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"We Don't Teach Critical Race Theory Here": A Sentiment Analysis of K-12 School and District Social Media Statements

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ABSTRACT

Conservative activism around the purported influence of Critical Race Theory (CRT) on K-12 education has swept the country in recent years. While others have documented the sources of these messages, how school districts have responded to these critiques has not yet been investigated. Drawing on research on how social media algorithms elevate polarizing information and activate emotions, we analyze public social media posts on school/district Facebook pages mentioning the phrase "critical race" to examine how educators address the claim of teaching CRT and how the local community responds. We use sentiment analysis to examine the emotions of these posts and how they are distributed across states. We also explore the sentiment of subsequent community reactions reflected in the comments of each post, including negative emotions such as anger and fear, and positive emotions such as trust. This study has implications for how school districts can help to stop cycles of fearful rhetoric and engage with stakeholders in ways that unite a school community around shared priorities.

Introduction

From school board meetings to state legislature houses, conservative activism around the purported influence of Critical Race Theory (CRT) on K-12 education has swept the country in the last several years. Many in K-12 and higher education initially responded with confusion, stating that CRT is a legal theory usually encountered in graduate school and thus not generally found in K-12 classrooms (e.g., Anderson, 2022). However, others have described the importance of teaching about structural racism and argued that curriculum including a critical lens is desirable and integral to reducing racism in the United States (U.S.; Banks, 1993, 2001; George, 2021). Based on the wave of state legislation—54 bills in 24 states with 11 passed into law as of October 2021 (PEN America, 2022)—the voices of fearmongering activist groups have been effective in mobilizing not only White parents' fear and anger around this issue, but also policymakers' attention (PEN America, 2022; Pollock et al., 2022). For decades, conservative politicians have exploited White Americans' racial fears using messaging tactics sometimes called "dog whistles," in how politicians presume they will be audible only to a subset of people (Haney López, 2015). To send a "dog whistle," politicians use coded phrases that invoke scarcity of material resources and position the interests of White people in the U.S. against other racial and ethnic groups. Both traditional and social media amplify such messages, manufacturing political spectacle and moral outrage about the perceived nature of schools (Anderson, 2007). These messages also create fear and anger in those who encounter them—sentiments that make such messages highly persuasive, as fear increases a person's desire to learn about a potential threat, and anger can make people susceptible to stereotypes and generalizations (Haney López, 2019). We

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view these recent conservative messages about CRT as dog-whistles, activating White parents' fears about their children's perceived emotional safety.

While others have documented the sources of these messages (i.e., Pollock et al., 2022), how school districts have responded to these critiques has not yet been investigated. Drawing on research on how social media algorithms elevate polarizing information and activate particular emotions, we analyze a dataset composed of all posts on public school/district Facebook pages mentioning the phrase "critical race" to examine how they address the claim of teaching CRT and how the local community responds. We describe the geographic location of these posts and use sentiment analysis to examine the degree to which the posts, and the subsequent community reactions in the comments of each post, reflect negative emotions such as anger and fear, positive emotions such as trust, and an overall negative or positive emotional valence. This is important because school districts can play a key role in stopping the cycle of fearful rhetoric, engaging with stakeholders in ways that unite a school community around shared priorities. Below, we describe the policy context of recent activism against the purported teaching of CRT in K-12 schools, discuss how the media and social media can activate fear and anger, describe what is known from political messaging research about how to counter such rhetoric, and then outline our methods, findings, and implications.

A brief history of recent anti-CRT sentiment

Echoing prior outcry against multicultural education (López, 2022), the most recent wave of critiques is nominally aimed at CRT and sometimes social-emotional learning or culturally responsive teaching, but seems to be broadly directed at any discussions of race or gender in K-12 education (Pollock et al., 2022). Dozens of states have now introduced, and more than a handful have passed, legislation limiting discussion of White privilege or male privilege, or promoting greater curriculum "transparency" so that teachers and schools can be monitored for the inclusion of those ideas (PEN America, 2022). This activism may seem grassroots, as parents share talking points with each other on Facebook or line up at school board meetings to speak, but as Pollock et al. (2022) point out, these talking points are coordinated strategies from Republican strategists and ex-Trump administration officials who sensed the political expediency of this issue for mobilizing voters in upcoming elections. These critiques are not new, but are instead part of a longstanding reaction on the right to the more liberal set of policies introduced before Richard Nixon's election in the 1960s and early 1970s (López et al., 2021).

