## Langer Research Associates

SURVEY RESEARCH DESIGN • MANAGEMENT • ANALYSIS

## 2023 Texas Teacher Poll Survey Methodology

In this report, two forms of data collection were utilized to capture the perspectives of Texas public school teachers: polling/surveying and moderated online discussion forums. There were 1,029 teachers included in the survey. Additionally, 24 teachers who were not surveyed participated in the moderated online discussion forums. The following section provides a description of the survey methodology, followed by a description of the moderated online discussion forum methodology.

## Survey

Sampling and data collection for this report were conducted by SSRS of Glen Mills, Pa., at the direction of Langer Research Associates.

Using the Texas Education Agency's 2021-2022 list of 376,397 public school teachers, 32,801 names and email addresses were randomly selected, stratified by metro status, region, race and ethnicity, years of teaching experience, and charter status. Oversamples were drawn to obtain results from at least 100 teachers in each of these groups: East, West, and Central regions; Black teachers; those with no more than two years of experience and/or younger than 30; and charter school teachers.

Most email addresses in the TEA list are personal (typically with a .com suffix). To increase contact opportunity, a third-party vendor, MDR, appended school-based email addresses as available, adding them to 14,922 records.

Sampled teachers were sent personalized email invitations signed by Dr. Shari Albright, president of the Charles Butt Foundation, with a unique passcode-embedded link to complete the survey online. The sample was released in two waves, with the second wave designed to ensure adequate sample sizes from subgroups. Multiple email invitations were sent to all sampled teachers. Fieldwork was conducted March 22-May 1, 2023, and June 13-15, 2023.

Of those invited, 27,882 did not click the invitation link, 1,258 did so but did not complete the survey, 98 were determined not to be current Texas public school teachers and 1,043 completed the survey. In quality control, the fastest $1 \%$ of respondents in total completion time were flagged for possible inattention, as were those who skipped more than $25 \%$ of the questions they received; these 14 cases were deleted. The final sample included 1,029 Texas public school teachers. The average time to complete the questionnaire was 17 minutes.

Data were weighted to address unequal probabilities of selection based on the number of available email addresses and to match known parameters from the TEA list, including:

- Gender (male, female)
- Age (18-29, 30-39, 40-49, 50-59, 60+)
- Race/ethnicity (White, Black, Hispanic, other)
- Highest degree earned (bachelor's or less, master's or higher)
- Tenure (2 years or fewer, 3-5 years, 6-10 years, 11-20 years, more than 20 years)
- School grade level (elementary, middle, high, combined, unknown)
- School enrollment ( $<100,100-249,250-499,500-999,1000-2499,2500+$, unknown)
- School's metro status (urban, suburban, rural, unknown)
- School's region (East, Dallas/Fort Worth, Houston area, Central, West, South/Southwest, unknown)

Weights were trimmed at the 2 nd and 98th percentiles. The survey has a design effect due to a weighting of 1.41, for a margin of sampling error of plus or minus 3.6 percentage points for the full sample; error margins are larger for subgroups. Results are highly representative in terms of known demographic values, as shown in the table below.

| Demographic Comparison of Survey Data and TEA Benchmarks |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Benchmark | Unweighted | Weighted |
| Gender | Male | 24.1\% | 23.0\% | 24.1\% |
|  | Female | 75.9\% | 77.0\% | 75.9\% |
| Age | 18-29 | 18.2\% | 12.1\% | 17.4\% |
|  | 30-39 | 28.9\% | 19.2\% | 28.9\% |
|  | 40-49 | 27.5\% | 30.8\% | 27.9\% |
|  | 50-59 | 19.1\% | 29.1\% | 19.4\% |
|  | 60+ | 6.3\% | 8.8\% | 6.4\% |
| Race/ethnicity | White | 56.6\% | 56.2\% | 56.6\% |
|  | Black | 11.1\% | 17.9\% | 11.3\% |
|  | Hispanic | 28.8\% | 22.8\% | 28.6\% |
|  | Other | 3.5\% | 3.1\% | 3.5\% |
| Education | Bachelor's or less | 73.6\% | 68.1\% | 73.2\% |
|  | Master's or higher | 26.4\% | 31.9\% | 26.8\% |
| Years of experience | 2 years or fewer | 19.2\% | 21.3\% | 19.5\% |
|  | 3-5 years | 15.1\% | 9.7\% | 14.3\% |
|  | 6-10 years | 20.6\% | 17.4\% | 20.6\% |
|  | 11-20 years | 28.7\% | 32.9\% | 29.0\% |
|  | More than 20 years | 16.4\% | 18.7\% | 16.6\% |
| School type | Elementary | 45.1\% | 41.3\% | 44.8\% |
|  | Middle | 20.8\% | 22.6\% | 20.9\% |
|  | High | 30.6\% | 31.2\% | 30.8\% |
|  | Combined | 3.0\% | 4.3\% | 3.1\% |
|  | Unknown | 0.5\% | 0.6\% | 0.5\% |
| School size | $<100$ | 0.9\% | 1.6\% | 0.9\% |
|  | 100-249 | 4.5\% | 4.1\% | 4.6\% |
|  | 250-499 | 20.6\% | 19.3\% | 20.5\% |
|  | 500-999 | 43.0\% | 43.3\% | 42.8\% |
|  | 1000-2499 | 21.5\% | 22.8\% | 21.7\% |


