Methodological Appendix: The Costs of Conflict Study

October 2024

Study Overview

In summer 2024, UCLA's Institute for Democracy, Education and Access, in partnership with The Superintendent Lab at the University of Texas at Austin, Professor Robert Shand at American University, and the Civic Engagement Research Group at UC Riverside, conducted a study exploring how U.S. public school districts experienced and responded to culturally divisive conflict during the 2023-23 school year. We administered a national survey to U.S. public school district superintendents, and received responses from 467 individuals, and conducted 42 follow-up interviews. The study aimed to assess the fiscal costs of conflict associated with the divisive fights that have become prevalent in public schools today.

We examined superintendents' responses to survey questions about conflict to characterize the level of culturally divisive conflict experienced by school districts. In addition, we estimated the fiscal impact of culturally divisive conflict by analyzing survey questions that addressed various costs associated with conflict. We used standard cost estimation techniques grounded in the economic concept of opportunity cost—including all resources that have alternative use or value, regardless of who pays for or provides the resource and whether there is a direct financial expenditure. Our estimates for the costs of conflict draw on survey questions about additional expenditures, redeployment of staff time, and staff turnover–all of which emerged due to culturally divisive conflict.

Survey Methods

In summer 2024, we conducted a national survey of K-12 public school district superintendents. We used the National Longitudinal Superintendent Database (NLSD) housed at The Superintendent Lab to administer an online survey via Qualtrics of nearly all K-12 public school district superintendents across the U.S. (n~12,500).[1] Prior to distribution, we piloted the survey with a group of recently retired superintendents and made revisions based on their feedback. The survey included three key sections with questions related to (1) the nature of conflict related to culturally divisive issues (e.g., frequency, by whom, toward whom, in what spaces), (2) frequency of and topics associated with personal or professional threats of superintendents and district staff, and (3) financial and human resource costs of conflict related to culturally divisive issues. 467 superintendents from 46 different states completed the survey. As is discussed below, survey respondents largely reflected the universe of school districts nationally.

We sent out unique survey links to all superintendents, which would allow us to match their responses with their district's National Center for Education Statistics (NCES) ID. We also shared an anonymous respondent link and QR code with superintendent support organizations that allowed some superintendents to complete the survey and not have their responses connected to their district unless the respondent volunteered that information. Among all survey completers, 98% completed it via the unique survey link so we were able to match their

---

[1] For a discussion of this longitudinal data of US school superintendents, see: White, Rachel S. "Ceilings made of glass and leaving en masse? Examining superintendent gender gaps and turnover over time across the United States." *Educational Researcher* 52, no. 5 (2023): 272-285.

responses with their district's NCES ID.. The survey required a significant time investment due to the level of detail being requested around changes in funding and staff. Nonetheless, 77.9% of superintendents who started the survey completed 50% or more of all survey questions.

Our sample includes superintendents from 46 states. Among respondents that we could match NCES ID with district locale information, respondents from nine states made up 50% of the sample: California (9.5%), Illinois (8.2%), Pennsylvania (7.0%), Texas (5.9%), Michigan (4.2%), Missouri (4.0%), Wisconsin (3.6%), Ohio (3.6%), and Washington (3.8%). This distribution is similar to that of all K-12 public school districts in the U.S., with 50% of school districts coming from those nine states.[2] Among our respondents, 45.1% were superintendents in rural districts, 19.7% town, 29.7% suburb, and 5.4% city. This sample is relatively representative of the distribution of locales among K-12 public school superintendents (nationally: 57% rural, 19% town, 19% suburban, 5% urban); however, both rural and urban superintendents were slightly underrepresented and suburban superintendents were overrepresented in our sample.

Connecting survey respondents with NLSD data on superintendent gender, we know that 69% of our respondents identified as men, 30% women, and 1% preferred not to say, which reflects national trends in which women comprise around 28% of all K-12 public school superintendents (White, 2023). Around 90% of our respondents identified as White, 3% identified as Black or African American, 3% as American Indian or Alaska Native, 2% as multiracial and 2% as other, and less than 1% identified as Asian or Pacific Islander. Additionally, 7% of our respondents were of Hispanic or Latine origin. Finally, 60% of respondents had less than 5 years of experience as a superintendent in their current district, 26% had 6-10 years, 10% had 11-15 years, and around 4% had 16 or more years in their current district. In terms of total tenure as a superintendent, 41% of respondents had 5 or fewer years, 32% had 6-10 years, 16% had 11-15 years, and 11% had 16 or more years of experience as a superintendent.