Politicians have used "dog whistles," or coded language that primarily activates White people's racial fears, for decades (Haney López, 2019). Former President Donald Trump continued and intensified this pattern, frequently stoking fear of immigrants, people of color, and appealing to White supremacists. It was in this political context that award-winning journalist Nikole Hannah-Jones published The 1619 Project in August 2019. Illustrating the central role of slavery in the U.S. since 1619, this collection of essays and poems received broad acclaim, but became a conservative flashpoint for anxieties about "revisionist" history. This anxiety from some on the right further intensified when some school districts responded to the murder of George Floyd in May 2020 with anti-racist professional development for teachers and efforts to make curriculum more inclusive. Some conservative activists seized on evidence that The 1619 Project instructional materials developed by the Pulitzer Center on Crisis Reporting were being widely used in schools (Schaefer Riley, 2020). Conservative, anti-CRT activist Christopher Rufo successfully captured President Trump's attention over the summer of 2020, shortly before Trump released an executive order against race and gender "scapegoating" and/or "stereotyping" in September 2020. In tweets and speeches from that month, Trump linked the term "Critical Race Theory" to The 1619 Project curriculum materials, stating that the combination "is especially harmful to children of minority backgrounds who should be uplifted, not disparaged. Teaching this horrible doctrine to our children is a form of child abuse in the truest sense of those words" (Ujifusa, 2020). The language of Trump's executive order was subsequently repeated in many of the state legislative efforts to limit or ban "CRT," with 42 states taking action (at

least introducing a bill) to limit discussions of racism and sexism in schools (Schwartz, 2022). At the local level, Pollock et al. (2022) describe a shared playbook of tactics this "conflict campaign" uses to sow division: caricaturing CRT and other equity work; conflating multiple issues that seem to trigger conservative parents (anti-racism, masks, and LGBTQ rights); employing combative language to intimidate educators; censoring particular topics; and seeking more control of local schools (p. 6). In this context of divisive rhetoric and rapid policy change, we next discuss the research on how such discourse, easily spread on social media, can activate fear and anger in ways that can divide school communities.

Literature review

The role of emotion and social media in shaping political perceptions

Political psychologists who study the role of emotions in political activity have identified fear and anxiety as key emotions that politicians manipulate. Fear and anxiety are emotions "triggered by perceived threats from immigration, terrorism, economic insecurity, or some combination" (Vasilopoulos et al., 2019), and evoking these emotions can persuade people to believe in a specific political ideology. An explanation for this process comes from political psychology research on justice motives, which demonstrates that most people fundamentally believe that people should receive what they deserve and deserve what they receive (e.g., Hafer & Sutton, 2016). Researchers who explore individuals' justice motives typically focus on how and why individuals react when they perceive that an injustice has occurred (Hafer & Sutton, 2016). Research also documents that when people perceive unfair treatment, their resulting anger and resentment heightens their desire to see injustice addressed (see Gollwitzer & Prooijen, 2016; Lambert et al., 2019). By exploiting individuals' justice motives, politicians on the Right in particular have successfully framed their agenda to capitalize on White people's resentment toward people of color and instill racially coded fear in the public—and then frame themselves as the party that provides the remedy to those problems (see Haney López, 2019). Legal scholar Haney López (2019) has provided evidence that fear-inducing messages that mobilize individuals toward favoring the Right are especially elevated during election cycles. The timing of current anti-CRT propaganda follows this election pattern and employs many of these strategies (López, 2022; López & Sleeter, 2023).

In addition to the contributions from political psychology research, communications scholars have demonstrated a causal relationship between individuals' social media engagement and their political persuasions (see Gil de Zúñiga et al., 2021). Taken together, understanding how pundits use social media to successfully manipulate emotions that lure individuals toward the Right's political agenda is necessary, particularly because "the low access barriers to information in social media ecologies enable the massive circulation of misleading content aiming to modify users' ideals" (Gil de Zúñiga et al., 2021, p. 14). Not only are a vast number of individuals engaged in reading and sharing misleading information on social media, but they also rarely seek out news beyond social media. This is partly due to the pervasive, but usually misguided, belief many individuals hold that they are well-informed due to the large volume of information they are exposed to on social media (Gil de Zúñiga & Cheng, 2021). Perhaps most alarming is that researchers have found that in comparison to news sources such as television, newspapers, and radio (known as "old media"), social media creates conditions for a contagion of more potent emotions, particularly those of anger and resentment (see Watson & Barnes, 2022).

How the media shapes public opinion

It is in this context—the public regularly engaging with emotionally manipulative information on social media—that school districts communicate with parents and other community stakeholders on Facebook or other social media platforms. Therefore, it is important to understand how the information those individuals encounter online may influence their opinions. Political scientists who research

how the media influences public opinion explain that there are three key mechanisms at play (Broockman & Kalla, 2022). Politicians use media for *agenda setting*, wherein the quantity of news coverage a particular issue receives influences a viewer's belief about the importance of the topic (Ansolabehere et al., 1993). *Framing* refers to the ways "media outlets alter their presentations of the same events and information" (see Broockman & Kalla, 2022, p. 5). *Partisan coverage* reflects the ways information is included or excluded, based on the extent to which it is "flattering to politicians and causes on their ideological or partisan side" (Broockman & Kalla, 2022, p. 5). Partisan coverage has been found to be particularly powerful in shaping individuals' beliefs because while "Framing concerns presenting the same information but emphasizing different aspects . . . partisan coverage filtering entails presenting different information entirely" (Broockman & Kalla, 2022, p. 7).