| Demographic Comparison of Survey Data and TEA Benchmarks |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Benchmark | Unweighted | Weighted |
|  | $2500+$ | $8.6 \%$ | $8.0 \%$ | $8.5 \%$ |
|  | Unknown | $0.9 \%$ | $0.9 \%$ | $0.9 \%$ |
| School metro status | Urban | $44.9 \%$ | $52.8 \%$ | $45.4 \%$ |
|  | Suburban | $43.6 \%$ | $38.0 \%$ | $43.1 \%$ |
|  | Rural | $11.5 \%$ | $9.0 \%$ | $11.4 \%$ |
|  | Unknown | $0.0 \%$ | $0.2 \%$ | $0.1 \%$ |
| School TX region | East | $12.8 \%$ | $11.2 \%$ | $12.7 \%$ |
|  | Dallas/Fort Worth | $22.6 \%$ | $24.0 \%$ | $22.7 \%$ |
|  | Houston area | $20.9 \%$ | $26.5 \%$ | $21.2 \%$ |
|  | Central | $13.0 \%$ | $9.9 \%$ | $12.6 \%$ |
|  | West | $11.2 \%$ | $9.8 \%$ | $11.1 \%$ |
|  | South/Southwest | $19.4 \%$ | $18.4 \%$ | $19.5 \%$ |
|  | Unknown | $0.0 \%$ | $0.2 \%$ | $0.1 \%$ |

In regional analysis, the following county groupings were used:
East: Anderson, Angelina, Bowie, Camp, Cass, Cherokee, Cooke, Delta, Ellis, Fannin, Franklin, Freestone, Grayson, Gregg, Hardin, Harrison, Henderson, Hill, Hopkins, Houston, Hunt, Jasper, Jefferson, Kaufman, Lamar, Leon, Liberty, Limestone, Madison, Marion, Montgomery, Morris, Nacogdoches, Navarro, Newton, Orange, Panola, Polk, Rains, Red River, Rockwall, Rusk, Sabine, San Augustine, San Jacinto, Shelby, Smith, Titus, Trinity, Tyler, Upshur, Van Zandt, Walker, Wood.

Dallas/Ft. Worth: Collin, Dallas, Denton, Tarrant.
Houston: Brazoria, Chambers, Fort Bend, Galveston, Harris.
South Central: Aransas, Austin, Bastrop, Bee, Bell, Brazos, Burleson, Caldwell, Calhoun, Colorado, DeWitt, Falls, Fayette, Goliad, Gonzales, Grimes, Guadalupe, Hays, Jackson, Karnes, LaVaca, Lee, Live Oak, McLennan, McMullen, Matagorda, Milam, Refugio, Robertson, San Patricio, Travis, Victoria, Waller, Washington, Wharton, Williamson, Wilson.

West: Andrews, Archer, Armstrong, Bailey, Bandera, Baylor, Blanco, Borden, Bosque, Briscoe, Brown, Burnet, Callahan, Carson, Castro, Childress, Clay, Cochran, Coke, Coleman, Collingsworth, Comal, Comanche, Concho, Coryell, Cottle, Crane, Crockett, Crosby, Dallam, Dawson, Deaf Smith, Dickens, Donley, Eastland, Ector, Edwards, Erath, Fisher, Floyd, Foard, Gaines, Garza, Gillespie, Glasscock, Gray, Hale, Hall, Hamilton, Hansford, Hardeman, Hartley, Haskell, Hemphill, Hockley, Hood, Howard, Hutchinson, Irion, Jack, Johnson, Jones, Kendall, Kent, Kerr, Kimble, King, Knox, Lamb, Lampasas, Lipscomb, Llano, Loving, Lubbock, Lynn, McCulloch, Martin, Mason, Menard, Midland, Mills, Mitchell, Montague, Moore, Motley, Nolan, Ochiltree, Oldham, Palo Pinto, Parker, Parmer, Potter, Randall, Reagan, Real, Roberts, Runnels, San Saba, Schleicher, Scurry, Shackelford, Sherman, Somervell, Stephens, Sterling, Stonewall, Sutton, Swisher, Taylor, Terry, Throckmorton, Tom Green, Upton, Ward, Wheeler, Wichita, Wilbarger, Winkler, Wise, Yoakum, Young.

South/Southwest: Atascosa, Bexar, Brewster, Brooks, Cameron, Culberson, Dimmit, Duval, El Paso, Frio, Hidalgo, Hudspeth, Jeff Davis, Jim Hogg, Jim Wells, Kenedy, Kinney, Kleberg, La Salle, Maverick, Medina, Nueces, Pecos, Presidio, Reeves, Starr, Terrell, Uvalde, Val Verde, Webb, Willacy, Zapata, Zavala.

