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# American Instructional Resources Surveys

## 2021 Technical Documentation and Survey Results

**T**he RAND American Educator Panels (AEP) consist of the American Teacher Panel (ATP), the American School Leader Panel (ASLP), and the American School District Panel (ASDP). These panels are nationally representative samples of teachers, school leaders, and district leaders across the country. The ATP includes more than 25,000 teachers, the ASLP includes more than 7,500 school principals, and the ASDP includes more than 850 district leaders (i.e., superintendents). Panelists 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, 2020).

Since 2014, the RAND Corporation has recruited AEP members using probabilistic sampling methods. The AEP samples are designed to be of sufficient size to facilitate national analyses as well as analyses of prevalent subgroups at the national level (e.g., elementary school teachers, high school mathematics teachers, teachers in urban schools). Similarly, the ATP is designed to permit state-representative analyses of responses among teachers in more than 25 states and the District of Columbia.

### **The 2021 American Instructional Resources Surveys**

Practitioners, policymakers, and researchers know very little about how U.S. teachers use and modify instructional materials in their classrooms to support student needs. In spring 2019 and spring 2020, RAND researchers administered the American Instructional Resources Surveys (AIRS) to a sample of ATP and ASLP members who work in K–12 schools to gather information from teachers and school leaders across the United States about their use or support of instructional materials (Kaufman, Doan, et al., 2020). Findings provided insight into the following issues:

- what instructional materials are being used by teachers in English language arts (ELA), mathematics, and science classrooms
- how teachers are using those materials and how they perceive the materials are supporting students

- what resources are provided to teachers to give them the knowledge and support they need to use their instructional materials in ways that support student learning (see Table 1 for details about survey content areas).

In spring 2021, RAND researchers again administered the AIRS to a sample of ATP and ASLP members to provide insight into these topics and additional items, including (1) science teachers' knowledge about their science standards and (2) the curriculum and instruction decisions that schools were making because of closures related to the coro-

navirus disease 2019 (COVID-19) pandemic. The updated survey also included some minor revisions to some AIRS 2020 survey items. These revisions were based on feedback from reviewers and our experiences in analyzing the 2020 data.

The ATP sample targeted K–12 teachers of English language arts, mathematics and science (including elementary teachers of all subjects) across the nation and in specific states. Geographically, the sampling was designed to result in 400 completed surveys in each of 16 states (Arkansas, California, Delaware, Florida, Kentucky, Louisiana, Massa-

TABLE 1  
American Teacher Panel and American School Leader Panel Survey Content Areas

American Teacher Panel Content Areas	American School Leader Panel Survey Content Areas
Teacher and student characteristics	School and student characteristics
Teacher background	School leader background
Curriculum and instruction during the COVID-19 pandemic	Curriculum and instruction during the COVID-19 pandemic
Anti-bias instruction	Anti-bias instruction
Commonly used curricula and other instructional materials for ELA, mathematics, and science, as well as modifications teachers make to their materials	Curricula and additional instructional materials recommended or required for ELA, mathematics, and science
Decisionmaker(s) about what materials are used	Decisionmaker(s) about what materials are used
Adequacy and perceptions of instructional materials	Adequacy and perceptions of instructional materials
Monetary purchases of science materials	
Use of integrated or traditional approaches for teaching middle school science	Use of integrated or traditional approaches for teaching middle school science
Principal supports for curricula and instruction	Principal supports for curricula and instruction
Teacher professional learning activities and teacher collaboration time related to subjects and curriculum	Teacher professional learning activities, and which vendors provide those activities
Extent to which professional learning opportunities provided adequate preparation for specific instructional activities	How much more professional learning teachers need in particular areas
Student engagement in particular classroom practices	School leader professional learning activities
Benchmark assessments used in mathematics and ELA	Benchmark assessments used in mathematics and ELA, and alignment of assessments with standards and state assessments
Estimated student achievement levels in mathematics and ELA in 2020–2021 and prior school years	Estimated student achievement levels in mathematics and ELA in 2020–2021 and prior school years
Teacher preparation program and emphases	Coherence and extent of district and school supports for ELA, mathematics, and science instruction
Extent to which preparation program provided adequate preparation for specific instructional activities	
Teachers' beliefs about their state standards	

NOTE: AIRS content area topics are asked of ELA, mathematics, and science teachers and school leaders. With the exception of the inclusion of anti-bias items, similar items for each topic were asked in spring 2019 and spring 2020 to facilitate longitudinal comparisons.

chusetts, Mississippi, Nebraska, New Mexico, New York, Ohio, Rhode Island, Tennessee, Texas, and Wisconsin) and 1,500 completed surveys across the balance of states for a national total of 7,900 surveys (see the Survey Completion Results section for details about completion rates). These sampling targets were selected to balance estimate precision, available sample, and ATP recruitment costs.

The survey instrument confirmed grades taught and screened out teachers who reported not currently teaching ELA, mathematics, or science. Approximately 1,049 invited teachers were screened out during the survey process and were removed from the invited samples. This number included 721 special education teachers inadvertently screened out of the survey as a result of a revised subjects-taught question. Once this was discovered, a version of the survey with revised screener questions was sent to those 721 teachers so that they could complete the survey if they wished to do so. No screen-ins (e.g., teachers initially classified as fine arts teachers who had switched to natural science during the time of survey administration) were possible, as these teachers would not have been invited to complete the survey on the basis of their initial classification. As a result, some level of undercoverage might exist, with eligible teachers misclassified as out of scope.

The ASLP sample targeted principals serving in schools at all grade levels with the goal of completing 1,500 surveys from a national sample of school leaders. Survey eligibility was limited to current school leaders and screened out 74 sampled panelists who were not currently working as school principals. Again, no screen-ins (e.g., a respondent who was classified as a classroom teacher in the sampling frame but became a principal during the time of survey administration) were possible.

## Survey Administration and Content

We developed and modified the AIRS questionnaires in consultation with funders (see the About This Report section) and a variety of experts on state standards and curricula. Experts and funders provided feedback on question wording, format, and sequencing, with the RAND Corporation maintaining final editorial control on the survey items. The

surveys were designed to generate representative data on teacher and principal perspectives regarding the topics listed in Table 1. Many survey items were developed by RAND, but the surveys also borrowed items (with permission) from several other sources. Our data tables include notes on items borrowed or adapted from non-RAND sources.<sup>1</sup> In addition, items were borrowed or adapted from prior RAND surveys (Doss and Johnston, 2018; Kaufman et al., 2018).

The data generated from the surveys are intended to be used by researchers and state education agencies in the 16 states where we have teacher oversamples. State education agencies in these 16 states can compare the responses of teachers from their states with a nationally representative comparison group. States have used AIRS and AEP data to inform policies on curriculum and instruction and support their curriculum reform efforts.<sup>2</sup>

The ATP survey had an approximate administration time of 30 minutes. Respondents were assigned to sections based on their responses to questions at the beginning of the survey about their grade band (K–5, 6–8, or 9–12) and subject(s) taught (ELA, mathematics, or natural science). Because of a lower number of 6th–8th grade teachers, if a respondent indicated teaching any grade 6–8, they were assigned the 6–8 grade path. If a respondent indicated teaching any grade K–5 and 9–12, but not 6–8, they were randomly assigned to either the K–5 or 9–12 grade path.

The ASLP survey had an approximate administration time of 30 minutes.

### Abbreviations

AEP	American Educator Panels
AIRS	American Instructional Resources Surveys
ASDP	American School District Panel
ASLP	American School Leader Panel
ATP	American Teacher Panel
CCD	Common Core of Data
COVID-19	coronavirus disease 2019
ELA	English language arts
IEP	Individualized Education Program
NCES	National Center for Education Statistics

## Survey Completion Results

The 2021 AIRS yielded 7,217 complete responses out of 13,322 eligible invitations for teachers (54.2 percent completion rate) and 1,757 complete responses out of 4,920 eligible invitations for school leaders (35.7 percent completion rate). Tables 2 and 3 provide

weighted descriptive statistics for ATP and ASLP survey respondents, respectively, along with available data on the full population of K-12 teachers and school leaders across the United States based on the National Center Common Core of Data (CCD). The weights, which are described below, are intended to

TABLE 2  
Weighted Sample Means, Unweighted Sample Means, and Population Means for American Teacher Panel Respondents

	Percentage		
	Unweighted Sample Mean	Weighted Sample Mean	Population Mean
<b>School characteristics</b>			
Elementary school	47.24	51.82	51.83
Middle school <sup>a</sup>	24.37	24.11	24.10
High school <sup>a</sup>	28.39	24.07	24.08
<b>School enrollment size</b>			
Small	16.67	17.58	18.07
Medium	30.26	31.00	31.34
Large	53.07	51.42	50.59
<b>Minority students in school</b>			
0–20%	26.26	21.80	21.75
20–40%	19.25	19.57	19.53
40–60%	17.35	16.84	16.79
60–80%	15.37	14.14	14.21
80–100%	21.78	27.66	27.73
<b>Students receiving free or reduced-price lunch</b>			
0–20%	14.90	15.28	15.28
20–40%	22.89	21.01	20.99
40–60%	25.70	22.91	22.88
60–80%	18.43	19.59	19.58
80–100%	18.08	21.20	21.28
<b>Urbanicity</b>			
City school	26.65	29.23	29.31
Suburban school	36.52	38.85	38.80
Town school	14.01	11.42	11.39
Rural school	22.82	20.50	20.50
<b>Teacher characteristics</b>			

Table 2—Continued

	Percentage		
	Unweighted Sample Mean	Weighted Sample Mean	Population Mean
Female	82.40	81.96	81.97
Degree: Master's or more	62.80	57.72	57.67
Years of experience			
0–3 years	12.26	13.63	13.80
4–9 years	26.87	24.22	24.15
10–14 years	20.78	19.97	19.91
15 or more years	40.09	42.17	42.14
Subject taught			
Math	63.18	66.04	66.06
ELA	71.83	74.30	74.38
Natural science	53.69	55.16	55.18

NOTES: The sample contains 7,217 teachers. School background characteristics were obtained from the CCD and are from the 2018–2019 school year. Proportions were calculated using survey weights, which are calibrated to match the national proportions for teachers. 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. School characteristics that are listed for population means were based on the CCD from the 2018–2019 school year, and teacher characteristics came from National Teacher and Principal Survey data from the 2017–2018 school year, both of which were used in weight calibration. The 2019–2020 CCD data were not available at the time of weight calibration.

<sup>a</sup> Middle schools include those with combined elementary and middle grades. High schools include those with combined elementary through high school grades.

TABLE 3

### Weighted Sample Means, Unweighted Sample Means, and Population Means for American School Leader Panel Respondents

	Percentage		
	Unweighted Sample Mean	Weighted Sample Mean	Population Mean
<b>School characteristics</b>			
Elementary school	39.44	41.79	41.79
Middle school <sup>a</sup>	40.35	37.41	37.36
High school <sup>a</sup>	20.20	20.80	20.85
School enrollment size			
Small	32.90	33.38	33.44
Medium	33.24	33.34	33.29
Large	33.86	33.29	33.27
Minority students in school			
0–20%	28.74	28.18	28.23
20–40%	18.95	19.11	19.08
40–60%	16.22	15.05	15.02
60–80%	12.41	12.28	12.26
80–100%	23.68	25.38	25.41

Table 3—Continued

	Percentage		
	Unweighted Sample Mean	Weighted Sample Mean	Population Mean
Students receiving free or reduced-price lunch			
0–20%	13.43	13.54	13.57
20–40%	22.20	20.86	20.86
40–60%	24.36	24.45	24.46
60–80%	18.33	19.38	19.35
80–100%	21.68	21.77	21.76
Urbanicity			
City school	26.81	26.60	26.60
Suburban school	31.30	32.25	32.26
Town school	12.98	12.74	12.71
Rural school	28.91	28.41	28.43
Principal characteristics			
Female	49.12	53.16	53.20
Degree: Doctorate	14.74	10.49	10.47
Years of experience			
0–2 years	25.50	45.55	45.66
3–9 years	55.72	42.34	42.26
10+ years	18.78	12.11	12.08

NOTES: The sample contains 1,757 principals. School background characteristics were obtained from the CCD and are from the 2018–2019 school year. Proportions were calculated using survey weights, which are calibrated to match the national proportions for principals. 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. School characteristics that are listed for population means were based on the CCD from the 2018–2019 school year, and teacher characteristics came from National Teacher and Principal Survey data from the 2017–2018 school year, both of which were used in weight calibration. The 2019–2020 CCD data were not available at the time of weight calibration.

<sup>a</sup> Middle schools include those with combined elementary and middle grades. High schools include those with combined elementary through high school grades.

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

## Calibrated Weighting

The 2021 AIRS includes weights to produce estimates that reflect the national population of public school teachers and principals in the United States and state-specific populations in 16 oversampled states during the 2020–2021 school year. The weighting process accounts for the probability of selection into the survey from the panel and the likelihood that an invited teacher or principal will complete the survey. These likelihoods are calibrated to reproduce the

population distribution of K–12 teachers and principals, with state-specific calibrations performed in oversampled states. The nonresponse adjustment is important to eliminate known sources of bias and ensure that the weighted sample matches the national characteristics of educators at the individual and school levels. This weighting approach is widely used for probability sample surveys and to adjust for nonresponse, including for such U.S. Department of Education surveys as the Teacher Follow-Up Survey. The final analysis weights 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 CCD, which are both from the National Center for Education Statistics (NCES), as well as the state-specific population of teachers and principals in oversampled states. (See Robbins and Grant, 2020, for more information.)
2. **the sample selection weight.** This is the inverse probability of selection into the 2021 AIRS sample using the ATP/ASLP as the frame. These probabilities were selected to achieve the goals of 7,900 ATP and 1,500 ASLP completed surveys. These weights are used to account for the differential probability that respondents are invited and enrolled in the ATP/ASLP.
3. **the survey response weight.** This is the inverse of the modeled probability of a teacher or principal completing the survey. These weights are used to account for the differential probability that respondents complete the 2021 AIRS, conditional upon being invited to complete the 2021 AIRS.

We subsequently recalibrated and trimmed the products of these weights as necessary. Recalibration ensures that the weights recover the population estimates after selection and nonresponse adjustments are applied. The sampling and weighting approach was designed to ensure a representative sample and limit the size of the design effect. We calculated the sampling frame weights to make the panel match the national population of teachers and principals based on several school-level (e.g., school size, level, urba-

nicity, sociodemographics) and individual-level (e.g., gender, experience) characteristics. The inverse of the selection probabilities ( $p_{si}$ ) was used as the sample selection weight. We estimated the response weights by modeling the likelihood ( $p_{ri}$ ) that a selected participant would respond to the survey, conditional on the school-level and individual-level characteristics of teachers and principals (including the states in which they are working). For parsimony, we used a variable-selection method to choose the model that best fit the data. We estimated the main weight 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:

$$\text{Main Weight} = \frac{1}{p_{fi}} * \frac{1}{p_{si}} * \frac{1}{p_{ri}}$$

Because there is no guarantee that this main weight sums to the total of all the population characteristics, it 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.<sup>3</sup>

The survey weights included in the 2021 AIRS, as with survey weights produced for each of the previous AIRS surveys, are intended to facilitate cross-sectional (e.g., current-year) analysis of teacher and school leader responses to the surveys. Cross-sectional comparisons of estimates across the 2019, 2020, and 2021 AIRS are useful for observing shifts in national, descriptive trends, but these weights were not designed to conduct longitudinal analyses among the same teachers over time (i.e., they do not account for panel members who do and do not complete the AIRS in multiple years).

