

TRUTH DECAY

2019 AMERICAN TEACHER PANEL CIVIC EDUCATION SURVEY

TECHNICAL DOCUMENTATION

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PURPOSE OF THIS TECHNICAL DOCUMENTATION

The RAND Corporation, a nonpartisan research organization, is engaged in an effort to counter Truth Decay—“the diminishing role of facts and analysis in American public life.”¹ As Jennifer Kavanagh and Michael Rich wrote in their seminal report on this topic, Truth Decay is characterized by growing disagreement about what material counts as facts and evidence along with declining public trust in sources of evidence.² Public schools have the potential to exacerbate or counter Truth Decay by supporting students’ development of knowledge, skills, and dispositions related to media literacy, critical thinking, and other aspects of civic education. As part of RAND’s Truth Decay initiative, we administered a survey to public-school teachers about their approaches to civic education. We will issue several brief Data Notes that draw on the survey data, along with a more comprehensive report later in 2020. The purpose of this report is to supplement the other material in this series by serving as a source of technical information about the survey.

THE AMERICAN TEACHER PANEL

The RAND American Educator Panels (AEP) consist of the American Teacher Panel (ATP) and American School Leader Panel (ASLP). The ATP, which we used for the civic education study, is a nationally representative panel of public-school teachers for kindergarten through 12th grade (K–12) who were recruited through probability-based methods from a list that includes most U.S. teachers (up to 95 percent). The ATP began in 2014 and consists of about 25,000 teachers. Teachers recruited to the ATP have agreed to participate in online surveys several times per year and receive incentives for completing surveys. The rates at which recruited teachers have agreed to join the panel have varied across recruitment waves, but the average recruitment rate is approximately 33 percent. Using probabilistic sampling methods, the ATP can produce national-level estimates and state-level estimates in 25 states that have been oversampled. ATP samples also are designed to be of sufficient size to facilitate analyses of prevalent subgroups at the national level (e.g., elementary school teachers, high school mathematics teachers, teachers in city schools). Data files from the survey conducted with the ATP are weighted using state and national teacher characteristics to account for differences in sampling and response rates to ensure that they are representative of the target population response rates.³

¹ RAND Corporation, undated-a.

² Kavanagh and Rich, 2018.

³ For more information about the panel, see RAND Corporation, undated-b; and Robbins and Grant, 2020.

THE 2019 CIVIC EDUCATION SURVEY: CONTENT AND ADMINISTRATION

As part of our examination of the state of civic education in U.S. schools for the Truth Decay initiative, we worked with the AEP to administer a survey in fall 2019 to the ATP on a variety of topics related to civic education. We selected

a nationally representative sample of elementary (K–5th grade) and secondary (6th–12th grade) social studies teachers to participate (see Table 1). The elementary sample consisted primarily of general-education teachers who provide instruction in social studies and other subjects. Most teachers in the secondary sample were social studies specialists, although several of them reported teaching additional subjects.

TABLE 1 Weighted Descriptive Statistics for Survey Respondents

	MEAN OR PROPORTION		
	Sample Unweighted (%)	Sample Weighted (%)	Population (%)
Characteristics of schools for teachers participating in the study			
Elementary school ^a	51.8	74.4	74.3
Middle school ^a	20.0	10.4	10.40
High school ^a	24.9	12.3	12.2
Other types of school ^a	3.3	2.9	3.1
School enrollment size:			
Small	19.6	23.4	23.6
Medium	44.3	52.3	52.2
Large	36.1	24.3	24.2
Minority students in school:			
0%–25%	29.2	29.2	29.2
25%–50%	23.2	22.7	22.8
50%–75%	17.8	16.6	16.5
75%–100%	29.9	31.5	31.5
Students receiving free or reduced-price lunch:			
0%–25%	19.5	17.7	17.7
25%–50%	28.1	25.6	25.6
50%–75%	26.5	28.4	28.3
75%–100%	26.0	28.3	28.4
Urbanicity:			
City school ^a	29.2	30.7	30.7
Suburban school ^a	40.7	38.9	38.7
Town school ^a	12.6	11.5	11.5
Rural school ^a	17.6	18.9	19.1
Teacher characteristics			
Total years in role		15.7	
Female ^a	72.1	82.3	82.3
Degree: Master's or higher	58.1	54.3	54.3
Years of experience: 0–3 years	10.7	11.7	11.7
4–9 years	31.1	28.9	28.7
10–14 years	18.2	20.0	20.2
15 or more years	40.0	39.5	39.5

