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Research Report

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American Instructional Resources Surveys

2019 Technical Documentation and Survey Results

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

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 panels are designed to permit analyses of the following geographic areas: Alabama, Arkansas, California, Florida, Georgia, Illinois, Kentucky, Louisiana, Maryland, Massachusetts, Mississippi, Nebraska, New Mexico, New York (New York State as a whole and New York City), North Carolina, Oklahoma, Rhode Island, South Carolina, Tennessee, Texas, Virginia, West Virginia, and Wisconsin.[1] One also can examine subgroups within these geographic areas (although there is lower precision for smaller groups). The AEP sample is not designed to permit analyses within geographic areas not listed above or among subgroups not specified above.

The 2019 American Instructional Resources Surveys

A growing number of studies suggests that use of specific curricula can lead to substantial increases in students' achievement, although these studies do not shed light on how curricula supports

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

achievement.[2] In addition, we know very little about how U.S. teachers use and modify curricula in their classrooms to support student needs. In spring 2019, RAND Corporation 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 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 they 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).

The ATP sample targeted two groups of teachers—one based on geography and one based on grade level taught. Geographically, the sampling was designed to result in 400 completed surveys in each of 12 states (California, Delaware, Florida, Louisiana, Massachusetts, Mississippi, Nebraska, New Mexico, New York, Rhode Island, Tennessee, and Wisconsin) and 1,500 completed surveys across the balance of states for a national total of 6,300 surveys (see the survey results sections for details about completion rates). These sampling targets were selected to balance estimate precision, available sample, and ATP recruitment costs. The survey targeted K–12 teachers who reported teaching ELA, mathematics, or natural sciences. The survey instrument confirmed grades taught and screened out teachers who reported not currently teaching ELA, mathematics, or science. Approximately 584 invited teachers were screened out during the survey process and were removed from the invited samples. No "screen-ins" were possible, which means that a teacher invited to participate as an ELA teacher who had switched to natural science was not included as a natural science respondent. As a result, some level of undercoverage might exist, with truly eligible teachers and principals currently 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 the survey screened out 73 sampled panelists who were not currently working as school principals. Again, no "screen-ins" were possible.

Abbreviations

AEP	American Educator Panels
AIRS	American Instructional Resources Surveys
ASLP	American School Leader Panel
ATP	American Teacher Panel
CCD	Common Core of Data
ELA	English language arts
ELL	English Language Learner
IEP	Individualized Education Program
NCES	National Center for Education Statistics

Survey Administration and Content

We developed 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 team 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 researchers, 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. In addition, items were borrowed or adapted from prior RAND surveys (Doss and Johnston, 2018; Kaufman, Opfer, Bongard, and Pane, 2018; Kaufman, Opfer, Bongard, Pane, and Thompson, 2018).

[2] For a comprehensive review of studies finding a relationship between use of particular curricula and student achievement gains, see Steiner, 2017.

TABLE 1

ATP and ASLP Survey Content Areas

ATP Content Areas	ASLP Content Areas
Teacher and student characteristics	School leader and student characteristics
Teacher background	School leader background
Commonly used curricula and digital materials	Curricula and digital instructional materials recommended or required
Perceptions of main materials and barriers to digital material use	Supports for curricula materials
Modifications to materials*	Perceptions of main materials
Principal supports for curricula and instruction	Teacher professional learning
Student engagement	School leader professional learning
Instructional feedback	Standards-aligned instructional content and approaches
Standards-aligned instructional practices	Benchmark assessments
Professional learning supports	School culture
Teacher preparation programs	
Teacher knowledge and beliefs	
Standards-aligned content and approaches*	
School culture	

NOTE: Items were asked of ELA, mathematics, and science teachers; items with an asterisk (*) were asked of ELA and mathematics teachers only.

The data generated from the surveys are intended to be used by researchers and state education agencies (SEAs) in the 12 states where we have teacher oversamples. SEAs in these 12 states can compare the responses of teachers from their states with a nationally representative comparison group.

The ATP survey had an approximate administration time of 30 minutes. Respondents were assigned to sections based on their grade band (K–5, 6–8, or 9–12) and subject taught (ELA, mathematics, or natural science). Because of a lower number of 6th to 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.

Survey Completion Results

The 2019 AIRS yielded 5,969 complete responses out of 10,772 invitations for teachers (55.4 percent completion rate), and 1,624 out of 5,000 for school leaders (32.5 percent completion rate). Table 2 provides weighted descriptive statistics for survey respondents. The weights, which are described below, are intended to ensure that the sample reflects the national population of teachers and school leaders.

Calibrated Weighting

Each AIRS survey respondent has been given a weight to ensure that estimates reflect the national population of teachers and school leaders. This weight is calculated by first modeling response probabilities of teachers (or principals) across a wide variety of teacher (or principal) characteristics. The main weight is then calibrated so that the weighted sample matches the known national teacher or school leader population across these characteristics.

TABLE 2
Weighted Descriptive Statistics

	ATP		ASLP	
	Mean	Standard Error	Mean	Standard Error
School characteristics				
Elementary school*	0.582	0.012	0.568	0.018
Middle school*	0.149	0.008	0.175	0.012
High school*	0.235	0.010	0.218	0.015
Other types of schools*	0.035	0.005	0.039	0.007
Total enrollment	882.628	16.264	619.747	15.441
Percentage Asian students	5.172	0.244	4.260	0.398
Percentage Hispanic students	27.895	0.714	23.829	1.025
Percentage black students	17.966	0.577	16.267	0.869
Percentage white students	43.683	0.794	49.631	1.195
Percentage other race/ethnicity students	5.284	0.188	6.013	0.278
Percentage of students receiving free or reduced-price lunch	55.925	0.731	55.099	1.059
High poverty school* (> 75% free or reduced-priced lunch)	0.300	0.012	0.283	0.017
Title I eligible school*	0.728	0.011	0.725	0.016
City school*	0.327	0.012	0.292	0.018
Suburban school*	0.384	0.012	0.332	0.017
Town school*	0.103	0.008	0.122	0.011
Rural school*	0.185	0.010	0.254	0.015
Educator characteristics				
Total years in role	14.819	0.173	8.985	0.161
Female*	0.823	0.008	0.513	0.015
Asian*^	0.031	0.004	0.016	0.004
Hispanic*^	0.077	0.006	0.075	0.008
Black*^	0.071	0.005	0.118	0.009
White*^	0.805	0.008	0.780	0.012
Other race/ethnicity*^	0.026	0.003	0.018	0.004

NOTE: The ATP sample contains 5,969 observations. The ASLP sample contains 1,624 observations. School characteristics were obtained from the Common Core of Data (CCD) and are from the 2016–2017 school year. Means and standard errors were calculated using survey weights, which are calibrated to match the national averages for teachers and school leaders. The definition for *high poverty school* (more than 75 percent free or reduced-price lunch) follows the definition set forth by the National Center for Education Statistics (NCES; McFarland et al., 2017). Educator characteristics are self-reported by the respondent. The rate of missingness in educator characteristics is about 2 percent and 5 percent in the teacher and principal samples, respectively.

* Variables are expressed as dichotomous indicators of group members (1 = in the group, 0 = not in the group).

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

Characteristics that factor into this process include descriptors at the individual level (e.g., gender, professional experience) and school level (e.g., school size, level, urbanicity, socioeconomic status) (Robbins and Grant, forthcoming).

To produce estimates that reflect the population of ELA, mathematics, and natural science teachers in the United States, as well as national estimates for principals, we created weights. The final analysis weights in the data file are the product of the following three interim weights:

1. **Calibrated weight of the ATP/ASLP sampling frame:** 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/principals based on the Schools and Staffing Survey and the CCD, which are both from the NCES (see Robbins and Grant, forthcoming, for more information)
2. **Sample selection weight:** the inverse probability of selection into the AIRS 2019 sample using the ATP/ASLP as the frame; these probabilities were selected in order to have 6,300 participants in the ATP and 1,500 in the ASLP
3. **Survey response weight:** the inverse of the modeled probability of a teacher or principal completing the survey.