# American Instructional Resources Surveys: Teacher Survey Results

## Teacher and Student Characteristics

1. With which of the following do you identify? ( $n = 7,020$ )

Teacher Race/Ethnicity	Weighted Percentage
American Indian or Alaska Native	2
Asian	3
Black or African American	8
Hispanic, Latino, or Spanish origin	8
Native Hawaiian or other Pacific Islander	1
White	80
Other	1
Decline to respond	5

NOTE: All percentages rounded to the nearest integer. Respondents were instructed to “select all that apply.”

2. Approximately, what percentage of the students you teach—including those in small push-in or pullout groups—are English learners? ( $n = 7,018$ )

Percentage of English Learner Students	Weighted Percentage
0	22
1–10	41
11–24	15
25–49	9
50–74	5
75–100	8

NOTE: All percentages rounded to the nearest integer.

3. Approximately, what percentage of the students you teach have an Individualized Education Program (IEP) and/or 504 plan? ( $n = 7,017$ )

Percentage of IEP Students	Weighted Percentage
0	5
1–10	40
11–24	32
25–49	13
50–74	3
75–100	7

NOTE: All percentages rounded to the nearest integer.

4. With which of the following do you identify? ( $n = 7,212$ )

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<b>Gender</b>	<b>Weighted Percentage</b>
Male	18
Female	82
Other	0

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NOTE: All percentages rounded to the nearest integer.

5. Percentage of Respondents by School Enrollment of Black Students ( $n = 6,833$ )

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<b>Students</b>	<b>Weighted Percentage</b>
10 or less	62
11–24	16
25–49	13
50–74	5
75–100	4

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NOTE: Information on school-level enrollments was obtained from NCES, 2020.

6. Percentage of Respondents by School Enrollment of Hispanic/Latino Students ( $n = 6,774$ )

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<b>Students</b>	<b>Weighted Percentage</b>
10 or less	42
11–24	23
25–49	15
50–74	11
75–100	9

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NOTE: Information on school-level enrollments was obtained from NCES, 2020.

7. This school year, what grade(s) do you teach? (*n* = 7,217)

Grades Taught	Weighted Percentage
Kindergarten	12
Grade 1	14
Grade 2	13
Grade 3	14
Grade 4	13
Grade 5	13
Grade 6	11
Grade 7	11
Grade 8	12
Grade 9	14
Grade 10	17
Grade 11	18
Grade 12	17
Ungraded (including special education students aged 18–22)	1
Other	1

NOTE: All percentages rounded to the nearest integer. Respondents instructed to “select all that apply.”

8. School Grade Level Routing (*n* = 7,217)

Level	Weighted Percentage
Elementary	52
Middle	24
High	24

NOTE: All percentages rounded to the nearest integer. Grade assignment reflects survey routing pattern.

9. Please indicate the main subject(s) you teach. (*n* = 7,215)

Subject	Weighted Percentage
Early childhood or general elementary	41
Special education	0
Arts or music	0
English and language arts (including English, language arts, reading, literature, writing, speech, etc.)	29
English as a second language, bilingual education, or English language development	0
World languages	0
Health education	0
Mathematics (including general mathematics, algebra, geometry, calculus, etc.)	19
Natural sciences (including general science, biology, chemistry, physics, etc.)	11
Social sciences (including social studies, geography, history, government/civics, etc.)	0
Career or technical education	0
Other	0

NOTE: All percentages rounded to the nearest integer. Respondents were instructed to "select all that apply." Percentages will not sum to 100 percent.

10. [For high school teachers only] You indicated that you teach natural science. Please indicate what courses you teach. (*n* = 515)

Science Courses	Weighted Percentage
Biology	46
Chemistry	38
Physics	30
Physical or earth science	24
Other	25

NOTE: All percentages rounded to the nearest integer. Respondents who indicated they did not teach natural science only and did not teach high school only did not see this question. Respondents were instructed to "select all that apply." Percentages will not sum to 100 percent.

11. Including this school year (2020–2021), but excluding your student teaching, how long have you worked as a teacher?  
(*n* = 7,217)

Years	Weighted Percentage
0–5 years	10
6–10 years	23
11–15 years	19
16–20 years	17
21 or more years	30

NOTE: This question instructed respondents to round to the nearest whole number. Responses were binned (i.e., sorted into categories according to years of experience) for this table.

12. Please indicate whether you are a teacher of record for class(es) you teach and/or provide push-in/pull-out services. (n = 7,020)

Years	Weighted Percentage
I am the teacher of record for class(es) I teach (i.e., I have primary responsibility for the learning of the students in the classes I teach)	88
I provide push-in or pull-out services for individual students who need special supports, intervention, remediation or enrichment (but am not the teacher of record)	7
I teach some classes as the teacher of record, and some where I provide push-in or pull-out services	4
None of the above	1

NOTE: This question instructed respondents to round to the nearest whole number.

## COVID-19 Items

13. Which of the following most closely reflects how instruction has been provided to your students for the majority of this school year (2020–2021)? (n = 7,217)

Instruction Model	Weighted Percentage
Fully remote instruction, where a large majority or all of your students have received at least one synchronous class each school day	22
Fully remote instruction, where a large majority or all of your students have received less than one synchronous class each school day (i.e., instruction might be distributed via paper workbooks or asynchronous videos)	3
Hybrid model involving in-person and remote instruction	49
Fully in-person instruction each school day for the majority, if not all, of your students	26

NOTE: This question was adapted from Kaufman, Diliberti et al., 2020. All percentages rounded to the nearest integer.

14. You indicated that instruction has been provided to your students through a hybrid model for the majority of the school year. Please indicate which of the following most accurately describes how you have provided instruction to your students for the majority of the school year. (n = 3,718)

Instruction Model	Weighted Percentage
I have provided in-person instruction only	3
I have provided remote instruction only	3
I have provided in-person and remote instruction simultaneously (in the same class)	62
I have provided in-person instruction for some classes and remote instruction for others (not at the same time)	29
Other	3

NOTE: Respondents who indicated they did not provide instruction through a hybrid instruction model did not see this question. All percentages rounded to the nearest integer.

15. Approximately what percentage of your students have an internet connection with sufficient speeds for distance learning at home? ( $n = 7,214$ )

Percentage of Students	Weighted Percentage
0–49	6
50–69	11
70–89	32
90–99	32
100	19

NOTE: This question was adapted from Kaufman, Diliberti et al., 2020. All percentages rounded to the nearest integer. Teachers reported one percentage in response to this question. Responses were binned (i.e., sorted into categories) for this table.

16. Approximately what percentage of your students have completed all or almost all of your assignments so far this school year (2020–2021)? ( $n = 7,214$ )

Percentage of Students	Weighted Percentage
0–49	19
50–69	22
70–89	36
90–99	18
100	4

NOTE: This question was adapted from Kaufman, Diliberti et al., 2020. All percentages rounded to the nearest integer. Teachers reported one percentage in response to this question. Responses were binned (i.e., sorted into categories) for this table.

17. Approximately how many hours of learning activities is a typical student expected to undertake during a typical week of 2020–2021 school year for the following subject you teach? ( $n = 7,217$ )

Hours	Weighted Percentage				
	0–3 Hours	4–6 Hours	7–9 Hours	10–12 Hours	13 or More Hours
ELA	77	13	4	2	4
Mathematics	85	10	3	1	2
Natural sciences	92	6	1	0	1

NOTE: Teachers reported hours of instructional time for each subject they taught in response to this question. Responses were binned (i.e., sorted into categories) for this table.

18. Thinking about the curriculum content you had taught by last school year (2019–2020) at this time, what proportion of that content have you taught this school year (2020–2021)? ( $n = 7,217$ )

Category	Weighted Percentage
None or almost none	0
About 25 percent	3
About 50 percent	16
About 75 percent	38
Nearly all or all	39
N/A—This is my first year teaching or I am teaching a different subject or course than last year	4

NOTE: This question was adapted from Kaufman, Diliberti et al., 2020. All percentages rounded to the nearest integer.

19. Please rank the top three reasons you have not been able to teach all the curriculum content you had covered by this time last year. (*n* = 4,133)

Category	Weighted Percentage			
	Not in Top Three	First Reason	Second Reason	Third Reason
The curriculum content I was using last year is not digitally accessible	37	16	19	28
My students need more remediation activities than last year	17	33	29	21
My students need more enrichment activities beyond what I taught last year	67	3	13	17
Students have had less classroom instructional time than last year	14	42	30	14
Other	66	6	8	20

NOTE: Respondents who indicated they taught nearly all or all the curriculum content did not see this question. Respondents were instructed to "please select the top three."

20. Approximately what percentage of your students have an adult that can supervise their learning at home? (*n* = 3,549)

Percentage of Students	Weighted Percentage
0–25	17
26–50	30
51–75	21
76–100	32

NOTE: All percentages rounded to the nearest integer. Responses omit teachers who reported "I don't know." Teachers reported one percentage in response to this question. Responses were binned (i.e., sorted into categories) for this table.

21. Approximately what percentage of parents or guardians of your students have you heard from (via in-person, phone, text, e-mail, video communication, or a response to any requests) at least once this school year (2020–2021)? (*n* = 7,216)

Percentage of Parents/Guardians	Weighted Percentage
0–25	27
26–50	16
51–75	10
76–100	48

NOTE: All percentages rounded to the nearest integer. Teachers reported one percentage in response to this question. Responses were binned (i.e., sorted into categories) for this table.

22. Approximately what percentage of your students have you not been able to contact since the school year began? (*n* = 7,205)

Percentage of Students	Weighted Percentage
0	54
1–5	18
6–10	11
Above 10	17

NOTE: All percentages rounded to the nearest integer. Teachers reported one percentage in response to this question. Responses were binned (i.e., sorted into categories) for this table.

## Anti-bias Instruction

23. What types of instructional materials do you typically use to provide anti-bias instruction?<sup>a</sup> (*n* = 7,217)

Category	Weighted Percentage
School- or district-provided instructional materials for my subject area	35
Instructional materials I find myself	37
Instructional materials I create from scratch	24
I teach anti-bias topics without the use of instructional materials (e.g., informal discussions with students, or during morning meetings)	39
Other instructional materials	5
N/A—I do not provide anti-bias instruction	27

NOTE: All percentages rounded to the nearest integer. Respondents who indicated they did not provide anti-bias instruction could not select other options. All other respondents were instructed to “select all that apply.” Percentages will not sum to 100 percent.

<sup>a</sup> *Anti-bias instruction* was defined in the survey as instruction that “emphasizes the development of students’ positive social identities and fosters their comfort and respect for all dimensions of diversity, including, for example, race and ethnicity, gender identity, religious identity, immigration status, sexual identity, socioeconomic status, and ability status . . . [as well as] raise their awareness of and promote their capacity to act against bias and injustice.”

24. How well prepared do you feel to provide anti-bias instruction within the classes you teach? (*n* = 7,214)

Category	Weighted Percentage
Not prepared at all	14
Not very well prepared	25
Somewhat well prepared	48
Very well prepared	13

NOTE: All percentages rounded to the nearest integer.

## Curriculum Materials and Other Instructional Materials

In the survey, *curriculum materials* were defined for educators as “instructional materials intended to constitute a full, comprehensive course of study for a particular subject and grade level.”

25. Have you ever used ELA or mathematics materials from Achievethecore.org to support your work? (*n* = 7,217)

Category	Weighted Percentage
No	88
Yes	12

NOTE: All percentages rounded to the nearest integer.

26. Have you ever used EdReports to select, modify, or implement curriculum? (*n* = 7,217)

Category	Weighted Percentage
No	94
Yes	6

NOTE: This question was adapted from Doss and Johnston, 2018. All percentages rounded to the nearest integer.

27. Select any materials you use regularly (once a week or more, on average) for your ELA instruction this school year (2020–2021) and any materials provided by your school or school district this school year (2020–2021), either as a requirement or recommendation, whether you use them or not.

27a. Top Ten Elementary School ELA Curriculum Materials ( $n = 1,406$ )

Top Ten Regularly Used Materials		Top Ten Required/Recommended Materials	
Curriculum Name	Weighted Percentage	Curriculum Name	Weighted Percentage
Curriculum materials I create myself	41	Curriculum materials my school or district created	21
Curriculum materials my school or district created	24	The Fountas & Pinnell Classroom (Heinemann)	20
The Fountas & Pinnell Classroom (Heinemann)	19	Benchmark Advance or Literacy (Benchmark Education)	19
Lucy Calkins Unit of Study	16	Lucy Calkins Unit of Study	18
Journeys (Houghton Mifflin Harcourt)	12	Journeys (Houghton Mifflin Harcourt)	17
Reading Wonders–2017 (McGraw-Hill Education)	12	Reading Wonders–2017 (McGraw-Hill Education)	15
Benchmark Advance or Literacy (Benchmark Education)	11	Foundations (Wilson Language Training)	12
Foundations (Wilson Language Training)	9	Reading Wonders–2020 (McGraw-Hill Education)	9
Engage NY (NYSED)	8	Engage NY (NYSED)	9
Reading Wonders–2020 (McGraw-Hill Education)	6	Reading Street Common Core (Pearson)	9

NOTE: This table presents the top ten instructional materials teachers indicated (1) they regularly use and (2) were required or recommended by their school or district. Responses for “other” are not included in this list. Respondents were instructed to “select all that apply.” Percentages will not sum to 100 percent. Respondents were prompted to skip a question row if they did not use a resource. There might be some respondents who did not provide answers to this question because they do not use the materials listed.

27b. Top Ten Middle School ELA Curriculum Materials (*n* = 746)

Top Ten Regularly Used Materials		Top Ten Required/Recommended Materials	
Curriculum Name	Weighted Percentage	Curriculum Name	Weighted Percentage
Curriculum materials I create myself	53	Curriculum materials my school or district created	19
CommonLit (CommonLit)	31	CommonLit (CommonLit)	11
Curriculum materials my school or district created	23	Edgenuity (Edgenuity, Inc.)	11
Engage NY (NYSED)	10	Lucy Calkins Unit of Study	11
MyPerspectives–2017 (Pearson)	8	MyPerspectives–2017 (Pearson)	10
Edgenuity (Edgenuity, Inc.)	7	Collections–2017 (Houghton Mifflin Harcourt)	9
Lucy Calkins Unit of Study	7	Engage NY (NYSED)	8
Holt McDougal Literature (Houghton Mifflin Harcourt)	6	Curriculum materials I create myself	8
StudySync (McGraw-Hill Education)	5	Holt McDougal Literature (Houghton Mifflin Harcourt)	8
Collections–2017 (Houghton Mifflin Harcourt)	5	Benchmark Advance or Literacy (Benchmark Education)	8

NOTE: This table presents the top ten instructional materials teachers indicated (1) they regularly use and (2) were required or recommended by their school or district. Responses for “other” are not included in this list. Respondents were instructed to “select all that apply.” Percentages will not sum to 100 percent. Respondents were prompted to skip a question row if they did not use a resource. There might be some respondents who did not provide answers to this question because they do not use the materials listed.