NOTES: The sample contains 820 observations. School background characteristics were obtained from the Common Core of Data and are from the 2017–2018 school year. Means and standard errors were calculated using survey weights, which are calibrated to match the national averages for teachers. The definition for a *high-poverty school*—more than 75 percent of the student body receiving free or reduced-price lunch—follows the definition set forth by the National Center for Education Statistics (2017). Educator characteristics are self-reported by respondents.

^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.



The goal of the survey was to understand the classroom-level practices and supports that might promote students' *civic development*, which the survey defined as encompassing three categories of competencies that have been described by civic education scholars and policy experts:⁴

- civic knowledge: an understanding of history, government, economics, and other related social studies topics
- civic skills: abilities that students need for citizenship, such as critical thinking, media literacy, and collaboration or teamwork
- civic dispositions: attitudes related to citizenship, such as appreciation for diverse views and experiences and a recognition of the importance of such activities as voting.

Schools can promote these outcomes through (1) a variety of programs and practices in social studies and other classes and (2) schoolwide initiatives, including extracurricular activities.⁵ Social studies teachers play a crucial role in supporting civic development, but it is important to acknowledge that their perspective on how schools address civics is incomplete.

Our survey items were developed specifically to document the following:

- approaches and topics addressed in teachers' social studies classrooms that might promote students' civic development
- teachers' beliefs about civic education and their degree of trust in various social institutions
- instructional materials and assessments that teachers use in their social studies classrooms to promote civic development
- teachers' perceptions regarding supports for and barriers to civic education (e.g., state standards, instructional materials, district support)
- teachers' perceptions of school climate and student behavior.

In developing the survey, we drew on previously fielded surveys developed by RAND and other organizations that have examined social studies and civic education in schools, and we drew on the broader literature about civic education practices and supports.⁶ A small number of survey items were borrowed or adapted from other



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sources with permission.⁷ The remaining items were developed by RAND. The survey had an approximate administration time of 20 minutes.

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SAMPLING, FIELD DATES, AND RESPONSE

The sample was designed to be a nationally representative group of teachers from across the United States. Anticipating a 60-percent completion rate,⁸ the sample was selected to produce completed surveys for 800 respondents. Because one goal of the project was to understand the differences between the experiences of elementary teachers and secondary teachers, we oversampled teachers in the latter group to produce a roughly even split of responses from each group (see Table 1). Invitations were sent to 1,334 teachers

⁴ Hansen et al., 2018; Whitehouse, Baumann, and Brennan, 2017.

⁵ Levine and Kawashima-Ginsberg, 2017.

⁶ Gould, 2011; Hansen et al., 2018; Levine and Kawashima-Ginsberg, 2017; Whitehouse, Baumann, and Brennan, 2017.

⁷ Farkas and Duffett, 2010; Kavanagh et al., forthcoming; Köhler et al., 2018; Rogers, 2019.

⁸ The completion rate is calculated by dividing the number of panel members who completed a survey by the number of panelists invited to take that survey; it does not account for the recruitment rate when teachers are invited to join the panel.