Interview Methods

To learn more about the stories of conflict and efforts of district leaders to respond to this conflict, we conducted interviews with 42 superintendents from 12 states during the summer of 2024. 12 of the 42 superintendents had taken our survey and were invited to participate in the interview because they reported moderate or high levels of conflict. The other 30 superintendents were invited to be interviewed through leadership networks. When we reached out to superintendents through leadership networks, we did not know whether they had experienced conflict. The interviews were conducted by our research team on Zoom and generally lasted between 45 minutes and an hour. Superintendents were promised confidentiality and asked whether and how their district experienced conflict and, if so, what sorts of costs they incurred responding to this conflict.

---

[2] Texas, California, Illinois, New York, Ohio, New Jersey, Michigan, Missouri, and Pennsylvania

Constructing the Culturally Divisive Conflict Score

Our national survey of school superintendents included a set of questions about whether and how often districts have been challenged on teaching and learning about race and racism, policies protecting LGBTQ+ students, and books available to students in the school library. It also explored the frequency with which conflict has prompted and employed misinformation, violent rhetoric, and threats. We combined responses to these questions to create a "Culturally Divisive Conflict Score" for each district. These scores ranged from 0 to 40 amongst our respondents. Scores of 0-5 are defined as LOW Conflict, scores of 6-15 MODERATE Conflict, and scores of 16-40 HIGH Conflict.

The survey questions used to create the Culturally Divisive Conflict Score are listed below. In blue, we show the conflict points that were assigned to different answers to account for the frequency of particular types of conflict. For most survey items, we assigned 1 point if the superintendent reported that a particular type of conflict occurred once or twice during the year, 2 points if it occurred monthly, and three points if it occurred weekly or more often. For example, if a superintendent reported that their district encountered political conflict about LGBTQ+ issues monthly, we assigned 2 conflict points. We asked several questions that addressed conflict on policies and practices related to LGBTQ+ rights, teaching about race and racism, efforts to restrict student access to library books, or the spread of misinformation. By contrast, we only asked a few questions that addressed hostile or violent or threatening behavior. Because these latter forms of conflict are more serious, we gave greater weight to responses for those questions, assigning more points.

Survey Questions used in the Culturally Divisive Conflict Score:

Q. In the 2023-2024 school year, how often did your district encounter political conflict about policies related to …

•Teaching about race/racism
(Never=0, Once or twice = 1, Monthly = 2, Weekly or more often =3)
•Banning books
(Never=0, Once or twice = 1, Monthly = 2, Weekly or more often =3)
•LGBTQ+ issues
(Never=0, Once or twice = 1, Monthly = 2, Weekly or more often =3)

Q. During the 2023-24 school year, how often did parents or community members spread misleading, inaccurate, and/or false information about your district's policies and practices?
(Never=0, Once or twice = 1, Monthly = 2, Weekly or more often =3)

Q. In the 2023-2024 school year, how often did parents and community members contact school or district administrators or school board members to raise issues or present concerns related to

•Policies and practices related to LGBTQ+ student rights

(Never=0, Once or twice = 1, Monthly = 2, Weekly or more often =3)

•Student access to books in the school library
(Never=0, Once or twice = 1, Monthly = 2, Weekly or more often =3)

•Teaching and learning about race and racism
(Never=0, Once or twice = 1, Monthly = 2, Weekly or more often =3)

•Teachers' use of highly credible information or media sources
(Never=0, Once or twice = 1, Monthly = 2, Weekly or more often =3)

Q. In the 2023-2024 school year, how often did individuals, elected officials, or organizations outside of your district seek to limit or challenge work in your district related to…

•Policies and practices related to LGBTQ+ student right
 (Never=0, Once or twice = 1, Monthly = 2, Weekly or more often =3)

•Student access to books in the school library
 (Never=0, Once or twice = 1, Monthly = 2, Weekly or more often =3)

•Teaching and learning about race and racism
 (Never=0, Once or twice = 1, Monthly = 2, Weekly or more often =3)

•Teachers' use of highly credible information or media sources
 (Never=0, Once or twice = 1, Monthly = 2, Weekly or more often =3)

Q. In the 2023-2024 school year, how often were school board meetings in your district characterized by hostile or violent rhetoric?
 (Never=0, Once or twice = 2, Monthly = 4, Weekly or more often =6)

Q. During the 2023-24 school year, how frequently did you feel fearful and/or worried about your safety and/or the safety of your family?
 (Never=0, Once or twice = 2, Monthly = 4, Weekly or more often =6)

Q. During the 2023-2024 school year, did any district representatives or staff receive threats related to their work?
(Yes = 5.)

