

WILLIAM R. JOHNSTON, LAURA S. HAMILTON, DAVID MATTHEW GRANT, CLAUDE MESSAN SETODJI,
CHRISTOPHER JOSEPH DOSS, CHRISTOPHER J. YOUNG

Learn Together Surveys

2019 Technical Documentation and Survey Results

The RAND American Educator Panels (AEP) consist of the American Teacher Panel (ATP) and American School Leader Panel (ASLP). These panels are nationally representative samples of K–12 public school educators. The ATP includes more than 25,000 teachers, and the ASLP includes more than 7,500 school principals. Both groups respond to numerous online survey requests each year. The AEP began in 2014 and expanded significantly during the 2016–2017 and 2017–2018 school years (Robbins and Grant, forthcoming).

Using probabilistic sampling methods, the AEP samples are designed to be of sufficient size to facilitate national analyses and analyses of prevalent subgroups at the national level (e.g., elementary school teachers, high school mathematics teachers, teachers in urban schools). Similarly, the panels are designed to permit analyses of the following geographic areas: Alabama, Arkansas, California, Florida, Georgia, Illinois, Kentucky, Louisiana, Maryland, Massachusetts, Mississippi, Nebraska, New Mexico, New York (New York State as a whole and New York City), North Carolina, Oklahoma, Rhode Island, South Carolina, Tennessee, Texas, Virginia, West Virginia, and Wisconsin.¹ One also can examine subgroups within these geographic areas (although there is lower

precision for smaller groups). The AEP sample is not designed to permit analyses within geographic areas not listed above.

SURVEY CHARACTERISTICS

- The ATP and ASLP included such topics as serving students with disabilities, supporting students' future careers, data for decision-making, and social and emotional learning.
- The ATP also featured the topics of teacher preparation, math materials and instruction, and teaching writing. The ASLP featured the topics of principal preparation and school management and operations.
- The 2019 Learn Together Surveys (LTS) yielded 3,744 complete responses out of 6,363 invitations for teachers (59-percent completion rate) and 1,679 complete responses out of 4,279 invitations for school leaders (40-percent completion rate).

The 2019 Learn Together Surveys

In March 2019, RAND researchers administered the Learn Together Surveys (LTS) to a sample of the ATP and ASLP members who work in schools serving grade 6 or higher.

The ATP sample targeted two groups of teachers—one based on geography and one based on grade level taught. Geographically, the sampling was designed to result in 400 completed surveys in each of five states—California, Florida, New York, Tennessee, and Texas—and 1,500 completed surveys across the balance of states for a national total of 3,500 surveys. These sampling targets were selected to balance estimate precision, available sample, and ATP recruitment costs. The survey targeted teachers of grades 6 or higher, and only teachers who reported teaching grade 6 or higher were invited to participate. The survey instrument confirmed grades taught and screened out teachers who reported not currently teaching grade 6 or higher. Approximately 32 invited teachers (0.5 percent) were screened out during the survey process. These teachers were removed from the invited samples. No “screen-ins” were possible, so some level of undercoverage might exist, with truly eligible teachers currently misclassified as “out-of-scope.”

The ASLP sample targeted principals at schools teaching grades 6 or higher with the goal of completing 1,500 surveys from a national sample of school leaders. Survey eligibility was limited to school leaders who reported leading a school with grade 6 or higher (including schools that had lower grade levels in addition to grades 6 through 12), and the ASLP survey instrument confirmed grades included at the school and screened out principals at schools that did not include grade 6 or higher. Approximately 104 invited school leaders (2 percent) were screened out during the survey process because their school did not include grade 6 or higher. Also, no “screen-ins” were possible, so some level of undercoverage

might exist, with truly eligible principals currently misclassified as “out-of-scope.”

Survey Content and Administration

The LTS questionnaires were developed by the Bill & Melinda Gates Foundation in consultation with staff at RAND. Researchers provided feedback on question wording, format, and sequencing, with the foundation maintaining final editorial control on the survey items. The survey was designed to generate representative data on teacher and principal perspectives regarding the topics listed in Table 1. Most items were developed by program staff at the foundation, with the exception of a set of social and emotional learning (SEL) items that were adapted from Bridgeland et al.’s (2013) nationally representative survey of teachers on their attitudes toward SEL.

The data generated from the survey are intended to be used by analysts at RAND, the foundation, and state education agencies (SEAs) in the five states where we have teacher oversamples. SEAs in these five states can compare the responses of teachers from their states with a nationally representative comparison group.

The ATP survey had an approximate administration time of 20 or 30 minutes, depending on grade levels taught: 6th- through 8th-grade teachers completed a 20-minute survey, whereas 9th- through 12th-grade teachers completed a 30-minute survey (they were asked to complete two additional sections, as reported in Table 1). The ASLP survey had a similar structure, with an approximate administration time of 25 minutes across all grade levels. See Table 1 for a summary of the content areas that were included in each survey.

