity as a lens for decision-making (National School Board Association, 2021), others may rarely consider, or may rarely explicitly consider, issues of race. Given the potential for large variation, our analyses

answer: to what degree do school boards, and members of the public, engage in such conversations, and under what circumstances?

We find that school board discussions relating to race are a relatively normal part of school board deliberations, with 23% of meetings containing affirmative race-related content from officials. This suggests that board members can and do discuss race without contention much of the time. Though our findings demonstrate that race is not an uncommon topic, we also find that its frequency varies dramatically by district: the 25th percentile district discusses race in only 5% of meetings while the 75th percentile district discusses race in 31% and the 95th percentile in 68%. Affirmative content from officials is most common in districts serving high proportions of Black and Hispanic students, in left-leaning districts with a highly educated population, in the Northeast and West, and in suburbs and urban areas. School board officials in rural and town districts discuss race less than half as often as their suburban and urban counterparts. Yet, districts in these areas still serve substantial populations of students of color—on average, 15% in rural districts and 22% in towns. Similarly, although districts in the South and Midwest discuss race the least, they too educate significant shares of students of color—33% in the South, for example. These patterns suggest that students of color in rural, town, and certain regional contexts may be relatively underserved in school board deliberations compared to their peers in Northeastern and Western districts. However, we should be careful in assuming that school board discussions of race are effective. Prior research suggests that some potential actions are likely to be effective for improving the achievement of students of color (like a focus on hiring teachers and leaders of color; Fischer, 2023; Price, 2010), but causal research on the impact of school board actions generally (Sutherland, 2022), but particularly for equity, is limited.

One finding that has emerged in the quantitative literature is that school board conflict is likely to be detrimental for students (Grissom, 2014). To this end, heated arguments about race-related issues like CRT may be concerning. Overall, we find that oppositional content is uncommon in meeting minutes, present in only 1% of meetings across the time period and in only 3% of meetings at it's peak in 2021. However, there are districts where oppositional content became a semi-regular point of discussion. In 2021, for example, in ten districts, oppositional content occurred in over a third of meetings. This frequency is even higher when looking to the LocalView data where 10% of districts had oppositional content in a third of meetings. Taken together, this suggests that while media coverage of CRT debates in school board meetings may not have been entirely overblown – there are indeed a subset of districts where CRT became an on-going topic of conversation – coverage was certainly not representative of the average district in the United States.

We found that oppositional race-related content is most common in urban and suburban districts, in the Northeast and West, and in areas with a highly educated population. These conversations are also most common in areas where the 2016 presidential election margin of victory was smaller. Several mechanisms likely explain this pattern. First, politically competitive districts may be especially exposed to the nationalization of local politics. When national media and partisan actors elevated CRT as a flashpoint issue in 2021, local boards in these communities became venues where those narratives were taken up and contested. In agenda-setting terms, national and partisan media heightened the salience of CRT at the national level, which was then translated to the local public agenda through board meetings and public comment (McCombs et al., 2018). Indeed, we find almost no references to CRT before September 2020, followed by sharp spikes thereafter, suggesting that media amplification played a central role in shaping local

discourse. Second, previous research which suggests that demographic and political heterogeneity encourages conflictual political engagement (Campbell, 2005; Holman et al., 2025); the correlation between politically competitive districts and oppositional content confirms these findings. In homogeneous districts—whether strongly Democratic or Republican—norms about race and schooling may be well established, leaving little room or incentive for public dispute. By contrast, politically competitive districts have less settled norms and more diverse constituencies, making board meetings arenas for negotiating local values.

Finally, across our analyses, we find that the most school board discourse around race – whether affirmative or oppositional – occurs on the coasts, in suburban districts, in high income and highly educated communities. These districts discussed race most often in 2018, had the greatest response to racial equity protests in 2020, and the greatest response to national CRT debates in 2021. That these characteristics are predictive of both affirmative and oppositional content suggests that these school boards have a different style of governing and a different style of public engagement – perhaps one that involves more active deliberation of values (Brighouse et al., 2016). Prior research indicates that individuals with higher levels of education are more likely to participate in board meetings (Campbell, 2005), and it may be that more educated and affluent communities also tend to elect representatives who are comfortable, or motivated, to deliberate publicly about value-laden issues such as race and diversity. High-performing and resource-rich districts may have greater capacity to engage in extended value deliberation precisely because their core academic and operational needs are already met. In this sense, the prevalence of both affirmative and oppositional race discourse in affluent, highly educated communities may reflect not only civic engagement but also the availability of bandwidth—political, administrative, and financial—to engage in symbolic and ideological debates.

These developments have important implications for educational governance and leadership. In politically competitive districts where controversy is more common, superintendents and other administrators may need to devote substantial effort to conflict management and board relations—tasks that prior research already identifies as among the most time-consuming aspects of their role (Hutchings Jr & Brown, 2021). This raises questions about whether different skillsets are now required for district leadership, or whether selection and preparation processes should more explicitly emphasize political and conflict management competencies.

Limitations

Our findings underscore the value of meeting minutes as a data source for examining the dynamics of school board governance, particularly when coupled with scalable methods of analysis like LLMs. However, our data and analytical approach both present limitations. First, meetings minutes are an incomplete record of events, ultimately subject to the discretion of the minute-taker. We addressed this shortcoming by supplementing the minutes dataset with the smaller sample of meeting transcripts—finding that patterns remained largely robust even as the magnitude of estimates change. Second, as the performance results in Table 3 indicate, our LLM-based meeting content measures are best understood as "imperfect surrogates" (Egami et al., 2023); we do not capture every instance of race-related content, nor does every LLM-identified instance of race-related content meet our definition of "race-related." And this same imperfection also applies to categorizations of affirmative, oppositional, public comment, or official comment. The imperfect nature of our LLM-based labels generates measurement error with associated estimator bias and inaccurate confidence intervals. Ideally, we would correct for this error using a procedure like design-based supervised learning or post-prediction inference

(Chae & Davidson, 2025; Egami et al., 2023; Wang et al., 2020). Unfortunately, however, the mismatch between our unit of inference (district) and our unit of labels (segments within minutes within districts) makes such a bias correction infeasible. Yet, given the relative rarity of our measures, we could not reasonably conduct our analyses without the use of surrogate labels.

Finally, our study primarily focuses on the frequency with which school boards discuss issues of race, with only very limited consideration of the content of those discussions. Further, we do not have any data on the identities of board members or members of the public – whether political or demographic – though prior research suggest that these identities are important for determining priorities (Blissett & Alsbury, 2018; Sampson, 2019). Most importantly, our study cannot speak to the impact of race-related discussions within school board meetings on the achievement or well-being of students of color, a key area for future research. However, our results do warn of the challenges of estimating the impact of race-related discussions; race-related discussions are not randomly distributed among districts, instead there are clear differences in the district characteristics of those who discuss race frequently and those who do not. When there is random variation in electoral outcomes to exploit (as when ballot order is randomized or alphabetized, or when elections are tight; Fischer, 2023; Macartney & Singleton, 2018; Shi & Singleton, 2023), treating topics identified in meeting minutes as a potential mediator of the impact of candidate characteristics on student outcomes may offer one solution.

Conclusion

Given the decentralized education system in the United States and heterogeneous local cultural contexts, there is the potential for great variability in the nature and extent of school boards' engagement with key social issues like racial equity and diversity. Media reports suggest that racial issues have become increasingly prominent in school board discussions. This paper

identifies substantial variability concerning the extent to which districts address these issues and illuminates the influence of local politics and demographics on the conversation. In doing so, it brings large-scale, empirical evidence to bear on important questions which have thus far only been explored in anecdotal media reports and small-scale, qualitative studies.

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Table 1

School District Sample Characteristics

	Nat. Pop.	Minutes	2018 Minutes	2019 Minutes	2020 Minutes	2021 Minutes	2022 Minutes	Local View
Prop. Districts in Northeast	0.19	0.23	0.26	0.25	0.24	0.23	0.22	0.25
	[0.4]	[0.42]	[0.44]	[0.43]	[0.43]	[0.42]	[0.42]	[0.43]
Prop. Districts in Midwest	0.37	0.37	0.33	0.35	0.35	0.37	0.37	0.28
	[0.48]	[0.48]	[0.47]	[0.48]	[0.48]	[0.48]	[0.48]	[0.45]
Prop. Districts in South	0.24	0.24	0.24	0.23	0.24	0.25	0.24	0.27
	[0.43]	[0.43]	[0.43]	[0.42]	[0.43]	[0.43]	[0.43]	[0.44]
Prop. Districts in West	0.2	0.17	0.18	0.18	0.17	0.16	0.17	0.14
	[0.4]	[0.37]	[0.38]	[0.38]	[0.38]	[0.37]	[0.37]	[0.35]
Prop. Districts Urban	0.06	0.07	0.08	0.07	0.07	0.08	0.08	0.22
	[0.24]	[0.26]	[0.27]	[0.26]	[0.26]	[0.27]	[0.27]	[0.42]
Prop. Districts Suburban	0.23	0.3	0.33	0.32	0.31	0.3	0.29	0.26
	[0.42]	[0.46]	[0.47]	[0.47]	[0.46]	[0.46]	[0.45]	[0.44]
Prop. Districts Town	0.18	0.22	0.2	0.21	0.22	0.22	0.23	0.25
	[0.39]	[0.41]	[0.4]	[0.41]	[0.41]	[0.41]	[0.42]	[0.43]
Prop. Districts Rural	0.52	0.41	0.39	0.39	0.4	0.41	0.41	0.21
	[0.5]	[0.49]	[0.49]	[0.49]	[0.49]	[0.49]	[0.49]	[0.41]
Enrollment (1,000) in District	3.55	3.96	4.52	4.39	4.14	4.07	4.02	9.29
	[13.94]	[9.5]	[10.65]	[10.24]	[9.8]	[9.69]	[9.66]	[16.75]
Prop Black or Hispanic Students	0.23	0.25	0.25	0.25	0.25	0.25	0.25	0.3
	[0.26]	[0.27]	[0.27]	[0.28]	[0.27]	[0.27]	[0.27]	[0.28]
Prop Other Race* in District	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	[0.13]	[0.1]	[0.11]	[0.1]	[0.1]	[0.1]	[0.1]	[0.09]
Prop. White Students in District	0.71	0.71	0.7	0.7	0.7	0.7	0.71	0.65
	[0.28]	[0.28]	[0.29]	[0.3]	[0.29]	[0.28]	[0.28]	[0.29]
Prop. FRPL Students in District	0.51	0.48	0.47	0.48	0.48	0.48	0.48	0.49
	[0.23]	[0.23]	[0.24]	[0.24]	[0.23]	[0.23]	[0.23]	[0.24]
Aggregate District Mean Test Score	0.01	0.05	0.07	0.06	0.05	0.05	0.05	0.05
	[0.35]	[0.36]	[0.37]	[0.38]	[0.37]	[0.36]	[0.36]	[0.39]
Prop adults in district area with BA+	0.25	0.26	0.27	0.27	0.26	0.26	0.26	0.32
	[0.13]	[0.14]	[0.15]	[0.15]	[0.15]	[0.14]	[0.14]	[0.16]

N	13071	500	348	388	428	479	482	116

Note: These data come from the Common Core of Data (CCD) and the Stanford Education Data Archive (SEDA). Standard deviations are in brackets. *Including Asian, American Indian, Alaska Native, Native Hawaiian, and Two or More Races Students, in District. 334 districts have at least one meeting across all years in the timeframe.