The seemingly "most influential political actor" in agenda setting is the partisan cable network Fox News (Yglesias, 2018, p. 683), but those with partisan beliefs that do not align with the Right also have partisan networks available, such as CNN and MSNBC. Fox News, however, is responsible for what was previously the highest rated show on cable television: Tucker Carlson Tonight, which principally relied on stoking fear among the most sought-after demographic, individuals between the ages of 25 and 54 (Katz, 2022). In a three-part series in the New York Times, Confessore (2022) explains:

> . . . accusing impoverished immigrants of making America dirty –[Tucker Carlson's] show teaches loathing and fear. Night after night, hour by hour, Mr. Carlson warns his viewers that they inhabit a civilization under siege—by violent Black Lives Matter protesters in American cities, by diseased migrants from south of the border, by refugees importing alien cultures, and by tech companies and cultural elites who will silence them, or label them racist, if they complain.

Researchers have found that individuals engage in a confirmation bias media loop, wherein they seek out partisan media that aligns with their beliefs that, in turn, makes them skeptical of information that contradicts those beliefs (see Broockman & Kalla, 2022). For example, researchers have found "conservative Republicans" to be far more likely to watch Fox News and less likely to watch CNN, whereas "liberal Democrats" are far more likely to watch CNN and less likely to watch Fox News (see Gil de Zúñiga et al., 2012). Although confirmation bias loops are a concern, there is promise in the findings that individual beliefs are malleable and can change with exposure to media that provides information to counter previously held beliefs (Broockman & Kalla, 2022).

Partisan media clearly attempts to influence public opinion on equitable educational approaches, engaging in agenda-setting on this topic. For example, 53% of CRT-related news stories were covered by outlets such as Fox News, in comparison to a mere 8% by outlets considered liberal (see Pollock et al., 2022). As such, conservative outlets intentionally shaped the public's view on the importance of CRT relative to liberal outlets—and strategically focused on contexts that were particularly important for elections. As explained by Pollock et al.:

> Districts experiencing the most rapid demographic change (in which the percentage of White student enrollment fell by more than 18% since 2000) were more than three times as likely as districts with minimal or no change in the enrollment of White students to be impacted by the localized conflict campaign . . . . Districts impacted by local campaigns are most likely to enroll a racially mixed and majority White student body and to be located in communities that are politically contested or leaning liberal or conservative, rather than in communities that voted strongly against or in favor of Trump in the 2020 presidential election. (p. vii)

In other words, the conservative media escalated their agenda-setting effort to promote anti-CRT campaigns most ardently in contested election contexts. In turn, conservative media is also providing favorable portrayals of conservative politicians who are campaigning on platforms that oppose "state sanctioned racism" and "collective guilt" (see Pollock et al., 2022)—becoming the answer to the manufactured crisis. More progressive media outlets, however, are largely absent from the debates (Pollock et al., 2022), particularly in ways that counter the race-based fears and anxieties created by political pundits (Haney López, 2019). This is the polarized media context in which school districts are responding to community concerns about CRT. While some schools and districts try to speak to their communities about CRT via social media, parents and community

members may come across anti-CRT messaging in grassroots or astroturf groups they see on social media as well. The Media Matters for American organization counted 160 Facebook groups in 2021 devoted specifically to the anti-CRT cause, including networks such as Moms for Liberty (Gogarty, 2021).

Rhetorical tactics from political messaging research

Research and polling from the field of political messaging offers a framework to evaluate school/district communication (e.g., Building Equitable Learning Environments Network [BELEN], 2021; Words That Win, 2022). If the goal is building community and solidarity to achieving equitable education for all, this research identifies rhetorical tactics that support this goal, as well as those that could backfire to accidentally undermine the common good of public education. Messaging evidence suggests educators and educational leaders should avoid some strategies: debates about what CRT is; claims that practices in an educational setting are or are not CRT; repeating terminology used by pundits on the Right; and ignoring the importance of equity for students, adults, and society (see BELEN, 2021; Haney López, 2019). Messages should avoid leading with a problem and refrain from using statistics and data to frame a problem (Words That Win, 2022). This messaging guidance indicates that the primary strategy we suspect many districts use—clarifying that CRT is not taught in the district—is counterproductive, and it would be better to unite stakeholder groups around shared, affirmative values. Like Stovall and Annamma (2021), we agree that "debates about the purpose of critical race theory and about whether it is even taught in schools aren't useful because they miss a larger point. We will never make discussions of white supremacy palatable to those who are invested in upholding it ... white rage is about covering up histories and hiding truth in the service of maintaining power" (para. 4).