27c. Top Ten High School ELA Curriculum Materials (n = 927)

Top Ten Regularly Used Materials		Top Ten Required/Recommended Materials	
Curriculum Name	Weighted Percentage	Curriculum Name	Weighted Percentage
Curriculum materials I create myself	75	Curriculum materials my school or district created	23
Curriculum materials my school or district created	29	Edgenuity (Edgenuity, Inc.)	18
CommonLit (CommonLit)	27	Holt McDougal Literature (Houghton Mifflin Harcourt)	16
Holt McDougal Literature (Houghton Mifflin Harcourt)	12	Curriculum materials I create myself	13
Prentice Hall Literature: Timeless Voices, Timeless Themes (Prentice Hall)	8	CommonLit (CommonLit)	13
MyPerspectives–2017 (Pearson)	7	Collections–2017 (Houghton Mifflin Harcourt)	12
Collections–2015 (Houghton Mifflin Harcourt)	6	MyPerspectives–2017 (Pearson)	11
SpringBoard ELA Common Core Edition–2018 (College Board)	6	Pearson Literature–2015 (Pearson)	9
Pearson Literature–2015 (Pearson)	6	Prentice Hall Literature: Timeless Voices, Timeless Themes (Prentice Hall)	9
Collections–2017 (Houghton Mifflin Harcourt)	5	Collections–2015 (Houghton Mifflin Harcourt)	8

NOTE: This table presents the top ten instructional materials teachers indicated (1) they regularly use and (2) were required or recommended by their school or district. Responses for “other” are not included in this list. Respondents were instructed to “select all that apply.” Percentages will not sum to 100 percent. Respondents were prompted to skip a question row if they did not use a resource. There might be some respondents who did not provide answers to this question because they do not use the materials listed.

28. Select any materials you use regularly (once a week or more, on average) for your mathematics instruction this school year (2020–2021) and any materials provided by your school or school district this school year (2020–2021), either as a requirement or recommendation, whether you use them or not.

28a. Top Ten Elementary School Math Curriculum Materials ( $n = 1,183$ )

Top Ten Regularly Used Materials		Top Ten Required/Recommended Materials	
Curriculum Name	Weighted Percentage	Curriculum Name	Weighted Percentage
Curriculum materials I create myself	40	Go Math (Houghton Mifflin Harcourt)	18
Curriculum materials my school or district created	18	Curriculum materials my school or district created	12
EngageNY (NYSED)	16	Ready (Curriculum Associates)	12
Go Math (Houghton Mifflin Harcourt)	14	enVision Math 2.0–2016 (Pearson)	12
Eureka Math (Great Minds)	10	EngageNY (NYSED)	11
Ready (Curriculum Associates)	10	Eureka Math (Great Minds)	11
enVision Math 2.0–2016 (Pearson)	10	Bridges In Mathematics (Math Learning Center)	10
Zearn (Zearn, Inc.)	8	enVision Math–2020 (Pearson)	8
Bridges In Mathematics (Math Learning Center)	7	Everyday Math–2016 (McGraw Hill Education)	6
enVision Math–2020 (Pearson)	6	Zearn (Zearn, Inc.)	6

NOTE: This table presents the top ten instructional materials teachers indicated (1) they regularly use and (2) were required or recommended by their school or district. Responses for “other” are not included in this list. Respondents were instructed to “select all that apply.” Percentages will not sum to 100 percent. Respondents were prompted to skip a question row if they did not use a resource. There might be some respondents who did not provide answers to this question because they do not use the materials listed.

28b. Top Ten Middle School Math Curriculum Materials ( $n = 746$ )

Top Ten Regularly Used Materials		Top Ten Required/Recommended Materials	
Curriculum Name	Weighted Percentage	Curriculum Name	Weighted Percentage
Curriculum materials I create myself	47	Go Math (Houghton Mifflin Harcourt)	14
Curriculum materials my school or district created	23	Curriculum materials my school or district created	12
Go Math (Houghton Mifflin Harcourt)	13	Big Ideas Math (Big Ideas Learning, LLC)	12
Big Ideas Math (Big Ideas Learning, LLC)	13	Illustrative Math (Kendall Hunt) (LearnZillion) (McGraw Hill)	10
Illustrative Math (Kendall Hunt) (LearnZillion) (McGraw Hill)	13	Glencoe Math (McGraw-Hill Education)	9
Engage NY (NYSED)	13	Ready (Curriculum Associates)	9
Open Up Resources 6–8 Math or Illustrative Math (Open Up Resources)	10	enVision Math 2.0–2016 (Pearson)	8
Glencoe Math (McGraw-Hill Education)	9	Eureka Math (Great Minds)	7
Eureka Math (Great Minds)	8	Open Up Resources 6–8 Math or Illustrative Math (Open Up Resources)	7
Ready (Curriculum Associates)	8	Engage NY (NYSED)	7

NOTE: This table presents the top ten instructional materials teachers indicated (1) they regularly use and (2) were required or recommended by their school or district. Responses for “other” are not included in this list. Respondents were instructed to “select all that apply.” Percentages will not sum to 100 percent. Respondents were prompted to skip a question row if they did not use a resource. There might be some respondents who did not provide answers to this question because they do not use the materials listed.

28c. Top Ten High School Math Curriculum Materials ( $n = 562$ )

Top Ten Regularly Used Materials		Top Ten Required/Recommended Materials	
Curriculum Name	Weighted Percentage	Curriculum Name	Weighted Percentage
Curriculum materials I create myself	51	Curriculum materials my school or district created	17
Curriculum materials my school or district created	21	Big Ideas Traditional (Big Ideas Learning, LLC)	11
Glencoe Traditional (McGraw-Hill Education)	12	Pearson Traditional (Pearson)	11
Pearson Traditional (Pearson)	11	Glencoe Traditional (McGraw-Hill Education)	10
Big Ideas Traditional (Big Ideas Learning, LLC)	9	HMH Traditional (Houghton Mifflin Harcourt)	7
Pearson Integrated (Pearson)	7	enVision A/G/A or Integrated Math (Pearson)	7
Engage NY (NYSED)	5	HMH Integrated (Houghton Mifflin Harcourt)	7
enVision A/G/A or Integrated Math (Pearson)	5	Big Ideas Integrated (Big Ideas Learning, LLC)	6
Big Ideas Integrated (Big Ideas Learning, LLC)	4	Curriculum materials I create myself	5
HMH Integrated (Houghton Mifflin Harcourt)	4	Engage NY (NYSED)	5

NOTE: This table presents the top ten instructional materials teachers indicated (1) they regularly use and (2) were required or recommended by their school or district. Responses for "other" are not included in this list. Respondents were instructed to "select all that apply." Percentages will not sum to 100 percent. Respondents were prompted to skip a question row if they did not use a resource. There might be some respondents who did not provide answers to this question because they do not use the materials listed.

29. Select any materials you use regularly (once a week or more, on average) for your science instruction this school year (2020–2021) and any materials provided by your school or school district this school year (2020–2021), either as a requirement or recommendation, whether you use them or not.

29a. Top Ten Elementary School Science Curriculum Materials ( $n = 1,183$ )

Top Ten Regularly Used Materials		Top Ten Required/Recommended Materials	
Curriculum Name	Weighted Percentage	Curriculum Name	Weighted Percentage
Curriculum materials I create myself	35	FOSS Next Generation K–8 (Delta Education)	16
Mystery Science (Mystery Science)	27	Mystery Science (Mystery Science)	15
Curriculum materials my school or district created	16	Curriculum materials my school or district created	14
STEMscopes (Accelerate Learning, Inc.)	8	STEMscopes (Accelerate Learning, Inc.)	11
FOSS Next Generation K–8 (Delta Education)	6	Amplify Science (Amplify)	8
Harcourt Science (Houghton Mifflin Harcourt)	4	Harcourt Science (Houghton Mifflin Harcourt)	7
Amplify Science (Amplify)	4	Pearson Science (Pearson)	7
Exploring Science (National Geographic Learning)	4	HMH Science Dimensions (Houghton Mifflin Harcourt)	6
Pearson Science (Pearson)	4	McGraw-Hill Science (McGraw-Hill Education)	6
ScienceFusion (Houghton Mifflin Harcourt)	3	Elevate Science (Pearson)	6

NOTE: This table presents the top ten instructional materials teachers indicated (1) they regularly use and (2) were required or recommended by their school or district. Responses for "other" are not included in this list. Respondents were instructed to "select all that apply." Percentages will not sum to 100 percent. Respondents were prompted to skip a question row if they did not use a resource. There might be some respondents who did not provide answers to this question because they do not use the materials listed.

## 29b. Top Ten Middle School Science Curriculum Materials (n = 746)

Top Ten Regularly Used Materials		Top Ten Required/Recommended Materials	
Curriculum Name	Weighted Percentage	Curriculum Name	Weighted Percentage
Curriculum materials I create myself	62	Curriculum materials my school or district created	24
Curriculum materials my school or district created	26	STEMscopes (Accelerate Learning, Inc.)	17
STEMscopes (Accelerate Learning, Inc.)	10	Curriculum materials I create myself	15
McGraw-Hill Science (McGraw-Hill Education)	8	McGraw-Hill Science (McGraw-Hill Education)	13
Glencoe Life Science (McGraw-Hill Education)	8	ScienceFusion (Houghton Mifflin Harcourt)	12
ScienceFusion (Houghton Mifflin Harcourt)	7	Science Techbook (Discovery Education)	12
Pearson Science (Pearson)	7	Amplify Science (Amplify)	11
Amplify Science (Amplify)	7	Pearson Science (Pearson)	11
Interactive Science (Pearson)	7	FOSS Next Generation Middle School (Delta Education)	11
Next Generation Science Storylines units (Next Generation Science Storylines)	6	Elevate Science (Pearson)	11

NOTE: This table presents the top ten instructional materials teachers indicated (1) they regularly use and (2) were required or recommended by their school or district. Responses for "other" are not included in this list. Respondents were instructed to "select all that apply." Percentages will not sum to 100 percent. Respondents were prompted to skip a question row if they did not use a resource. There might be some respondents who did not provide answers to this question because they do not use the materials listed.

## 29c. Top Ten High School Science Curriculum Materials (n = 562)

Top Ten Regularly Used Materials		Top Ten Required/Recommended Materials	
Curriculum Name	Weighted Percentage	Curriculum Name	Weighted Percentage
Curriculum materials I create myself	84	Curriculum materials my school or district created	26
Curriculum materials my school or district created	36	Curriculum materials I create myself	16
Next Generation Science Storylines units (Next Generation Science Storylines)	10	HMH Science Dimensions (Houghton Mifflin Harcourt)	11
STEMscopes (Accelerate Learning, Inc.)	8	Next Generation Science Storylines units (Next Generation Science Storylines)	9
Inspire Science (McGraw-Hill Education)	7	Inspire Science (McGraw-Hill Education)	9
HMH Science Dimensions (Houghton Mifflin Harcourt)	6	STEMscopes (Accelerate Learning, Inc.)	9
OpenStax (Rice University)	6	Science Techbook (Discovery Education)	8
Science Techbook (Discovery Education)	6	inquiryHub Biology	5
Issues and Science (Lab-Aids)	5	Issues and Science (Lab-Aids)	5
inquiryHub Biology	3	Science Education for Public Understanding Program (SEPUP) (Lab-Aids)	5

NOTE: This table presents the top ten instructional materials teachers indicated (1) they regularly use and (2) were required or recommended by their school or district. Responses for "other" are not included in this list. Respondents were instructed to "select all that apply." Percentages will not sum to 100 percent. Respondents were prompted to skip a question row if they did not use a resource. There might be some respondents who did not provide answers to this question because they do not use the materials listed.

30. Indicate which additional instructional materials—beyond curriculum materials—you use regularly (once a week or more, on average) for your ELA instruction this school year (2020–2021). (*n* = 3,042)

Material Name	Weighted Percentage
Resources I create myself	55
Teachers Pay Teachers	50
YouTube	48
Resources I create collectively with other teachers at my school	42
Using a search engine (e.g., Google)	35
Kahoot!	35
Epic!	28
BrainPOP	28
Resources obtained through social media sites	26
Newsela	21

NOTE: This table presents the top ten most-selected additional ELA materials used by teachers. Percentages rounded to the nearest integer.

31. Indicate which additional instructional materials—beyond curriculum materials—you use regularly (once a week or more, on average) for your mathematics instruction this school year (2020–2021). (*n* = 2,306)

Material Name	Weighted Percentage
Teachers Pay Teachers	48
Resources I create myself	47
YouTube	37
Kahoot!	33
Khan Academy	32
Resources I create collectively with other teachers at my school	31
Using a search engine (e.g., Google)	28
BrainPOP	27
Desmos	23
Resources obtained through social media sites	22

NOTE: This table presents the top ten most-selected additional mathematics materials used by teachers. Percentages rounded to the nearest integer.

32. Indicate which additional instructional materials—beyond curriculum materials—you use regularly (once a week or more, on average) for your science instruction this school year (2020–2021). (*n* = 1,762)

Material Name	Weighted Percentage
YouTube	66
Teachers Pay Teachers	55
Resources I create myself	53
BrainPOP	47
Kahoot!	41
Resources I create collectively with other teachers at my school	39
Using a search engine (e.g., Google)	36
Discovery Education	27
Resources obtained through social media sites	23
Edpuzzle	22

NOTE: This table presents the top ten most-selected additional science materials used by teachers. Percentages rounded to the nearest integer.

33. You indicated that you regularly use ELA/mathematics/science curriculum materials you created yourself. What best describes the curriculum materials you create yourself? (*n* = 3,544)

Category	Weighted Percentage		
	ELA	Mathematics	Science
Curriculum materials that I create from scratch	18	14	15
Curriculum materials I create by combining and/or adapting existing curriculum or instructional materials, including district- or school-provided materials	55	61	53
Curriculum materials I create by combining and/or adapting existing curriculum or instructional materials, not including my district- or school-provided materials	25	19	29
Other	2	5	3

NOTE: All percentages rounded to the nearest integer. Respondents who did not indicate they used materials they created themselves did not see this question.

34. Indicate the importance you place on various characteristics of instructional materials when choosing which materials to use in your ELA/mathematics/science classroom lessons. (*n* = 7,191)

Characteristics	Weighted Percentage		
	ELA	Mathematics	Science
Will be engaging or compelling to my students	99	97	99
Offer activities at appropriate level of challenge for my students	98	99	98
Are easy for me to enact in my classroom	91	92	93
Are easy to adapt to meet needs of my students	97	97	97
Include content and approaches that are culturally relevant	91	75	81
Include supports for English Learners	73	70	74
Include content and approaches that promote social and emotional learning.	81	62	70
Are easily integrated with my school technology	87	86	92
Are aligned with my state's ELA standards	93	96	96
Other (please specify):	46	49	54

NOTE: All percentages rounded to the nearest integer. Response choices for these items included: "not important," "slightly important," "somewhat important," and "extremely important." We display the percentage of teachers that reported who these characteristics were "somewhat important" or "extremely important."