Assessing Direct Costs

To ascertain the direct costs of culturally divisive conflict, we asked superintendents: *"How much did your district alter spending on the following services in response to conflict related to culturally divisive issues?"*

–Security
–Media and Communication
–Social Media Support
–Legal
–Community relations
–Improving school board relations
–Government relations
–Other (fill in)

For each category of expenditure, superintendents could report that there was "No additional or reduced cost" OR, they could select an expenditure range that most closely reflected the costs to their district. Because larger districts, on average, spend more than smaller districts on various services, we presented superintendents with different expenditure ranges depending on their district enrollment. The expenditure ranges were based on the National Center for Education Statistics School Finance Survey (F-33, Fiscal Year 2021; https://nces.ed.gov/ccd/pdf/2023304_FY21F33_Documentation.pdf) "Supplemental Business Services" expenditures by enrollment.

Enrollment Bin	Low Expenditure						High Expenditure
0-2499	No additional or reduced cost	$1-2000	$2001-5000	5001-7000	7001-9000	9001-12000	12001+
2500-4999	No additional or reduced cost	$1-10000	$10001-20000	$20001-30000	$30001-40000	$40001-50000	$50001+
5000-9999	No additional or reduced cost	$1-18000	18001-36000	36001-54000	54001-72000	72001-90000	90001+
10000-19999	No additional or reduced cost	1-35000	35001-70000	70001-100000	100001-140000	140001-175000	175000+
20000-49999	No additional or reduced cost	1-80000	80001-160000	160001-240000	240001-300000	300001-400000	400001+
50000+	No additional or reduced cost	1-300000	300001-600000	600001-900000	900001-1200000	1200001-1500000	1500001+

For each observation, we imputed the midpoint of the range of costs selected for each category and summed costs across categories to derive an estimate of total direct costs per school district. We then multiplied the average per student cost in each district by 10,000 to come up with an estimate of total direct costs for a medium-sized district that serves the modal student in the

United States, and to disentangle district size from the level of conflict, as larger districts on average experience more conflict.

Assessing Indirect Costs

We examined the opportunity cost of staff time that was reallocated from normal district purposes toward efforts to address or ameliorate the effects of culturally divisive conflict. We asked superintendents:

"In the 2023-24 school year, how many hours in a typical week, if any, did all administrative staff members collectively spend working on the following due to conflict related to culturally divisive issues?"

–Security
–Media and Communication
–Social Media Support
–Legal
–Community relations
–Improving school board relations
–Government relations
–Other (fill in)

We summed the hours per week across categories. Choosing to err on the side of conservatism, we assumed that these costs would be incurred over the course of a 40-week academic year, rather than a full calendar year, so multiplied weekly hours by 40 to arrive at annual hours. We estimate the economic value of this time by multiplying it by the median annual salary of a K-12 school district administrator as reported by the Bureau of Labor Statistics Occupational Employment and Wage Statistics (https://www.bls.gov/oes/current/oes119032.htm) of $103,460, divided by 2080 hours and applied estimated fringe benefits for state and local government employees of 55% of wages according to the Employer Cost of Employee Compensation (https://www.bls.gov/news.release/ecec.t03.htm), arriving at an estimated hourly rate of $77.10 per hour as the value of administrator time.

Assessing Turnover Costs

To estimate the magnitude of staff turnover due to culturally divisive conflict, we asked superintendents:
"To the best of your knowledge, approximately how many [a. District Office Staff, b. Principals or Assistant Principals, c. Teachers; d. Other School Staff] left in the 2023-24 school year due to conflict related to culturally divisive issues?

We instructed superintendents to leave the box blank if no staff in a particular category left due to culturally divisive conflict and to indicate "don't know" if they were not sure of the number for a given category.

To estimate the costs of this turnover, we derived estimates based on an interactive tool developed by the Learning Policy Institute, What's the Cost of Teacher Turnover? (https://learningpolicyinstitute.org/product/2024-whats-cost-teacher-turnover#:~:text=The%20research%20used%20to%20create,and%20training%20are%20factored%20in.)

Based on district size, we applied these costs to each instance of employee turnover:
Districts with less than 10,000 students: $12,000 per staff turnover
Districts with 10,000-=49,999 students: $16,400
Districts with more than 50,000 students: $25,000.

Total Costs of Conflict to US Public Schools

We combined total, indirect, and turnover costs and divided those by the average enrollment in each respective category of HIGH, MODERATE, and LOW Conflict districts to derive an estimated average cost per student in each respective category. We then estimated the proportions of students represented by each category of conflict in our sample by weighting the number of districts in each category by enrollment. We applied those proportions to the estimated 49.6 million students in the United States (https://nces.ed.gov/programs/coe/indicator/cga/public-school-enrollment) as weights multiplied by the estimated per student costs of conflict for each respective type of district to come up with a weighted average total cost of conflict across all districts in the United States.