In terms of specific, productive techniques for schools/districts to use, however, there is a growing body of messaging research that provides explicit guidance in how to counter the Right's fear-laden discourse (e.g., BELEN, 2021; Frame Works Institute, 2020; Haney López, 2019; Lake Research Partners, 2018; Words That Win, 2022). These techniques include explicitly mentioning race as a way to counter "divide and conquer" strategies, as well as calling out the divisive strategies themselves; using a vision and aspirational language; and leveraging the idea of "working together" (Lake Research Partners, 2018). Because the Right uses fear to mobilize and distract particular groups, it is important to identify how school districts respond to this "conflict campaign" (Pollock et al., 2022), with what emotional valence, and the extent of fear, anger, and other emotions in the resulting comments from school community members. Therefore, we draw on sentiment analysis of school/district Facebook posts and their associated comments to illustrate where educators may currently be falling short and to glean lessons for how schools and districts can respond in ways that halt the cycle of fearful rhetoric and create more unity across their communities.

Method

Methodology

Our approach was guided by quantitative ethnography (Shaffer, 2017), an approach in which researchers integrate quantitative and computational methods (e.g., machine learning, educational data mining) with human-driven, qualitative methods to make sense of web-based data. We used techniques from Public Internet Data Mining methods (Kimmons & Veletsianos, 2018) to access social media data, combined with descriptive quantitative analyses and qualitative analysis to analyze social media data—an increasingly widely used data source in education (Greenhow et al., 2019). Quantitative ethnography and similar approaches are useful for understanding the complex phenomenon for which one methodology alone fails to support an adequate investigation (Nelson, 2020; Rosenberg & Krist, 2021; Shaffer, 2017).

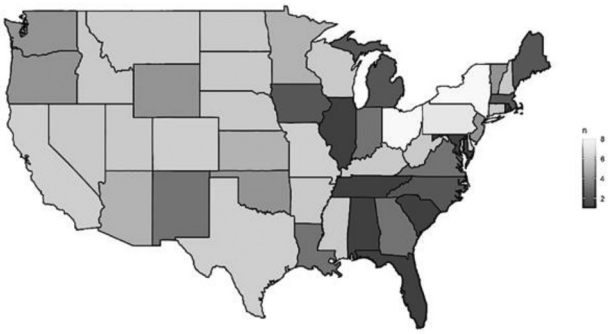

Figure 1 The number of CRT-related posts by state; lighter colors indicate a *higher* number of posts.

Data source and collection

Our data source was the Facebook posts of U.S. schools and districts, specifically posts that mentioned "critical race" in the message body. To extract these posts, we drew on a collection of public Facebook pages from U.S. schools and districts from past research (e.g., Rosenberg et al., 2022). We accessed this collection of pages and their posts through the Facebook-owned CrowdTangle platform, which permits access to data from all public Facebook Pages (CrowdTangle Team, 2022). To create this list, we accessed the websites of every school and district in the U.S., saving any Facebook accounts linked from their homepage. This yielded a list of 14,670 unique public Facebook pages for schools and districts.

We searched these school and district Facebook pages for all mentions of "critical race."[1] We conducted this search for the period of January 1, 2020 through December 31, 2021. The result of this search was 159 posts. We then manually filtered this list, removing posts that were duplicates, off-topic, or from accounts that were irrelevant (e.g., a few school or district homepages linked to their counties' public Facebook page, which was subsequently included in our collection of pages, though these were not, strictly, school or district Facebook pages). The result of this filtering was a collection of 118 posts by 95 unique institutions (71 schools and 23 districts). As can be seen in Figure 1, in which the lighter colors (white, light gray) indicate a higher number of posts from that state, these schools/districts were located in 33 different states from across the country; the states with the greatest number of posts were New York and Ohio (with eight posts each) followed by Pennsylvania (with seven posts).

The 95 unique institutions whose posts comprised our sample were each followed by 7,984 individuals, on average, with a large spread in number of followers ($min = 465$, $max = 81{,}423$, $SD = 11{,}670$). Collectively, their total number of followers (representing the upper bound of how many individuals saw these posts—though the true number is likely a fraction of this) was 894,206.

Data analysis

For the descriptive analyses, we carried out a sentiment analysis of the 118 posts and their associated comments. To do so, we used the *NRC* dictionary (Mohammad & Turney, 2013), a widely used collection of words and their sentiments across many categories. The dictionary includes two measures of overall emotional valence (positive and negative); three specific positive emotions (anticipation, joy, and trust); four specific negative emotions (anger, disgust, fear, and sadness); and one neutral measure (surprise). We assigned each post and comment a sentiment score for each of

[1]We realized that querying "CRT" yielded greater false positives in the form of posts that were not about "Critical Race Theory" but about "classroom reduction teachers" or televisions with "cathode ray tubes" being allowed in school electronic waste drives. Similarly, querying "Critical Race Theory" did not yield an appreciable increase in relevant posts, while requiring the word "theory" as part of the query resulted in some false negatives in which relevant posts were excluded.

these categories; this score represented the proportion of the total number of words in each post or comment classified into each sentiment category. As an example, if 9 of the 100 words in a post were classified as being related to trust, this post would receive a sentiment score for trust of 0.09. Because most posts received multiple comments, we then averaged these scores across all of a post's comments. To describe the sentiment, we calculated the average sentiment and the variability (measured by the standard deviation, *SD*). We report the results for posts and comments on each of these dimensions, ordered by overall positive, specific positive, overall negative, specific negative, and neutral.