Table 2

Classification of Example Excerpts According to Four Key Definitions: Not Race-Related, Race-Related Affirmative, Race-Related Oppositional, and Race-Related Both

Example Excerpt	Classification
Services for students with disabilities equity requirement…students must not be excluded from career technical or academic programs, courses, services, or activities due to equipment barriers or because necessary related aids and services or auxiliary aids are not available.	Not Race-Related
Technology Academy received the College Board AP Computer Science Female Diversity Award	Not Race-Related
It was also noted that our Equity and Diversity presentation to the NSAA went very well. The NSAA directors were impressed by the efforts we are taking to ensure that everyone within the district feels safe, welcome, and valued.	Race-Related, Affirmative
This fits into the school's long-term plan of closing the achievement gap for all students [including]: reading disparity for students entering 2 or more grade levels below when entering 7th grade, ethnic disparity, economic disparity, SPED student disparity	Race-Related, Affirmative
Expand institutional awareness by incorporating content and methodologies that promote justice and equity for all into the school curriculum, establish a district diversity council, …develop a strategic response to assessing and developing appropriate interventions for students when they return from distance learning to close the achievement gaps.	Race-Related, Affirmative
This model curriculum…focuses on skin color instead of focusing on what's important and that is content and character.	Race-Related, Oppositional
He has received questions about implementing Critical Race Theory. The district will continue to align itself with the [STATE] Board of Education standards.	Race-Related, Oppositional
Comments by: …[PERSON] - critical race theory - we're creating the problem by bringing it here, no right to teach it [PERSON] - Merry Christmas issue, critical race theory - don't need in this community	Race-Related, Oppositional
[Participant] applauded the district's equity work and asked the district to continue its dedication to the equity goals, [Participant] commented on Critical Race Theory citing a course from last summer and asked the district for greater transparency in how Critical Race Theory is being applied in the district.	Race-Related, Both
I'm a supporter of DEI and am committed to working within the bounds of my Board of Ed role to improving any inequities that are occurring, but I do not agree with the tenets of Critical Race Theory	Race-Related, Both

Note. Excerpts have been shortened and anonymized where appropriate.

Table 3

Comparison of Model and Prompting Approaches, as Estimated in the Development Dataset

Model	Prompting Approach	Macro F1 Race-Related and Stance	Macro F1 Speaker
llama 3.3	Original Prompt	0.83	0.70
llama 3.3	Empirically Selected	0.87	0.84
llama 3.3	Empirically Selected + Few-shot	0.87	0.73
gpt-5-mini	Original Prompt	0.91	0.91
gpt-5-mini	Empirically Selected	**0.95**	0.89
gpt-5-mini	Empirically Selected + Few-shot	0.92	**0.95**
gpt-4.1-mini	Empirically Selected + Fine-tuning	0.89	0.82

Table 4

Validation of Classifier

	Accuracy	Precision	Recall
Race-Related	0.97	0.95	0.97
	(0.01)	(0.01)	(0.01)
Affirmative Statements	0.96	0.95	0.95
	(0.01)	(0.01)	(0.01)
Oppositional Statements	0.99	0.87	0.90
	(0.00)	(0.05)	(0.04)
Public Comment	0.97	0.94	0.91
	(0.01)	(0.02)	(0.03)

Note. Standard errors (in parentheses) are estimated via bootstrapping. Segments which were hand labeled and/or classified as both affirmative and oppositional are included in the calculation for each respective performance metric.

Table 5

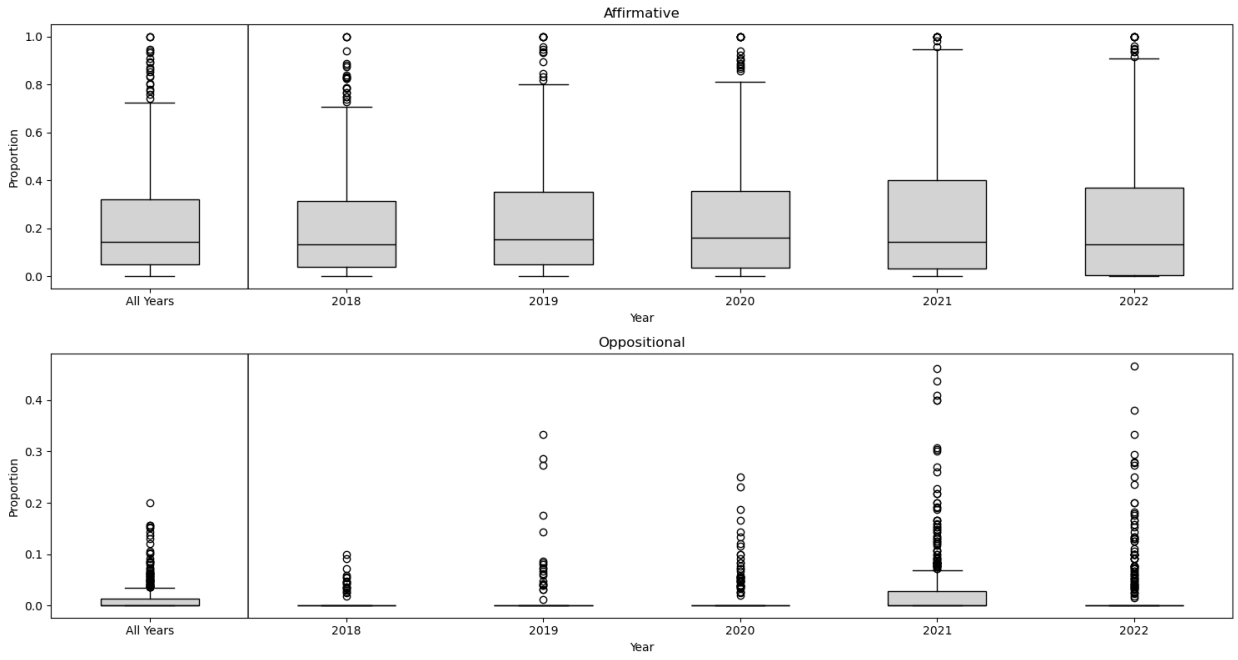
Proportion of Meetings with Race-Related Content by Stance, Speaker, and Year

Proportion of Meetings With…	Overall	2018	2019	2020	2021	2022
Any Race-Related Content	0.24	0.21	0.23	0.24	0.28	0.25
Affirmative Race Content	0.24	0.21	0.23	0.24	0.27	0.25
Oppositional Race Content	0.01	0	0	0.01	0.03	0.02
Affirmative Race Content from Officials	0.23	0.2	0.22	0.23	0.26	0.24
Affirmative Race Content from Public	0.03	0.02	0.02	0.03	0.04	0.03
Oppositional Race Content from Officials	0.01	0	0	0	0.01	0.01
Oppositional Race Content from Public	0.01	0	0	0	0.02	0.01

Note. Proportions estimated across all collected meetings within the study period (2018-2022).

Figure 1

Proportion of Meetings within District with Race-Related Content, by Stance, and Year



Note. Boxes show the interquartile range (IQR) where the bottom of the box is the 25th percentile districts, the line in the box is the median district, and the top of the box is the 75th percentile district. Whiskers extend to the lowest and highest values within 1.5 times the IQR. Points beyond the whiskers represent outliers.

Table 6

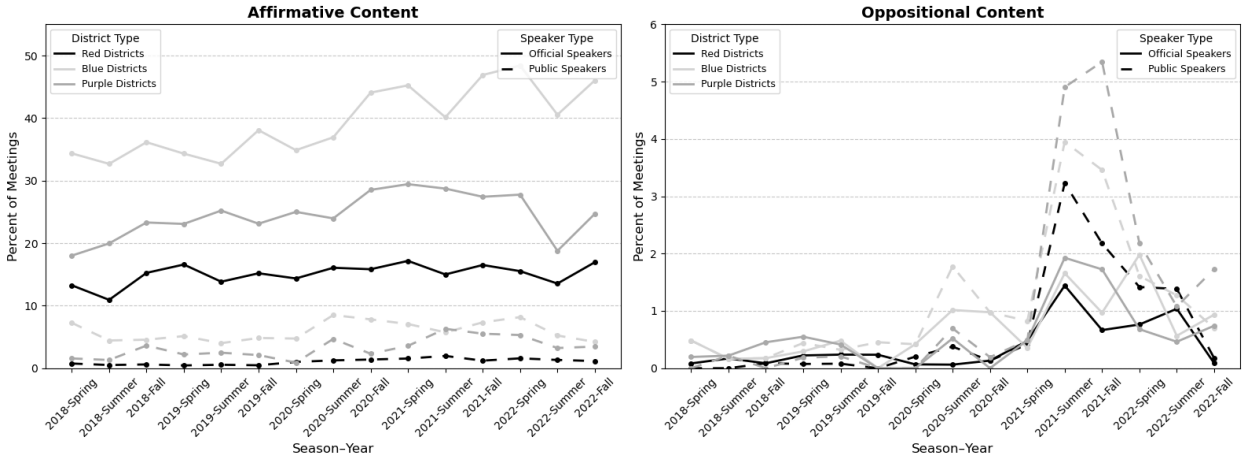
Frequency of Various Topics in a Random Sample of 50 Districts

Topic	Proportion of Meetings in Sample
Finance & Budget	0.84
Personnel & HR	0.79
Facilities & Technology	0.73
Sports & Athletics	0.56
Attendance & Enrollment	0.39
Academics & Curriculum	0.38
Pandemic Policies & Reports	0.33

Note. Proportions of topics in a random sample of (up to) 10 meetings from 50 districts. 499 meetings total, as one district only had nine meeting minutes posted online.

Figure 2

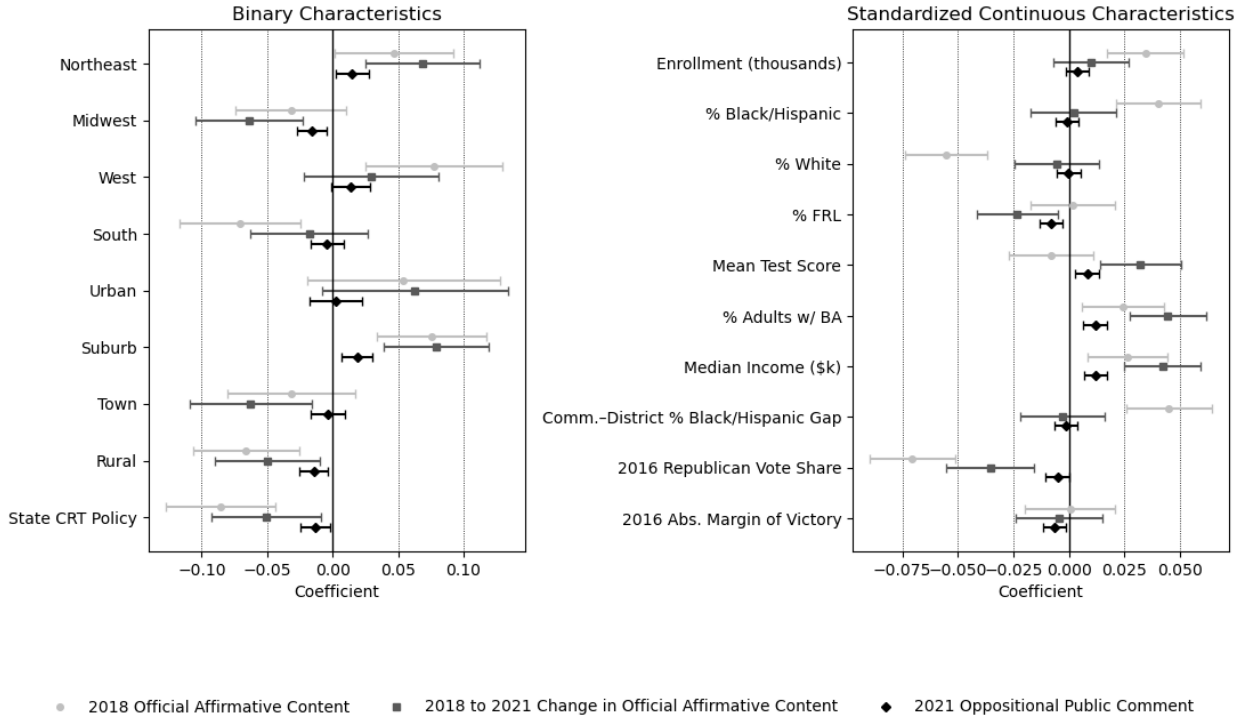
Affirmative and Oppositional Race-Related Content, by Speaker and District Politics (2018-2022)



Note. Graph presents the proportion of meetings for each year, where 1 = January through April (spring), 2 = May through August (summer), and 3 = September through December (fall). Blue districts are defined as <.45 Republican 2016 presidential vote share, purple districts are defined as a Republican 2016 presidential vote share between 0.45 and 0.55, and red districts are defined as >.45 Republican 2016 presidential vote share.