35. Indicate the extent to which the ELA/mathematics/science instructional materials provided by your district or school as a recommendation or requirement are adequate for each purpose listed below. We are specifically interested in knowing your perceptions of those materials as they were designed (whether you use them or not, and prior to any modifications you may make to them). (n = 7,140)

Purpose	Weighted Percentage		
	ELA	Mathematics	Science
Helping all students master my state's ELA/mathematics/science standards	36	38	41
Covering content addressed by benchmark or districtwide assessments	34	30	34
Covering content addressed by my state-mandated assessment	33	30	32
Meeting the needs of students with IEPs or 504 plans	51	57	54
Meeting the needs of English learners	53	56	54
Accelerating the learning of students who are performing below grade level	58	61	61
Helping me provide culturally relevant instruction	50	65	58
Providing digital instructional materials for use by all students	43	41	43
Providing digital instructional materials for use by students with IEPs or 504 plans	53	54	53
Providing digital instructional materials for use by English learners	53	57	55
Providing a manageable number of topics to teach in a school year	37	39	35
Making learning engaging for students	46	47	37
Reflecting students' interests or experiences	50	58	45
Providing real-world tasks or activities that have applications outside of school	50	47	38
Providing me with strategies to improve my instruction	48	51	52
Supporting students' social and emotional learning	59	68	62
Providing lessons that are easy for teachers to implement in the classroom	40	41	43
Reflecting the diversity of identities within my classroom	51	63	58
Centering the knowledge, experiences, and contributions of diverse groups of people across varied membership groups (e.g., race, gender, socioeconomic status, ability status)	51	63	56
Helping my students develop positive social identities based on their memberships in multiple social groups (e.g., race, gender, socioeconomic status, ability status)	53	65	58
Helping my students express comfort with and respect for the different dimensions of human diversity	53	64	57
Helping my students recognize and understand individual-level bias and systemic injustice	59	67	60
Helping my students determine appropriate action against bias and injustice	61	67	61

NOTE: All percentages rounded to the nearest integer. Response choices were on a 7-point adequacy scale, ranging from 1 ("completely inadequate") to 7 ("completely adequate"), with middle point 4 ("adequate in some ways and inadequate in others"). We display the percentage of teachers who reported less than a 5 for the materials.

36a. You indicated that the ELA curriculum materials provided by your school or district are inadequate (less than a 5 on the adequacy scale in the last question) for the following reasons. For each reason, indicate whether you would prefer to address that inadequacy. (n = 2,514)

Purpose	Weighted Percentage				
	1—Completely on my own (e.g., by creating, finding, or modifying materials)	2—Mostly on my own and with some better school- or district-provided materials	3—Mostly through better school- or district-provided materials, with some work on my own	4—Completely through better school- or district-provided materials	N/A—I don't have a need to address this for the students I teach
Helping all students master my state's ELA standards	12	31	42	15	1
Covering content addressed by benchmark or districtwide assessments	10	30	41	17	2
Covering content addressed by my state-mandated assessment	9	29	40	21	1
Meeting the needs of students with IEPs or 504 plans	12	26	40	20	2
Meeting the needs of English learners	10	22	38	22	8
Accelerating the learning of students who are performing below grade level	14	27	43	16	0
Helping me provide culturally relevant instruction	16	28	37	19	1
Providing digital instructional materials for use by all students	11	21	33	33	2
Providing digital instructional materials for use by students with IEPs or 504 plans	11	18	35	32	3
Providing digital instructional materials for use by English learners	11	16	32	32	8
Providing a manageable number of topics to teach in a school year	14	24	37	23	1
Making learning engaging for students	22	37	32	8	1
Reflecting students' interests or experiences	24	35	31	8	1
Providing real-world tasks or activities that have applications outside of school	20	30	37	12	0
Providing me with strategies to improve my instruction	14	27	43	15	1
Supporting students' social and emotional learning	16	27	39	16	1

Purpose	Weighted Percentage				
	1—Completely on my own (e.g., by creating, finding, or modifying materials)	2—Mostly on my own and with some better school- or district-provided materials	3—Mostly through better school- or district-provided materials, with some work on my own	4—Completely through better school- or district-provided materials	N/A—I don't have a need to address this for the students I teach
Providing lessons that are easy for teachers to implement in the classroom	13	24	41	20	1
Reflecting the diversity of identities within my classroom	17	28	39	13	2
Centering the knowledge, experiences, and contributions of diverse groups of people across varied membership groups (e.g., race, gender, socioeconomic status, ability status)	16	28	39	16	2
Helping my students develop positive social identities based on their memberships in multiple social groups (e.g., race, gender, socioeconomic status, ability status)	17	29	36	16	2
Helping my students express comfort with and respect for the different dimensions of human diversity	17	30	37	14	1
Helping my students recognize and understand individual-level bias and systemic injustice	18	27	36	18	2
Helping my students determine appropriate action against bias and injustice	18	25	37	18	2

NOTE: All percentages rounded to the nearest integer. Respondents saw only the purposes they marked as "inadequate" (less than a 5 in the adequacy scale) for the question in Table 35.

36b. You indicated that the mathematics curriculum materials provided by your school or district are inadequate (less than a 5 on the adequacy scale in the last question) for the following reasons. For each reason, indicate whether you would prefer to address that inadequacy. (*n* = 2,014)

Purpose	Weighted Percentage				
	1—Completely on my own (e.g., by creating, finding, or modifying materials)	2—Mostly on my own and with some better school- or district-provided materials	3—Mostly through better school- or district-provided materials, with some work on my own	4—Completely through better school- or district-provided materials	N/A—I don't have a need to address this for the students I teach
Helping all students master my state's mathematics standards	11	29	43	16	2
Covering content addressed by benchmark or districtwide assessments	11	24	40	23	2
Covering content addressed by my state-mandated assessment	9	27	39	24	1
Meeting the needs of students with IEPs or 504 plans	14	28	38	19	2
Meeting the needs of English learners	11	23	36	22	8
Accelerating the learning of students who are performing below grade level	13	26	41	19	1
Helping me provide culturally relevant instruction	12	25	33	24	6
Providing digital instructional materials for use by all students	11	19	33	34	2
Providing digital instructional materials for use by students with IEPs or 504 plans	11	19	31	35	3
Providing digital instructional materials for use by English learners	10	18	30	33	9
Providing a manageable number of topics to teach in a school year	14	23	33	31	1
Making learning engaging for students	19	35	34	11	0
Reflecting students' interests or experiences	20	37	30	12	1
Providing real-world tasks or activities that have applications outside of school	16	30	40	14	1
Providing me with strategies to improve my instruction	13	29	39	17	2

Purpose	Weighted Percentage				
	1—Completely on my own (e.g., by creating, finding, or modifying materials)	2—Mostly on my own and with some better school- or district-provided materials	3—Mostly through better school- or district-provided materials, with some work on my own	4—Completely through better school- or district-provided materials	N/A—I don't have a need to address this for the students I teach
Supporting students' social and emotional learning	14	26	37	19	4
Providing lessons that are easy for teachers to implement in the classroom	16	23	39	21	1
Reflecting the diversity of identities within my classroom	14	29	33	20	4
Centering the knowledge, experiences, and contributions of diverse groups of people across varied membership groups (e.g., race, gender, socioeconomic status, ability status)	13	25	36	22	4
Helping my students develop positive social identities based on their memberships in multiple social groups (e.g., race, gender, socioeconomic status, ability status)	15	26	36	19	4
Helping my students express comfort with and respect for the different dimensions of human diversity	14	27	35	20	4
Helping my students recognize and understand individual-level bias and systemic injustice	15	23	34	23	6
Helping my students determine appropriate action against bias and injustice	13	23	34	24	6

NOTE: All percentages rounded to the nearest integer. Respondents saw only the purposes they marked as "inadequate" (less than a 5 in the adequacy scale) for the question in Table 35.

36c. You indicated that the science curriculum materials provided by your school or district are inadequate (less than a 5 on the adequacy scale in the last question) for the following reasons. For each reason, indicate whether you would prefer to address that inadequacy. (*n* = 1,453)

Purpose	Weighted Percentage				
	1—Completely on my own (e.g., by creating, finding, or modifying materials)	2—Mostly on my own and with some better school- or district-provided materials	3—Mostly through better school- or district-provided materials, with some work on my own	4—Completely through better school- or district-provided materials	N/A—I don't have a need to address this for the students I teach
Helping all students master my state's science standards	16	23	41	18	2
Covering content addressed by benchmark or districtwide assessments	14	21	39	20	5
Covering content addressed by my state-mandated assessment	12	25	38	22	3
Meeting the needs of students with IEPs or 504 plans	14	28	37	18	4
Meeting the needs of English learners	12	22	40	19	7
Accelerating the learning of students who are performing below grade level	15	27	40	16	2
Helping me provide culturally relevant instruction	14	26	34	21	5
Providing digital instructional materials for use by all students	11	19	36	32	3
Providing digital instructional materials for use by students with IEPs or 504 plans	12	19	32	32	5
Providing digital instructional materials for use by English learners	11	17	34	30	8
Providing a manageable number of topics to teach in a school year	14	23	38	23	2
Making learning engaging for students	22	37	31	10	0
Reflecting students' interests or experiences	21	35	31	10	2
Providing real-world tasks or activities that have applications outside of school	19	29	38	13	1
Providing me with strategies to improve my instruction	12	26	43	17	2
Supporting students' social and emotional learning	16	25	39	16	3

Purpose	Weighted Percentage				
	1—Completely on my own (e.g., by creating, finding, or modifying materials)	2—Mostly on my own and with some better school- or district-provided materials	3—Mostly through better school- or district-provided materials, with some work on my own	4—Completely through better school- or district-provided materials	N/A—I don't have a need to address this for the students I teach
Providing lessons that are easy for teachers to implement in the classroom	16	21	41	21	1
Reflecting the diversity of identities within my classroom	16	30	34	17	4
Centering the knowledge, experiences, and contributions of diverse groups of people across varied membership groups (e.g., race, gender, socioeconomic status, ability status)	16	27	34	18	5
Helping my students develop positive social identities based on their memberships in multiple social groups (e.g., race, gender, socioeconomic status, ability status)	16	27	32	20	5
Helping my students express comfort with and respect for the different dimensions of human diversity	15	28	36	18	4
Helping my students recognize and understand individual-level bias and systemic injustice	15	26	36	18	5
Helping my students determine appropriate action against bias and injustice	15	25	37	19	5

NOTE: All percentages rounded to the nearest integer. Respondents saw only the purposes they marked as "inadequate" (less than a 5 in the adequacy scale) for the question in Table 35.

37. The ELA/Math/Science curriculum materials provided by my district or school as a recommendation or requirement are . . . (n = 7,110)

Category	Weighted Percentage		
	ELA	Mathematics	Science
Too challenging for the majority of my students	28	32	18
At the right level for the majority of my students	54	56	58
Not challenging enough for the majority of my students	10	9	11
I don't know	7	4	12

NOTE: All percentages rounded to the nearest integer.

## Principal Supports

38. Which of the following does your school principal most encourage you to use as the basis for your ELA/mathematics/science lesson plans: (*n* = 7,094)

Category	Weighted Percentage		
	ELA	Mathematics	Science
My recommended or required ELA/mathematics/science curriculum materials	46	44	36
Materials I have developed on my own from scratch	1	2	2
Materials I have developed in collaboration with other ELA/mathematics/science teachers	9	8	9
Whatever materials I think will best meet my students' needs	41	45	50
Other	3	0	0

NOTE: Respondents were instructed to pick one option. All percentages rounded to the nearest integer.

39. Indicate your agreement or disagreement with the following statements regarding your ELA/mathematics/science teaching this school year (2020–2021). (*n* = 7,092)

Category	Weighted Percentage		
	ELA	Mathematics	Science
My principal encourages me to use the ELA/mathematics/science curriculum materials required or recommended by my district or school as the basis for my lessons.	80	82	72
My principal expects me to use the ELA/mathematics/science curriculum materials required or recommended by my district or school as the basis for my lessons.	71	71	62
My principal provides me with feedback on how well I use ELA/mathematics/science curriculum materials.	56	56	44
My principal knows which curricula are aligned with my state's standards	77	76	56
My teacher observations take into account my use of the required ELA/mathematics/science curriculum materials	67	65	46

NOTE: All percentages rounded to the nearest integer. Response choices for these items included: "strongly disagree," "somewhat disagree," "somewhat agree" and "strongly agree." We display the percentage of teachers that reported they "somewhat agree" and "strongly agree" with these statements.

40. Who is the primary decisionmaker (i.e., the person or people who typically make most of the decisions) about which ELA/mathematics/science instructional materials you use in your classroom each day? (*n* = 7,089)

Category	Weighted Percentage		
	ELA	Mathematics	Science
Me	43	40	48
Teachers in my school system (including or excluding me)	17	17	16
My principal	6	5	3
My district leaders	32	36	31
Someone else	2	2	2

NOTE: All percentages rounded to the nearest integer.

## Student Engagement

41. In this school year (2020–2021), what proportion of your students typically engage in each of the following activities at least once a week for the English language arts classes you teach? ( $n = 3,030$ )

Classroom Practice	Weighted Percentage				
	No Students	Less Than Half of My Students	About Half of My Students	More Than Half of My Students	All or Nearly All My Students
Read fictional texts of sufficient grade-level complexity with the whole class	4	10	14	23	50
Read nonfiction texts of sufficient grade-level complexity with the whole class	3	13	17	23	44
Read and discuss different texts, depending on students' assigned reading levels	7	13	15	25	40
Read and discuss texts that include diverse perspectives	5	18	19	27	31
Read or discuss texts of sufficient grade-level complexity for at least half of instructional time	4	15	21	28	32
Read and engage in productive and sustained academic discussions to co-construct knowledge about grade-level texts and content.	6	19	22	25	29
Use evidence from a text to make inferences about central ideas or key details	1	8	18	29	43
Analyze how two or more texts address similar themes or topics	4	15	24	27	30
Write arguments to support claims in an analysis of substantive topics	14	22	19	22	24
Write responses to reading based on student prior experience or knowledge of the theme or topic	7	14	20	27	32
Learn and use a range of general academic and domain-specific vocabulary (i.e., words and phrases) sufficient for college and career readiness	5	14	24	27	30
Build knowledge of specific literary devices or concepts (e.g., irony, rhetoric)	9	16	23	26	27
Practice specific reading comprehension skills or strategies	1	8	17	27	47
Build volume of independent reading to build knowledge about topics	4	20	22	25	29

NOTE: This question was adapted from a survey question used in Kaufman et al., 2018. All percentages rounded to the nearest integer.

42. In this school year (2020–2021), what proportion of your students typically engage in each of the following activities at least once a week for the mathematics classes you teach? ( $n = 2,297$ )

Classroom Practice	Weighted Percentage				
	No Students	Less Than Half of My Students	About Half of My Students	More Than Half of My Students	All or Nearly All My Students
Spend most instructional time on grade-level mathematics topics addressed by the state mathematics standards for my grade level	1	5	14	27	53
Revisit previous grades' content to fill learning gaps	6	44	21	18	11
Relate new mathematics content to other mathematics content within and across grade levels	5	24	21	28	22
Pursue conceptual understanding, procedural skill and fluency, and application with equal intensity	4	23	24	29	21
Explain their thinking and build on other students' thinking	2	25	26	29	19
Make sense of problems that do not include clear procedures for solving	3	32	28	25	13
Persevere in solving problems that do not include clear solution procedures	3	35	28	23	12
Use repeated practice to improve their procedural skills	0	14	24	32	30
Apply mathematics to solve problems in real-world contexts	1	21	26	29	22
Look for and make use of structure (e.g., patterns in numbers, shapes, or algorithms)	1	20	28	30	20
Choose and use appropriate tools when solving a problem	0	15	32	32	21

NOTE: This question was adapted from a survey question used in Kaufman et al., 2018. All percentages rounded to the nearest integer.