The products of these weights were subsequently recalibrated and trimmed as necessary.[3] We conducted recalibration to ensure that the weights were set up to recover the population estimates after the screening and for nonresponse weight adjustments. The sampling and weighting approach was designed to ensure a representative sample and limit the size of the design effect. The sampling frame weights were calculated to make the panel match the national population of teachers/principals based on several school-level (e.g., school size, level, urbanicity, sociodemographics) and individual-level (e.g., gender, education, experience) characteristics. The inverse of the selection probabilities (p_{si}) was used as the sample selection weight. The response weights were estimated by modeling the likelihood (p_{ri}) of a selected participant responding to the survey conditional on the school- and individual-level characteristics of teachers and principals (including states). For parsimony, a variable selection method was used to choose the model that best fit the data. The main weight was estimated as the product of the sampling frame calibration weight ($1/p_{fi}$), the sample selection weight ($1/p_{si}$) and the response weight ($1/p_{ri}$):

$$Main\ Weight = \frac{\mathbf{1}}{p_{fi}} \times \frac{\mathbf{1}}{p_{si}} \times \frac{\mathbf{1}}{p_{ri}}$$

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.[4]

In the remainder of this report, we provide detailed tables showing AIRS responses for teachers and school leaders.

Note that table and figure results will not always sum to 100 percent because of rounding or because the questions are designed to allow multiple selections (or no selection).

[3] We estimated the recalibration totals using the full ATP sampling frame, assuming that the full frame would provide an adequate approximation for the subsets of ELA, mathematics, and natural science teachers included in the AIRS-specific sample.

[4] 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.

American Instructional Resources Surveys: Teacher Survey Results

Teacher and Student Characteristics

1. With which of the following do you identify? (*n* = 5,840)

Race/Ethnicity	Weighted Percentage
American Indian or Alaska Native	1
Asian	3
Black or African American	7
Hispanic, Latino, or Spanish origin	8
Native Hawaiian or other Pacific Islander	1
White	80
Other	1
Decline to respond	5

NOTE: Respondents were instructed to "select all that apply." Percentages will not sum to 100 percent.

2. Approximately, what percentage of the students you teach—including those in small push-in or pull-out groups—are English Language Learners (ELLs)? (*n* = 5,837)

Percentage of ELL Students	Weighted Percentage
10 or less	64
11–24	15
25–49	9
50–74	5
75–100	5

3. Approximately, what percentage of the students you teach have an Individualized Education Program (IEP) and/or 504 Plan? (*n* = 5,837)

Percentage of IEP Students	Weighted Percentage
10 or less	36
11–24	34
25–49	16
50–74	4
75–100	7

4. With which of the following do you identify? (*n* = 5,966)

Gender	Weighted Percentage
Male	16
Female	84

NOTE: This question was not asked directly during the survey. The information was taken from data that panelists had previously provided.

5. Percentage of Respondents by School Enrollment of Black Students (*n* = 5,813)

Percentage of Black Students (School)	Weighted Percentage
10 or less	60
11–24	17
25–49	13
50–74	6
75–100	4

NOTE: Information on school-level enrollments was obtained from the 2016–2017 NCES CCD (NCES, 2019).

6. Percentage of Respondents by School Enrollment of Hispanic/Latino Students (*n* = 5,813)

Percentage of Hispanic/Latino Students (School)	Weighted Percentage
10 or less	46
11–24	20
25–49	15
50–74	10
75–100	9

NOTE: Information on school-level enrollments was obtained from the 2016–2017 NCES CCD (NCES, 2019).

Teacher Background

7. This school year (2018–2019), what grade(s) do you teach? (*n* = 5,969)

Grade	Weighted Percentage
Kindergarten	13
Grade 1	15
Grade 2	15
Grade 3	16
Grade 4	16
Grade 5	16
Grade 6	9
Grade 7	9
Grade 8	9
Grade 9	13
Grade 10	17
Grade 11	17
Grade 12	16
Ungraded (including special education students aged 18–22)	1
Other	2

NOTE: Respondents were instructed to “select all that apply.” Percentages will not sum to 100 percent.

7a. Percentage of Elementary (K–5) and Secondary (6–12) School Teachers (*n* = 5,969)

School Level	Weighted Percentage
Elementary	55
Secondary	45

NOTE: Elementary and secondary school percentages were calculated using a single count for any teacher who marked that they were teaching grades K–5 or 6–12.

8. Please indicate the main subject(s) you teach (*n* = 5,969)

Subject	Weighted Percentage
Math (including general math, algebra, geometry, calculus, etc.)	65
ELA	72
Natural science (including general science, biology, chemistry, physics, etc.)	52
Social science	44
Art and/or music	8
Health education	11
World languages	1
Computer science	7
Career or technical education	2
Special education	14
English as a second language (ESL) or English Language Development (ELD)	10
Physical education	4
Other	3

NOTE: Respondents were instructed to "select all that apply." Percentages will not sum to 100 percent.

9. Including this school year (2018–2019), how long have you worked as a teacher? (*n* = 5,830)

	Weighted Percentage			
Years of Experience	Total	In Current State	In Current District	In Current School
0–5 years	14	18	28	40
6–10 years	23	23	24	25
11–15 years	21	21	19	17
16–20 years	19	18	15	10
21+ years	23	20	14	8

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

Commonly Used Curricula

English Language Arts Curricula

10. Which of the following ELA curricula do you use regularly (once a week or more) for your ELA instruction this school year (2018–2019)?

10a. Top Ten Elementary School ELA Curricula (*n* = 1,252)

Curriculum Name	Weighted Percentage
Curricula I create myself	19
Curricula my school or district created	16
Lucy Calkins Units of Study	16
Reading Wonders (McGraw-Hill Education)	14
The Fountas & Pinnell Classroom (Heinemann)	12
Journeys—2017 (Houghton Mifflin Harcourt)	10
Leveled Reader Series	10
Journeys—2009 (Houghton Mifflin Harcourt)	9
Reading Street Common Core (Pearson)	8
Fundations (Wilson Language Training)	7

NOTE: This table presents the top ten most-selected instructional materials. Responses for "Other" and "N/A" are not included in this list. Respondents were instructed to "select all that apply." Percentages will not sum to 100 percent.

10b. Top Ten Middle School ELA Curricula (*n* = 617)

Curriculum Name	Weighted Percentage
Curricula I create myself	38
Curricula my school or district created	26
CommonLit (CommonLit)	18
Holt McDougal Literature (Houghton Mifflin Harcourt)	12
Lucy Calkins Units of Study	11
Collections—2015 (Houghton Mifflin Harcourt)	9
Engage NY (New York State Education Department)	7
Collections—2017 (Houghton Mifflin Harcourt)	6
Leveled Reader Series	5
Prentice Hall Literature: Timeless Voices, Timeless Themes (Prentice Hall)	5

NOTE: This table presents the top ten most-selected instructional materials. Responses for "Other" and "N/A" are not included in this list.

10c. Top Ten High School ELA Curricula (*n* = 545)

Curriculum Name	Weighted Percentage
Curricula I create myself	53
Curricula my school or district created	32
CommonLit (Commonlit)	16
Pearson Literature—2015 (Pearson)	13
Holt McDougal Literature—2012 (Houghton Mifflin Harcourt)	13
Prentice Hall Literature: Timeless Voices, Timeless Themes (Prentice Hall)	6
Engage NY (New York State Education Department)	6
Collections—2015 (Houghton Mifflin Harcourt)	6
Collections—2017 (Houghton Mifflin Harcourt)	5
SpringBoard ELA Common Core Edition—2017 (College Board)	4

NOTE: This table presents the top ten most-selected instructional materials. Responses for "Other" and "N/A" are not included in this list.