For a deeper, qualitative analysis, we also selected a sample of two contrasting posts and their associated comments. To select posts, we arranged the posts in order of their overperforming score, which measures how a post's number of total interactions (comments, likes, and reactions) compares to other posts from the same page. From the posts with highest overperforming scores, we selected a post with comments that had above-average negative sentiment. Then, we selected an overperforming post with comments with a more neutral sentiment (i.e., below average negative sentiment), reasoning that these two posts could present contrasting cases of local communities' reactions to how a school/district described their stance on CRT. Looking at the rhetorical moves that a school or district makes in such a post, together with the associated comments from the school community, provides a first step in assessing the effectiveness of particular messages and how particular messages may be linked to specific reactions, with implications for how schools can effectively communicate with stakeholders.

Findings

Descriptive analysis

Average sentiment and variability of posts

Table 1 shows that posts were fairly positive; on average, 6.70% of words were positive, although there was substantial variation between posts around this average ($SD = 4.76\%$). We can see that specific positive emotions were generally more common, with trust being notably high ($M = 6.32\%$, $SD = 5.25\%$). Negative emotions were much less common, with negativity, overall, comprising 1.04% ($SD = 2.13\%$) of the words in posts; specific negative emotions, like fear, sadness, and disgust, were concomitantly low.

Average sentiment and variability of comments

Table 2 shows that positive words were—similar to posts—common in comments, with almost seven words out of every hundred, on average, having a positive valence. However, there was quite a bit more variation in the degree of positive sentiment for comments compared to posts ($SD = 12.28\%$, compared to 4.76% for posts). Similarly, while the proportion of words indicating trust was similar (5.85%), the standard deviation was more than double that of trust-related words in posts (for

Table 1 The average sentiment of posts.

Sentiment Category	Group	Sentiment Score (%) *M*	Sentiment Score (%) *SD*
Positive	Overall	6.70	4.76
Trust	Specific positive	6.32	5.25
Anticipation	Specific positive	4.08	3.06
Joy	Specific positive	1.21	1.59
Negative	Overall	1.04	2.13
Anger	Specific negative	0.54	1.70
Fear	Specific negative	0.53	1.05
Sadness	Specific negative	0.43	0.99
Disgust	Specific negative	0.24	0.60
Surprise	Neutral	0.50	1.17

For this table, the sentiment scores are transformed from proportions to the average percentage of words in a post associated with each sentiment category.

Table 2 The average sentiment of comments.

Sentiment Category	Group	Sentiment Score (%) *M*	Sentiment Score (%) *SD*
Positive	Overall	6.84	12.28
Trust	Specific positive	5.85	11.29
Anticipation	Specific positive	3.83	9.44
Joy	Specific positive	3.52	10.60
Negative	Overall	2.89	6.18
Fear	Specific negative	1.63	5.05
Anger	Specific negative	1.28	4.27
Sadness	Specific negative	1.24	4.44
Disgust	Specific negative	1.20	5.53
Surprise	Neutral	1.84	8.18

For this table, the sentiment scores are transformed from proportions to the average percentage of words in a post's comments associated with each sentiment category.

comments, *SD* = 11.29%, compared to *SD* = 5.25% for posts). Although the average negative sentiment in comments represented only 2.89% of words, this is almost three times higher than the average negative sentiment in posts (1.04%). Compared to the average sentiment of Facebook posts, the average sentiment of comments on these schools' and districts' CRT-related Facebook posts were between two and a half (joy) and five times greater (disgust), also including higher proportions of anger, fear, surprise, and sadness. In addition, across the board, standard deviations for the sentiment of comments were between two times greater (trust) and more than nine times greater (disgust) than the sentiment for posts, reflecting greater variability in the sentiment of Facebook comments across all emotional dimensions.

Post overperformance and comment negativity

We next present the overperformance of posts by the negativity of comments in Figure 2. Here, the *x*-axis represents the sentiment score of the post (with higher values indicating that comments on that post were more negative), and the *y*-axis represents the overperforming score (with higher values indicating that the score was interacted with more than the average, past posts from the same account). The two posts we chose to analyze qualitatively are labeled in the plot. Vertical, dashed lines indicate a neutral (0) overperforming score and the mean level of the negativity of the comments at the post level (2.89). Note how the post from Westfield, MA, which was slightly negative (0.038 sentiment score) overperformed, but was far less negative (0.006) in terms of comments than the average post, and how the post from Springboro, OH—which was not very negative (0.013) overperformed, but was more strongly negative (0.039).