43. In this school year (2020–2021), what proportion of your students typically engage in each of the following activities at least once a week for the science classes you teach? ( $n = 1,756$ )

Classroom Practice	Weighted Percentage				
	No Students	Less Than Half of My Students	About Half of My Students	More Than Half of My Students	All or Nearly All My Students
Discuss different ways to approach a problem	6	24	29	26	15
Justify their scientific thinking verbally or through a model	6	23	31	25	15
Justify their scientific reasoning in writing	9	32	26	21	12
Construct a scientific argument supported by evidence	12	32	26	19	11
Develop their own questions about a scientific topic	9	32	28	20	11
Develop or use scientific models	14	25	24	21	16
Plan and carry out a scientific investigation	15	23	25	20	17
Analyze or interpret data	8	20	22	26	25
Use mathematics or computational thinking in science	11	22	23	23	20
Construct their own explanations and arguments	8	22	29	27	14
Obtain, evaluate or communicate information about a phenomenon	13	24	25	23	15
Use engineering design processes to develop solutions to problems	22	33	21	14	9
Participate in a hands-on scientific experience	19	15	12	19	36
Write in a science journal (e.g., taken notes/recorded questions or observations)	20	18	16	20	26
Hear from or engage with scientists to learn about science	50	20	11	9	10
Revise or change one's thinking based on new learning	11	24	29	22	14

NOTE: This question was adapted from a survey question used in University of Chicago, 2017. All percentages rounded to the nearest integer.

## Science Instruction

44. Is your school currently implementing the Next Generation Science Standards (NGSS) standards or standards similar to NGSS (i.e., based on the K–12 Framework for Science Education)? ( $n = 1,752$ )

Standards	Weighted Percentage
No	22
Yes	55
I don't know	22

NOTE: All percentages rounded to the nearest integer.

45. Please indicate which approach comes closest to describing how your school currently approaches teaching science in grades 6–8. ( $n = 389$ )

Model	Weighted Percentage
Integrated or spiraled model: Students are exposed to a combination of earth, space, life, and physical sciences at each grade level.	57
Traditional discipline or topic-specific model: Topics are grouped together within grade level roughly by discipline (e.g., earth and space science in 6th grade, life science in 7th grade, and physical science in 8th grade)	43

NOTE: All percentages rounded to the nearest integer.

46. If your school switched from a traditional discipline or topic-specific model to an integrated or spiraled approach, did you go through professional development to support you in incorporating this change? ( $n = 232$ )

	Weighted Percentage
No	19
Yes	27
N/A—My school did not switch models during my time as a teacher	53

NOTE: All percentages rounded to the nearest integer.

47. If your school switched from a traditional discipline or topic-specific model to an integrated or spiraled approach, did you receive new curriculum materials that are aligned with this new approach? ( $n = 232$ )

	Weighted Percentage
No	16
Yes	31
N/A—My school did not switch models during my time as a teacher	53

NOTE: Respondents who did not indicate their school switched from a traditional discipline or topic-specific model to an integrated or spiraled approach did not see this question. All percentages rounded to the nearest integer.

48. Please indicate whether you or your school district has purchased any of the following science learning materials for your students: (*n* = 1,754)

Science Learning Materials	Weighted Percentage		
	Not Purchased	Purchased with School or District Funding	Purchased with My Own Money and Not Reimbursed by My School or District
Branded science kits like FOSS or Smithsonian STC for hands-on science learning	18	68	14
Supplies for hands-on science learning	5	61	33
Online digital curriculum subscription	10	74	16
Access to digital platforms that support investigations via simulations	13	72	15
Other	85	8	7

NOTE: All percentages rounded to the nearest integer.

49. This school year (2020–2021), please estimate how much of your own money you have spent on science learning materials for your students that have not been reimbursed by your school or district. (*n* = 1,758)

Dollars	Weighted Percentage
0	19
1–49	13
50–99	17
100–199	19
200 or more	34

NOTE: All percentages rounded to the nearest integer. Teachers reported dollars spent. Responses were binned (i.e., sorted into categories) for this table.

## Professional Learning

50. This school year (2020–2021), how often have you participated in the following types of ELA/mathematics/science professional learning activities? (*n* = 7,049)

Professional Learning Activity	Weighted Percentage				
	Never	1–3 Times per Year	4–6 Times per Year	1–3 Times per Month	Weekly or More Often
Workshops or trainings focused on ELA/mathematics/science teaching	32	49	12	6	2
Workshops or trainings focused on use of my main ELA/mathematics/science materials	45	42	7	4	1
General (not subject-specific) workshops or trainings	16	47	24	10	4
Coaching focused on my ELA/mathematics/science teaching	59	27	8	4	2
Coaching focused on use of my main ELA/mathematics/science materials	62	25	6	4	2
Collaborative learning with other teachers (e.g., Professional Learning Communities) focused on ELA/mathematics/science teaching	22	29	13	16	20
Collaborative learning with other teachers (e.g., Professional Learning Communities) focused on use of my main ELA/mathematics/science instructional materials	30	27	12	14	17
Other	77	9	6	4	4

NOTE: All percentages rounded to the nearest integer.

51. On a seven-point scale, please indicate the extent to which your collaborative time focused on classroom management or noninstructional issues (planning field trips, doing paperwork) versus [ELA/math/science] instructional issues (lesson planning, discussing standards, examining student data). (*n* = 7,045)

1 Time completely spent on classroom management or noninstructional issues	Weighted Percentage					7 Time completely spent on instructional issues
	2	3	4 Time equally spent on instructional and classroom management/noninstructional issues	5	6	
4	6	10	28	20	20	12

NOTE: All percentages rounded to the nearest integer.

52. On a seven-point scale, indicate the extent to which this collaborative time was relevant to my ELA/mathematics/science curriculum materials. (*n* = 7,044)

1 Never relevant to my curriculum materials	Weighted Percentage					7 Always relevant to my curriculum materials
	2	3	4	5	6	
6	9	13	20	24	16	13

NOTE: All percentages rounded to the nearest integer.

53. Who determines what occurs during your collaborative time? What percentage of the activities were determined by the following people? (*n* = 7,036)

	Weighted Percentage					
	0	1–10	11–24	25–49	50–74	75–100
Percentage determined by participating teachers	15	12	7	16	20	30
Percentage determined by designated team/group leaders (e.g., grade-level chair, instructional coach)	30	16	13	24	11	6
Percentage determined by a school administrator and/or district leaders	19	20	10	18	16	17

NOTE: All percentages rounded to the nearest integer. Teachers reported a percentage of activities determined by each group of people. Responses were binned (i.e., sorted into categories) for this table.

54. To what extent have professional learning opportunities provided by your school or district this school year (2020–2021) prepared you to undertake the following instructional activities in your classroom? (*n* = 7,040)

Professional Learning Activity	Weighted Percentage			
	Did Not Prepare Me at All	Prepared Me to a Slight Extent	Prepared Me to a Moderate Extent	Prepared Me to a Great Extent
Use curriculum materials provided by my school or district	21	31	36	12
Modify curricula to meet needs of students with IEPs or 504 plans	34	35	25	7
Modify curricula to meet needs of English learners	41	33	21	5
Support students in developing positive social identities based on their memberships in multiple social groups (e.g., race, gender, socioeconomic status, ability status, etc.)	37	33	23	6
Support students in developing comfort with and respect for the different dimensions of human diversity	38	33	23	6
Support students in understanding individual-level bias and systemic injustice and determining appropriate action against bias and injustice	46	30	19	5
Build content-specific knowledge for the subject(s) I teach	22	30	37	11
Provide remote instruction in my subject area	16	35	36	13
Support students' social and emotional learning	21	36	32	12
Reflect on my own cultural lens and personal biases	37	32	24	8
Understand systemic bias and injustice and their impact on students' education	42	31	21	6

NOTE: All percentages rounded to the nearest integer.

55. Since the end of last school year (2019–2020), how many hours did you spend in professional learning activities related to the following topics in [ELA/math/science]? ( $n = 7,036$ )

Statement	Weighted Percentage				
	0 Hours	1–5 Hours	6–10 Hours	11–20 Hours	More Than 20 Hours
Understanding my state standards in ELA/mathematics/science	32	44	13	7	4
Developing my knowledge of content in ELA/mathematics/science	26	39	18	9	8
Observing other teachers' lessons (in person or on video) that model instruction aligned to the standards in ELA/mathematics/science	57	32	7	3	2
Receiving feedback from observations on my ELA/mathematics/science lessons	43	46	7	3	2
Learning how to implement my main instructional materials	23	39	19	9	10
Modifying my main instructional materials so that they will better align to the standards in ELA/mathematics/science	31	37	16	8	7
Modifying my main instructional materials for remote instruction	15	31	18	13	23
Making my main instructional materials digitally accessible for students	16	33	19	11	22
Modifying my main instructional materials to meet the needs of students below grade level	25	38	18	9	9
Modifying my main instructional materials to provide culturally relevant instruction	45	34	12	5	3
Analyzing student work to determine whether it met the expectations of the standards in ELA/mathematics/science	26	37	17	10	10
Learning instructional strategies that support my students in meeting the demand of the ELA/mathematics/science standards	23	41	19	10	7

NOTE: This question was adapted from TNTP, 2018. All percentages rounded to the nearest integer.

56. Since the end of last school year (2019–2020), can you estimate roughly how many hours of professional development you received altogether that were focused on your ELA/mathematics/science teaching? ( $n = 7,029$ )

Time	Weighted Percentage
0 hours	15
Less than 8 hours	35
8–16 hours (i.e., 1–2 days)	19
17–32 hours (i.e., 3–4 days)	14
33–48 hours (i.e., 5–6 days)	8
49–64 hours (i.e., 7–8 days)	4
More than 64 hours (i.e., more than 8 days)	5

NOTE: All percentages rounded to the nearest integer.

## Benchmark Assessments

57. Which benchmark assessments have your students already taken this school year (2020–2021) to assess their progress in ELA and mathematics?

57a. Top Ten Elementary School ELA Benchmark Assessments ( $n = 3,400$ )

Assessment Name	Weighted Percentage
District-created benchmark assessments	40
Benchmark assessments provided within my curriculum materials	28
State-created benchmark assessments	27
iReady Diagnostic (Curriculum Associates)	25
MAP or Measures of Academic Progress (NWEA)	20
Benchmark assessments I created	20
Fountas & Pinnell	19
School-created benchmark assessments	19
Star Reading/Star Math (Renaissance Learning)	17
iReady Assessments (Curriculum Associates)	16

NOTE: This table presents the top ten most-selected benchmark assessments used for ELA by elementary school teachers. Percentages rounded to the nearest integer.

57b. Top Ten Middle School ELA Benchmark Assessments ( $n = 1,719$ )

Assessment Name	Weighted Percentage
District-created benchmark assessments	35
State-created benchmark assessments	30
MAP or Measures of Academic Progress (NWEA)	20
School-created benchmark assessments	19
iReady Diagnostic (Curriculum Associates)	18
Star Reading/Star Math (Renaissance Learning)	17
We use a benchmark assessment, but I don't know the name of it	17
Benchmark assessments I created	15
Benchmark assessments provided within my curriculum materials	14
Star Assessments (Renaissance)	11

NOTE: This table presents the top ten most-selected benchmark assessments used for ELA by middle school teachers. Percentages rounded to the nearest integer.

57c. Top Ten High School ELA Benchmark Assessments (*n* = 1,919)

Assessment Name	Weighted Percentage
District-created benchmark assessments	27
State-created benchmark assessments	26
Benchmark assessments I created	20
School-created benchmark assessments	19
We use a benchmark assessment, but I don't know the name of it	17
ACT Aspire (ACT, Inc.)	11
Benchmark assessments provided within my curriculum materials	11
Star Reading/Star Math (Renaissance Learning)	9
MAP or Measures of Academic Progress (NWEA)	9
Star Assessments (Renaissance)	5

NOTE: This table presents the top ten most-selected benchmark assessments used for ELA by high school teachers. Percentages rounded to the nearest integer.

57d. Top Ten Elementary School Math Benchmark Assessments (*n* = 3,400)

Assessment Name	Weighted Percentage
District-created benchmark assessments	42
Benchmark assessments provided within my curriculum materials	27
State-created benchmark assessments	25
iReady Diagnostic (Curriculum Associates)	25
MAP or Measures of Academic Progress (NWEA)	20
Benchmark assessments I created	19
School-created benchmark assessments	19
iReady Assessments (Curriculum Associates)	16
Star Reading/Star Math (Renaissance Learning)	14
We use a benchmark assessment, but I don't know the name of it	13

NOTE: This table presents the top ten most-selected benchmark assessments used for mathematics by elementary school teachers. Percentages rounded to the nearest integer.

57e. Top Ten Middle School Math Benchmark Assessments ( $n = 1,719$ )

Assessment Name	Weighted Percentage
District-created benchmark assessments	36
State-created benchmark assessments	29
MAP or Measures of Academic Progress (NWEA)	20
School-created benchmark assessments	18
iReady Diagnostic (Curriculum Associates)	17
We use a benchmark assessment, but I don't know the name of it	15
Star Reading/Star Math (Renaissance Learning)	15
Benchmark assessments I created	15
Benchmark assessments provided within my curriculum materials	13
iReady Assessments (Curriculum Associates)	10

NOTE: This table presents the top ten most-selected benchmark assessments used for mathematics by middle school teachers. Percentages rounded to the nearest integer.

57f. Top Ten High School Math Benchmark Assessments ( $n = 1,919$ )

Assessment Name	Weighted Percentage
District-created benchmark assessments	25
State-created benchmark assessments	23
We use a benchmark assessment, but I don't know the name of it	17
School-created benchmark assessments	17
Benchmark assessments I created	15
ACT Aspire (ACT, Inc.)	10
MAP or Measures of Academic Progress (NWEA)	9
Star Reading/Star Math (Renaissance Learning)	7
Benchmark assessments provided within my curriculum materials	6
Star Assessments (Renaissance)	4

NOTE: This table presents the top ten most-selected benchmark assessments used for mathematics by high school teachers. Percentages rounded to the nearest integer.

58. Please estimate current average achievement of your students in ELA and mathematics. If your students have taken benchmark assessments this year, please use students' performance on those assessments to inform your estimates. ( $n = 7,032$ )

Category	Weighted Percentage					
	Far Below Grade Level (i.e., by more than one grade)	Somewhat Below Grade Level	At Grade Level	Somewhat Above Grade Level	Far Above Grade Level (i.e., by more than one grade)	N/A or Not Sure
ELA achievement	11	33	27	15	3	10
Math achievement	11	34	27	13	2	14

NOTE: All percentages rounded to the nearest integer.

59. Please estimate the average achievement of your students in ELA and mathematics at this time in previous school years, prior to COVID-19. ( $n = 7,032$ )

Weighted Percentage	Weighted Percentage					
	Somewhat Below Grade Level	At Grade Level	Somewhat Above Grade Level	Far Above Grade Level (i.e., by more than one grade)	Far Above Grade Level (i.e., by more than one grade)	N/A or Not Sure
ELA achievement	7	25	32	21	5	10
Math achievement	7	25	33	19	4	13

NOTE: All percentages rounded to the nearest integer.

## Teacher Preparation Programs

60. How long ago did you complete your formal teacher preparation program? ( $n = 7,035$ )

Response	Weighted Percentage
In the last five years (2014 or later)	10
More than five years ago	86
N/A—I did not complete a formal teacher preparation program	4

NOTE: All percentages rounded to the nearest integer.

61. What kind of preparation did you primarily receive before becoming a classroom teacher? ( $n = 700$ )

Response	Weighted Percentage
I went through a university-run teacher preparation program.	77
I went through a district- or charter management organization-run teacher preparation program.	10
I went through a teacher preparation program that was run by an entity besides a university, district, or charter management organization.	11
Other	2

NOTE: Respondents who did not complete a formal teacher preparation program or who completed their program more than five years ago did not see this question. All percentages rounded to the nearest integer.

62. Please select the type of program through which you were prepared to teach. (n = 700)

Response	Weighted Percentage
Traditional teacher preparation program	73
Alternative certification program	25
I don't know	1

NOTE: Respondents who did not complete a formal teacher preparation program or who completed their program more than five years ago did not see this question. All percentages rounded to the nearest integer.