Figure 3

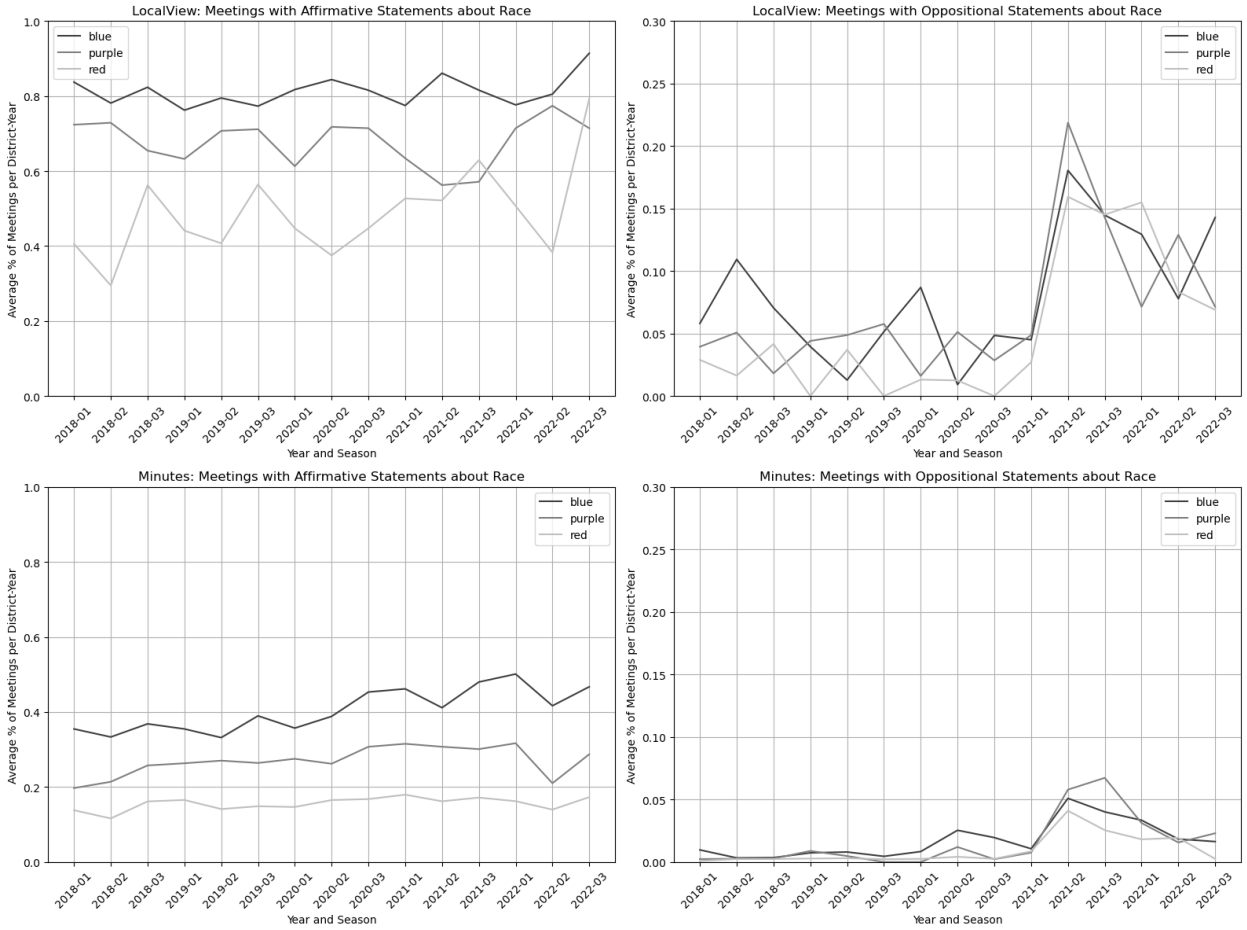
Relationship Between District Characteristics and Proportion of Meetings with Affirmative and Oppositional Race-Related Content



Note. Coefficients are from separate regressions of the proportion of race-related content on each characteristic, controlling for baseline meeting length. Continuous independent variables are standardized, so coefficients represent the change in the outcome associated with a one–standard deviation increase in the characteristic. Error bars indicate 95% confidence intervals.

Figure 4

Affirmative and Oppositional Content in LocalView Transcripts by District Politics, Time, and Data Source



Note. Graph presents the proportion of meetings for each year, where 1 = January through April (spring), 2 = May through August (summer), and 3 = September through December (fall). Blue districts are defined as <.45 Republican 2016 presidential vote share, purple districts are defined as a Republican 2016 presidential vote share between 0.45 and 0.55, and red districts are defined as >.55 Republican 2016 presidential vote share.

Appendix A

Robustness of Findings to Variations in Sample Across Time

As noted in the main manuscript, our primary panel sample is unbalanced across years: for 166 districts, meeting minutes were available for only some years between 2018 and 2022, while 334 districts were observed throughout the full period. Because of this sample instability, Table 1 in the main manuscript shows slight variability in sample characteristics across years. In this appendix, we assess the sensitivity of our results to this variation using two complementary approaches. First, we incorporate non-response weighting by estimating each district's propensity to be included in the 2018 sample—the year with the fewest districts and the largest deviations from full-sample characteristics—based on factors including enrollment, urbanicity, demographics, and community characteristics. In analyses below, we then weighted districts by the inverse of this propensity. Replicating the analyses presented in Table 10 of the main manuscript, results in Table A1 are similar in direction, magnitude, and statistical significance. Second, we present temporal trends under three sampling and weighting schemes: (1) the full sample, unweighted; (2) a balanced panel of districts present in all years; and (3) the full sample, weighted by non-response propensities. See Figure A1. Estimates are highly similar across all three approaches, indicating that our findings are robust to sample composition over time.

Table A1

Relationship Between District Characteristics and Proportion of Meetings with Affirmative and Oppositional Race-Related Content, with Non-Response Weights

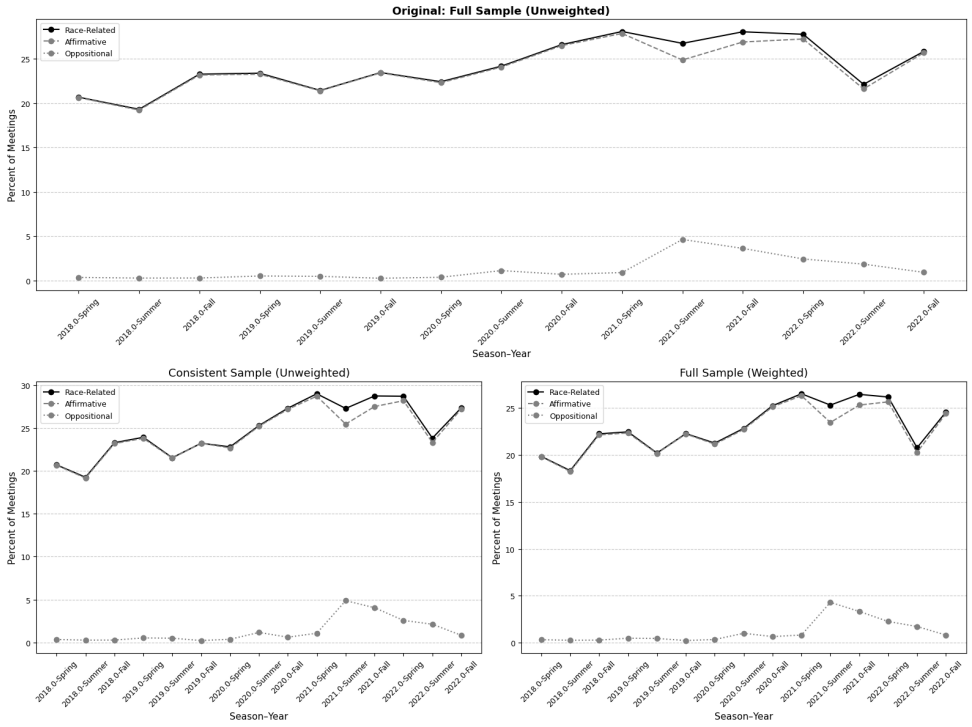
	Official Affirmative Content in 2018		Change in Official Affirmative Content 2018 to 2021		Oppositional Public Statements in 2021	
	Individual Models (1)	Conditional Model (2)	Individual Models (3)	Conditional Model (4)	Individual Models (5)	Conditional Model (6)
Northeast	0.094**	0.085*	0.066*	-0.009	0.014†	-0.001
	(0.03)	(0.03)	(0.03)	(0.04)	(0.01)	(0.01)
Midwest	0.034	0.037	-0.027	-0.064*	-0.006	-0.012
	(0.03)	(0.03)	(0.02)	(0.03)	(0.01)	(0.01)
West	0.116***	0.050	0.038	0.007	0.015†	0.006
	(0.03)	(0.03)	(0.03)	(0.04)	(0.01)	(0.01)
Urban	0.091*	-0.039	0.084*	0.064	0.012	0.007
	(0.04)	(0.04)	(0.04)	(0.05)	(0.01)	(0.01)
Suburb	0.089***	0.005	0.081***	0.056†	0.020**	0.011
	(0.02)	(0.03)	(0.02)	(0.03)	(0.01)	(0.01)
Town	0.014	0.002	-0.018	-0.007	0.005	0.006
	(0.03)	(0.03)	(0.02)	(0.03)	(0.01)	(0.01)
Enrollment (1,000)	0.004***	0.003**	0.001	-0.001	0.001†	0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Prop Black/Hispanic	0.001***	-0.004***	0.000	0.001	-0.000	0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Prop White	-0.002***	-0.005***	-0.000	0.002†	-0.000	0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Prop Free/Reduced Lunch	0.000	-0.002*	-0.001*	0.002*	-0.000**	0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Aggregate District Mean Test Score (weighted)	-0.021	-0.079†	0.077**	0.081†	0.021**	0.008
	(0.03)	(0.05)	(0.03)	(0.05)	(0.01)	(0.01)
District to Community Black/Hispanic	0.004***	0.003*	0.000	0.000	-0.000	-0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Adults with BA	0.188**	-0.271	0.300***	-0.090	0.082***	0.031
	(0.07)	(0.17)	(0.06)	(0.17)	(0.02)	(0.05)

Median Income in Thousands	0.001**	-0.000	0.002***	0.002*	0.001***	0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Pct. Republican Vote Share	-0.004***	-0.003**	-0.002**	-0.001	-0.000†	0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Absolute Margin of Victory	-0.000	0.001	-0.001	0.000	-0.001*	-0.001†
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)