Abbreviations

AEP	American Educator Panels
ASLP	American School Leader Panel
ATP	American Teacher Panel
CASEL	Collaborative for Academic, Social, and Emotional Learning
LTS	Learn Together Surveys
SEA	state education agency
SEL	social and emotional learning

Survey Completion Results

The 2019 LTS yielded 3,744 complete responses out of 6,363 invitations for teachers (59-percent completion rate) and 1,679 complete responses out of 4,279 invitations for school leaders (40-percent completion rate). Table 2 provides weighted descriptive statistics for survey respondents. The weights, which are described in the next section, are intended to ensure

TABLE 1
ATP and ASLP Survey Content Areas

ATP Content Areas	ASLP Content Areas
Your teaching assignment	Your school assignment
Sources of information and support	Sources of information and support
Serving students with disabilities	Serving students with disabilities
Supporting students' future careers ^a	Supporting students' future careers ^a
Supporting students' transitions to postsecondary education ^a	Supporting students' transitions to postsecondary education ^a
Data for decisionmaking	Data for decisionmaking
Perceptions of principals	Perceptions of teachers
Social and emotional learning	Social and emotional learning
Teacher preparation	Principal preparation
Use of digital communities	Use of digital communities
Math materials and instruction	School management and operations
Teaching writing	Demographics
Demographics	

^a These questions were asked of teachers and principals who serve 9th- through 12th-grade students only.

that the sample reflects the national population of teachers and school leaders.

Calibrated Weighting

Each LTS respondent has been given a weight to ensure that estimates reflect the national population of teachers and school leaders. This weight is calculated by first modeling response probabilities of teachers (or principals) across a wide variety of teacher (or principal) characteristics. The main weight is then calibrated so that the weighted sample matches the known national teacher or school leader population across these characteristics. Characteristics that factor into this process include descriptors at the individual level (e.g., gender, professional experience) and school level (e.g., school size, level, urbanicity, socioeconomic status).

To produce estimates that reflect the population of 6th- to 12th-grade teachers and principals in schools that included grades 6 through 12 in the United States, we created weights. We also conducted recalibration to make sure that the weights are set up to recover the population estimates after the screening and for nonresponse weight adjustments. The final analysis weights in the data file are the product of the following three interim weights:

1. the calibrated weight of the ATP/ASLP sampling frame—this is a calibration weight that assigns a weight for each ATP/ASLP member based on individual and school-level characteristics so that the sum of the weights along the calibration factors closely matches the characteristics of the national population of teachers and principals based on the Schools and Staffing Survey and the Common Core of Data, which are both from the National Center for Educational Statistics (2017). See Robbins and Grant (forthcoming) for more information.
2. the sample selection weight—this is the inverse probability of selection into the LTS 2019 sample using the ATP/ASLP as the frame. These probabilities were selected in order to have 3,500 participants in the ATP and 1,500 in the ASLP.
3. the survey response weight—this is the inverse of the modeled probability of a teacher or principal completing the survey.

The products of these weights were subsequently recalibrated and trimmed as necessary.² The sampling and weighting approach was designed to ensure a representative sample and limit the size of the design effect. The sampling frame weights were

TABLE 2
Weighted Descriptive Statistics

	ATP		ASLP	
	Mean	Standard Error	Mean	Standard Error
School characteristics				
Elementary school ^a	0.083	0.006	0.279	0.014
Middle school ^a	0.364	0.009	0.311	0.013
High school ^a	0.501	0.009	0.316	0.013
Other types of schools ^a	0.039	0.004	0.073	0.008
Total enrollment	1,081.445	13.580	609.490	13.041
Percentage Asian students	4.849	0.154	3.746	0.248
Percentage Hispanic students	24.095	0.489	21.202	0.816
Percentage black students	16.020	0.409	14.472	0.687
Percentage white students	50.853	0.585	55.351	1.000
Percentage other race/ethnicity students	4.183	0.132	5.229	0.256
Percentage of students receiving free or reduced-price lunch	50.199	0.521	52.775	0.845
High poverty school ^a (more than 75% free or reduced-price lunch)	0.212	0.008	0.246	0.013
Title I-eligible school ^a	0.512	0.010	0.549	0.015
City school ^a	0.275	0.008	0.241	0.013
Suburban school ^a	0.395	0.009	0.292	0.013
Town school ^a	0.111	0.006	0.131	0.009
Rural school ^a	0.218	0.008	0.336	0.013
Educator characteristics				
Total years in role	14.742	0.159	9.074	0.169
Female ^a	0.640	0.009	0.420	0.014
Asian ^{a, b}	0.029	0.003	0.017	0.004
Hispanic ^{a, b}	0.083	0.005	0.075	0.008
Black ^{a, b}	0.071	0.005	0.118	0.009
White ^{a, b}	0.840	0.007	0.809	0.011
Other race/ethnicity ^{a, b}	0.037	0.004	0.028	0.005

NOTES: The ATP sample contains 3,744 observations. The ASLP sample contains 1,679 observations. School background characteristics were obtained from the Common Core of Data and are from the 2016–2017 school year. Means and standard errors were calculated using survey weights, which are calibrated to match the national averages for teachers and school leaders. The definition for high poverty school (greater than 75 percent free or reduced-price lunch) follows the definition set forth by the National Center for Education Statistics (National Center for Education Statistics, 2017). Educator characteristics are self-reported by the respondent. The rate of missingness in educator characteristics is about 2 percent and 5 percent in the teacher and principal samples, respectively.