63. Which of the following did your program emphasize more (pick one): (n = 700)

Response	Weighted Percentage
My program emphasized how to develop my own lessons and unit plans from scratch.	34
My program emphasized curriculum literacy, focusing on how to skillfully use and modify curricula provided to me.	14
My program emphasized both of these approaches equally.	45
My program emphasized neither of these approaches.	7

NOTE: Respondents who did not complete a formal teacher preparation program or who completed their program more than five years ago did not see this question. All percentages rounded to the nearest integer.

64. You indicated that your program emphasized curriculum literacy. Did courses in your program provide you with practice in using or modifying specific curricular materials? (n = 393)

Response	Weighted Percentage
No	25
Yes	75

NOTE: Respondents who did not complete a formal teacher preparation program or who completed their program more than five years ago did not see this question. Respondents who did not indicate their program "emphasized curriculum literacy" or "emphasized both [curriculum literacy and developing lessons and unit plans from scratch]" did not see this question. All percentages rounded to the nearest integer.

65. To what extent did your teacher preparation program (including practicum/internship) prepare you to engage in the following instructional activities? (n = 700)

Response	Weighted Percentage				
	Did Not Prepare Me at All	Prepared Me to a Slight Extent	Prepared Me to a Moderate Extent	Prepared Me to a Great Extent	I Don't Remember or N/A
Identify the strengths or weaknesses of curricular materials	13	29	34	23	1
Use curriculum materials that could be provided by my future school or district	16	26	35	21	2
Modify curricula to meet needs of students with IEPs or 504 plans	9	29	37	25	1
Modify curricula to meet needs of English learners	12	32	36	20	1
Support students in developing positive social identities based on their memberships in multiple social groups (e.g., race, gender, socioeconomic status, ability status, etc.)	15	25	35	24	2
Support students in developing comfort with and respect for the different dimensions of human diversity	15	26	34	23	2
Support students in understanding individual-level bias and systemic injustice and determining appropriate action against bias and injustice	22	27	30	18	2
Build content-specific knowledge for the subject(s) I teach	4	14	38	44	0
Support students' social and emotional learning	7	26	40	26	0
Provide remote instruction in my subject area	54	20	13	12	1
Reflect on my own cultural lens and personal biases	13	24	32	30	1
Understand systemic bias and injustice and their impact on students' education	19	25	31	23	1

NOTE: Respondents who did not complete a formal teacher preparation program or who completed their program more than five years ago did not see this question. All percentages rounded to the nearest integer.

## Teacher Beliefs

66. Indicate your disagreement or agreement with the following statements about your state's standards in ELA/mathematics/science. (*n* = 7,036)

Response	Weighted Percentage			
	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Teaching and learning that is aligned to the ELA/mathematics/science standards prepares students for their future.	4	16	59	21
Teaching and learning that is aligned to the ELA/mathematics/science standards gives students a deep understanding of the subject area.	5	19	56	21
Teaching and learning that is aligned to the ELA/mathematics/science standards makes class more engaging for students.	8	36	42	14
The ELA/mathematics/science standards are too challenging for my students.	19	38	34	10
The ELA/mathematics/science standards make teaching less enjoyable.	17	37	37	9
My students need something different than what is outlined in the ELA/mathematics/science standards.	10	28	47	15
My state's standards in ELA/mathematics/science make it difficult for students to learn basic skills in ELA/mathematics/science.	17	40	31	11
My state's standards in ELA/mathematics/science provide educators a manageable number of topics to teach in a school year.	14	31	44	11
I find myself skipping some standards-aligned ELA/mathematics/science content in my instruction.	25	26	39	9
The standards in ELA/mathematics/science help me identify essential material to teach my students.	3	13	51	33
The standards in ELA/mathematics/science help my students achieve higher scores on district and/or state assessments.	9	28	49	15

NOTE: This question was adapted from TNTP, 2018. All percentages rounded to the nearest integer.

# American Instructional Resources Surveys: Principal Survey Results

## School Leader and Student Characteristics

1. With which of the following do you identify? ( $n = 1,694$ )

Principal Race/Ethnicity	Weighted Percentage
American Indian or Alaska Native	1
Asian	2
Black or African American	12
Hispanic, Latino, or Spanish origin	8
Native Hawaiian or other Pacific Islander	0
White	76
Other	1
Decline to respond	4

NOTE: All percentages rounded to the nearest integer. Respondents were instructed to "select all that apply."

2. Approximately what percentage of the students at your school are English learners? ( $n = 1,691$ )

Percentage of English Learner Students	Weighted Percentage
0	11
1–10	55
11–24	18
25–49	11
50–74	4
75–100	2

NOTE: All percentages rounded to the nearest integer.

3. Approximately what percentage of the students at your school have an IEP and/or 504 plan? ( $n = 1,693$ )

Percentage of IEP Students	Weighted Percentage
0	0
1–10	28
11–24	60
25–49	11
50–74	1
75–100	0

NOTE: All percentages rounded to the nearest integer.

4. With which of the following do you identify? (*n* = 1,750)

Gender	Weighted Percentage
Male	47
Female	53

NOTE: All percentages rounded to the nearest integer.

5. Percentage of Respondents by School Enrollment of Black Students (*n* = 1,699)

Percentage	Weighted Percentage
10 or less	65
11–24	16
25–49	11
50–74	4
75–100	5

NOTE: All percentages rounded to the nearest integer. School principals were not asked what percentage of their students were Black; this information on school-level enrollments was obtained from NCES, 2020.

6. Percentage of Respondents by School Enrollment of Hispanic/Latino Students (*n* = 6,774)

Students	Weighted Percentage
10 or less	45
11–24	23
25–49	15
50–74	9
75–100	8

NOTE: All percentages rounded to the nearest integer. School principals were not asked what percentage of their students were Hispanic; this information on school-level enrollments was obtained from NCES, 2020.

7. This school year (2020–2021), what grade(s) are included in the school you lead? ( $n = 1,757$ )

Grades Taught	Weighted Percentage
Kindergarten	57
Grade 1	57
Grade 2	57
Grade 3	57
Grade 4	56
Grade 5	54
Grade 6	38
Grade 7	33
Grade 8	32
Grade 9	27
Grade 10	27
Grade 11	27
Grade 12	26
Ungraded (including special education students aged 18–22)	5
Other	13

NOTE: All percentages rounded to the nearest integer. Respondents instructed to “select all that apply.”

8. What is the highest degree that you have earned? ( $n = 1,694$ )

Degree	Weighted Percentage
Associate’s degree	0
Bachelor’s degree (B.A., B.S., etc.)	1
Master’s degree (M.A., M.A.T., M.B.A., M.Ed., M.S., etc.)	56
Educational specialist or professional diploma (at least one year beyond master’s level)	29
Doctorate or first professional degree (Ph.D., Ed.D., M.D., L.L.B., J.D., D.D.S.)	14
Do not have a degree	0

NOTE: All percentages rounded to the nearest integer.

9. Including this school year (2020–2021), how long have you worked as a principal? ( $n = 1,694$ )

Category	Weighted Percentage
0–5 Years	43
6–10 Years	38
11–15 Years	12
16–20 Years	4
21+ Years	2

NOTE: All percentages rounded to the nearest integer. Principals reported a number of years in response to this question. Responses were binned (i.e., sorted into categories) for this table.

## COVID-19 Items

10. Which of the following most closely reflects how instruction has been provided to students at your school for the majority of this school year (2020–2021)? ( $n = 1,757$ )

Category	Weighted Percentage
Fully remote instruction, where a large majority or all of your students receive at least one synchronous class each school day	12
Fully remote instruction, where a large majority or all of your students receive less than one synchronous class each school day (i.e., instruction might be distributed via paper workbooks or asynchronous videos)	2
Hybrid model involving in person and remote instruction	57
Fully in-person instruction each school day for the majority, if not all, of your students	29

NOTE: This question was adapted from Kaufman, Diliberti, et al., 2020. All percentages rounded to the nearest integer.

11. Approximately what percentage of your school's students have you not been able to contact since the school year began? ( $n = 1,757$ )

Category	Weighted Percentage
0	45
1–5	36
6–10	10
+10	10

NOTE: This question was adapted from Kaufman, Diliberti, et al., 2020. All percentages rounded to the nearest integer. Principals reported one percentage in response to this question. Responses were binned (i.e., sorted into categories) for this table.

12. Please estimate the percentage of students in your school who currently have access to the following at home: ( $n = 1,757$ )

Category	Weighted Percentage			
	0–25	26–50	51–75	76–100
Digital device (e.g., tablet or laptop)	3	5	22	69
High speed internet connection	6	11	61	22

NOTE: This question was adapted from Kaufman, Diliberti, et al., 2020. All percentages rounded to the nearest integer. Principals reported one percentage in response to this question. Responses were binned (i.e., sorted into categories) for this table.

13. Which of the following changes to instructional programming has your school adopted for this school year (2020–2021)? ( $n = 1,757$ )

Category	Weighted Percentage
Adopted new online-accessible curriculum or instructional materials	58
Delayed the use of planned new curriculum or instructional materials	16
Adopted a new learning management system	33
Added software, courses, or coursework (whether online or in-person) to review previously taught content or catch students up to grade level	47
Added or increased social and emotional learning programming or minutes of instruction	52
Other	3
N/A—We haven't enacted any substantive change to the content of our school's instructional programming	10

NOTE: This question was adapted from Kaufman, Diliberti et al., 2021. All percentages rounded to the nearest integer.

## Anti-bias Instruction

14. What types of instructional materials do teachers typically use to provide anti-bias instruction?<sup>a</sup> (*n* = 1,753)

Category	Weighted Percentage
School- or district-provided instructional materials for their subject area	29
Instructional materials teachers find themselves or create from scratch	31
Teachers typically address anti-bias topics without the use of instructional materials	47
I don't know	6
N/A—Teachers typically do not provide anti-bias instruction	19

NOTE: All percentages rounded to the nearest integer. Respondents were instructed to “select all that apply.”

<sup>a</sup> *Anti-bias instruction* was defined in the survey as instruction that “emphasizes the development of students’ positive social identities and fosters their comfort and respect for all dimensions of diversity, including, for example, race and ethnicity, gender identity, religious identity, immigration status, sexual identity, socioeconomic status, and ability status . . . [as well as] raise their awareness of and promote their capacity to act against bias and injustice.”

## Curriculum Materials

15. Have you ever heard of EdReports? (*n* = 1,749)

Response	Weighted Percentage
No	63
Yes	37

NOTE: This question was adapted from Doss and Johnston, 2018. All percentages rounded to the nearest integer.

16. To the best of your knowledge, has your district used EdReports to select, adapt, or implement curriculum? (*n* = 665)

Response	Weighted Percentage
No	30
Yes	37
Don't know	32

NOTE: This question was adapted from Doss and Johnston, 2018. All percentages rounded to the nearest integer.

17. Have you used EdReports to select, modify, or implement curriculum? (*n* = 665)

Response	Weighted Percentage
No	64
Yes	36

NOTE: This question was adapted from Doss and Johnston, 2018. All percentages rounded to the nearest integer.

18. Have ELA or mathematics materials from Achievethecore.org ever been provided to teachers at your school as a recommendation or requirement? (*n* = 1,748)

Response	Weighted Percentage
No	80
Yes	20

NOTE: All percentages rounded to the nearest integer.

19. Indicate the importance you place on various characteristics of instructional materials teachers are required or recommended to use in their classroom lessons. (*n* = 1,745)

Response	Weighted Percentage			
	Not Important	Slightly Important	Somewhat Important	Extremely Important
Will be engaging or compelling to students	0	0	13	87
Offer activities at appropriate level of challenge for students	0	1	21	78
Are easy for teachers to enact in their classroom	0	3	39	57
Are easy to adapt to meet needs of students	0	1	22	77
Include content and approaches that are culturally relevant	1	6	35	57
Include supports for English learners	4	13	30	54
Include content and approaches that promote social and emotional learning	1	9	43	48
Are easily integrated with my school technology	1	6	44	49
Are aligned with my state's standards	0	0	14	85
Other characteristics	45	2	14	39

NOTE: All percentages rounded to the nearest integer.

## English Language Arts Curriculum Materials

20. Select the following ELA curricula that are provided by your school or district, either as a requirement or recommendation, this school year (2020–2021).

20a. Top Ten Elementary School ELA Curriculum Materials (*n* = 646)

Curriculum Name	Weighted Percentage
Lucy Calkins Unit of Study	25
Curriculum materials my school or district created	22
The Fountas & Pinnell Classroom (Heinemann)	21
Curriculum materials teachers create themselves	19
Foundations (Wilson Language Training)	17
Journeys (Houghton Mifflin Harcourt)	15
Reading Wonders–2017 (McGraw-Hill Education)	11
Benchmark Advance or Literacy (Benchmark Education)	10
Core Knowledge Language Arts (CKLA) (Amplify)	7
Engage NY (NYSED)	6

NOTE: This table presents the top ten most-selected instructional materials. Responses for “other” are not included in this list. Respondents were instructed to “select all that apply.” Percentages will not sum to 100 percent. Respondents were prompted to skip a question row if they did not use a resource. There might be some respondents who did not provide answers to this question because they do not use the materials listed.

20b. Top Ten Middle School ELA Curriculum Materials (*n* = 792)

Curriculum Name	Weighted Percentage
Curriculum materials teachers create themselves	31
Curriculum materials my school or district created	25
Edgenuity (Edgenuity, Inc.)	14
Lucy Calkins Unit of Study	11
Journeys (Houghton Mifflin Harcourt)	9
Holt McDougal Literature (Houghton Mifflin Harcourt)	9
Engage NY (NYSED)	8
CommonLit (CommonLit)	8
MyPerspectives (Pearson)	8
StudySync (McGraw-Hill Education)	7

NOTE: This table presents the top ten most-selected instructional materials. Responses for “other” are not included in this list. Respondents were instructed to “select all that apply.” Percentages will not sum to 100 percent. Respondents were prompted to skip a question row if they did not use a resource. There might be some respondents who did not provide answers to this question because they do not use the materials listed.

20c. Top Ten High School ELA Curriculum Materials (*n* = 286)

Curriculum Name	Weighted Percentage
Curriculum materials teachers create themselves	44
Curriculum materials my school or district created	36
Edgenuity (Edgenuity, Inc.)	29
Holt McDougal Literature (Houghton Mifflin Harcourt)	17
CommonLit (CommonLit)	13
Pearson Literature (Pearson)	13
SpringBoard ELA Common Core Edition–2018 (College Board)	9
MyPerspectives (Pearson)	7
Collections–2017 (Houghton Mifflin Harcourt)	7
StudySync (McGraw-Hill Education)	7

NOTE: This table presents the top ten most-selected instructional materials. Responses for “other” are not included in this list. Respondents were instructed to “select all that apply.” Percentages will not sum to 100 percent. Respondents were prompted to skip a question row if they did not use a resource. There might be some respondents who did not provide answers to this question because they do not use the materials listed.

21. Beyond curricula, please select the additional instructional materials that are required or recommended by your school or district for ELA instruction this school year (2020–2021). (*n* = 1,723)

Material Name	Weighted Percentage
Kahoot!	48
BrainPOP	35
Flipgrid	33
Khan Academy	33
Newsela	33
Nearpod	29
Quizlet	27
iReady	26
RAZ Kids	24
Teachers Pay Teachers	23

NOTE: This table presents the top ten most-selected additional materials. Responses for “other” are not included in this list. Respondents were instructed to “select all that apply.” Percentages will not sum to 100 percent. Respondents were prompted to skip a question row if they did not use a resource. There might be some respondents who did not provide answers to this question because they do not use the materials listed.