Note. Standard errors are in parentheses. ***p<0.001, **p<0.01, *p<0.05, †p<0.10

Figure A1

Temporal Patterns by Sample and Weighting Schemes



Appendix B

Expanding the Labelled Sample using Race-Related Terms

Because race-related segments in meeting minutes are rare, it is difficult to validate our LLM classifications by just using a representative sample of meeting segments. Therefore, we supplemented this representative sample with another sample of 1500 segments, each of which contained at least one of 70 race-related terms. We used a predominately deductive approach using word embeddings, to identify race-related terms. We began with an initial seed list of four terms: "race," "racism," "racial equity," and "critical race theory." This initial seed list was designed to invoke multiple perspectives on race, and was drawn from a review of academic literature, school board equity policies, and school board anti-CRT policies. (The term "racial equity," for example, is commonly used in diversity and equity initiatives, while "critical race theory" is commonly used in critiques of race-based equity initiatives.) Next, we expanded this list via an empirical analysis of word embeddings. Word embeddings map individual terms (i.e., words and phrases) to numerical vectors. The meaning of a given word, then, is represented by the vector coordinates, and the vector is optimized so that words appearing in similar contexts will be close together in vector-space (Mikolov et al., 2013). For example, the words "sickness" and "illness" will likely have a higher vector similarity than "garden" and "violin." Word vectors are commonly trained on very large volumes of online text, and the latest versions can elegantly handle homonyms and ambiguous meanings by considering a word's context (Devlin et al., 2019; Radford et al., 2018). In this paper, we used transformer-based embeddings from OpenAI, which were last pre-trained in September 2021 (OpenAI, 2024)—after the murder of George Floyd and the initial uptick in debates surrounding critical race theory. This timing is important because, for an embedding to adequately capture the meaning behind a phrase like "critical race

theory," it must be trained on multiple documents containing that term. We used this seed list of embeddings to find additional race-related terms, identifying a further 50 terms within the corpus which were close in vector space to each of the terms in our seed list. For each of these terms, we chose a random selection of 10 transcripts containing the term and categorized the relevant excerpt as either: (a) clearly about race; (b) clearly not about race; or (c) unclear. To remain in our final list of terms, at least half of the excerpts containing the term needed to be clearly about race, and no more than 20% could be identified as unrelated to race.

Our final list included the following 70 terms (case insensitive): African, Asian, biases, bigoted, bigotry, biracial, black history, black lives matter (BLM), black male, black man, black student, black woman, Caucasian, civil rights, critical consciousness, critical race theory (CRT), culturally relevant, culturally responsive, desegregation, disparities, diversity, ethnic, ethnicity, European, Haitian, hatred, Hispanic, Indian, indigenous, inequality, inequitable, inequity, injustices, intersectional, intersectionality, Jewish, Latina, Latino, Marxist, microaggressions, multicultural, multiculturalism, multiracial, NAACP, Native American, people of color, racial, racism, racist, slavery, social justice, stereotype, unconscious bias, white fragility, white privilege, white supremacy, whiteness, and young black.

Appendix C

Large Language Model Selection and Prompt Engineering

Model Selection

In Table C1, we compare the performance and cost of 11 large language models (LLMs) across four providers (OpenAI, Anthropic, Google, and Meta). For the GPT-5 models, we also test two levels of "effort" (the amount of hidden "thinking" tokens that are allowed before the final answer). In each model combination, we test performance at distinguishing between affirmative race-related content, oppositional race-related content, and not race-related using the Macro F1. All models are responding to the following prompt with excerpts drawn from our training dataset:

```
'We are studying how race is addressed in school board meeting minutes. Classify the following excerpt from meeting
minutes into one of four categories:
      Oppositional: an excerpt which reflects opposition to a racial equity/diversity program or policy.
      Affirmative: an excerpt which indicates the district is doing something for equity/diversity or where the
speaker is in favor of improving racial equity in the district
      Both: an excerpt which reflects both opposition and support or implementation of a diversity/equity activity
      NA: The excerpt has nothing to do with race.
Respond only with oppositional, affirmative, both, or NA. Excerpt:'
```

Table C1

Model Comparison

Provider	Model	Open Source	effort	temperature	Macro F1	Estimated Total Cost	Estimated Total Cost with Few Shot
OpenAI	gpt-5	No	med	NA	0.81	1742.42	2447.45
OpenAI	gpt-5	No	minimal	NA	0.75	205.91	910.94
OpenAI	gpt-5-mini	No	med	NA	0.90	254.27	395.27
OpenAI	gpt-5-mini	No	minimal	NA	0.86	41.33	182.34
OpenAI	gpt-5-nano	No	med	NA	0.82	125.63	153.83
OpenAI	gpt-5-nano	No	minimal	NA	0.72	8.27	36.47
OpenAI	gpt-4o-mini-2024-07-18	No	NA	0.01	0.77	43.55	213.24

OpenAI	gpt-4.1-nano-2025-04-14	No	NA	0.01	0.69	29.05	142.17
OpenAI	gpt-4.1-mini-2025-04-14	No	NA	0.01	0.82	116.22	568.72
Anthropic	claude-opus-4-1-20250805	No	NA	0.01	0.74	2672.52	12795.00
Anthropic	claude-sonnet-4-20250514	No	NA	0.01	0.88	536.31	2560.81
Anthropic	claude-3-5-haiku-20241022	No	NA	0.01	0.85	44.65	213.35
Google	gemini-2.5-pro	No	NA	NA	0.90	3808.80	4590.04
Meta	llama3.3:latest	Yes	NA	0.01	0.84	0	0

Based on cost and performance, we move forward with prompt engineering for three models: gpt-5-mini with medium effort, gpt-4.1-mini-2025-04-14, and gptllama3.3. Though the latter exhibits lower performance, as an open-source model, the only costs incurred are the computing costs associated with our university's high performance computing center. Tables C2 and C3 provide empirically selected prompt and few-shot examples (i.e., the best performing prompt and examples, within the training dataset) for each of these models, with performance results estimated in the development dataset and described in the main manuscript.

Prompt Engineering

Table C2

Stance Prompts

Model	Prompting Approach	Prompt
	Original Prompt	We are studying how race is addressed in school board meeting minutes. Classify the following excerpt from meeting minutes into one of four categories: Oppositional: an excerpt which reflects opposition to a racial equity/diversity program or policy. Affirmative: an excerpt which indicates the district is doing something for equity/diversity or where the speaker is in favor of improving racial equity in the district Both: an excerpt which reflects both opposition and support or implementation of a diversity/equity activity NA: The excerpt has nothing to do with race. Respond only with oppositional, affirmative, both, or NA. Excerpt:
llama 3.3	Empirically Selected	You will be provided an excerpt from school board meeting minutes. Classify the excerpt according to whether it contains an affirmative statement about race (in favor of a racial initiative or diversity), an oppositional statement about race (against or disavowing racial initiatives or diversity), both, or if the excerpt is not at all about race or diversity (NA). Title IX and stock anti-discrimination statements, without additional discussion, should not be coded as about race. General statements about equity would be coded as race-related unless the speaker is clearly referring to equity on a dimension other than race or ethnicity (e.g., sexuality). If an excerpt describes someone speaking about critical race theory,

		without context, assume they are opposed to critical race theory. Respond with only affirmative, oppositional, both, or NA. Excerpt:
llama 3.3	Empirically Selected + Few-shot	You will be provided an excerpt from school board meeting minutes. Classify the excerpt according to whether it contains an affirmative statement about race (in favor of a racial initiative or diversity), an oppositional statement about race (against or disavowing racial initiatives or diversity), both, or if the excerpt is not at all about race or diversity (NA). Title IX and stock anti-discrimination statements, without additional discussion, should not be coded as about race. General statements about equity would be coded as race-related unless the speaker is clearly referring to equity on a dimension other than race or ethnicity (e.g., sexuality). If an excerpt describes someone speaking about critical race theory, without context, assume they are opposed to critical race theory. Respond with only affirmative, oppositional, both, or NA. Here are some examples: Text: at this time the Board cannot determine the time when the discussion to be held in Executive Session will be made public, but will disclose the minutes of the Executive Session when the need for confidentially no longer exists NOW, THEREFORE, be it resolved by the [DISTRICT] Board of Education that this meeting shall be adjourned to an Executive Session (closed session) and the public wil be excluded in order that the Board may discuss the items listed below, and upon reconvening this public meeting the Board President will announce, if possible, the time when and the circumstances under which the discussion conducted in Executive Session will be disclosed to the public. This resolution is authorized and allowed by and pursuant to NJ.S.A. 10:4-13. The general nature of the subject to be discussed per NuJS.A. 10:4-13 (a) Student Matters, Administrator Negotiations, Legal Matters and Superintendent Evaluation Moved by Mis.

Classification: NA

Text: of Trustees approve the items of the consent agenda as presented, except for Item H-11. Motion by [PERSON]., second by [PERSON]. Final Resolution: Motion Passes Yea: [PERSON]., [PERSON, [PERSON]., [PERSON]. (advisory) Action (Consent), Minutes: 2. BOARD OF TRUSTEES - Approve Minutes of the April 23, 2021 Special Board Meeting Resolution: Approval of Minutes of the April 23, 2021 Special Board Meeting The Superintendent recommends the Board of Trustees approve the items of the consent agenda as presented, except for Item H-11. Motion by [PERSON]., second by [PERSON].. Final Resolution: Motion Passes Yea: [PERSON]., [PERSON]. [PERSON], [PERSON]., [PERSON]. (advisory) Action (Consent), Minutes: 3. BOARD OF TRUSTEES - Approve Minutes of the April 24, 2021 Special Board Meeting Resolution: Approval of Minutes of the April 24, 2021 Special Board Meeting The Superintendent recommends the Board of Trustees
Classification: NA

Text: the opening is going to look like. So, that's an ongoing conversation. We are again getting ahead of the game. So, were going to be ready when it happens. Outside of that, I too want to wish our two board members that are up for reelection the best of luck tomorrow night. We hope to see up on that podium in December. And, we do want to wish each and every one of you a very happy Thanksgiving. Its going to be a weird year but there's lots of things to be thankful for even in these trying times. So, happy Thanksgiving to everybody. Thats my report for tonight. Thank you. D.4. Comments from the Public Minutes: E. BOARD POLICIES AND ADMINISTRATIVE REGULATIONS E.1. Delete the following: BP 6141.6 (Multicultural Education); BP 6145.3 (Publications); E 6153 (School-Sponsored Trips); E 6154