11. Please indicate which digital materials your students and/or you use regularly (once a week or more) for ELA instruction this school year (2018–2019).

11a. Top Ten ELA Digital Materials Students Use (*n* = 2,411)

Digital Material	Weighted Percentage
YouTube	22
ReadWorks	19
Newsela	18
Kahoot!	17
Quizlet	16
i-Ready (Curriculum Associates)	14
ABCya!	14
Starfall	12
BrainPOP	12
Khan Academy	10

NOTE: This table presents the top ten most-selected digital materials. Responses for "Other" and "N/A" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use digital materials.

11b. Top Ten ELA Digital Materials Teachers Use (*n* = 2,411)

Digital Material	Weighted Percentage
YouTube	40
Kahoot!	22
ReadWorks	21
Newsela	19
BrainPOP	19
ReadWriteThink	12
Quizlet	12
Flocabulary	10
i-Ready (Curriculum Associates)	9
Khan Academy	6

NOTE: This table presents the top ten most-selected digital materials. Responses for "Other" and "N/A" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use digital materials.

12. Which of the following additional digital materials do you reference or use regularly (once a week or more) to plan your ELA instruction this school year (2018–2019)?

12a. Top Ten ELA Digital Planning Materials (*n* = 2,409)

Digital Material	Weighted Percentage
Teachers Pay Teachers	60
Using a search engine (e.g., Google)	43
Resources obtained through a search on Pinterest	27
Common Core State Standards Initiative (corestandards.org)	25
Scholastic Teacher	21
State department of education website	14
Edutopia	9
NCTE (National Council of Teachers of English)	6
Achieve the Core	4
Teacher.org	4

NOTE: This table presents the top ten most-selected digital materials. Responses for "Other" and "N/A" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use digital materials.

13. Which of the following ELA intervention materials do you use to support students below grade level?

13a. Top Ten ELA Materials for Below-Grade-Level Students (*n* = 2,396)

Material	Weighted Percentage
Accelerated Reader (Renaissance)	17
Response to Intervention (RTI) Everyday Intervention (Nasco)	11
Read 180 (Houghton Mifflin Harcourt)	7
Study Island (Edmuntum)	5
mClass (Amplify Education, Inc.)	4
QuickReads (Pearson)	2
Total Motivation Reading (Mentoring Minds)	2
SuccessMaker (Pearson)	2
iLit Literacy and ELL Solutions (Pearson)	1
ReadyUP! (Pearson)	1

NOTE: This table presents the top ten most-selected intervention materials. Responses for "Other" and "N/A" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use digital materials.

Math Curricula

14. Which of the following math curricula do you use regularly (once a week or more) for your math instruction this school year (2018–2019)?

14a. Top Ten Elementary School Math Curricula (*n* = 1,082)

Curriculum Name	Weighted Percentage
Go Math (Houghton Mifflin Harcourt)	20
EngageNY (New York State Education Department)	14
Curricula I create myself	13
enVision Math 2.0—2016 (Pearson)	11
Curricula my school or district created	10
Eureka Math (Great Minds)	10
My Math—2018 (McGraw-Hill Education)	8
Zearn (Zearn, Inc.)	7
Ready (Curriculum Associates)	7
Investigations in Number, Data and Space 3rd Edition—2017 (Pearson)	5

NOTE: This table presents the top ten most-selected instructional materials. Responses for "Other" and "N/A" are not included in this list.

14b. Top Ten Middle School Math Curricula (*n* = 499)

Curriculum Name	Weighted Percentage
Curricula I create myself	18
Go Math (Houghton Mifflin Harcourt)	18
Glencoe Math (McGraw-Hill Education)	17
Curricula my school or district created	10
Big Ideas Math (Big Ideas Learning, LLC)	10
Eureka Math (Great Minds)	7
Engage NY (NYSED)	7
Holt McDougal Math (Houghton Mifflin Harcourt)	6
Carnegie Learning Math Solution—2018 (Carnegie Learning)	6
Open Up Resources 6–8 Math or Illustrative Math (Open Up Resources)	6

NOTE: This table presents the top ten most-selected instructional materials. Responses for "Other" and "N/A" are not included in this list.

14c. Top Ten High School Math Curricula (*n* = 440)

Curriculum Name	Weighted Percentage
Curricula I create myself	38
Curricula my school or district created	20
Pearson Traditional (Pearson)	14
Holt McDougal Larson Traditional Series (Houghton Mifflin Harcourt)	9
Glencoe Traditional (McGraw-Hill Education)	9
Big Ideas Traditional (Big Ideas Learning, LLC)	6
HMH Traditional (Houghton Mifflin Harcourt)	6
Engage NY (NYSED)	5
Pearson Integrated (Pearson)	5
SpringBoard Traditional (College Board)	3

NOTE: This table presents the top ten most-selected instructional materials. Responses for "Other" and "N/A" are not included in this list.

15. Please indicate which digital materials your students and/or you use regularly (once a week or more) for math instruction this school year (2018–2019).

15a. Top Ten Math Digital Materials Students Use (*n* = 2,018)

Digital Material	Weighted Percentage
Prodigy	20
Khan Academy	20
Kahoot!	17
ixl.com	15
YouTube	13
i-Ready (Curriculum Associates)	12
XtraMath	10
Starfall	10
Desmos	10
Quizlet	9

NOTE: This table presents the top ten most-selected digital materials. Responses for "Other" and "N/A" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use digital materials.

15b. Top Ten Math Digital Materials Teachers Use (*n* = 2,018)

Digital Material	Weighted Percentage
YouTube	28
Kahoot!	22
BrainPOP	20
Khan Academy	16
Desmos	10
ixl.com	10
Quizlet	9
i-Ready (Curriculum Associates)	9
Prodigy	6
LearnZillion	5

NOTE: This table presents the top ten most-selected digital materials. Responses for "Other" and "N/A" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use digital materials.

16. Which of the following additional digital materials do you reference or use regularly (once a week or more) to plan your math instruction this school year (2018–2019)?

16a. Top Ten Math Digital Planning Materials (*n* = 2,015)

Digital Material	Weighted Percentage
Teachers Pay Teachers	56
Using a search engine (e.g., Google)	35
Resources obtained through a search on Pinterest	23
Common Core State Standards Initiative (corestandards.org)	22
Kuta Software	18
State department of education website	14
Scholastic Teacher	7
Achieve the Core	4
Edutopia	4
BetterLesson	4

NOTE: This table presents the top ten most-selected digital materials. Responses for "Other" and "N/A" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use digital materials.

17. Which of the following math intervention materials do you use to support students below grade level?

17a. Top Ten Math Materials for Below-Grade-Level Students (***n*** = 2,006)

Material	Weighted Percentage
enVision MATH: Diagnosis and Intervention System (Pearson)	7
Response to Intervention (RTI) Everyday Intervention (Nasco)	6
Study Island (Edmentum)	4
MathXL for School (Pearson)	4
3-Tier Math Model Intervention (Meadows Center)	3
Do The Math (Scholastic/Houghton Mifflin Harcourt)	2
Math Expressions: Response to Intervention (Houghton Mifflin Harcourt)	2
Assessment and Learning in Knowledge Spaces (ALEKS) (McGraw-Hill Education)	2
Total Motivation Math (Mentoring Minds)	2
SuccessMaker (Pearson)	1

NOTE: This table presents the top ten most-selected intervention materials. Responses for "Other" and "N/A" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use intervention materials.