Qualitative analyses of contrasting posts and associated comments

Westfield, MA: A moderately overperforming post with more neutral sentiment

Westfield Public Schools is a district in western Massachusetts that serves a relatively small number of students classified as having a disability (5.5%) and families with income below the poverty level (6.1%), although 20.3% of families receive food benefits.[2] The median income for households with children in the Westfield schools is $81,369. In 2020–2021, the Westfield community demographics were 85% White, 1% Black, 3% Asian or Asian/Pacific Islander, 10% Hispanic/Latino, 0% American Indian or Alaska Native, 0% Native Hawaiian or other Pacific Islander, and 1% two or more races. Since 2010, the Westfield community had a decrease in the proportion of White residents (from 92.8% in 2010 to 85% in 2020), an increase in the Hispanic student population (then 7.5%), and a small increase in the Asian or Asian/Pacific Islander population (1.35%), and has maintained a similar proportion of Black residents

[2]Demographic information and other district statistics for both Westfield, MA and Springboro, OH are from the National Center for Education Statistics accessed in June 2022.

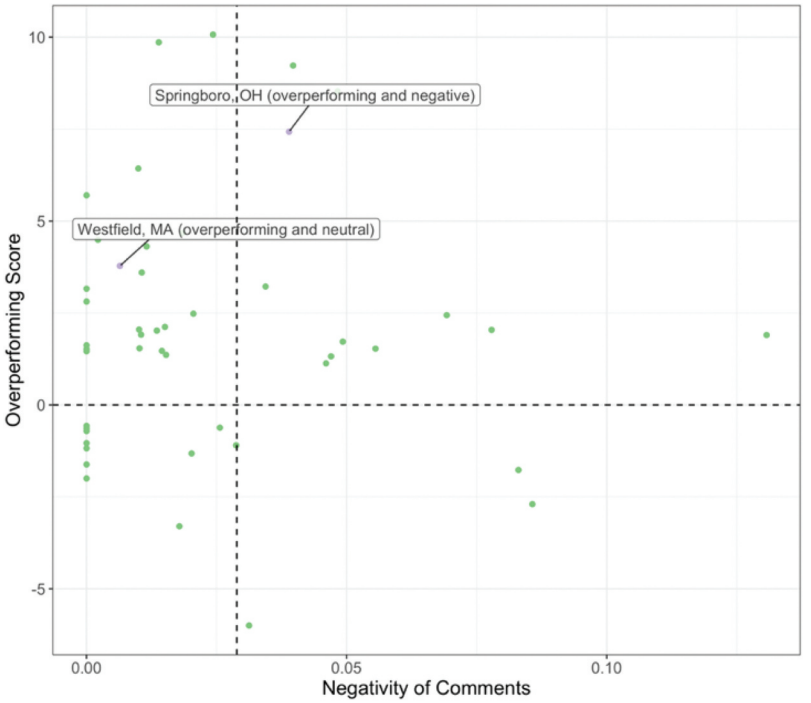

Figure 2 The overperformance of posts by the negativity of comments.

(1.6%). Although not an enormous change, these demographic shifts are precisely the kind of changes that make particular areas vulnerable to the "conflict campaign" (see Pollock et al., 2022).

In the context of a school board election in which at least one candidate raised the specter of CRT (Camerota, 2021), Westfield Public Schools superintendent Stefan Czaporowski addressed families with a six-paragraph post in the fall of 2021 that was received with 72 reactions, 13 comments, and 17 shares. Unlike other posts that directly addressed the question of whether CRT is taught in the district, Westfield only brought up CRT to say that, "Debating about masks or the myth that Critical Race Theory is being taught in our schools is . . . nonproductive," contrasting those issues to the real crises of students' mental health and a shortage of teachers, substitute teachers, and bus drivers. Superintendent Czaporowski elaborated on the teacher shortage, saying:

> The lack of qualified teachers in the U.S. has worsened during the pandemic. Difficulties filling teacher openings continue to affect schools across the country . . . Our district still has over a dozen critical positions to fill and it's already the middle of October. The teacher shortage didn't start with COVID-19. Educators have been leaving the profession for years for a variety of reasons, and the pandemic only exacerbated the situation. According to a June survey of 2,690 members of the National Education Association, 32% said the pandemic was likely to make them leave the profession earlier than expected.

This message relies on strategies that the messaging evidence suggests should not be used (Words That Win, 2022). Namely, this message leads with problems, rather than shared values, and is filled with data that appeals to logic, but is unlikely to have emotional resonance with the intended audience. The last part of the social media message, however, has content that is more forward-looking and positive:

> If we truly hope to work together to create an environment where children can learn and thrive and be surrounded by positive role models and examples in their community, we need to acknowledge that our world is hurting, traumatized, and in need of healing. We also need to celebrate the good work that our educators, administrators, support staff and families do every day caring for our children.

While the post did not use the most effective messaging techniques, the reactions and comments were generally positive: 72 reactions of "like," "love," and "care." The post's comments either expressed general gratitude for the district's efforts or focused criticism on the teacher shortage and the district's staffing decisions. An anonymous administrator for the Westfield schools Facebook account responded to three critical comments, but Superintendent Czaporowski personally responded to one Westfield resident's question about the utility of various assessment data, expressing gratitude for the comment before redirecting back to the main point of the post, that "the two major factors affecting student success right now are the lack of qualified staff and mental health needs. These two factors directly affect student performance." Westfield's strategy of minimizing focus on CRT and redirecting focus to other, more urgent issues, seems to have been successful based on the mostly neutral comments attached to this post.