		(Homework/Makeup Work); E 6174 (Education for English Language Learners) Minutes: Classification: both Text: 5. 24 P.S. 426 6. 24 P.S. 427 7. 24 P.S. 428 8. 65 Pa. C.S.A. 703 9. 65 Pa. C.S.A. 709 10. 24 P.S. 423 11. 65 Pa. C.S.A. 712.1 12. Pol. 903 13. 65 Pa. C.S.A. 707 14. 24 P.S. 421 15. 24 P.S. 425 16. 24 P.S. 324 17. 24 P.S. 508 18. 24 P.S. 609 19. 24 P.S. 687 20. 24 P.S. 707 21. 24 P.S. 671 22. 24 P.S. 634 23. 24 P.S. 1129 24. 24 P.S. 640 25. 24 P.S. 803 26. Pol. 108 27. 24 P.S. 1071 28. 24 P.S. 1076 29. Pol. 604 30. Pol. 005 31. Pol. 606 32. Pol. 605 33. Pol. 107 DocuSign Envelope ID: 1666A11A-BBEF-4321-99A3-B5A4D556FE29 34. 24 P.S. 621 34. 24 P.S. 621 35. Pol. 608 36. Pol. 610 37. 24 P.S. 1080 38. 24 P.S. 514 39. 24 P.S. 702 40. 24 P.S. 708 41. 24 P.S. Classification: NA Now classify this excerpt:
gpt-5-mini	Empirically Selected	We are studying how race is addressed in school board meeting minutes. Classify the follow excerpt from meeting minutes into one of four categories: affirmative, oppositional, both, or NA. An oppositional excerpt is against a racial equity or diversity initiative. An affirmative statement is any excerpt related to race that is not oppositional. General statements about equity would be coded as race-related unless the speaker is clearly referring to equity on a dimension other than race or ethnicity (e.g., sexuality). Title IX and stock anti-discrimination statements, without additional discussion, should not be coded as about race. Statements against critical race theory (CRT) should be classified as oppositional. This includes statements where someone states the district is not teaching CRT, as this is a disavowal of a racial initiative. If an excerpt describes

		someone speaking about critical race theory, without context, assume they are opposed to critical race theory. Excerpt:
gpt-5-mini	Empirically Selected + Few-shot	We are studying how race is addressed in school board meeting minutes. Classify the follow excerpt from meeting minutes into one of four categories: affirmative, oppositional, both, or NA. An oppositional excerpt is against a racial equity or diversity initiative. An affirmative statement is any excerpt related to race that is not oppositional. General statements about equity would be coded as race-related unless the speaker is clearly referring to equity on a dimension other than race or ethnicity (e.g., sexuality). Title IX and stock anti-discrimination statements, without additional discussion, should not be coded as about race. Statements against critical race theory (CRT) should be classified as oppositional. This includes statements where someone states the district is not teaching CRT, as this is a disavowal of a racial initiative. If an excerpt describes someone speaking about critical race theory, without context, assume they are opposed to critical race theory. Here are some examples: Text: the mural in the main hallway; [PERSON] for her painting in the office; the daily twitter campaign on Black History from [PERSON]; and the conversations that took place in different classrooms. [PERSON] graduate and Record-Journal writer, spoke with a Journalism Class; she will be a repeat guest. In March, [PERSON] will celebrate Womens History Month. 37272. Announcements by the President You Care We Care Recipients [PERSON] stated that the [DISTRICT] Board of Education takes great pride in honoring our students. Each month the Board honors and recognizes students who demonstrate kindness, compassion,

inspire others through their actions, and make a difference in their school community. [PERSON] read a narrative on why these three students were selected, and he congratulated students and families. 3 Community Support Award [PERSON] stated that a tremendous group of people were being honored for the February Community Support
Classification: affirmative

Text: The Board has chosen September 2nd after the Open House to be the night to present to the community, and get their input for their wants and needs for our school building. 8. Hiring Special Education Teacher Discussion: After [PERSON], [PERSON] has extended the position of High School Special Education to her for the 2021-2022 school year. She has verbally accepted. 9. MSBA & MASA Notice Discussion: [PERSON] stated that all board members should have received an email from MSBA regarding Critical Race Theory. We believe we need to stick to historical facts. 10. Dean of Students' Position Discussion: At this time, [PERSON] recommends that we eliminate the Dean of Students position. He will assume all duties as Principal and Superintendent. 11. Technology Coordinator Discussion: This will be a change in title for [PERSON], to more closely reflect her duties for the past few
Classification: Oppositional

Text: 8. Recess A brief recess was taken from 7:20 to 7:38 p.m. No Board business was discussed during the break. 9.1 Questions and/or Comments from Interested Citizens The first speaker, [PERSON], district parent, spoke about safety. [PERSON] stated that her daughter, who attends the middle school, was bullied and that there was an act of racism toward her as well. She stated her daughter was called out by students that support Black Lives Matter (BLM) because her daughter stated that all lives matter. [PERSON]

claims that there were three incidents that occurred last week alone and feels that her daughter is not safe. She feels the District is teaching equity and not equality. [PERSON] wants the school to do a better job of bringing students together and to analyze what is being taught and what books are being promoted. The next speaker was [PERSON], district
Classification: oppositional

Text: designed to promote diversity and inclusion. The instruction shall highlight and promote diversity, including economic diversity, equity, inclusion, tolerance, and belonging in connection with gender and sexual orientation, race and ethnicity, disabilities and religious tolerance. + Examine the impact that unconscious bias and economic disparities have at both an individual level and on society as a whole. + Encourage safe, welcoming and inclusive environments for all students regardless of race or ethnicity, sexual and gender identities, mental and physical disabilities and religions belie, Buildings & Grounds Committee ~([PERSON], Chairperson) 4 Soccer Assoc. met with district staff and spoke about renovating Field, The committee discussed rolling the cost into the upcoming field improvement referendum. A committee is being formed of community stakeholders to address the fields and support the plan to move forward. Negotiations Committee -([PERSON], Chairperson) No Report Minutes of the Public Meeting of July 20, 2021
Classification: affirmative

Text: by [PERSON], second by [PERSON]. Final Resolution: Motion Carried Yes: [PERSON], [PERSON], [PERSON], [PERSON], [PERSON], [PERSON], [PERSON] Action (Consent): 2. Recommendations of the Committee on Special Education Resolution: BE IT RESOLVED, that the recommendations dated November 21, 2019 of the Committee on Special Education, for the

		2019-20 school year be approved as presented. BE IT RESOLVED, that the Board of Education of the [DISTRICT] approve the Consent Agenda which includes H.1 through H.9. Motion by [PERSON], second by [PERSON]. Final Resolution: Motion Carried Yes: [PERSON], [PERSON], [PERSON], [PERSON], [PERSON], [PERSON], [PERSON] Action (Consent): 3. Revised List of Authorizations, Appointments, Designations and Re-adoptions Resolution: BE IT RESOLVED, that the revised list dated November 21, 2019 of Authorizations, Appointments, Designations and Classification: NA Text: for your support and leadership. From [PERSON] Dear [DISTRICT] Board of Education, I would like to commend the principals, [PERSON] and Dr. [PERSON] for their continued support of our black students. It is important for the leaders in our district to show that they support the Black community. We cannot remain silent and ignore their needs, because being silent is being complicit. When we see messages like this from our own principals, it sends a message to our students and their families that we are aware of the issues that they face on a daily basis. It is up to all of us to fight against systemic racism. Thank you again [PERSON] and [PERSON]. Minutes of the Regular Board Meeting of October 6, 2020 Page 6 of 13 [PERSON] As a teacher at [SCHOOL], I want to Classification: affirmative Text:
gpt-4.1-mini	Empirically Selected + Fine-tuning	You will be provided an excerpt from school board meeting minutes. Classify the excerpt according to whether it contains an affirmative statement about race (in favor of a racial initiative or diversity), an oppositional statement about race (against or

	disavowing racial initiatives or diversity), both, or if the excerpt is not at all about race or diversity (NA). We broadly define "race-related" as any statement where race and ethnicity—or associated issues such as equity, inclusion, multiculturalism, and/or representation—are referenced. An affirmative statement might refer to equality, inclusion, diversity, multicultural education, multicultural holidays, social justice, celebration of marginalized racial groups, tracking racial outcomes with data, and/or a recognition of systemic racism. Affirmative statements may range from symbolic (such as statements that simply express appreciation for diversity) to action-oriented (such as statements that indicate substantive efforts to increase the hiring of teachers of color). They may also range from politically neutral (such as statements acknowledging Black History Month) to politically liberal (such as statements expressing support for the Black Lives Matter movement). Mention of an ESL or Spanish teacher should not be coded as about race. Title IX and stock anti-discrimination statements, without additional discussion, should also not be coded as about race. If an excerpt describes someone speaking about critical race theory, without context, assume they are opposed to critical race theory. Respond only with oppositional, affirmative, both, or NA. Excerpt:

Table C3

Speaker Prompts

Model	Prompting Approach	Prompt
	Original Prompt	Read the following extract from a school board meeting minutes and pay close attention to the part that is about race. Does that portion likely come from the public comment section of the meeting? Respond only yes or no. Excerpt:
llama 3.3	Empirically Selected	You will be given an excerpt from school board meeting minutes. Focus specifically on the parts of the text that discuss race. Based on that content, determine whether it is likely drawn from the public comment section of the meeting (where parents and community members speak). Answer yes if the race-related portion is from the public comment section; otherwise, answer no. When an excerpt contains a mix of public comment and official content, check whether the race-related discussion occurs within the public comment section. Respond only yes or no. Excerpt:
llama 3.3	Empirically Selected + Few-shot	You will be given an excerpt from school board meeting minutes. Focus specifically on the parts of the text that discuss race. Based on that content, determine whether it is likely drawn from the public comment section of the meeting (where parents and community members speak). Answer yes if the race-related portion is from the public comment section; otherwise, answer no. When an excerpt contains a mix of public comment and official content, check whether the race-related discussion occurs within the public comment section. Respond only yes or no

Text: other diversity groups or interest groups. [PERSON] said there are a lot of interest groups out there and we would want to be consistent to not leave anyone out. [PERSON] said she disagrees with [PERSON], that we have done a significant amount of things in support of minorities in town. She said the Open Choice is an example of Board level actions. She added that she does not believe what [PERSON]is asking is out of alignment [PERSON]disagreed, noting that [PERSON] is talking about support programs and inclusion programs, not a political statement of support for a minority group. [PERSON] said we have the voice and platform to show our support in the community. [PERSON]said that the Town Council represents the community and has that voice. [PERSON] said she agrees with [PERSON], saying if we are going to

Classification: no

Text: He added that the online subscription provides curriculum for strategies, information, lesson plans that are best practices in terms of experiential education. Board of Education Members: [PERSON], President; [PERSON], Vice President; [PERSON], Clerk [PERSON], [PERSON], [PERSON], [PERSON]Email the Board at: [EMAIL] [PERSON], a Tlingit elder, introduced himself in Tlingit and spoke of the importance of preserving the Tlingit language. He also encouraged members to keep the cultural positions in the budget. [PERSON], [SCHOOL] Junior, and [PERSON], [SCHOOL] Sophomore, spoke of the importance of the AVID program. [PERSON] added that AVID really helped in middle school with note taking and in high school with making portfolios. [PERSON]added that AVID helps in high school when it comes to looking and applying for colleges and FAFSA. [PERSON], Indian studies Project Director and Native Student Success Coordinator, spoke in

Classification: yes

Text: Liaison Committee Reports [PERSON]noted an upcoming fall festival at [the] field on October 2, 2021. XVII. Public Comment on Non-agenda Items Public comments included concerns with using the Parking lot as a drop off and pick up for [SCHOOL] and possible solutions to ease traffic in [PLACE]. An email from the public included a question with regard to collection of diversity and inclusion data. Superintendent [PERSON] described steps and measures already being taken to encourage appropriate behavior during morning drop-off and pick-up of [SCHOOL] students. Mr. Board of Education Minutes September 27, 2021 Page 149 [PERSON]also noted the historical challenge of traffic around [PLACE] and how improvements had been made to add an additional driveway access to campus several years ago. Mr. [PERSON] addressed the question of the methodology of the collection of diversity and inclusion data and noted that it is

Classification: yes

Text: our vision for that role, that we want to hear about homecoming, sports, etc., but at the same time we are very clear that one of the agenda items on that report that we want to hear about our students of color experiences in our schools. Particularly in relation to social justice and inequity. [PERSON] We do not have a current president or vice president right now because we haven’t been able to hold ASB elections yet. [PERSON] Important to get started on getting student voices before students come back to school. [PERSON] Thank you, [PERSON] for your advocacy for our students, and thank you board for being on board and listening to our students of color. Thank you for taking this very important step for justice. [PERSON]Is everyone on board to coming to those meetings on the 23 rd and 24 th ? [PERSON]is the only one

		Classification: no Text: Board. 7. CEA Report (Information) President [PERSON] spoke about on-going negotiations, limited education funding from the State of [STATE], inflation, and non-instructional time by elementary teachers. Chair [PERSON] asked [PERSON]to follow-up on some of the points [PERSON] discussed. 8. Public Comment Citizens may speak for three minutes on school district matters. Please sign up on the speaker sheet provided at the entrance door. Comments about specific personnel or students may not be expressed. Citizens may also submit comments to the Board via e-mail at [EMAIL] prior to the meeting. Page 2 [PERSON] [PERSON] read a letter from a LGBTQ+ group, and discussed CRT, SEL, and the budget. [PERSON] spoke about the relevancy of the Economics book up for adoption, as well as the US History books. [PERSON] [PERSON] talked about emails he has sent to Trustees and Administration with
gpt-5-mini	Empirically Selected	Read the following extract from a school board meeting minutes and pay close attention to the part that is about race. Does that portion likely come from the public comment section of the meeting? When an excerpt contains a mix of public comment and official content, check whether the race-related discussion occurs within the public comment section. Respond only yes or no. Excerpt:
gpt-5-mini	Empirically Selected + Few-shot	Read the following extract from a school board meeting minutes and pay close attention to the part that is about race. Does that portion likely come from the public comment section of the meeting? When an excerpt contains a mix of public comment and

official content, check whether the race-related discussion occurs within the public comment section. Respond only yes or no.