## Mathematics Curriculum Materials

22. Select the following mathematics curricula that are provided by your school or district, either as a requirement or recommendation, this school year (2020–2021).

22a. Top Ten Elementary School Mathematics Curriculum Materials (*n* = 647)

Curriculum Name	Weighted Percentage
Go Math (Houghton Mifflin Harcourt)	17
Curriculum materials my school or district created	16
Eureka Math (Great Minds)	14
Curriculum materials teachers create themselves	13
Ready (Curriculum Associates)	12
EngageNY (NYSED)	12
enVision Math - 2020 (Pearson)	10
Zearn (Zearn, Inc.)	10
enVision Math 2.0–2016 (Pearson)	9
Everyday Math–2016 (McGraw Hill Education)	8

NOTE: This table presents the top ten most-selected instructional materials. Responses for “other” are not included in this list. Respondents were instructed to “select all that apply.” Percentages will not sum to 100 percent. Respondents were prompted to skip a question row if they did not use a resource. There might be some respondents who did not provide answers to this question because they do not use the materials listed.

22b. Top Ten Middle School Mathematics Curriculum Materials (*n* = 792)

Curriculum Name	Weighted Percentage
Curriculum materials teachers create themselves	22
Curriculum materials my school or district created	18
Go Math (Houghton Mifflin Harcourt)	16
Engage NY (NYSED)	12
Ready (Curriculum Associates)	12
Eureka Math (Great Minds)	10
enVision Math–2020 (Pearson)	10
Big Ideas Math–2013 (Big Ideas Learning, LLC)	10
Glencoe Math (McGraw-Hill Education)	9
enVision Math 2.0–2016 (Pearson)	9

NOTE: This table presents the top ten most-selected instructional materials. Responses for “other” are not included in this list. Respondents were instructed to “select all that apply.” Percentages will not sum to 100 percent. Respondents were prompted to skip a question row if they did not use a resource. There might be some respondents who did not provide answers to this question because they do not use the materials listed.

22c. Top Ten High School Mathematics Curriculum Materials (*n* = 287)

Curriculum Name	Weighted Percentage
Curriculum materials my school or district created	33
Curriculum materials teachers create themselves	32
Pearson Traditional (Pearson)	16
Glencoe Traditional (McGraw-Hill Education)	13
Pearson Integrated (Pearson)	10
HMH Integrated (Houghton Mifflin Harcourt)	9
HMH Traditional (Houghton Mifflin Harcourt)	8
Big Ideas Traditional (Big Ideas Learning, LLC)	8
Engage NY (NYSED)	5
CPM Integrated Math (CPM Education Program)	5

NOTE: This table presents the top ten most-selected instructional materials. Responses for “other” are not included in this list. Respondents were instructed to “select all that apply.” Percentages will not sum to 100 percent. Respondents were prompted to skip a question row if they did not use a resource. There might be some respondents who did not provide answers to this question because they do not use the materials listed.

23. Beyond curricula, please select the additional instructional materials that are required or recommended by your school or district for mathematics instruction this school year (2020–2021). (*n* = 1,720)

Material Name	Weighted Percentage
Khan Academy	49
Kahoot!	43
BrainPOP	32
IXL Math	31
Quizlet	30
i-Ready (Curriculum Associates)	24
YouTube	18
Prodigy	18
Teachers Pay Teachers	17
MobyMax	16

NOTE: This table presents the top ten most-selected additional materials. Responses for “other” are not included in this list. Respondents were instructed to “select all that apply.” Percentages will not sum to 100 percent. Respondents were prompted to skip a question row if they did not use a resource. There might be some respondents who did not provide answers to this question because they do not use the materials listed.

## Science Curriculum Materials

24. Select the following science curricula that are provided by your school or district, either as a requirement or recommendation, this school year (2020–2021).

24a. Top Ten Elementary School Science Curriculum Materials (*n* = 648)

Curriculum Name	Weighted Percentage
Mystery Science (Mystery Science)	25
Curriculum materials my school or district created	21
Curriculum materials teachers create themselves	20
FOSS Next Generation K–8 (Delta Education)	19
STEMscopes (Accelerate Learning, Inc.)	12
Amplify Science (Amplify)	10
Harcourt Science (Houghton Mifflin Harcourt)	7
ScienceFusion (Houghton Mifflin Harcourt)	6
Pearson Science (Pearson)	5
Elevate Science (Pearson)	4

NOTE: This table presents the top ten most-selected instructional materials. Responses for “other” are not included in this list. Respondents were instructed to “select all that apply.” Percentages will not sum to 100 percent. Respondents were prompted to skip a question row if they did not use a resource. There might be some respondents who did not provide answers to this question because they do not use the materials listed.

24b. Top Ten Middle School Science Curriculum Materials (*n* = 793)

Curriculum Name	Weighted Percentage
Curriculum materials teachers create themselves	26
Curriculum materials my school or district created	21
Amplify Science (Amplify)	11
STEMscopes (Accelerate Learning, Inc.)	10
McGraw-Hill Science (McGraw-Hill Education)	8
FOSS Next Generation K–8 (Delta Education)	8
Pearson Science (Pearson)	7
Glencoe Life Science (McGraw-Hill Education)	6
Harcourt Science (Houghton Mifflin Harcourt)	5
Science Techbook (Discovery Education)	4

NOTE: This table presents the top ten most-selected instructional materials. Responses for “other” are not included in this list. Respondents were instructed to “select all that apply.” Percentages will not sum to 100 percent. Respondents were prompted to skip a question row if they did not use a resource. There might be some respondents who did not provide answers to this question because they do not use the materials listed.

24c. Top Ten High School Science Curriculum Materials (*n* = 286)

Curriculum Name	Weighted Percentage
Curriculum materials teachers create themselves	50
Curriculum materials my school or district created	45
HMH Science Dimensions (Houghton Mifflin Harcourt)	18
Next Generation Science Storylines units (Next Generation Science Storylines)	11
STEMscopes (Accelerate Learning, Inc.)	11
Inspire Science (McGraw-Hill Education)	10
Science Techbook (Discovery Education)	8
inquiryHub Biology	3
OpenStax (Rice University)	1
Science Education for Public Understanding Program (SEPUP) (Lab-Aids)	1

NOTE: This table presents the top ten most-selected instructional materials. Responses for “other” are not included in this list. Respondents were instructed to “select all that apply.” Percentages will not sum to 100 percent. Respondents were prompted to skip a question row if they did not use a resource. There might be some respondents who did not provide answers to this question because they do not use the materials listed.

25. Beyond curricula, please select the additional instructional materials that are required or recommended by your school or district for science instruction this school year (2020–2021). (*n* = 1,727)

Material Name	Weighted Percentage
Kahoot!	44
BrainPOP	38
Khan Academy	31
Quizlet	30
Discovery Education	26
YouTube	24
Newsela	22
Teachers Pay Teachers	21
Next Generation Science Standards ( <a href="http://www.nextgenscience.org">www.nextgenscience.org</a> )	20
State department of education website	19

NOTE: This table presents the top ten most-selected additional materials. Responses for “other” are not included in this list. Respondents were instructed to “select all that apply.” Percentages will not sum to 100 percent. Respondents were prompted to skip a question row if they did not use a resource. There might be some respondents who did not provide answers to this question because they do not use the materials listed.

## Science Instruction

26. Is your school currently implementing the Next Generation Science Standards (NGSS) or standards similar to NGSS (i.e., based on the K–12 Framework for Science Education)? (*n* = 1,723)

Response	Weighted Percentage
No	22
Yes	67
Don't know	10

NOTE: All percentages rounded to the nearest integer.

27. Please indicate which approach comes closest to describing how your school currently approaches teaching science in grades 6–8. (*n* = 789)

Model	Weighted Percentage
Integrated or spiraled model: Students are exposed to a combination of earth, space, life, and physical sciences at each grade level.	47
Traditional discipline or topic-specific model: Topics are grouped together within grade level roughly by discipline (e.g., earth and space science in 6th grade, life science in 7th grade, and physical science in 8th grade).	53

NOTE: All percentages rounded to the nearest integer.

28. If your school switched from a traditional discipline or topic-specific model to an integrated or spiraled approach within your time as principal, did teachers go through professional development to support them in incorporating this change? (*n* = 378)

Response	Weighted Percentage
No	10
Yes	40
I don't know	4
N/A—My school did not switch models during my time as a principal	46

NOTE: All percentages rounded to the nearest integer.

29. Do administrators and/or science teacher leaders conducting teacher evaluations have training in observing an integrated approach to teaching science? (*n* = 378)

Response	Weighted Percentage
No	48
Yes	40
Don't know	12

NOTE: All percentages rounded to the nearest integer.

30. Do administrators conducting teacher evaluations use a rubric specifically designed to observe science instruction (and not instruction in other subjects)? (*n* = 1,721)

Response	Weighted Percentage
No	88
Yes	9
Don't know	3

NOTE: All percentages rounded to the nearest integer.

## Professional Learning and Supports

31. In your school, do teachers' required or recommended ELA/mathematics/science curriculum materials include any of the following resources? (*n* = 1,757)

Resources	ELA	Mathematics	Science
Online learning software for students	64	70	53
Comprehensive (full) versions of curriculum materials teachers and students can access remotely	59	65	49
Classroom assessments	76	80	54
N/A—Teachers' required or recommended curriculum materials do not include any of these resources	9	6	24

NOTE: This question was adapted from the NECE Teacher Survey on Math Instructional Materials as used in Blazar et al., 2019. All percentages rounded to the nearest integer.

32. Who is the primary decisionmaker about which ELA/mathematics/science instructional materials teachers use in their classroom each day? (*n* = 1,757)

Primary Decisionmaker	ELA	Mathematics	Science
Individual teachers in their own classrooms	10	9	14
Collaborative group(s) of teachers in my school system	40	41	39
Me and/or other school administrators	10	10	10
My district leaders	38	37	36
Someone else	2	2	2

NOTE: All percentages were rounded to the nearest integer.

33. Thinking about this school year (2020–2021), how often has your district or school provided the following types of professional learning activities to ELA/mathematics/science teachers? (*n* = 1,757)

Professional Learning Activity	ELA		Mathematics		Science	
	At Least Once a Year	At Least Once a Month	At Least Once a Year	At Least Once a Month	At Least Once a Year	At Least Once a Month
Workshops or trainings focused on ELA/mathematics/science teaching	85	18	80	14	61	7
Workshops or trainings focused on teachers' use of their main ELA/mathematics/science instructional materials	82	16	78	14	61	7
General (not subject-specific) workshops or trainings	90	20	88	19	73	13
Coaching focused on ELA/mathematics/science instruction	82	26	79	23	58	11
Coaching focused on teachers' use of their main ELA/mathematics/science instructional materials	80	26	75	20	57	11
Collaborative learning with other teachers (e.g., Professional Learning Communities) focused on ELA/mathematics/science teaching	92	46	91	43	75	28
Collaborative learning with other teachers (e.g., Professional Learning Communities) focused on teachers' use of their main ELA/mathematics/science instructional materials	92	45	90	41	74	27
Other in-person trainings that teachers access on their own	32	8	29	7	24	4

NOTE: Response choices for this item were "never," "1–3 times a year," "4–6 times per year," "1–3 times per month," and "1–3 times per week or more." We display the percentage of leaders that reported that they participated in professional learning activities at least once a year and at least once a month.

34. Please indicate whether the following professional learning activities for ELA/mathematics/science teachers were provided by district/school staff or an external vendor from outside of your district. (*n* = 1,757)

Professional Learning Activity	ELA		Mathematics		Science	
	District/ School	External	District/ School	External	District/ School	External
Workshops or trainings focused on ELA/mathematics/science teaching	81	19	80	20	84	16
Workshops or trainings focused on teachers' use of their main ELA/mathematics/science instructional materials	78	22	78	22	84	16
General (not subject-specific) workshops or trainings	88	12	88	12	88	12
Coaching focused on ELA/mathematics/science instruction	90	10	89	11	90	10
Coaching focused on teachers' use of their main ELA/mathematics/science instructional materials	89	11	88	12	90	10
Collaborative learning with other teachers (e.g., Professional Learning Communities) focused on ELA/mathematics/science teaching	96	4	95	5	95	5
Collaborative learning with other teachers (e.g., Professional Learning Communities) focused on teachers' use of their main ELA/mathematics/science instructional materials	95	5	95	5	95	5

NOTE: All percentages rounded to the nearest integer.

35. Relative to the support and instruction already provided to teachers (if any), how much more or less professional learning do you think teachers need on the following topics to support their instruction? (*n* = 1,696)

Professional Learning Activity	Weighted Percentage			
	Less	No More or Less	A Little More	A Lot More
Use of curriculum materials provided by my school or district	2	31	54	13
Modification curricula to meet needs of students with IEPs or 504 plans	1	13	51	35
Modification of curricula to meet needs of English learners	3	21	44	32
Support for students in developing positive social identities based on their memberships in multiple social groups (e.g., race, gender, socioeconomic status, ability status, etc.)	2	16	45	37
Support for students in developing comfort with and respect for the different dimensions of human diversity	2	16	45	36
Support for students in understanding individual-level bias and systemic injustice and determining appropriate action against bias and injustice	3	16	41	40
Content-specific knowledge in their subject area	1	24	59	16
Provision of remote instruction	4	27	47	22
Reflecting on their own cultural lens and personal biases	3	13	41	42
Understanding systemic bias and injustice and their impact on students' education	3	14	39	44

NOTE: All percentages rounded to the nearest integer.

36. This school year (2020–2021), how often have you participated in professional learning activities specifically intended for school leaders (e.g., principals and assistant principals) or other administrators focused on the following topics? (*n* = 1,696)

Professional Learning Activity	Weighted Percentage				
	Never	1–3 Times per Year	4–6 Times per Year	1–3 Times per Month	1–3 Times per Week or More Often
Strategies for supporting teachers to improve their ELA instruction	31	43	14	10	2
Strategies for supporting teachers to improve their mathematics instruction	36	42	11	9	2
Strategies for supporting teachers to improve their science instruction	51	33	7	8	1
Main instructional materials used by ELA teachers	37	41	11	9	2
Main instructional materials used by math teachers	41	40	8	8	2
Main instructional materials used by science teachers	55	31	6	6	2

NOTE: All percentages rounded to the nearest integer.

## Benchmark Assessments

37. Which benchmark assessments do your students take over the course of this school year (2020–2021) to assess their progress in ELA?

37a. Top Ten Elementary School ELA Benchmark Assessments (*n* = 663)

Assessment Name	Weighted Percentage
District-created benchmark assessments	43
State-created benchmark assessments	25
School-created benchmark assessments	23
iReady Diagnostic (Curriculum Associates)	23
MAP or Measures of Academic Progress (NWEA)	23
Fountas & Pinnell	23
Star Reading/Star Math (Renaissance Learning)	18
iReady Assessments (Curriculum Associates)	18
Star Assessments (Renaissance)	13
aimswebPlus (Pearson)	11

NOTE: This table presents the top ten most-selected benchmark assessments used for ELA by school leaders serving elementary (K–5) schools.