Science Curricula

18. Which of the following science curricula do you use regularly (once a week or more) for your science instruction this school year (2018–2019)?

18a. Top Ten Science Curricula (*n* = 1,521)

Curriculum Name	Weighted Percentage
Curricula I create myself	30
Curricula my school or district created	19
Pearson Science (Pearson)	10
McGraw-Hill Science (McGraw-Hill Education)	10
STEMscopes (Accelerate Learning, Inc)	8
FOSS Next Generation Middle School (Delta)	6
Harcourt Science (Houghton Mifflin Harcourt)	5
ScienceFusion (Houghton Mifflin Harcourt)	5
Glencoe Life Science (McGraw-Hill Education)	4
Interactive Science (Pearson)	4

NOTE: This table presents the top ten most-selected instructional materials. Responses for "N/A" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use instructional materials.

19. Please indicate which digital materials your students and/or you use regularly (once a week or more) for science instruction this school year (2018–2019).

19a. Top Ten Science Digital Materials Students Use (*n* = 1,520)

Digital Material	Weighted Percentage
Kahoot!	17
Quizlet	16
BrainPOP	15
Khan Academy	11
PhET Interactive Simulations	7
ixl.com	6
MobyMax	5
Freckle	5
Study Island	3
Science Channel	2

NOTE: This table presents the top ten most-selected digital materials. Responses for "Other" and "N/A" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use digital materials.

19b. Top Ten Science Digital Materials Teachers Use (*n* = 1,520)

Digital Material	Weighted Percentage
BrainPOP	31
Kahoot!	26
Quizlet	11
Khan Academy	9
PhET Interactive Simulations	8
Science Channel	4
ixl.com	4
MobyMax	3
Study Island	3
Freckle	2

NOTE: This table presents the top ten most-selected digital materials. Responses for "Other" and "N/A" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use digital materials.

20. Which of the following additional digital materials do you reference or use regularly (once a week or more) to plan your science instruction this school year (2018–2019)?

20a. Top Ten Science Digital Planning Materials (*n* = 1,519)

Digital Material	Weighted Percentage
Teachers Pay Teachers	50
Using a search engine (e.g., Google)	47
Next Generation Science Standards (www.nextgenscience.org)	30
Resources obtained through a search on Pinterest	22
State department of education website	14
NSTA (National Science Teachers Association)	11
Edutopia	7
BetterLesson	4
Teacher.org	3
TeachingChannel	3

NOTE: This table presents the top ten most-selected digital materials. Responses for "Other" and "N/A" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use digital materials.

Main Materials Used by Teachers

21. Of the curriculum materials you indicated using regularly, please choose the ONE main material you use the most.

21a. Top Ten Main Elementary School ELA Curriculum Materials (*n* = 1,235)

Curriculum Name	Weighted Percentage
Lucy Calkins Units of Study	11
Reading Wonders (McGraw-Hill Education)	11
i-Ready (Curriculum Associates)	8
Leveled Reader Series	7
Journeys—2017 (Houghton Mifflin Harcourt)	7
Journeys—2009 (Houghton Mifflin Harcourt)	5
Reading Street Common Core (Pearson)	5
The Fountas & Pinnell Classroom (Heinemann)	5
ReadWorks	5
Benchmark Advance or Literacy (Benchmark Education)	4

NOTE: This table presents the top ten most-selected materials.

21b. Top Ten Main Middle School ELA Curriculum Materials (*n* = 608)

Curriculum Name	Weighted Percentage
Curricula I create myself	28
Curricula my school or district created	17
Lucy Calkins Units of Study	8
Newsela	7
ReadWorks	5
Collections—2017 (Houghton Mifflin Harcourt)	5
Collections—2015 (Houghton Mifflin Harcourt)	5
Holt McDougal Literature (Houghton Mifflin Harcourt)	4
CommonLit (CommonLit)	4
SpringBoard ELA—2018 (College Board)	4

NOTE: This table presents the top ten most-selected materials.

21c. Top Ten Main High School ELA Curriculum Materials (*n* = 533)

Curriculum Name	Weighted Percentage
Curricula I create myself	47
Curricula my school or district created	16
Pearson Literature—2015 (Pearson)	7
Holt McDougal Literature—2012 (Houghton Mifflin Harcourt)	7
YouTube	6
Newsela	4
CommonLit (Commonlit)	4
Collections—2015 (Houghton Mifflin Harcourt)	4
Collections—2017 (Houghton Mifflin Harcourt)	3
Achieve 3000	3

NOTE: This table presents the top ten most-selected materials.

21d. Top Ten Main Elementary School Math Curriculum Materials (*n* = 1,069)

Curriculum Name	Weighted Percentage
Go Math (Houghton Mifflin Harcourt)	17
i-Ready (Curriculum Associates)	9
Curricula I create myself	8
EngageNY (NYSED)	8
My Math—2018 (McGraw-Hill Education)	8
Curricula my school or district created	8
Eureka Math (Great Minds)	8
enVision Math 2.0—2016 (Pearson)	7
Ready (Curriculum Associates)	5
enVision Math—2012 (Pearson)	3

NOTE: This table presents the top ten most-selected materials.

21e. Top Ten Main Middle School Math Curriculum Materials (*n* = 494)

Curriculum Name	Weighted Percentage
Go Math (Houghton Mifflin Harcourt)	14
Curricula I create myself	13
Glencoe Math (McGraw-Hill Education)	12
Big Ideas Math (Big Ideas Learning, LLC)	8
ixl.com	7
Eureka Math (Great Minds)	6
Khan Academy	6
Curricula my school or district created	5
Carnegie Learning Math Solution—2018 (Carnegie Learning)	5
Prentice Hall Math (Pearson)	4

NOTE: This table presents the top ten most-selected materials.

21f. Top Ten Main High School Math Curriculum Materials (*n* = 423)

Curriculum Name	Weighted Percentage
Curricula I create myself	30
Curricula my school or district created	10
Pearson Traditional (Pearson)	9
Desmos	7
Khan Academy	7
Glencoe Traditional (McGraw-Hill Education)	6
Big Ideas Traditional (Big Ideas Learning, LLC)	5
Holt McDougal Larson Traditional Series (Houghton Mifflin Harcourt)	5
HMH Traditional (Houghton Mifflin Harcourt)	4
YouTube	3

NOTE: This table presents the top ten most-selected materials.

21g. Top Ten Main Science Curriculum Materials (*n* = 1,448)

Curriculum Name	Weighted Percentage
Curricula I create myself	23
Curricula my school or district created	13
BrainPOP	7
Pearson Science (Pearson)	6
McGraw-Hill Science (McGraw-Hill Education)	6
STEMscopes (Accelerate Learning, Inc.)	5
ScienceFusion (Houghton Mifflin Harcourt)	4
FOSS Next Generation Middle School (Delta)	4
Kahoot!	3
Harcourt Science (Houghton Mifflin Harcourt)	2

NOTE: This table presents the top ten most-selected materials.