Text: other diversity groups or interest groups. [PERSON] said there are a lot of interest groups out there and we would want to be consistent to not leave anyone out. [PERSON] said she disagrees with [PERSON], that we have done a significant amount of things in support of minorities in town. She said the Open Choice is an example of Board level actions. She added that she does not believe what [PERSON]is asking is out of alignment [PERSON]disagreed, noting that [PERSON] is talking about support programs and inclusion programs, not a political statement of support for a minority group. [PERSON] said we have the voice and platform to show our support in the community. [PERSON] said that the Town Council represents the community and has that voice. [PERSON] said she agrees with [PERSON], saying if we are going to

Classification: no

Text: He added that the online subscription provides curriculum for strategies, information, lesson plans that are best practices in terms of experiential education. Board of Education Members: [PERSON], President; [PERSON], Vice President; [PERSON], Clerk [PERSON], [PERSON], [PERSON], [PERSON]Email the Board at: [EMAIL] [PERSON], a Tlingit elder, introduced himself in Tlingit and spoke of the importance of preserving the Tlingit language. He also encouraged members to keep the cultural positions in the budget. [PERSON], [SCHOOL] Junior, and [PERSON], [SCHOOL] Sophomore, spoke of the importance of the AVID program. [PERSON] added that AVID really helped in middle school with note taking and in high school with making portfolios. [PERSON]added that AVID helps in high school when it comes to looking and applying for colleges and FAFSA.

[PERSON], Indian studies Project Director and Native Student Success Coordinator, spoke in

Classification: yes

Text: Liaison Committee Reports [PERSON]noted an upcoming fall festival at Astor field on October 2, 2021. XVII. Public Comment on Non-agenda Items Public comments included concerns with using the Parking lot as a drop off and pick up for [SCHOOL] and possible solutions to ease traffic in [PLACE]. An email from the public included a question with regard to collection of diversity and inclusion data. Superintendent [PERSON] described steps and measures already being taken to encourage appropriate behavior during morning drop-off and pick-up of [SCHOOL] students. Mr. Board of Education Minutes September 27, 2021 Page 149 [PERSON]also noted the historical challenge of traffic around [PLACE] and how improvements had been made to add an additional driveway access to campus several years ago. Mr. [PERSON] addressed the question of the methodology of the collection of diversity and inclusion data and noted that it is

Classification: yes

Text: our vision for that role, that we want to hear about homecoming, sports, etc., but at the same time we are very clear that one of the agenda items on that report that we want to hear about our students of color experiences in our schools. Particularly in relation to social justice and inequity. [PERSON]We do not have a current president or vice president right now because we haven’t been able to hold ASB elections yet. [PERSON]Important to get started on getting student voices before students come back to school. [PERSON]Thank you, [PERSON]for your advocacy for our students, and thank you board for being on board and listening to

		our students of color. Thank you for taking this very important step for justice. [PERSON]Is everyone on board to coming to those meetings on the 23rd and 24th [PERSON] is the only one Classification: no Text: Board. 7. CEA Report (Information) President [PERSON] spoke about on-going negotiations, limited education funding from the State of [STATE], inflation, and non-instructional time by elementary teachers. Chair [PERSON] asked [PERSON]t o follow-up on some of the points Mr. Hayes discussed. 8. Public Comment Citizens may speak for three minutes on school district matters. Please sign up on the speaker sheet provided at the entrance door. Comments about specific personnel or students may not be expressed. Citizens may also submit comments to the Board via e-mail at [EMAIL] prior to the meeting. Page 2 [PERSON] [PERSON]read a letter from a LGBTQ+ group, and discussed CRT, SEL, and the budget. [PERSON] spoke about the relevancy of the Economics book up for adoption, as well as the US History books. [PERSON] [PERSON]talked about emails he has sent to Trustees and Administration with Classification: yes Now classify this excerpt:
gpt-4.1-mini	Empirically Selected + Fine-tuning	Some of the following excerpt from a school board meeting will be related to race. Does that portion of the meeting minutes come from the public comment section of the meeting (i.e., remarks by parents or other community members). Reply yes if so, otherwise reply no. When an excerpt contains a mix of public comment and official content, check whether the race-related discussion occurs within the public comment section. Respond only yes or no. Excerpt:

Appendix D

Analysis of LocalView Transcripts

Transcript Sample

We selected our sample of meeting transcripts from the LocalView database (see Barari & Simko, 2023). Though the database extends back to 2006, we focused our analysis on meetings occurring between 2018 and 2022, aligning with our principal analysis of meeting minutes data. During this period, LocalView collected text captions from 3739 probable school board meetings, from 150 unique entities that had uploaded meetings to YouTube. Of these, we excluded meetings from entities which could not be linked to a school district in the National Center for Education Statistics dataset, meetings which were shorter than ten minutes, and meetings lacking English captions. This generated a final sample of 2953 transcripts from 118 unique school districts (see Table D1). Of these, 47 are located within blue communities (<0.45 Republican presidential vote share in 2016), 45 are within red communities (> 0.55 Republican presidential vote share), and 24 are within purple communities (politically competitive districts with a Republican presidential vote share between 0.45 and 0.55). Table D2 compares the characteristics of this sample to our main sample of districts with meeting minutes. The LocalView sample consists of a greater number of urban districts, with a higher enrollment, and lower percent Republican vote share.

Table D1

Number of Districts and Identified Transcripts Per District by Year

Year	# Unique Districts	Min. # of Meetings	Ave. # of Meetings	Median # of Meetings	Max. # of Meetings
2018	69	1	9.12	6	49
2019	70	1	8.66	5	57
2020	68	1	10.38	6	55
2021	56	1	10.11	5.5	74
2022	48	1	9.29	6.5	66

Note. 25 districts have at least one meeting across all years in the timeframe.

Table D2

Comparison of Minutes Sample and LocalView Sample Characteristics

	Minutes Sample	LocalView Sample
Northeast	0.23	0.25
	[0.42]	[0.43]
Midwest	0.37	0.28
	[0.48]	[0.45]
South	0.24	0.27
	[0.43]	[0.44]
West	0.17	0.14
	[0.37]	[0.35]
Urban	0.08	0.22
	[0.26]	[0.42]
Suburb	0.29	0.26
	[0.46]	[0.44]
Town	0.22	0.25
	[0.41]	[0.43]
Rural	0.41	0.21
	[0.49]	[0.41]
Enrollment (1,000)	3.95	9.29
	[9.49]	[16.75]
Prop Black/Hispanic	0.25	0.3
	[0.27]	[0.28]
Prop Other	0.05	0.05

	[0.1]	[0.09]
Prop White	0.71	0.65
	[0.28]	[0.29]
Prop FRPL	0.48	0.49
	[0.23]	[0.24]
Aggregate district mean test score	0.05	0.05
	[0.36]	[0.39]
Prop adults in district with BA+	0.26	0.32
	[0.14]	[0.16]
District area-weighted Republican Presidential 2016 vote prop	0.58	0.49
	[0.18]	[0.21]
N	500	116

Frequency

Table D3 compares the frequency of race-related content—including both affirmative and oppositional statements—across the meeting minutes and LocalView transcript datasets. Notably, the median district in both samples contains no oppositional content. At the upper end of the distribution, frequencies diverge: the 95th percentile district has oppositional content in 6% of its meeting minutes, compared to 24% in the 95th percentile LocalView district. Differences in affirmative content are also pronounced. The median LocalView district includes affirmative race-related content in 57% of meetings, whereas the median minutes district includes such content in only 14%. These discrepancies likely reflect both sample composition—the transcript dataset includes a larger share of urban districts, which display higher rates of affirmative content in the minutes sample—and data source differences (e.g., meeting transcripts capturing more detail than minutes). Because of the difference in sample, it is difficult to draw conclusions about the quality of minutes as a data source from these comparisons. To address this, Appendix E focuses on a sub-sample of districts for which both minutes and transcripts are available, allowing us to isolate differences attributable to the data source rather than sampling

variation. Here, we summarize the patterns observed within the LocalView dataset related to the overall prevalence, stance, and distribution of race-related content across districts.

Trends observed in the LocalView sample were quite similar to those observed in the primary sample. See Figure D1. In both the minutes and transcripts sample, blue districts discuss race with the greatest frequency and increase consistently over time. And, in both the minutes and the transcript sample, oppositional content is most common in purple districts and increases sharply in 2021. However, the frequencies of these discussions are particularly notable in the LocalView dataset. Blue districts affirmative discuss race in approximately 80% of meetings (or higher) across the panel, and even red districts (the district who discuss race the least frequently) contain affirmative content in between 40% and 80% of meetings depending on the season. Also notably, in 2021, purple districts discuss oppositional content in over 20% of meetings, with blue and red districts featuring proportions that are just a little bit lower. Finally, Table D4 presents the results of regressions:

$$Y_d = \beta_0 + \beta_1 X_d + \delta_1 BaselineWords_d + \varepsilon_e,$$

where Y_d is one of three measures of interest: (1) $Y_{2018,d}$ the proportion of 2018 meetings within a district featuring affirmative race-related content; (2) $Y_{2021-2018,d}$ the change in this proportion between 2018 and 2021; and (3) $Y_{2021,d}$, the proportion of meetings within a district with oppositional comments in 2021. X_d represents one of several district characteristics, including urbanicity, student demographics, geography (each measured in 2018), and political affiliation (measured in 2016). The variable $BaselineWords_d$ served as a proxy for the baseline level of detail in meeting minutes or transcripts and is defined as the median number of words in a district's first three meetings. We repeat these regressions for both the minutes sample and the

transcript sample, reporting results side by side. Across the table, patterns tend towards similar directions, though, particularly for affirmative content, the LocalView coefficients are larger. Note also that LocalView standard errors also tend to be larger given the smaller number of districts.

Table D3

Proportion of Transcripts within District with Race-Related Content, by Percentile and Stance

	Meeting Minutes			LocalView Transcripts		
District Percentile	Any Race-Related	Any Affirmative	Any Oppositional	Any Race-Related	Any Affirmative	Any Oppositional
0.25	0.05	0.05	0	0.18	0.18	0
0.5	0.14	0.14	0	0.59	0.57	0
0.75	0.32	0.32	0.01	0.95	0.95	0.04
0.9	0.59	0.58	0.04	1	1	0.12
0.95	0.69	0.69	0.06	1	1	0.24

Note. The sum of the proportion of meetings with affirmative content and the proportion of meetings with oppositional content may be greater than the proportion of meetings with any race-related content. This is because statements may qualify as having both affirmative and oppositional components.

