LANGER RESEARCH ASSOCIATES

SURVEY RESEARCH DESIGN · MANAGEMENT · ANALYSIS

2022 Texas Teacher Poll
Survey Methodology and Modeling

Sampling and data collection for the Charles Butt Foundation's 2022 Texas teachers survey were conducted by SSRS of Glen Mills, Pa., at the direction of Langer Research Associates.

A total of 35,296 names and email addresses were randomly selected from the Texas Education Agency's 2020 listing of 376,007 public school teachers, stratified by metro status and region. Oversamples were drawn to obtain results from at least 100 teachers in each of these groups: East, West and South Central regions; Black teachers; those age 60+; and those with no more than two years' experience and/or younger than 30.

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 for 12,116 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 three waves, with the second and third waves designed to ensure adequate sample sizes from subgroups. Multiple email invitations were sent to all sampled teachers. Fieldwork began April 4 and closed May 16.

Of those invited, 33,095 did not click the invitation link, 753 did so but did not complete the survey, 142 were determined not to be current Texas public school teachers and 1,306 completed the survey. In quality control, the fastest 1 percent of respondents in total completion time were flagged for possible inattention, as were those who skipped more than 25 percent of the questions they received; these 15 cases were deleted. The final sample included 1,291 Texas public school teachers. Average time to complete the questionnaire was 20.8 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 size (<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, South Central, West, South/Southwest, unknown)

Weights were trimmed at the 2nd and 98th percentiles. The survey has a design effect due to weighting of 1.25, for a margin of sampling error of plus or minus 3.0 percentage points for the full sample; error margins are larger for subgroups.

All differences described in this report have been tested for statistical significance. Those that are significant at the 95 percent confidence level (or higher) are reported without qualification. Those that are significant at 90-94 percent confidence are described as "slight" differences. Those that are significant at less than 90 percent confidence are not reported as differences.

Results are highly representative in terms of known demographic values:

Demographic comparison of study participants and Texas public school teachers				
		Benchmark	Unweighted	Weighted
Gender	Male	23.9%	23.0%	24.0%
	Female	76.1%	77.0%	76.0%
Age	18-29	18.4%	12.7%	18.1%
	30-39	29.4%	24.6%	29.2%
	40-49	27.5%	29.7%	27.7%
	50-59	18.5%	25.1%	18.7%
	60+	6.3%	7.9%	6.3%
Race/ethnicity	White	57.1%	61.4%	57.4%
	Black	11.1%	15.1%	11.2%
	Hispanic	28.3%	20.1%	27.9%
	Other	3.5%	3.3%	3.5%
Education	Bachelor's or less	73.9%	65.6%	73.7%
	Master's or higher	26.1%	34.4%	26.3%
Years of experience	2 years or fewer	18.6%	20.4%	18.8%
	3-5 years	15.8%	11.9%	15.4%
	6-10 years	20.2%	17.2%	20.2%
	11-20 years	29.1%	32.5%	29.3%
	More than 20 years	16.2%	18.0%	16.3%
School type	Elementary	45.5%	38.1%	45.3%
	Middle	21.0%	23.3%	21.1%
	High	30.3%	34.5%	30.5%
	Combined	2.8%	3.6%	2.8%
	Unknown	0.4%	0.5%	0.4%
School size	<100	0.9%	1.3%	0.9%
	100-249	4.4%	5.1%	4.4%
	250-499	17.0%	19.1%	17.1%
	500-999	43.8%	40.0%	43.5%
	1000-2499	21.7%	21.3%	21.8%
	2500+	8.0%	8.9%	8.0%
	Unknown	4.2%	4.2%	4.2%
School metro status	Urban	45.3%	45.2%	45.3%
	Suburban	43.2%	39.4%	43.0%
	Rural	11.5%	15.0%	11.6%

Demographic comparison of study participants and Texas public school teachers				
		Benchmark	Unweighted	Weighted
	Unknown	0.0%	0.4%	0.1%
School TX region	East	12.7%	14.8%	12.7%
	Dallas/Fort Worth	22.6%	18.2%	22.5%
	Houston area	21.2%	18.8%	21.0%
	South Central	12.9%	14.3%	12.9%
	West	11.1%	12.4%	11.2%
	South/Southwest	19.5%	21.1%	19.6%
	Unknown	0.0%	0.4%	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/Fort 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.

In analyzing Q1, an open-ended question asking about the local public schools' biggest problem or problems (up to three were accepted), two independent coders reviewed and categorized responses, first using categories from previous Charles Butt Foundation surveys among Texas adults, then adding new categories as warranted. The coders then compared and reconciled their work.

Modeling results

Index construction
Factor analysis was used to distill aspects of teachers' experiences into distinct constructs. Four unique components were identified, measuring 1) teachers' sense of meaning and impact in their current position, 2) their perceived societal value, 3) workplace structure and 4) value and belonging in the workplace.

The meaning and impact index includes four items:
- How much do you feel you have each of these in your current position as a public school teacher?
    - A rewarding career that makes a difference (Q17d)
    - The ability to help students reach their potential (Q17e)
    - Strong relationships with students (Q17g)
    - A job that makes a positive impact on society (Q17i)

The perceived societal value index includes four items:
- How much, if at all, do you feel that your community values you as a teacher? (Q3)
- How much, if at all, do you feel that each of these value you as a teacher?
    - Texans overall (Q4a)
    - The parents of your students (Q4b)
    - Elected officials in the state (Q4c)

The workplace structure index includes five items:
- How much do you feel you have each of these in your current position as a public school teacher?
    - Leadership opportunities (Q17a)
    - Input into school and district decision making (Q17b)
    - A positive work culture and environment (Q17c)
    - Autonomy as classroom leader (Q17f)
    - Opportunities for creative work (Q17h)

The workplace value and belonging index includes three items:
- How much, if at all, do you feel that each of these value you as a teacher?
    - Your school administrators (Q4d)
    - Other teachers at your school (Q4e)
- How strong is your sense of belonging at your school? (Q9)

Each was tested using Cronbach's alpha (α), a measure of internal consistency, with all four indices showing reliability.

- Meaning and impact index, α = 0.82
- Perceived societal value index, α = 0.77
- Workplace structure index, α = 0.83
- Workplace value and belonging index, α = 0.70

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 Q12 coded as 1) Have seriously considered and 0) Have not seriously considered as the dependent variable. Independent variables are listed in Table 1.

Table 1: Predicting seriously considering leaving public school teaching in the past year

	M1	*M2*	*M3*
Female	**0.46**	**0.46**	**0.52**
Tenure	0.00	0.00	0.02
Salary (log scale)	-0.97	0.04	0.06
Postgraduate degree	0.18	0.15	0.11
Race/ethnicity: Black	0.04	-0.05	-0.06
Race/ethnicity: Hispanic	0.22	0.19	0.30
Race/ethnicity: Mixed, Other racial/ethnic minority	0.04	0.08	0.19
Urbanicity: Urban	**0.33**	**0.34**	0.36
Urbanicity: Rural	-0.06	0.04	0.15
Number of hours worked as public school teacher		0.05	0.03
Feeling fairly paid		**-0.88**	**-0.44**
Needing to work an extra job for money		**0.36**	0.28
Workplace structure index			**-0.34**
Sense of meaning and impact index			**-0.56**
Perceived societal value index			**-0.43**
Workplace value and belonging index			**-0.34**
Cox-Snell Pseudo-R-squared	*0.02*	*0.05*	*0.17*

p < 0.05 bolded. Log-odds ratio coefficients are from survey-weighted logistic regression