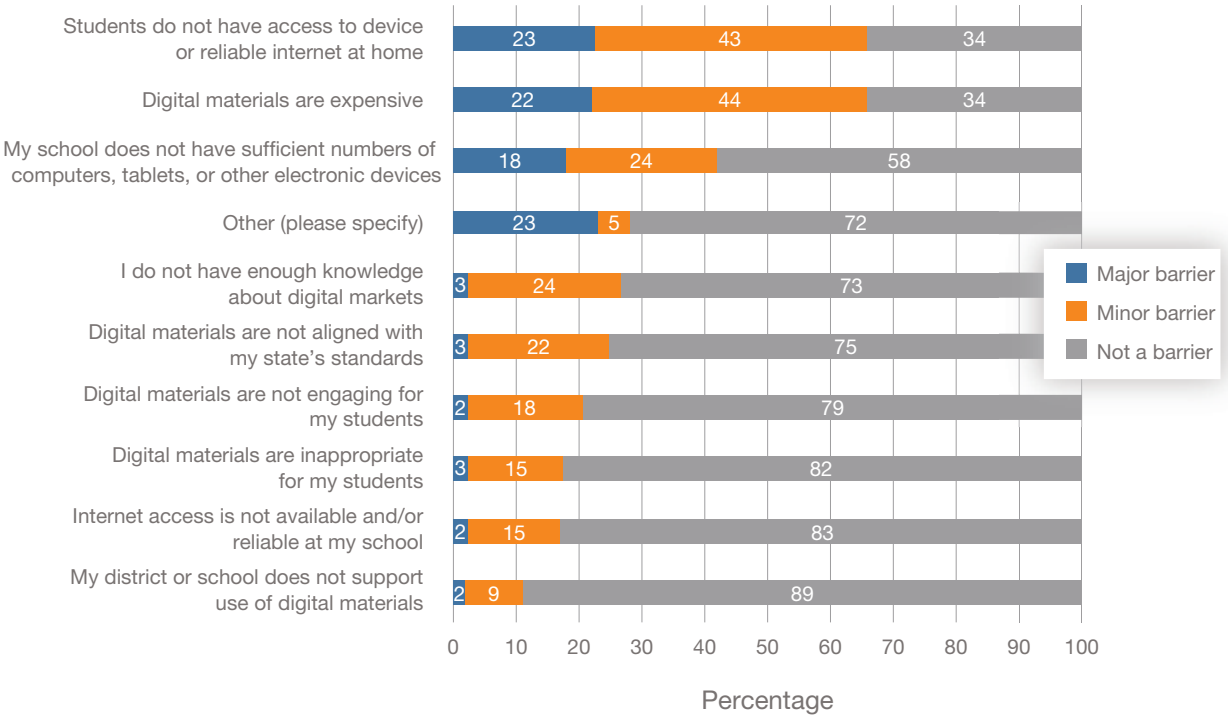
Perceptions of Main Materials and Barriers to Digital Material Use

22. Percentage of Teachers that Agree with the Following Statements About Their Main Materials for ELA/Math/Science (*n* = 5,929)

	Weighted Percentage		
My main [ELA/math/science] materials . . .	**ELA**	**Math**	**Science**
Help my students master my state's standards	88	90	87
Cover content addressed by benchmark and districtwide assessments sufficiently	84	86	79
Cover content addressed by my state-mandated assessment sufficiently	83	84	76
Meet the needs of students with IEPs or 504 plans	70	61	68
Meet the needs of ELLs	62	53	56
Provide me with a manageable number of topics to teach in a school year	85	81	80
Help me accelerate the learning of students who are performing below grade level	73	65	58
Provide suggestions for additional materials (e.g., pacing guides) or external resources for my lessons	69	65	62
Are culturally relevant	82	71	75
Are closely aligned with my district's goals and vision for good teaching	89	88	84
Provide digital instructional materials for use by all students	67	66	66
Provide digital instructional materials for use by students who are below grade level	61	56	53
Provide digital instructional materials for use by ELLs	52	43	46
Provide texts and topics that are linguistically appropriate for ELLs	59	46	49
Are engaging for students	82	73	83
Are very user-friendly and easy for me to implement	84	82	82
Are too challenging for most students	25	29	23
Are at the right level for most students	79	77	80
Are not challenging enough for most students	17	21	18
Provide differentiated (i.e., scaffolded) materials to meet the needs of different students	71	64	56

NOTE: Response choices for these items were: strongly disagree, somewhat disagree, somewhat agree, and strongly agree. We display the percentage of teachers that reported that they somewhat agree and strongly agree to measure agreement with these statements.

23. To what extent are each of the following barriers to using digital materials? (*n* = 5,938)



Modifications to Materials

24. Please complete the following sentence: I typically use lessons from my main [ELA/math/science] materials . . . (*n* = 5,909)

	Weighted Percentage		
	ELA	Math	Science
With no or few modifications	15	20	17
With modifications to less than half of a lesson plan	36	35	30
With modifications to more than half of a lesson plan	20	19	17
N/A—My main materials do not include lesson plans or I typically create my own lesson plans	29	27	36

25. Weighted Percentage of Teachers that Report Making Different Types of Modifications to Their [ELA/Math/Science] Materials At Least Once a Week (*n* = 5,893)

	Weighted Percentage		
Type of Modification	ELA	Math	Science
Make materials more culturally relevant for my students	50	40	42
Make materials more challenging for my students	65	59	53
Make materials less challenging for my students	59	44	44
Make materials more relevant to my students' future education and careers	55	53	53
Make materials more appropriate for my students with IEPs or 504 plans	76	71	67
Make materials more appropriate for ELLs	55	42	49
Make materials more appropriate for students who are below grade level	78	76	64
Reduce the time they will take (e.g., fit them into the lesson or into a unit)	73	68	72
Better address my students' learning needs, based on assessment results	83	82	70
Better address state standards	60	55	55
Better address the content in my subject area	65	67	62
Scale them for a larger class size	36	32	40
Other	23	17	20

NOTE: Response choices for these items were: I do not make this type of modification, less than once a week, once a week, 2–3 times a week, and for nearly every lesson. We display the percentage of teachers that reported making each type of modification once a week, 2–3 times a week, or for nearly every lesson.

Principal Supports, Student Engagement, and Instructional Feedback

Principal Supports

26. Indicate your agreement with the following statements about principal support (*n* = 5,886)

	Weighted Percentage		
	ELA Teachers	Math Teachers	Science Teachers
My principal encourages me to use existing curricula as the basis for my lessons.	69	69	60
My principal encourages me to plan lessons from scratch instead of using existing [ELA/math/science] curricula.	34	29	30
My principal provides me with feedback on how well I use curricula.	61	57	43
My principal knows which curricula are and are not aligned with my state's standards.	68	64	56
My teacher evaluations take into account my use of the required curricula.	67	66	45
My teacher observations take into account my use of the required curricula.	69	69	48

NOTE: Response choices for these items were: strongly disagree, somewhat disagree, somewhat agree, and strongly agree. We display the percentage of teachers that reported that they somewhat agree and strongly agree to measure agreement with these statements.

Student Engagement

27. What proportion of your students typically engage in each of the following activities for the ELA classes you teach? (*n* = 2,386)

	Weighted Percentage		
Activity	No Students	Less Than Half	At Least Half
Read fictional texts of sufficient grade-level complexity with the whole class	3	13	84
Read nonfiction texts of sufficient grade-level complexity with the whole class	3	18	79
Read or discuss texts of sufficient grade-level complexity for at least half of instructional time	4	18	78
Use evidence from a text to make inferences about central ideas and key details	2	11	87
Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of text related to the whole	8	22	71
Analyze how two or more texts address similar themes or topics	5	20	75
Write arguments to support claims in an analysis of substantive topics	16	23	60
Strengthen writing by planning, revising, editing, and/or rewriting	6	19	75
Conduct short or sustained research projects	21	27	53
Participate in a range of conversations and collaborations with diverse partners	4	17	79
Learn and use a range of general academic and domain-specific vocabulary (i.e., words and phrases) sufficient for career readiness	5	20	75
Build volume of independent reading on conceptually coherent topics to build knowledge about topics	5	27	68

NOTE: Response choices for these items were: no students, a few of my students, less than half of my students, more than half of my students, all or nearly all of my students. We display the percentage of teachers that reported a few of my students and less than half of my students as less than half, and more than half of my students and all or nearly all of my students as at least half.