Figure D1

Affirmative and Oppositional Content by District Politics, Time, and Data Source

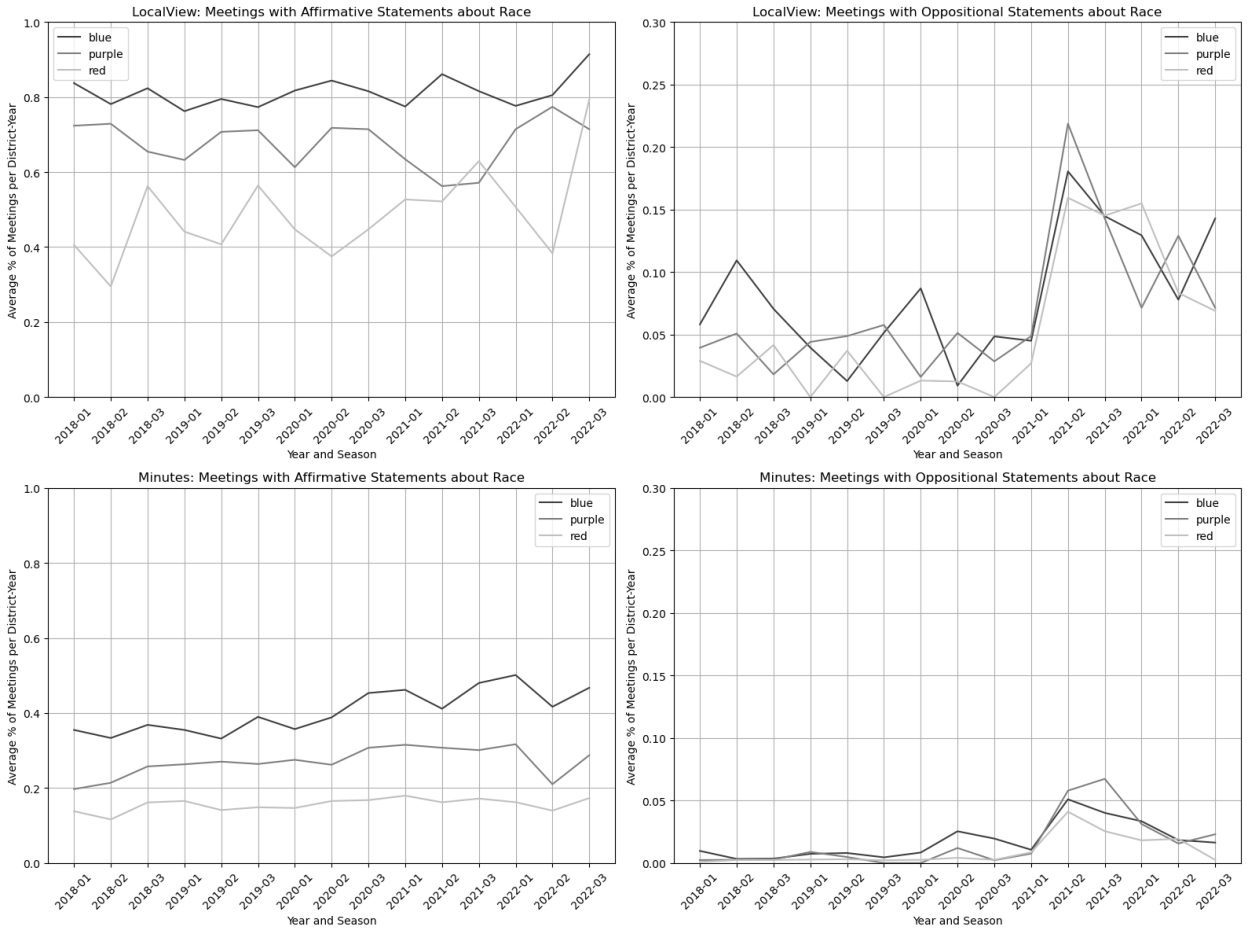


Table D4

Relationship Between District Characteristics and Proportion of Meetings with Affirmative and Oppositional Race-Related Content Among LocalView and Minutes Samples

	Official Affirmative Content in 2018		Change in Official Affirmative Content 2018 to 2021		Oppositional Public Statements in 2021	
	Minutes (1)	LocalView (2)	Minutes (3)	LocalView (4)	Minutes (5)	LocalView (6)
Northeast	0.103***	0.333*	0.067*	-0.098	0.021*	0.045
	(0.03)	(0.13)	(0.03)	(0.15)	(0.01)	(0.06)
Midwest	0.029	0.121	-0.028	0.145	-0.004	0.021
	(0.03)	(0.11)	(0.03)	(0.13)	(0.01)	(0.06)
West	0.128***	0.200	0.035	0.079	0.026**	0.010
	(0.03)	(0.16)	(0.03)	(0.16)	(0.01)	(0.07)
Urban	0.083*	0.344**	0.100*	-0.180	0.007	0.065
	(0.04)	(0.13)	(0.04)	(0.17)	(0.01)	(0.06)
Suburb	0.084***	0.434***	0.101***	-0.187	0.024***	0.105†

	(0.02)	(0.12)	(0.02)	(0.15)	(0.01)	(0.06)
Town	0.008	-0.001	-0.006	-0.062	0.005	0.050
	(0.03)	(0.11)	(0.03)	(0.13)	(0.01)	(0.06)
Enrollment (1,000)	0.004***	0.011*	0.001	-0.001	0.001†	0.003
	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
Prop Black/Hispanic	0.001***	0.002	0.000	-0.002	-0.000	-0.001
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Prop White	-0.002***	-0.003	-0.000	0.001	-0.000	0.001
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Prop Free/Reduced Lunch	-0.000	-0.005*	-0.001*	0.000	-0.000**	-0.001
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Aggregate District Mean Test Score (weighted)	-0.025	0.107	0.098***	0.109	0.025**	0.025
	(0.03)	(0.14)	(0.03)	(0.16)	(0.01)	(0.06)
District to Community Black/Hispanic	0.004***	0.001	-0.000	-0.001	-0.000	-0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Adults with BA	0.192**	1.314***	0.309***	-0.172	0.091***	0.051
	(0.07)	(0.27)	(0.06)	(0.33)	(0.02)	(0.13)
Median Income in Thousands	0.001**	0.008**	0.002***	-0.001	0.001***	0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Pct. Republican Vote Share	-0.004***	-0.011***	-0.002**	0.003	-0.000†	-0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Absolute Margin of Victory	-0.000	-0.002	-0.000	0.007	-0.001*	-0.005*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
State CRT Policy	-0.093***	-0.066	-0.049*	-0.222†	-0.019**	-0.097†
	(0.022)	(0.096)	(0.022)	(0.115)	(0.006)	(0.053)
	N = 348	N = 62	N = 343	N = 37	N = 479	N = 54

Note. Standard errors are in parentheses. ***p<0.001, **p<0.01, *p<0.05, †p<0

Appendix E

Probing the Reliability of Meeting Minutes as a Data Source

A key question for the interpretation of our work, and for future work on school boards using meeting minutes as a data source, is the extent to which meeting minutes capture the most important aspects of meetings. Our comparison of findings between the LocalView and minutes sample in Appendix D speak to this in part, but in this section, we more directly address the question by analyzing a sample of meetings for which both minutes and transcripts are available. To do so, we began with the LocalView data, randomly sampling two meetings from each district. Then, an undergraduate research assistant searched school district webpages for the minutes document associated with that meeting. Overlap in mediums was somewhat rare; out of 264 transcribed meetings, we could identify minutes for 62. (This is likely largely because transparency laws often require *either* that meeting minutes or a video of the proceedings are posted for the public.)

We applied our classifiers to both the minutes and transcripts for these meetings. There was no oppositional content identified within this sample, in either the transcripts or the meetings but Table E1 provides information on the overlap in affirmative content;; 38 of the 62 transcripts had at least one 150-word segment which was classified as containing affirmative content. Of these, 19 of the associated minutes were classified as containing affirmative content, while the remaining 19 were not. Taken at face value, and treating transcripts as the gold standard, this would indicate that minutes result in an estimated recall of 50% and that 50% of race-related content is missing.

However, Figure E1 illustrates the circumstances under which the minutes fail to capture affirmative content. The figure provides a histogram of the number of affirmative segments

among transcripts classified as affirmative. The white portion displays the meetings where minutes were not classified as affirmative while the black portion displays the meetings where they were. When there is a single one-off race-related comment in the transcript, the minutes are rarely classified as affirmative. However, where there are more than two comments in the transcripts, the minutes usually are classified as affirmative. Additionally, Table E2 provides five example instances of where the transcript contained race-related content which was not captured in the meeting minutes. Often, in these cases, equity is not the primary topic of conversation but instead a value informing the speaker's perspective.

Finally, Table E3 identifies a second, key predictor of alignment between minutes classification and transcript classification: the length of the minutes document. Among the 38 meetings with affirmative content according to the transcript, minutes which were classified as affirmative are, on average, 1815 words longer. This provides some evidence that the length of the minutes offer a useful proxy for quality; when the document is longer, content from the transcript is more likely to be identifiable in the minutes.

Taken together, these results suggest that minutes most reliably capture race-related discussions when the discussion is sustained and when the minutes are sufficiently long. The results also suggest that word count can be useful as a screen for high-quality minutes and that conclusions should be more tempered when documents are short or conclusions require identifying brief or one-off instances of a topic.

Table E1

Cross-Tabulation of Minutes and Transcripts Classification Status

	Transcript Classified as Affirmative	Transcript Not Classified as Affirmative

Minutes Classified as Affirmative	19	4
Minutes Not Classified as Affirmative	19	20

Figure E1

Distribution of Number Affirmative Transcript Segments by Minutes Affirmative Classifications

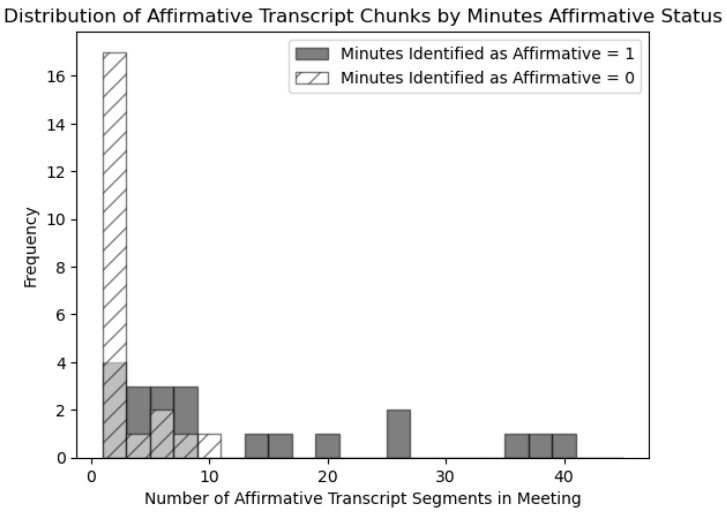


Table E2

	Affirmative Transcript Excerpt	Associated Minutes Excerpt	Identified as Affirmative
1	I pretty much agree with what everyone said on the strengths and weaknesses … you got three interviews… I heard transparency, that was consistent, and…diversity again	The Board reviewed notes from candidate interview today and from April 29, 2019. Discussed strengths and weaknesses of both candidates.	Minutes Only
2	I'm [PERSON] and I have lived in [DISTRICT] for five years and I have to say that I'm very excited about the new energy that has come into [DISTRICT] and [PERSON] I want to thank you for your values of inclusivity, environment, wellness, and, creativity	Residents....presented comments to the Board and Council, each highlighting his/her particular perspective and suggestions"	Minutes Only

3	[PERSON] passes along her gratitude to [PERSON] and her team for their tireless commitment to food access and educational equity	[PERSON] announced that this is School Breakfast week. [PERSON] presented [PERSON] the "School Meals Hero" trophy from No Kid Hungry [STATE].	Minutes Only
4	It's multicultural so kids will see who they are by authors who wrote books that look like them	5th grade ELA teachers at Lower and [PERSON] 8th grade ELA teacher at the Middle School can and spoke about the new English curriculum. [PERSON] then spoke about the Literacy Curriculum Renewal, the choice that they made and the costs of the items.	Minutes Only
5	[DISTRICT] has what we call Youth design crews we are actually designing for equity	(MOU) Between the City of Santa Rosa and Santa Rosa City Schools To Allow An Alternative To the Construction of Affordable Housing or School Facilities	Minutes Only

Table E3

Regression of LLM-Identifying Meeting Minutes as Affirmative Word Count, among Transcripts with Affirmative Content

Coefficient	Estimate	SE	95% LL	95% UL	P-Value
Intercept	1652.26	678.47	276.26	3028.27	0.02
Minutes Identified as Affirmative	1815.11	959.50	-130.86	3761.07	0.07

Note. Coefficients of regression of word count in minutes on whether the minutes are identified as containing affirmative content, among minutes where the transcript contained affirmative content. *N = 38*.