37b. Top Ten Secondary School ELA Benchmark Assessments (*n* = 1,104)

Assessment Name	Weighted Percentage
District-created benchmark assessments	38
State-created benchmark assessments	33
School-created benchmark assessments	30
MAP or Measures of Academic Progress (NWEA)	20
iReady Diagnostic (Curriculum Associates)	17
Star Reading/Star Math (Renaissance Learning)	14
iReady Assessments (Curriculum Associates)	12
Star Assessments (Renaissance)	11
We use a benchmark assessment, but I don't know the name of it	10
ACT Aspire (ACT, Inc.)	9

NOTE: This table presents the top ten most-selected benchmark assessments used for ELA by school leaders serving secondary (6–12) schools.

38. Which benchmark assessments do your students take over the course of this school year (2020–2021) to assess their progress in mathematics?

38a. Top Ten Elementary School Mathematics Benchmark Assessments (*n* = 663)

Assessment Name	Weighted Percentage
District-created benchmark assessments	44
State-created benchmark assessments	24
iReady Diagnostic (Curriculum Associates)	24
School-created benchmark assessments	24
MAP or Measures of Academic Progress (NWEA)	23
iReady Assessments (Curriculum Associates)	17
Star Reading/Star Math (Renaissance Learning)	15
iReady Standards Mastery (Curriculum Associates)	9
Star Assessments (Renaissance)	9
aimswebPlus (Pearson)	8

NOTE: This table presents the top ten most-selected benchmark assessments used for mathematics by school leaders serving elementary (K–5) schools.

38b. Top Ten Secondary School Mathematics Benchmark Assessments ( $n = 1,104$ )

Assessment Name	Weighted Percentage
District-created benchmark assessments	38
State-created benchmark assessments	33
School-created benchmark assessments	30
iReady Diagnostic (Curriculum Associates)	19
MAP or Measures of Academic Progress (NWEA)	19
iReady Assessments (Curriculum Associates)	13
Star Reading/Star Math (Renaissance Learning)	12
We use a benchmark assessment, but I don't know the name of it	9
ACT Aspire (ACT, Inc.)	9
iReady Standards Mastery (Curriculum Associates)	8

NOTE: This table presents the top ten most-selected benchmark assessments used for mathematics by school leaders serving secondary (6–12) schools.

39. To what extent do the ELA/mathematics benchmark assessments your students take align with each of the following: ( $n = 1,663$ )

Professional Learning Activity	Weighted Percentage			
	Not at All Aligned	A Little Aligned	Mostly Aligned	Totally Aligned
Content of state ELA standards	1	5	57	38
Content of state-mandated ELA summative assessment	1	6	58	35
Content of state mathematics standards	0	4	55	41
Content of state-mandated mathematics summative assessment	0	6	57	38

NOTE: All percentages rounded to the nearest integer.

40. Please estimate the average achievement of your students in ELA and mathematics at this time in previous school years, prior to COVID-19. ( $n = 1,702$ )

Professional Learning Activity	Weighted Percentage					
	Far Below Grade Level	Somewhat Below Grade Level	At Grade Level	Somewhat Above Grade Level	Far Above Grade Level	N/A—I Haven't Assessed My Students According to Their Grade Level
Please estimate the average achievement of your students in ELA	5	35	30	23	7	1
Please estimate the average achievement of your students in mathematics	8	36	28	22	6	1

NOTE: All percentages rounded to the nearest integer.

41. Please estimate the current average achievement of your students in ELA and mathematics. If your students have taken benchmark assessments this school year (2020–2021), please use students’ performance on those assessments to inform your estimates. (*n* = 1,701)

	Weighted Percentage					N/A—I Haven’t Assessed My Students According to Their Grade Level
	Far Below Grade Level	Somewhat Below Grade Level	At Grade Level	Somewhat Above Grade Level	Far Above Grade Level	
Please estimate the current average achievement of your students in ELA	9	43	27	15	4	3
Please estimate the current average achievement of your students in mathematics	11	45	24	14	3	3

NOTE: All percentages rounded to the nearest integer.

## School Environment and Culture

42. Which subject areas do you evaluate in your school? (*n* = 1,709)

Subject	Weighted Percentage
ELA	95
Math	95
Science	82
Other	30

NOTE: All percentages rounded to the nearest integer. Respondents were instructed to “select all that apply.”

43. Which of the following do you most encourage ELA/mathematics/science teachers at your school to use as the basis for their lesson plans? (*n* = 1,708)

Teacher Subject	Weighted Percentage				Other
	Their Recommended or Required Curriculum Materials	Materials They Have Developed on Their Own From Scratch	Materials They Have Developed in Collaboration with Other Teachers	Whatever Materials They Think Will Best Meet Their Students’ Needs	
ELA	61	1	15	18	4
Mathematics	65	1	15	16	4
Science	56	2	19	19	4

NOTE: All percentages rounded to the nearest integer.

44. To what extent are the following present in your school to support teachers' instruction? (*n* = 1,707)

Subject	Weighted Percentage			
	Not Present	Present to a Slight Extent	Present to a Moderate Extent	Present to a Large Extent
A set of ELA teaching practices that are used by all	4	16	47	33
A set of mathematics teaching practices that are used by all	4	16	46	34
A set of science teaching practices that are used by all	11	26	41	22
ELA curricula that is well-aligned with ELA teaching practices my school encourages teachers to use	2	11	43	44
Mathematics curricula that is well-aligned with mathematics teaching practices my school encourages teachers to use	2	10	44	44
Science curricula that are aligned with science teaching practices my school encourages teachers to use	8	22	42	28
ELA benchmark or interim assessments that are aligned with ELA teaching practice	4	12	39	45
Mathematics benchmark or interim assessments that are aligned with mathematics teaching practice	3	11	41	45
Science benchmark or interim assessments that are aligned with science teaching practice	21	24	32	23

NOTE: All percentages rounded to the nearest integer.

45. Indicate your agreement or disagreement with each of the following statements describing connections among elements of your instructional system. (*n* = 1,706)

Subject	Weighted Percentage				
	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree	I Don't Know
Formal evaluation rubrics for ELA teachers are closely connected with instructional goals for ELA	9	14	40	34	3
Formal evaluation rubrics for math teachers are closely connected with instructional goals for math	9	15	39	34	3
Formal evaluation rubrics for science teachers are closely connected with instructional goals for science	12	20	39	23	5
Formal evaluation rubrics for teachers align with my definition of good instruction	2	5	33	59	1
Teacher observation protocols I use are connected with my state standards and district goals	2	6	30	61	2
Teacher observation protocols I use take into account teachers' use of curriculum	3	9	37	50	1
The rubric my district uses for principal evaluation aligns with my definition of good leadership	3	8	39	46	3
The rubric my district uses for principal evaluation includes a focus on academic standards teachers are expected to address in the classroom	7	13	37	39	3
The rubric my district uses for principal evaluation includes a focus on whether teachers are using required/recommended curricula	16	22	33	26	4
Curriculum, instruction, and supplemental materials are well coordinated across the different grade levels at this school	3	9	42	46	0
There is consistency in curriculum, instruction, and supplemental materials among teachers in the same grade level at this school	2	5	34	58	1

NOTE: All percentages rounded to the nearest integer.

46. Thinking about this school year (2020–2021), indicate your agreement or disagreement with each of the following statements about your district. (*n* = 1,704)

Subject	Weighted Percentage			
	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
The district has clear expectations for school-based planning.	6	20	52	23
The district conveys the importance of using the standards-aligned curriculum.	2	9	45	44
The district has a clear vision for improving student outcomes and provides clear direction on how to achieve that vision.	6	18	52	23
The district helps me build school capacity for ongoing professional learning.	5	19	52	24
The district helps me create time and/or opportunities for teacher collaboration.	6	17	51	26
The district helps me create time and/or opportunities for teacher collaboration.	6	20	50	24

NOTE: All percentages rounded to the nearest integer.

## Notes

<sup>1</sup> Non-RAND sources included Achieve the Core, undated; Elmore, Forman, and Stosich, 2016; Shanahan and Duffett, 2013; TNTP, 2018; and University of Chicago, 2017.

<sup>2</sup> See Council of Chief State School Officers, 2020, p. 14.

<sup>3</sup> Replicate weights were not produced for the AIRS data files; 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.

## Bibliography

Achieve the Core, “Common Core Knowledge and Practice Survey,” webpage, undated. As of January 31, 2020: <https://achievethecore.org/page/1104/common-core-knowledge-and-practice-survey>

Blazar, David, Blake Heller, Thomas J. Kane, Morgan Polikoff, Douglas Staiger, Scott Carrell, Dan Goldhaber, Douglas Harris, Rachel Hitch, Kristian L. Holden, and Michal Kurlaender, *Learning by the Book: Comparing Math Achievement Growth by Textbook in Six Common Core States*, Cambridge, Mass.: Harvard University Center for Education Policy Research, March 2019.

Council of Chief State School Officers, *Building on Our Momentum: CCSSO 2019–20 Annual Report*, Washington, D.C., 2020. As of July 20, 2020: [https://ccsso.org/sites/default/files/2020-06/CCSSO\\_Annual-Report-01620-Spreads\\_Final.pdf](https://ccsso.org/sites/default/files/2020-06/CCSSO_Annual-Report-01620-Spreads_Final.pdf)

Doss, Christopher Joseph, and William R. Johnston, *AEP Data Note Technical Appendix*, Santa Monica, Calif.: RAND Corporation, RR-2575/1-BMGF, 2018. As of February 11, 2020: [https://www.rand.org/pubs/research\\_reports/RR2575z1.html](https://www.rand.org/pubs/research_reports/RR2575z1.html)

Elmore, Richard F., Michelle L. Forman, and Elizabeth Leisy Stosich, *Internal Coherence Assessment Protocol*, Washington, D.C.: Strategic Education Research Partnership, 2016. As of February 3, 2020: [https://irp-cdn.multiscreensite.com/7a45b809/files/uploaded/ic\\_survey\\_october2016\\_v2.pdf](https://irp-cdn.multiscreensite.com/7a45b809/files/uploaded/ic_survey_october2016_v2.pdf)

Kaufman, Julia H., Melissa Kay Diliberti, Gerald P. Hunter, David Grant, Laura S. Hamilton, Heather L. Schwartz, Claude Messan Setodji, Joshua Snoke, and Christopher J. Young, *COVID-19 and the State of K–12 Schools: Results and Technical Documentation from the Fall 2020 American Educator Panels COVID-19 Surveys*, Santa Monica, Calif.: RAND Corporation, RR-A168-5, 2020. As of October 7, 2021: [https://www.rand.org/pubs/research\\_reports/RRA168-5.html](https://www.rand.org/pubs/research_reports/RRA168-5.html)

Kaufman, Julia H., Melissa Kay Diliberti, Gerald P. Hunter, Joshua Snoke, David Grant, Claude Messan Setodji, and Christopher J. Young, *COVID-19 and the State of K–12 Schools: Results and Technical Documentation from the Spring 2021 American Educator Panels COVID-19 Surveys*, Santa Monica, Calif.: RAND Corporation, RR-A168-7, 2021. As of October 18, 2021: [https://www.rand.org/pubs/research\\_reports/RRA168-7.html](https://www.rand.org/pubs/research_reports/RRA168-7.html)

Kaufman, Julia H., Sy Doan, Andrea Prado Tuma, Ashley Woo, Daniella Henry, and Rebecca Ann Lawrence, *How Instructional Materials Are Used and Supported in U.S. K–12 Classrooms: Findings from the 2019 American Instructional Resources Survey*, Santa Monica, Calif.: RAND Corporation, RR-A134-1, 2020. As of July 8, 2020: [https://www.rand.org/pubs/research\\_reports/RRA134-1.html](https://www.rand.org/pubs/research_reports/RRA134-1.html)

Kaufman, Julia H., V. Darleen Opfer, Michelle Bongard, and Joseph D. Pane, *Changes in What Teachers Know and Do in the Common Core Era: American Teacher Panel Findings from 2015 to 2017*, Santa Monica, Calif.: RAND Corporation, RR-2658-HCT, 2018. As of February 11, 2020: [https://www.rand.org/pubs/research\\_reports/RR2658.html](https://www.rand.org/pubs/research_reports/RR2658.html)

McFarland, Joel, Bill Hussar, Cristobal de Brey, Tom Snyder, Xiaolei Wang, Sidney Wilkinson-Flicker, Semhar Gebrekristos, Jijun Zhang, Amy Rathbun, Amy Barmer, Farrah Bullock Mann, and Serena Hinz, *The Condition of Education 2017*, Washington, D.C.: National Center for Education Statistics, NCES 2017-144, 2017.

National Center for Education Statistics, 2019–20 Common Core of Data (CCD) Universe Files (2021-0150), data file, March 2020.

NCES—See National Center for Education Statistics.

Robbins, Michael W., and David Grant, *RAND American Educator Panels Technical Description*, Santa Monica, Calif.: RAND Corporation, RR-3104-BMGF, 2020. As of September 30, 2021: [https://www.rand.org/pubs/research\\_reports/RR3104.html](https://www.rand.org/pubs/research_reports/RR3104.html)

Shanahan, Tim, and Ann Duffett, *Common Core in the Schools: A First Look at Reading Assignments*, Washington, D.C.: Thomas B. Fordham Institute, 2013. As of September 30, 2021: <http://edexcellence.net/publications/common-core-in-the-schools>

Steiner, David, *Curriculum Research: What We Know and Where We Need to Go*, Washington, D.C.: StandardsWork, March 2017. As of February 3, 2020: <https://standardswork.org/wp-content/uploads/2017/03/sw-curriculum-research-report-fnl.pdf>

TNTP, *The Opportunity Myth: What Students Can Show Us About How School Is Letting Them Down—and How to Fix It*, New York, 2018. As of February 3, 2020: [https://tntp.org/assets/documents/TNTP\\_The-Opportunity-Myth\\_Web.pdf](https://tntp.org/assets/documents/TNTP_The-Opportunity-Myth_Web.pdf)

University of Chicago, *5Essentials Survey*, Chicago, Ill.: University of Chicago Consortium on School Research, 2017.

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## About This Report

This technical report provides additional information about the sample, survey instruments, and resultant data for the 2021 American Instructional Resources Surveys (AIRS) that were administered to principals and teachers in spring 2021 via the RAND Corporation's American Educator Panels (AEP). This report contains substantial text from Sy Doan, David Grant, Daniella Henry, Julia H. Kaufman, Rebecca Ann Lawrence, Andrea Prado Tuma, Claude Messan Setodji, Laura Stelitano, Ashley Woo, and Christopher J. Young's *American Instructional Resources Surveys: 2020 Technical Documentation and Survey Results*, Santa Monica, Calif.: RAND Corporation, 2020. The descriptions of the AIRS content, survey administration, and weighting are largely identical to that of the 2020 report.

The AIRS focused on instructional resources used and supported in English language arts, mathematics, and science K–12 classrooms across the United States, including those used during coronavirus disease 2019–related school closures. The results are intended to inform policy and education practice related to use of instructional resources. If you are interested in using AEP data for your own analysis or reading other AEP-related publications, please email [aep@rand.org](mailto:aep@rand.org).

## RAND Education and Labor

This study 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 technical report is based on research funded by the Bill & Melinda Gates Foundation, the Charles and Lynn Schusterman Family Foundation, the Overdeck Family Foundation, and the Walton Family Foundation. We are grateful to foundation staff for their collaboration and feedback on our surveys and analysis. The findings and conclusions we present are those of the authors and do not necessarily reflect positions or policies of the foundations funding this technical report.

More information about RAND can be found at [www.rand.org](http://www.rand.org). Questions about this technical report or about the AIRS project should be directed to [jkaufman@rand.org](mailto:jkaufman@rand.org), and questions about RAND Education and Labor should be directed to [educationandlabor@rand.org](mailto:educationandlabor@rand.org).



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