28. What proportion of your students typically engage in each of the following activities for the math classes you teach? (*n* = 1,996)

	Weighted Percentage		
Activity	**No Students**	**Less Than Half**	**At Least Half**
Spend at least half of instructional time on grade-level math topics addressed by the state mathematics standards for my grade level	1	14	85
Relate new math content to other math content within and across grade levels	3	35	62
Pursue conceptual understanding, procedural skill and fluency, and application with equal intensity	2	37	61
Explain their thinking and build on other students' thinking	2	34	65
Make sense of problems that do not include clear procedures for solving and persevere in solving them	3	42	55
Use repeated practice to improve their computational skills	1	19	80
Apply math to solve problems in real-world contexts	1	26	73
Look for and make use of structure (e.g., patterns in numbers, shapes, or algorithms)	1	27	72
Choose and use appropriate tools when solving a problem	1	21	78

NOTE: Response choices for these items were: no students, a few of my students, less than half of my students, more than half of my students, all or nearly of all my students. We display the percentage of teachers that reported a few of my students and less than half of my students as less than half, and more than half of my students and all or nearly all of my students as at least half.

29. What proportion of your students typically engage in each of the following activities for the science classes you teach? (University of Chicago, 2017; *n* = 1,499)

	Weighted Percentage		
Activity	**No Students**	**Less Than Half**	**At Least Half**
Discuss different ways to approach a problem	6	34	60
Justify their scientific reasoning in writing	10	35	55
Develop their own questions about a scientific topic	9	41	51
Develop or use scientific models	12	24	64
Plan and carry out a scientific investigation	12	23	65
Analyze or interpret data	8	21	72
Use math or computational thinking in science	11	31	59
Construct their own explanations and arguments using evidence and reasoning	8	28	64

NOTE: Response choices for these items were: no students, a few of my students, less than half of my students, more than half of my students, all or nearly all of my students. We display the percentage of teachers that reported a few of my students and less than half of my students as less than half, and more than half of my students and all or nearly all of my students as at least half.

Instructional Feedback

30. Do you receive feedback from observations of instruction that help you improve instructional practice? (n = 5,969)

	Weighted Percentage		
	ELA Teachers	Math Teachers	Science Teachers
No	18	17	24
Yes	66	61	42
N/A—I don't receive feedback from observations of my [ELA/math/science] instruction	16	21	34

Professional Learning Supports

31. This school year (2018–2019), how often have you participated in the following types of [ELA/math/science] professional learning activities (n = 5,860)

	Weighted Percentage					
	ELA		Math		Science	
Activity	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/math/science] teaching and learning	89	10	80	7	65	3
Workshops or trainings focused on use of my main [ELA/math/science] materials	72	5	66	4	50	2
General (not subject-specific) workshops or trainings	91	14	89	15	85	14
Coaching focused on my [ELA/math/science] teaching	55	10	52	9	31	4
Coaching focused on use of my main [ELA/math/science] materials	50	7	48	8	31	4
Collaborative learning with other teachers focused on [ELA/math/science] teaching and learning	90	48	86	40	72	28
Collaborative learning with other teachers focused on my main [ELA/math/science] instructional materials	81	39	79	35	62	23
Online learning I access on my own	79	31	73	28	75	31
Other in-person trainings that I access on my own	26	6	17	3	22	5

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 teachers that reported that they participated in professional learning activities at least once a year and at least once a month.

32. Percentage of Teachers Reporting Professional Learning Helped Improve Use of Main Material to "Moderate" or "Great" Extent (*n* = 5,772)

	Weighted Percentage		
Activity	ELA	Math	Science
Workshops or trainings focused on [ELA/math/science] teaching and learning	57	50	44
Workshops or trainings focused on use of my main materials	58	53	45
General (not subject-specific) workshops or trainings	50	43	40
Coaching focused on my [ELA/math/science] teaching	59	54	46
Coaching focused on use of my main materials	57	54	44
Collaborative learning with other teachers focused on [ELA/math/science] teaching and learning	72	72	61
Collaborative learning with other teachers focused on my main instructional materials	72	71	61
Online learning I access on my own	64	60	55
Other in-person trainings	80	72	73

NOTE: Response choices for this item were: not at all, to a small extent, to a moderate extent, and to a great extent. For this item, teachers were instructed to describe other in-person trainings that they received. The responses for "other in-person trainings" in this section is the weighted percentage of teachers who provided an "Other" written response to this survey item.

33a. Since the end of last school year (2017–2018), how many hours did you spend in professional learning activities related to the following topics in ELA? (TNTP, 2018; *n* = 5,852)

	Weighted Percentage			
Activity	0 hours	1–5 hours	6–10 hours	10+ hours
Understanding my state standards in ELA	15	39	17	30
Developing my knowledge of content in ELA	10	26	17	47
Observing other teachers' lessons (in person or on video) that model instruction aligned to the standards in ELA	34	41	12	14
Receiving feedback from observations on my lessons	25	53	9	13
Learning how to implement my main instructional materials	16	33	17	35
Modifying my main instructional materials so that they will better align to the needs of students below grade level	14	29	17	40
Modifying my main instructional materials to meet the needs of students below grade level	10	28	16	47
Modifying my main instructional materials to provide culturally relevant instruction	23	29	15	33
Analyzing student work to determine whether it met the expectations of the standards in ELA	9	27	15	49
Learning instructional strategies that support my students in meeting the demand of the standards	6	27	22	46

NOTE: For this section, teachers were permitted to estimate hours spent in professional learning activities if they did not know the exact amount of time.

33b. Since the end of last school year (2017–2018), how many hours did you spend in professional learning activities related to the following topics in math? (*n* = 5,852)

	Math			
Activity	**0 hours**	**1–5 hours**	**6–10 hours**	**10+ hours**
Understanding my state standards in math	17	36	18	29
Developing my knowledge of content in math	13	28	17	42
Observing other teachers' lessons (in person or on video) that model instruction aligned to the standards in math	39	40	8	12
Receiving feedback from observations on my lessons	30	52	8	10
Learning how to implement my main instructional materials	17	34	19	30
Modifying my main instructional materials so that they will better align to the needs of students below grade level	16	28	16	40
Modifying my main instructional materials to meet the needs of students below grade level	13	28	15	44
Modifying my main instructional materials to provide culturally relevant instruction	31	28	14	27
Analyzing student work to determine whether it met the expectations of the standards in math	14	25	15	46
Learning instructional strategies that support my students in meeting the demand of the standards	10	31	20	40

NOTE: For this section, teachers were permitted to estimate hours spent in professional learning activities if they did not know the exact amount of time.

33c. Since the end of last school year (2017–2018), how many hours did you spend in professional learning activities related to the following topics in science? (*n* = 5,852)

	Science			
Activity	**0–4**	**1–5**	**6–10**	**10+**
Understanding my state standards in science	24	38	15	23
Developing my knowledge of content in science	22	31	15	31
Observing other teachers' lessons (in person or on video) that model instruction aligned to the standards in science	55	30	7	7
Receiving feedback from observations on my lessons	52	36	6	5
Learning how to implement my main instructional materials	28	33	16	23
Modifying my main instructional materials so that they will better align to the needs of students below grade level	26	30	13	31
Modifying my main instructional materials to meet the needs of students below grade level	27	31	15	27
Modifying my main instructional materials to provide culturally relevant instruction	38	28	13	22
Analyzing student work to determine whether it met the expectations of the standards in science	33	27	12	28
Learning instructional strategies that support my students in meeting the demand of the standards	24	34	15	27

NOTE: For this section, teachers were permitted to estimate hours spent in professional learning activities if they did not know the exact amount of time.