Word Count

As further exploration into the extent to which the length of meeting minutes relates to the information extracted from them, we estimate a modified version of Equation 4 among our full meeting minutes sample, estimating:

$$Y_{dt} = \beta_0 + \beta_1 MeanWordCount_{dt} + \lambda_t + \varepsilon_{dt},$$

Equation E1

Y_{dt} remains the proportion of race-related meetings in each year t for each district d and λ_t represents year fixed effects. Here, $MeanWordCount1000_{dt}$ represents the average length of the meeting minutes for a district *d* in year *t* and the coefficient indicates the relationship between the word count of minutes, in thousands, and the proportion of meetings identified as containing race-related content. Table E4 provides the results and illustrates a strong positive relationship between word count and concept identification. For example, a 1000-word increase in minutes word count is associated with a 3.5 percentage point increase in the percent of district meetings that contain race-related content in a given year. We again take this as evidence that word count is a potentially important indicator of reporting quality.

Table E4

Relationship Between Proportion of Meetings with Race-Related Content and Average, Yearly Meeting Length

Proportion of Meetings	Overall Mean	Coefficient on
Race Related	0.237	0.035***
		(0.01)
Affirmative	0.233	0.035***
		(0.01)
Oppositional	0.013	0.003***
		(0.00)
Not Public Affirmative	0.226	0.035***
		(0.01)
Public Affirmative	0.027	0.005***
		(0.00)
Not Public Oppositional	0.005	0.001***
		(0.00)
Public Oppositional	0.009	0.002***

(0.00)

Appendix F

Robustness of Findings to Model Specification

As a robustness check, we re-estimated the models presented in Figure 3 in the main manuscript (and in Appendix G) using a binomial generalized linear model with the total number of meetings provided as weights. Results from these models were substantively similar to the OLS estimates, suggesting that our findings are not sensitive to distributional assumptions. As in the main models, Northeastern and Western, urban and suburban districts with high enrollment, higher proportions of students of color and in left-leaning communities are more likely to have higher proportions of meetings with official affirmative content in 2018. And, higher-performing districts in the West and in the Suburbs in communities with mixed political leanings are most likely to have high proportions of oppositional public comments in 2021.

Table F1

Relationship Between District Characteristics and Proportion of Meetings with Affirmative and Oppositional Race-Related Content

	Official Affirmative Content in 2018		Change in Official Affirmative Content 2018 to 2021		Oppositional Public Statements in 2021	
	Individual Models (1)	Conditional Model (2)	Individual Models (3)	Conditional Model (4)	Individual Models (5)	Conditional Model (6)
Northeast	0.529**	0.605*	1.610**	0.358	0.463	-0.249
	(0.20)	(0.28)	(0.62)	(1.15)	(0.37)	(0.46)
Midwest	0.176	0.219	-0.198	-1.077	-0.645†	-0.886*
	(0.21)	(0.23)	(0.66)	(1.01)	(0.35)	(0.42)
West	0.831***	0.329	0.890	-0.142	0.681*	0.534
	(0.22)	(0.25)	(0.69)	(1.18)	(0.34)	(0.41)
Urban	0.729**	-0.163	1.802*	2.279†	0.651†	0.446
	(0.26)	(0.24)	(0.71)	(1.21)	(0.35)	(0.42)
Suburb	0.486**	-0.162	1.744**	1.621*	0.862**	0.524
	(0.17)	(0.18)	(0.56)	(0.75)	(0.29)	(0.32)
Town	0.033	-0.049	-0.471	-0.401	0.035	0.061
	(0.21)	(0.20)	(1.22)	(1.54)	(0.36)	(0.40)

Enrollment (1,000)	0.017**	0.012**	0.003	-0.057	0.007	0.007
	(0.01)	(0.01)	(0.02)	(0.15)	(0.01)	(0.01)
Prop Black/Hispanic	0.010***	-0.016**	-0.005	-0.017	-0.001	0.025*
	(0.00)	(0.01)	(0.01)	(0.06)	(0.00)	(0.01)
Prop White	-0.013***	-0.022***	0.002	0.012	-0.000	0.023†
	(0.00)	(0.01)	(0.01)	(0.05)	(0.00)	(0.01)
Prop Free/Reduced Lunch	0.002	-0.019**	-0.025*	0.004	-0.017**	-0.002
	(0.00)	(0.01)	(0.01)	(0.03)	(0.01)	(0.01)
Aggregate District Mean Test Score (weighted)	-0.247	-0.693†	1.763***	1.569	0.903***	0.128
	(0.15)	(0.36)	(0.49)	(1.32)	(0.27)	(0.53)
District to Community Black/Hispanic	0.026***	0.013†	-0.001	0.033	-0.013	-0.020
	(0.01)	(0.01)	(0.02)	(0.03)	(0.01)	(0.01)
Adults with BA	0.814†	-1.575	3.988***	-3.641	2.364***	0.172
	(0.42)	(1.09)	(0.96)	(4.55)	(0.59)	(1.93)
Median Income in Thousands	0.006*	0.001	0.023***	0.010	0.016***	0.011
	(0.00)	(0.01)	(0.01)	(0.02)	(0.00)	(0.01)
Pct. Republican Vote Share	-0.026***	-0.018**	-0.031*	-0.018	-0.011*	0.008
	(0.00)	(0.01)	(0.02)	(0.03)	(0.01)	(0.01)
Absolute Margin of Victory	0.006	0.003	-0.011	0.006	-0.030*	-0.034**
	(0.01)	(0.01)	(0.02)	(0.03)	(0.01)	(0.01)

Note. Standard errors are in parentheses. ***p<0.001, **p<0.01, *p<0.05, †p<0

Appendix G

Exploratory Word Counts

Table G1

Proportion of Affirmative Race-Related Meetings with Specific Races Mentioned

	All Years	2018	2019	2020	2021	2022
asian	0.03	0.03	0.02	0.03	0.03	0.03
african	0.05	0.05	0.05	0.06	0.04	0.04
black	0.1	0.07	0.09	0.13	0.11	0.12
white	0.05	0.05	0.04	0.06	0.05	0.06
hispanic	0.04	0.04	0.04	0.03	0.03	0.04
latin*	0.06	0.06	0.06	0.07	0.07	0.05
indian	0.04	0.04	0.04	0.04	0.05	0.05
indigenous	0.01	0	0.01	0.01	0.02	0.01
native	0.07	0.07	0.07	0.07	0.07	0.07
diversity	0.16	0.13	0.14	0.16	0.19	0.17
equity	0.33	0.21	0.27	0.36	0.41	0.35
inclusion	0.09	0.03	0.04	0.09	0.12	0.13

Note. Key word search allows for variation in capitalization and punctuation (e.g., both Asian and Asian-American are captured). Latin* search allows for variable ending characters, including Latino, Latina, and Latinx.

Appendix H

Regression Estimates for Predictors of Race-Related Content

Relationship Between District Characteristics and Proportion of Meetings with Affirmative and Oppositional Race-Related Content

	Official Affirmative Content in 2018		Change in Official Affirmative Content 2018 to 2021		Oppositional Public Statements in 2021	
	Individual Models (1)	Conditional Model (2)	Individual Models (3)	Conditional Model (4)	Individual Models (5)	Conditional Model (6)
Northeast	0.092**	0.055	0.067*	-0.019	0.015†	-0.005
	(0.028)	(0.039)	(0.027)	(0.038)	(0.008)	(0.011)
Midwest	0.032	0.018	-0.028	-0.067*	-0.007	-0.014
	(0.026)	(0.032)	(0.026)	(0.031)	(0.007)	(0.009)
West	0.121***	0.049	0.043	-0.011	0.015†	0.002
	(0.032)	(0.037)	(0.031)	(0.037)	(0.009)	(0.010)
Urban	0.093*	-0.031	0.091*	0.057	0.011	0.005
	(0.039)	(0.045)	(0.037)	(0.045)	(0.011)	(0.013)
Suburb	0.092***	0.003	0.085***	0.056†	0.022**	0.011
	(0.024)	(0.029)	(0.023)	(0.029)	(0.007)	(0.009)
Town	0.016	0.005	-0.018	-0.007	0.006	0.006
	(0.027)	(0.026)	(0.026)	(0.026)	(0.007)	(0.007)
Enrollment (1,000)	0.004***	0.003**	0.001	-0.001	0.000	0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)
Prop Black/Hispanic	0.002***	-0.000	0.000	-0.001	-0.000	0.000
	(0.000)	(0.001)	(0.000)	(0.001)	(0.000)	(0.000)
Prop Free/Reduced Lunch	0.000	-0.001	-0.001*	0.001	-0.000**	0.000
	(0.000)	(0.001)	(0.000)	(0.001)	(0.000)	(0.000)
Aggregate District Mean Test Score (weighted)	-0.022	-0.062	0.089***	0.076	0.023**	0.007
	(0.027)	(0.049)	(0.026)	(0.049)	(0.007)	(0.014)
District to Community Black/Hispanic Difference	0.004***	0.003*	-0.000	0.000	-0.000	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)
Adults with BA	0.169*	-0.233	0.311***	-0.085	0.082***	0.033

	(0.066)	(0.170)	(0.062)	(0.169)	(0.019)	(0.046)
Median Income in Thousands	0.001**	0.001	0.002***	0.002†	0.001***	0.000
	(0.000)	(0.001)	(0.000)	(0.001)	(0.000)	(0.000)
Pct. Republican Vote Share	-0.004***	-0.003**	-0.002***	-0.001	-0.000†	0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)
Absolute Margin of Victory	0.000	0.001	-0.000	0.000	-0.001*	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)
State CRT Policy Adopted	-0.086***	-0.025	-0.051*	-0.029	-0.013*	-0.008
	(0.022)	(0.025)	(0.021)	(0.024)	(0.006)	(0.007)

Note. In individual models, Southern districts serve as the omitted category for geographic variables and rural districts serve as the omitted category for urbanicity variables. Standard errors are in parentheses. ***p<0.001, **p<0.01, *p<0.05, †p