Springboro, OH: A highly overperforming post with above average negative sentiment

Springboro, Ohio is a city located south of Dayton and north of Cincinnati, a predominantly Quaker town in the 1800s that served as a stop on the Underground Railroad. The Springboro zip code is wealthy—the median household income in recent years was over $116,000, with fewer than 3% of families below the poverty line. However, between 2000 and 2010, Springboro has grown both in number of residents (from 12,380 to 17,422), and at least slightly, in demographic diversity, from 96% White in 2000 to 92% White in 2010, with a corresponding increase split across African American, Asian, Hispanic or Latino residents, as well as those identifying as two or more races.

In the summer of 2021, Springboro Schools superintendent Larry Hook turned to Facebook to "address the recent questions and concerns that have been shared by parents and community members regarding Critical Race Theory (CRT) and if CRT is being considered for this district's curriculum." Superintendent Hook went on to write, "Springboro Schools has not and will not support or implement CRT into our curriculum at any grade level," and then outlined four specific "topics sometimes associated with CRT" that echoes the list of divisive concepts presented in Trump's executive order:

- Teaching from a perspective that the United States and/or its legal system is systematically racist and designed to create and maintain inequalities between genders, ethnicities, different religious heritages, or races;
- Teaching that socialism and communism are morally superior to democracy, capitalism, and a free market economy;
- That any gender, ethnicity, religious heritage, or race should feel superior or inferior;
- That one should feel guilt or shame due to their ethnicity, religious heritage, race, or gender.

This posts turns the reader's attention to the now-contentious CRT term, potentially distracting the reader from the larger goals and values of the district.

The superintendent goes on to emphasize that the district follows the learning standards laid out by the Ohio Department of Education and that the most recently approved standards for social studies do not include CRT, although the superintendent seems to also invoke norms of local control in Ohio as additional political cover, stating that, "As standards are updated and released, the Superintendent will make recommendations to the Board of Education on whether or not to adopt them." Finally, the superintendent affirms district values:

> Springboro Schools is committed to maintaining our excellent curriculum, which is the educational foundation of countless Springboro graduates who have gone on to enjoy success in numerous pursuits such as college, vocational school, military service, and skilled trades. We will also strive to continuously improve our environment and student experience so that every student is able to feel welcome and safe.

Linking back to the ideas from political messaging research about what "not to do," this statement concludes by affirming values of safety and high-quality curriculum for "every student," but in a race-

neutral way that calls into question what the district means by welcome and safe (i.e., that White students feel emotionally safe).

Springboro community members had quite a bit to say about this Facebook post. The post had one of the highest numbers of interactions in our sample and a higher-than-average negative sentiment score. The post was shared 53 times and received 291 comments, all concentrated in a short period of time after the post was released.

Initial comments on the post applauded it (literally, with applause emojis), complimented, or thanked the district without providing explanation. As the comment thread continued, however, more residents expressed their dissatisfaction with the district's stance. Eight of the 291 comments received more than 40 reactions. Seven of those eight comments were not against the teaching of CRT, but actually against the district's statement, criticizing the district for endorsing what commentors called a "white-washed" version of history. The top comment (with 95% of reactions being "like" or "love") explained that,

> Being a school you should totally know that CRT isn't a curriculum. . .It's only about teaching the TRUTH of our nation. A nation where the laws put in place were made to keep POC oppressed . . . teaching patriotism without what happened is not teaching, it's brainwashing.

Two comments referred to Springboro's history as a stop on the Underground Railroad. One commentor highlighted this history in a positive way but without viewing it as contradictory to the district's prohibitions of teaching about structural racism. This person commented,

> Springboro was a stop in the Underground Railroad and I'm glad it's still a place where people stand up for what is right. Let us continue to teach history (the good and the bad) while not letting it bog down our future. America has made mistakes, but we have improved and will continue to improve as long as people grasp the fact that their ability to reach their potential isn't limited by their race, but by their character.

In contrast, another commentor wondered if students would still being able to learn about the Underground Railroad under these guidelines, "Or are parents so easily frightened the entire notion must be scrubbed from the curriculum?"

This example from Springboro, Ohio illustrates a school district Facebook post that overperformed relative to other posts from Springboro Schools and whose comments reflected a higher-than-average negative sentiment. Perhaps surprisingly, the post received a number of comments critical of the district—but not against the teaching of CRT. Instead, many of these negative comments pushed the district to teach hard history and clarified what the commentors believed to be a more accurate view of CRT.