34. Please indicate whether the following professional learning activities in which you have participated were provided by district/school staff or an external vendor from outside of your district (*n* = 5,596)

	Weighted Percentage					
	ELA		Math		Science	
Activity	District/ School	External Vendor	District/ School	External Vendor	District/ School	External Vendor
Workshops or trainings focused on [ELA/ math/science] teaching and learning	82	18	79	21	69	31
Workshops or trainings focused on use of my main materials	76	24	75	25	71	29
General (not subject-specific) workshops or trainings	80	20	84	16	81	19
Coaching focused on my [ELA/math/ science] teaching	91	9	89	11	90	10
Coaching focused on use of my main materials	86	14	84	16	85	15

Teacher Preparation Programs

35. What kind of teacher preparation did you primarily receive before becoming a classroom teacher? (*n* = 762)

Program Type	Weighted Percentage
Went through a university-run teacher preparation program	78
Went through a district- or charter management organization–run teacher preparation program	9
Went through a teacher preparation program that was run by an entity besides a university, district, or charter management organization	11
Other	2

NOTE: Only teachers who took part in a preparation program in the last five years were asked this survey item. The results for this item show responses from teachers across all subjects.

36. Indicate your agreement with the following statements about your preparation program (*n* = 761)

	Weighted Percentage
My program prepared me to identify the strengths and weaknesses of curriculum materials.	57
My program provided adequate support on how to skillfully use and modify curriculum materials to meet the student needs.	70
The amount of clinical training I received (i.e., teaching internship or residency) was adequate.	78
The mentor teacher who supported me during my clinical training (i.e., teaching internship or residency) was effective in helping me improve.	85
My program offered content-specific coaching for the subject(s) I teach.	73
My program helped me build content-specific knowledge for the subject(s) I teach.	74

NOTE: The results for this item show responses from teachers across all subjects. Response choices for these items were: strongly disagree, somewhat disagree, somewhat agree, and strongly agree. We display the percentage of teachers that reported that they somewhat agree and strongly agree to measure agreement with these statements.

Teacher Knowledge and Beliefs

Standards-Aligned Instructional Content and Approaches

English Language Arts

37. Which of the following approaches for selecting reading texts aligns with your state's ELA and literacy standards? (Shanahan and Duffett, 2013; *n* = 2,377)

	Weighted Percentage
Select abridged or adapted versions of complex texts for students below grade level	37
Select grade-level texts that all students read as a class	63
Select texts for individual students based on their reading level	63
Select texts for a class based on qualitative factors such as knowledge demands and quantitative factors like word and sentence length	30
Other	2
I don't know	14

38. Which of the following types of writing assignments align with your state's ELA and literacy standards? (*n* = 2,374)

	Weighted Percentage
Write an opinion piece or argument on a topic or text, supporting a point of view with reasons and sufficient evidence	88
Write an informative/explanatory text that develops a topic with relevant details and other information	88
Write a creative fictional scene that depicts characters and/or experiences in vivid detail	30
Write a narrative to develop real or imagined experiences with descriptive details and clear event sequences	72
Write a play about real or imagined characters that conveys a larger idea about the world	13
I don't know	3

39. To what extent do your state standards focus on the following types of vocabulary instructions? (Shanahan and Duffett, 2013; *n* = 2,370)

	Weighted Percentage				
	Not at All	To a Slight Extent	To a Moderate Extent	To a Great Extent	I Don't Know
Teach words related to a specific content area or text being covered in class (e.g., teaching "magma" when reading a text about volcanoes)	2	10	34	50	4
Teach words students are likely to encounter when reading in a variety of content areas that do not have content-specialized definitions (e.g., "establish" and "verify")	3	13	34	45	4

40. Which of the following major topics are emphasized in the_math class(es) you teach, according to your state standards for math? (Achieve the Core, undated)

40a. Major Topics in Kindergarten (*n* = 254)

Topics	Weighted Percentage
Compare numbers	88
Understand meaning of addition and subtraction	86
Tell and write time from analog and digital clocks to the nearest five minutes using a.m. and p.m.	7
Develop understanding of fractions as numbers	6
I don't know	5

40b. Major Topics in 1st Grade (*n* = 276)

Topics	Weighted Percentage
Add and subtract within 20	93
Measure lengths indirectly and by iterating length units	64
Identify arithmetic patterns (including patterns in the addition or multiplication tables) and explain them using properties of operations	48
Extend understanding of fraction equivalence and ordering	18
I don't know	3

40c. Major Topics in 2nd Grade (*n* = 276)

Topics	Weighted Percentage
Understand place value	95
Represent and solve problems involving addition	92
Identify line of symmetry in two-dimensional figures	32
Apply and extend previous understandings of multiplication and division to multiply and divide fractions	6
I don't know	2

40d. Major Topics in 3rd Grade (*n* = 265)

Topics	Weighted Percentage
Multiply and divide within 100	89
Develop understanding of fractions as numbers	87
Understand meaning of addition and subtraction	70
Display numerical data in plots on a number line, including dot plots, histograms, and box plots	58
I don't know	2

40e. Major Topics in 4th Grade (*n* = 285)

Topics	Weighted Percentage
Extend understanding of fraction equivalence and ordering	93
Generalize place value understanding for multidigit whole numbers	91
Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates	16
Understand ratio concepts and use ratio reasoning to solve problems	12
I don't know	3

40f. Major Topics in 5th Grade (*n* = 276)

Topics	Weighted Percentage
Apply and extend previous understandings of multiplication and division to multiply and divide fractions	92
Understand the place value system	83
Recognize and draw shapes having specific attributes, such as a given number of angles or a given number of equal faces	57
Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation	17
I don't know	2

40g. Major Topics in 6th Grade (*n* = 251)

Topics	Weighted Percentage
Understand ratio concepts and use ratio reasoning to solve problems	95
Apply and extend previous understandings of arithmetic to algebraic expressions	87
Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points	58
Perform operations with numbers expressed in scientific notation	36
I don't know	2

40h. Major Topics in 7th Grade (*n* = 221)

Topics	Weighted Percentage
Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers	85
Use properties of operations to generate equivalent expressions	82
Understand that the graph of an equation in two variables is the set of all of its solutions plotted in the coordinate plane	46
Generate the prime factorization of numbers to solve problems	33
I don't know	6

40i. Major Topics in 8th Grade (*n* =230)

Topics	Weighted Percentage
Define, evaluate, and compare functions	86
Understand and apply the Pythagorean Theorem	82
Represent and analyze quantitative relationships between dependent and independent variables	75
Understand that a set of data collected to answer a statistical question has a distribution, which can be described by its center spread and overall shape	43
I don't know	7

40j. Major Topics in Algebra (*n* = 448)

Topics	Weighted Percentage
Create equations and inequalities in one variable and use them to solve problems	94
Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients	88
Solve quadratic equations in one variable	77
Use polar coordinates to describe locations on a plane	20
I don't know	1

40k. Major Topics in Geometry (*n* = 305)

Topics	Weighted Percentage
Experiment with transformations on the coordinate plane	82
Identify the slope and the intercept of a linear model in the context of the data	57
Explain and use the relationship between the sine and cosine of complementary angles	56
Derive the formula for the sum of a finite geometric series and use the formula to solve problems	22
I don't know	9

Teacher Beliefs

41. Indicate your agreement with the following statements about your state's standards in [ELA/math/science] (TNTP, 2018; *n* = 5,860)

	Weighted Percentage		
Beliefs	**ELA**	**Math**	**Science**
Teaching and learning that is aligned to the [ELA/math/science] standards prepares students for their future.	79	81	81
Teaching and learning that is aligned to the [ELA/math/science] standards gives students a deep understanding of the subject area.	75	73	77
Teaching and learning that is aligned to the [ELA/math/science] standards make class more engaging for students.	56	62	77
The [ELA/math/science] standards are too challenging for my students.	45	46	32
The standards make teaching less enjoyable.	48	46	41
My students need something different than what is outlined in the standards.	62	67	53
My state's standards in [ELA/math/science] make it difficult for students to learn basic skills.	44	50	36
My state's standards in [ELA/math/science] provide educators with a manageable number of topics to teach	60	57	66
I find myself skipping some standards-aligned content in my instruction.	49	41	52
The standards in [ELA/math/science] help me identify essential material to teach my students.	83	87	82
The standards in [ELA/math/science] help my students achieve higher scores on district and/or state	70	71	63

NOTE: Response choices for these items were: strongly disagree, somewhat disagree, somewhat agree, and strongly agree. We display the percentage of teachers that reported that they somewhat agree and strongly agree to measure agreement with these statements.