## Moderated Online Discussion Forums

Moderated online discussion forums (forums) were held June 5-9, 2023, with participants responding to questions posed in discussion guides, commenting on one another's postings and replying to follow-up questions from the Langer and Charles Butt Foundation research teams. Beyond discussions on belonging, inclusion, equity, and school safety, conversations covered teachers' pathways into and through the profession, retention strategies, and advice for teachers entering the profession.

Forum participants were selected to include a range of characteristics. The group of teachers with six or more years of experience initially included nine women and three men; six Black teachers, four Latino or Hispanic teachers, and two Asian teachers. They were geographically dispersed, with four teaching in Houston, three in the Dallas/Fort Worth area, two apiece in Central Texas and South/Southwest Texas, and one in East Texas. Seven taught in urban areas, four in suburban areas and one in a small town/rural area. Three taught pre-K through fifth grade, six taught grades 6 through 8, and two taught grades 9 through 12; another taught special education and general education homebound at all levels. Two have taught for six to nine years, seven for 10-14 years, and three for 15 years or longer. Nine hold an alternative teaching certification, two a master's degree with certification, and one a traditional undergraduate certification. Their ages ranged from 36 years to 51 years old, with a median of 45 years old. The forum of longertenured teachers experienced attrition; of the 12 initial participants, seven completed the full five days of discussion.

The second forum, of teachers with three or fewer years of experience, also included nine women and three men; seven Latino teachers, three Black teachers, two Asian teachers. Four taught in schools in South/Southwest Texas, three in Houston, two in the West region, and one apiece in Dallas/Fort Worth, Central Texas, and East Texas. Six taught in urban areas, four in suburban areas and two in small town or rural areas. Four taught pre-K through fifth grade, two taught grades six through eight, five taught grades nine through 12, and again one taught special education at all levels. Seven hold an alternative teaching certification, four a traditional undergraduate certification, and one a master's degree with certification. Their ages ranged from 24 years to 50 years old, with a median of 32 years old.

In addition to these characteristics, teachers across the two forums reported teaching a range of subjects, including language arts, science, mathematics, social studies, special education, English as a second language, Spanish, physical education, business, and architecture, adding another layer of variety to their experiences.

## Modeling Results

Having seriously considered leaving one's position as a public school teacher in the past year was modeled using logistic regression, with binary responses from Q4 as the dependent variable, coded as 1) Have seriously considered and 0 ) Have not seriously considered. Independent variables are listed in Table 1.

Table 1: Predicting Seriously Considering Leaving Public school Teaching in the Past Year

|  | $M 1$ | $M 2$ | $M 3$ |
| :--- | :--- | :--- | :--- |
| Female | -0.07 | -0.09 | -0.31 |
| Tenure | -0.00 | -0.00 | $\mathbf{0 . 0 2}$ |
| Salary (log scale) | 0.00 | 0.25 | -0.18 |
| Race/ethnicity: Black | -0.37 | -0.37 | -0.07 |
| Race/ethnicity: Hispanic | 0.35 | 0.33 | 0.23 |
| Race/ethnicity: Mixed, Other racial/ethnic | 0.47 | 0.58 | 0.53 |
| minority |  |  |  |
| Urbanicity: Urban | 0.25 | 0.20 | 0.06 |
| Urbanicity: Rural | -0.32 | -0.30 | -0.34 |
| Region: East | -0.20 | -0.25 | -0.20 |
| Region: Houston | 0.06 | 0.06 | -0.23 |
| Region: Central | 0.34 | 0.27 | 0.22 |
| Region: West | -0.09 | -0.07 | 0.04 |
| Region: South/Southwest | -0.28 | -0.27 | -0.42 |
| Certification type: Traditional undergraduate | -0.21 | -0.22 | -0.28 |
| Certification type: Master's | 0.50 | 0.43 | 0.48 |
| Feeling fairly paid |  | $\mathbf{- 0 . 6 6}$ | -0.27 |
| Positive work environment |  |  | $\mathbf{- 0 . 5 2}$ |
| Mental health in relation to teaching job |  |  | $\mathbf{- 0 . 5 9}$ |
| Stress index |  |  | $\mathbf{0 . 6 8}$ |
| Cox-Snell Pseudo-R-squared | 0.03 | 0.04 | 0.20 |

$\mathrm{p}<0.05$ bolded. Log-odds ratio coefficients are from survey-weighted logistic regression

The model includes an index variable measuring reported sources of stress teachers experienced in the past school year. The stress index includes nine items:

- Have any of the following been a source of stress for you this school year?
- Staff shortages, including a lack of substitute teachers and support staff (Q15a)
- Pressure to have your students do well on standardized tests (Q15b)
- Poor pay and benefits (Q15c)
- Feeling that you need to support students' mental health and emotional well-being (Q15d)
- Lack of communication and understanding from administrators (Q15e)
- Excessive workload/long hours (Q15f)
- Feeling that you need to keep your students safe (Q15g)
- Interacting with parents (Q15h)
- Complying with the state law on how to teach about current and historical events, cultural differences and political issues (Q15i)

The stress index was tested for internal consistency using Cronbach's alpha ( $\alpha$ ). The reliability coefficient of the stress index is $\alpha=0.74$, meaning the stress items are closely related.