Discussion

In summary, we analyzed 118 posts from the 71 schools and 23 districts who mentioned "critical race" on Facebook between January 2020 and December 2021. While this represents only a small proportion of U.S. schools and districts, this study nevertheless provides an opportunity to use data mining techniques to examine how schools and districts engage with stakeholders around contentious issues. These schools and districts were located in about two-thirds of states, with the highest number located in New York, Ohio, and Pennsylvania. As one might expect in formal communications from schools and/or districts, there were few words in the posts with a negative emotional valence. Interestingly, both posts and their associated comments had similar proportions of words with positive emotional valences and trust. This may reflect how parents are likely to rate their own children's school highly while viewing U.S. education broadly as lower quality (Schneider, 2017). However, in every emotional category other than trust, the average sentiment score for comments was higher than for posts, and in every emotional category, the spread of sentiment scores was broader than for posts. We believe this is a function of how social media can activate strong and polarizing

emotions, with those feeling especially strongly in positive or negative directions being the most likely to engage in commenting on a post and responding to others' comments. It makes sense that comments would have significant variation in sentiment compared to relatively mundane, informational posts from a school or district, even if those posts were focused on a polarizing issue such as CRT.

The two posts and associated comments we highlight here, from Westfield, MA and Springboro, OH, illustrate some of the rhetorical moves that schools and districts make. For example, districts sometimes bundled particular issues together, as in how Westfield contrasted the importance of teacher shortages and student mental health with the "distraction" of CRT. Districts also picked up on language from other government policy documents, as when Springboro used language similar to Trump's executive order. Many districts, including Springboro, also stated directly that the district did not teach CRT, a technique that messaging research suggests is not effective because it draws the reader's attention back to a contentious term. The comments associated with these posts ranged from short expressions of general support or criticism to long comments and exchanges, heated at times. Based on the smaller number and more neutral-tone comments, it seems that Westfield's strategy of mentioning CRT only in the context of other issues may have been fairly successful. Comments were generally positive, compared to Springboro's statement of CRT not being taught along with a list of prohibited concepts. The many comments in response to the Springboro superintendent's post were far more polarized, with many supporting the district, but many also criticizing it for not teaching important and nuanced history.

Implications and guidance from messaging research

This work has clear implications for school and district leaders in how to communicate with stakeholders about perceptions of CRT and other hot-button issues. Political messaging work points to the following practices as effective in diffusing the fear- and anger-inducing strategies used by conservative political pundits: (1) name the divisive tactics being used and connect them to the outcomes they produce; (2) create a unity of purpose that does not avoid race; and (3) provide a call to action (see Hodge et al., 2022; Lake Research Partners, 2018). Indeed, evidence points to bipartisan support for messages that explicitly challenge narratives that attempt to divide people along race and ethnicity (e.g., Lake Research Partners, 2018). Moreover, consistent with prior research on justice motive theory, "equality, fairness, and unity" are values that people with a variety of political perspectives view positively when they encounter them in messages (Lake Research Partners, 2018, p. 90).

The example post described from Westfield, MA earlier illustrates some of this guidance, ending with a statement of forward action toward a common purpose and shared goals. While this statement of common purpose is more effective in countering critiques related to CRT than simply saying that CRT is not taught in the district, this message could be improved by naming an opponent outside of the district and their divisive tactics, and highlighting specific groups of students. For example, concluding with a statement such as,

> We can work together to create an environment where the Black, Latinx, and White children in our district can learn and thrive. Politicians on TV and on social media are intentionally distracting us to maintain power—and they are distracting us from what really matters: the physical and mental health and well-being of our children, as well as their future opportunities. We need to celebrate the work that educators and families do every day caring for our children.

In other words, school and district leaders should make sure to focus on their mission and vision—focus on affirmative values rather than fact-checking claims or getting bogged down in countering claims about CRT in the district.

Limitations and future research

While we are reasonably confident that this dataset includes all school and district posts referencing CRT, it is a very small number compared to the number of schools and districts in the U.S. Further, although anti-CRT rhetoric is widespread, not every district is encountering CRT critiques, as they are most common in politically heterogeneous districts with rapidly changing racial and ethnic demographics (Pollock et al., 2022). In addition, districts may very well use other means to communicate with parents, such as email blasts, websites, learning management systems, or text message notifications: communications which we could not capture. Unlike Facebook posts, where there is a built-in mechanism for public debate, those other means of communication provide one-way information for parents to which they may react differently, and community members without children in K-12 school may not receive these communications at all.

Our goal here is not only to examine school-based communication to parents and the community, but also the reaction to that communication. Future research might examine school and district communication across Facebook, Twitter, and other social media platforms compared to more static modes of communication to identify how school district messaging and public discourse vary by mode of communication. Future research might also identify how think tanks are linked to both traditional and conservative media in spreading conservative messages (Haas, 2007), or identify actors in the "nebulous array" (Hodge et al., 2020, p. 3) of individuals, non-system actors, and the media who collectively spread CRT-related messages. On the whole, this study represents an important first step in demonstrating the utility of data mining and sentiment analysis for addressing such questions.

Disclosure statement

No potential conflict of interest was reported by the authors.

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