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on October 2, 2019, followed by eight emailed reminders over the course of the eight-week field period. Following the second reminder, it was determined that a low completion rate and higher-than-anticipated screen-out rate would require that additional teachers be sampled.⁹ A second batch of 266 sampled teachers received emailed invitations on October 22, 2019, bringing the combined sample to 1,600. A total of six reminder emails were sent to the additional sample over the course of a five-week field period. All final reminders were emailed on November 21, 2019. The field period closed on November 22, 2019, with 798 completed surveys and 22 partially completed surveys (in which respondents answered at least 10 percent of the questions), for a total of 820 cases receiving a weight (see the next section for information about weighting). After removing screened-out cases and including partial responses, the completion rate was 51.3 percent.¹⁰

Table 1 provides descriptive statistics for survey respondents using both the unweighted and weighted samples, along with descriptive statistics for the national population. The weights, which are described in the next section, are intended to ensure that the sample reflects the national population of teachers.

CALIBRATED WEIGHTING

To provide a weighted sample similar to the population of K–12 teachers in the United States, we created weights. The weighting process accounted for the probability of selection into the civic education survey from the teacher panel and the likelihood that an invited teacher would complete the survey; these likelihoods were calibrated to reproduce the population distribution of K–12 teachers. The nonresponse adjustment is important because it allowed us to eliminate known sources of bias and ensure that the weighted sample matched the national characteristics of teachers at the individual and school levels. This weighting approach is widely used for probability sampling surveys and to adjust for nonresponse;¹¹ notably, it is used in U.S. Department of Education surveys, such as the *Teacher Follow-Up Survey*.¹² The final analysis weights are the product of three interim weights:

1. calibrated weight of the sampling frame: This is a calibration weight that assigns each ATP member a weight 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 as set by the National Center for Education Statistics' School and Staffing Survey (SASS).
2. sample selection weight: This refers to the inverse of probability of selection into the sample using the ATP as the frame.
3. survey response weight: This refers to the inverse of modeled probability of a teacher completing the survey.

The products of these weights were subsequently recalibrated and trimmed if necessary. The sampling and weighting approach was designed to ensure

⁹ Teachers were sampled to participate in this survey if they reported teaching social studies, civics, or similar courses in a previous survey. Teachers were screened at the beginning of the survey to ensure that they still taught the target subject or subjects—i.e., if they indicated teaching “social studies or social science (including general social studies, geography, history, government/civics, etc.).” If they did not, they were screened out of the survey.

¹⁰ American Association for Public Opinion Research, 2016.

¹¹ For probability samples, see Deville and Särndal, 1992; for nonresponse, see Kott, 1996.

¹² Goldring, Taie, and Riddles, 2016.

a representative sample and limit the size of the design effect. As we have noted, the sampling frame weights went through three adjustments. First, they were calculated based on several school-level (e.g., school size, level, urbanicity, sociodemographics) and individual-level (e.g., gender, education, experience) characteristics to make the panel match the national population of teachers. Second, the inverse of the selection probabilities p_{si} were used as the sample selection weight. Finally, the response weights were estimated by modeling the likelihood p_{ri} of a selected participant responding to the survey conditional on the school-level and individual-level characteristics of teachers. 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 ($1/p_{ri}$), as follows:

$$\text{Weight} = 1/p_{fi} \times 1/p_{si} \times 1/p_{ri}$$

Because there is no guarantee that this main weight sums to the total of all the characteristics of the population of interest, we calibrated it one more time to the population of K–12 teachers in the United States, using individual-level and school-level characteristics to obtain the final weight. If some of these final weights were extreme, we used a trimming process (at the 95th percentile) to reduce the outliers; the trimmed weights were then reallocated for the population totals to remain the same after trimming.¹³

SUBGROUP COMPARISONS

The weighted descriptive summaries that we feature in other documents in this series are typically presented separately for elementary teachers and for secondary teachers. For teachers who taught some grades in each group,

we assigned them to the group for which they reported teaching more grade levels (e.g., a teacher of grades 4, 5, and 6 would be assigned to elementary; a teacher of grades 5 through 8 would be assigned to secondary). Teachers who reported teaching an equal number of elementary and secondary grades were assigned to the secondary group.

In some cases, we examined responses for teachers in subgroups of schools, broken down by urbanicity, racial or ethnic composition of student body, and percentage of students affected by poverty. We also examined subgroups of teachers who reported teaching higher or lower percentages of English-language learners. Table 2 shows the criteria for different subgroups.