^a Variables are expressed as dichotomous indicators of group members (1 = in the group, 0 = not in the group). The mean value represents the proportion of respondents who are members of the group in question.

^b Variables were not used in the calculation of sampling weights.

calculated to make the panel match the national population of teachers and principals based on several school-level (e.g., school size, level, urbanicity, sociodemographics) and individual-level (e.g., gender, education, experience) characteristics. The inverse of the selection probabilities (p_{st}) was used as

the sample selection weight. The response weights were estimated by modeling the likelihood (p_{it}) that a selected participant would respond to the survey, conditional on the school and individual-level characteristics of teachers and principals (including the state in which they are working). For parsimony,

a variable-selection method was used to choose the model that best fit the data. The main weight was estimated as the product of the sampling frame calibration weight ($1/p_{fi}$), the sample selection weight ($1/p_{si}$), and the response weight ($1/p_{ri}$):

$$\text{Weight} = \frac{1}{P_{fi}} \times \frac{1}{P_{si}} \times \frac{1}{P_{ri}}$$

Because there is no guarantee that this main weight will sum to the total of all the population characteristics, this main weight was calibrated again based on individual and school-level characteristics to obtain the final weight. If some of these final weights were extreme within sampling states, a trimming process (at the 95th percentile) was used to reduce the outliers and the trimmed weights were reallocated for the population totals to remain the same after trimming.³

A supplemental Microsoft Excel spreadsheet containing detailed data is available at www.rand.org/t/RR4332.

Notes

¹ State oversamples were funded by The Bill & Melinda Gates Foundation to track their investments in these states.

² Because this survey was restricted to educators serving 6th through 12th grades, we estimated the recalibration totals using the sampling frame. Using the calibrated sampling frame, we assume that its subset to 6th through 12th grade will be a good approximation.

³ Replicate weights were not produced for the LTS data files and variance estimation using the provided single weight should suffice. We made this decision after calculating variance with and without replication and determined that differences in the standard errors were negligible. If analysts of these data need to estimate variance using replication, syntax for an alternative variance estimation method (jackknife) is available upon request.

References

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About the Authors

William R. Johnston is an associate policy researcher at RAND and a member of the Pardee RAND Graduate School faculty. His research explores how local, state, and national political and social contexts relate to educational opportunities and outcomes for youth.

Laura S. Hamilton is a senior behavioral scientist and distinguished chair in learning and assessment at RAND. She directs the RAND Center for Social and Emotional Learning Research and co-directs the American Educator Panels.

David Matthew Grant is a senior social/behavioral scientist at RAND. Grant has extensive survey research experience, including telephone-based surveys, random digit-dial sampling, address-based sampling, noncoverage, and nonresponse bias.

Claude Messan Setodji is a senior statistician at RAND and co-director of the RAND Center for Causal Inference. His research interests include applications of statistics to public policy, especially in health care cost and care, causal inferences, sampling techniques, and data reduction and visualization.

Christopher Joseph Doss is a quantitative researcher at RAND who specializes in fielding causal and descriptive studies in education. His past research has focused on evaluations of early childhood education policies, K–12 accountability policies, and alternative teacher and principal preparation programs.

Christopher J. Young is a policy analyst at RAND. He has expertise in project planning and administration, survey management, and qualitative data collection. Prior to joining RAND, Young worked as a research assistant at Claremont Graduate University where he helped coordinate national surveys of special education teachers and university faculty.

About This Report

This report provides additional information about the sample, survey instrument, and resultant data for the 2019 Learn Together Surveys (LTS) that were administered to principals and teachers in March 2019 via the RAND Corporation's American Educator Panels (AEP). The LTS focus on several topics, and the results are intended to inform policy and practice related to these topics.

This research was undertaken by RAND Education and Labor, a division of the RAND Corporation that conducts research on early childhood through postsecondary education programs, workforce development, and programs and policies affecting workers, entrepreneurship, and financial literacy and decisionmaking. This report is based on research funded by the Bill & Melinda Gates Foundation. We are grateful to the foundation staff for their collaboration and feedback on our surveys and analysis. The findings and conclusions contained within are those of the authors and do not necessarily reflect positions or policies of the Bill & Melinda Gates Foundation. For more information and research on these and other related topics, please visit gatesfoundation.org.

If you are interested in using AEP data for your own analysis or reading other AEP-related publications, please email aep@rand.org or visit www.rand.org/aep. More information about RAND can be found at www.rand.org. Questions about this report or about the LTS should be directed to laurah@rand.org, and questions about RAND Education and Labor should be directed to educationandlabor@rand.org.



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Published (2020) by the RAND Corporation

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