The statistical significance of group differences was determined by estimating weighted linear probability models that regressed a specific response category of a survey question on categorical variables denoting the subgroup of interest (e.g., school with majority nonwhite students, high-poverty school). We conducted a series of supplemental regression analyses to assess whether differences persisted when including statistical controls for select teacher characteristics (race or ethnicity, total years of experience, grade level), the percentage of English-language learners that a teacher reported serving, and school characteristics (urbanicity and a combined vulnerability variable, which is the average of two standardized variables: the percentage of students receiving a free or reduced-price lunch in a teachers' school and the percentage of nonwhite students in a teacher's school).

TABLE 2 Subgroups Used for Analysis

Urbanicity			Student Body Racial or Ethnic Composition		Socioeconomic Status		English-Language Learners	
City	Suburban	Town and rural	More than 50% nonwhite students	50% or fewer nonwhite students	More than 75% of students receiving free or reduced-price lunch	75% or fewer students receiving free or reduced-price lunch	More than 10% English-language learners	10% or fewer English-language learners

¹³ A more detailed description of the weighting process is available in Robbins and Grant, 2020.

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ABOUT THIS REPORT

The RAND Corporation administered a survey in fall 2019 to social studies teachers who are members of RAND's American Teacher Panel to explore how teachers and schools promote civic development. Respondents consisted of (1) elementary general-education teachers who indicated that they taught social studies along with other subjects and (2) other teachers, mostly from middle and high schools, who reported teaching only social studies. The American Teacher Panel is part of the American Educator Panels (AEP), which are nationally representative samples of teachers and school leaders across the country. The AEP is part of 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. If you are interested in using AEP data for your own surveys or analysis or reading other AEP-related publications, please email aep@rand.org or visit www.rand.org/aep.

This work is part of RAND's Truth Decay initiative (Kavanagh and Rich, 2018), which studies the diminishing role of facts

and analysis in public life. Through this initiative, RAND has invited researchers and engaged stakeholders to find solutions that counter Truth Decay and the threat it poses to evidence-based policymaking. More information about Truth Decay is available at www.rand.org/truth-decay.

We are extremely grateful to the U.S. public-school teachers who agreed to participate in the ATP. Their time and willingness to share their experiences are invaluable for this effort and for helping us understand more about how to better support their hard work in schools. We also thank our reviewers, Andrew McEachin and Brian Gill, for helpful feedback that improved this report; and we thank editor Arwen Bicknell, production editor Monette Velasco, and designer Pete Soriano for their support in presenting this series.

More information about RAND can be found at www.rand.org. Questions about this report should be directed to laurah@rand.org.

FUNDING

Funding for this research was provided by gifts from RAND supporters and income from operations.

THE CIVIC EDUCATION SERIES

This technical documentation supports a series on how schools can equip students with the knowledge, skills, and dispositions they will need to succeed in life after high school and contribute to their communities and their country as adults. Data Notes in this series are

- Laura S. Hamilton, Julia H. Kaufman, and Lynn Hu, *Media Use and Literacy in Schools: Civic Development in the Era of Truth Decay*, RR-A112-2
- Julia H. Kaufman, Laura S. Hamilton, and Lynn Hu, *Teachers' Civics Instructional Materials: Civic Development in the Era of Truth Decay*, RR-A112-3
- Laura S. Hamilton, Julia H. Kaufman, and Lynn Hu, *Social Studies' Teachers Perspectives on Key Civic Outcomes in 2010 and 2019: Civic Development in the Era of Truth Decay*, RR-A112-4
- Julia H. Kaufman, Laura S. Hamilton, and Lynn Hu, *Social Studies Teachers' Trust in Institutions and Groups: Civic Development in the Era of Truth Decay*, RR-A112-5.

A more comprehensive report on the state of civic education in America's schools is also in development.

TRUTH DECAY

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