School Culture

42. Indicate your agreement with each of the following statements about your school this school year (2018–2019). (Elmore, Forman, and Stosich, 2016; *n* = 5,856)

	Weighted Percentage
People in this school are eager to share information about what does and does not work.	80
Making mistakes is considered part of the learning process in this school.	80
In this school, teachers feel comfortable trying new, research-based teaching approaches.	78
In this school, it is easy to speak up about what is on my mind.	67
People in this school are usually comfortable talking about problems and disagreements about teaching and learning.	71
Teachers in this school frequently observe other teachers and are comfortable being observed (even if the observation is unannounced).	40

NOTE: Response choices for these items were: strongly disagree, somewhat disagree, somewhat agree, and strongly agree. We display the percentage of teachers that reported that they somewhat agree and strongly agree to measure agreement with these statements.

American Instructional Resources Surveys: School Leader Survey Results

School Leader and Student Characteristics

1. With which of the following do you identify? (*n* = 1,490)

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	78
Other	0
Decline to respond	3

NOTE: Respondents were instructed to "select all that apply." Percentages will not sum to 100 percent.

2. Approximately, what percentage of the students at your school are ELLs? (*n* = 1,487)

Percentage ELL	Weighted Percentage
10 or less	66
11–24	18
25–49	10
50–74	4
75–100	2

3. Approximately, what percentage of the students at your school have an Individualized Education Program (IEP) and/or 504 plan? (*n* = 1,488)

Percentage IEP	Weighted Percentage
10 or less	25
11–24	63
25–49	11
50–74	1
75–100	1

4. With which of the following do you identify? (*n* = 1,617)

Gender	Overall
Male	49
Female	51

5. Percentage of Respondents by School Enrollment of Black Students (*n* = 1,537)

Percentage of Black Students (School)	Weighted Percentage
10 or less	63
11–24	17
25–49	10
50–74	5
75–100	6

NOTE: Information on school-level enrollments was obtained from the 2016–2017 NCES CCD.

6. Percentage of Respondents by School Enrollment of Hispanic/Latino Students (*n* = 1,581)

Percentage of Hispanic/Latino Students (School)	Weighted Percentage
10 or less	51
11–24	20
25–49	13
50–74	8
75–100	8

NOTE: Information on school-level enrollments was obtained from the 2016–2017 NCES CCD.

School Leader Background

7. This school year (2018–2019), what grade(s) are included in the school you lead? (*n* = 1,624)

Grade	Weighted Percentage
Kindergarten	56
Grade 1	57
Grade 2	57
Grade 3	57
Grade 4	57
Grade 5	54
Grade 6	38
Grade 7	35
Grade 8	35
Grade 9	26
Grade 10	27
Grade 11	26
Grade 12	26
Ungraded	5

NOTE: Respondents were instructed to “select all that apply.” Percentages will not sum to 100 percent.

8. What is the highest degree you have earned? (*n* = 1,490)

Highest Degree Earned	Weighted Percentage
Bachelor's degree (B.A., B.S., etc.)	1
Master's degree (M.A., M.A.T., M.B.A., etc.)	52
Educational specialist or professional	29
Doctorate or first professional degree	18

9. Including this school year (2018–2019), how long have you worked as a principal? (*n* = 1,489)

	Weighted Percentage		
Years	Total	In Current State	In Current District
0–5 years	33	35	46
6–10 years	34	34	31
11–15 years	16	15	13
15–20 years	13	13	9
21+ years	3	3	2

10. Are you certified and/or licensed in "school administration"? (*n* = 1,490)

Certified/Licensed	Weighted Percentage
Yes	99
No	1

Curriculum Materials

EdReports

11. Have you ever heard of EdReports? (*n* = 1,624)

Response	Weighted Percentage
Yes	40
No	60

12. To the best of your knowledge, has your district used EdReports to select, adapt, or implement curriculum? (*n* = 654)

Response	Weighted Percentage
Yes	11
No	89

13. Have you used EdReports to select, modify, or implement curriculum? (*n* = 654)

Response	Weighted Percentage
Yes	12
No	88

English Language Arts Curriculum Materials

14. Select the following ELA curricula that are provided by your school or district, either as a requirement or recommendation, this school year (2018–2019).

14a. Top Ten Elementary School ELA Curriculum Materials (*n* = 596)

Curriculum Name	Weighted Percentage
Lucy Calkins Units of Study	10
The Fountas & Pinnell Classroom (Heinemann)	10
Curricula my school or district created	8
Fundations (Wilson Language Training)	6
Journeys—2017 (Houghton Mifflin Harcourt)	6
Curricula teachers create themselves	6
Leveled Reader Series (please specify)	6
Engage NY (NYSED)	5
Journeys—2009 (Houghton Mifflin Harcourt)	5
Benchmark Advance or Literacy (Benchmark Education)	5

NOTE: This table presents the top ten most-selected instructional materials. Responses for "Other" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use the materials listed.

14b. Top Ten Middle School ELA Curriculum Materials (*n* = 732)

Curriculum Name	Weighted Percentage
Curricula my school or district created	10
Curricula teachers create themselves	10
Engage NY (NYSED)	6
Journeys—2017 (Houghton Mifflin Harcourt)	5
Lucy Calkins Units of Study	5
Edgenuity (Edgenuity, Inc.)	5
Holt McDougal Literature (Houghton Mifflin Harcourt)	5
Collections—2017 (Houghton Mifflin Harcourt)	4
Journeys—2009 (Houghton Mifflin Harcourt)	3
CommonLit (CommonLit)	3

NOTE: This table presents the top ten most-selected instructional materials. Responses for "Other" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use the materials listed.

14c. Top Ten High School ELA Curriculum Materials (*n* = 262)

Curriculum Name	Weighted Percentage
Curricula my school or district created	6
Curricula teachers create themselves	6
Edgenuity (Edgenuity, Inc.)	3
Holt McDougal Literature—2012 (Houghton Mifflin Harcourt)	2
Pearson Literature—2015 (Pearson)	2
Collections—2017 (Houghton Mifflin Harcourt)	2
Prentice Hall Literature: Timeless Voices, Timeless Themes (Prentice Hall)	2
Engage NY (NYSED)	2
Collections—2015 (Houghton Mifflin Harcourt)	1
SpringBoard ELA Common Core Edition—2017 (College Board)	1

NOTE: This table presents the top ten most-selected instructional materials. Responses for "Other" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use the materials listed.

15. Please select the digital materials that are required or recommended by your school or district for ELA instruction this school year (2018–2019).

15a. Top Eleven ELA Digital Instruction Materials (*n* = 1,589)

Digital Material	Weighted Percentage
Kahoot!	42
Khan Academy	34
BrainPOP	33
Newsela	32
Quizlet	29
MobyMax	20
i-Ready (Curriculum Associates)	20
ReadWorks	18
Flocabulary	18
Starfall	18
ixl.com	16

NOTE: This table presents the top ten most-selected digital materials. Responses for "Other" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use digital materials.

16. Please select the digital materials that are required or recommended by your school or district for ELA teachers to use in planning their instruction this school year (2018–2019).

16a. Top Ten ELA Digital Planning Materials (*n* = 1,583)

Digital Material	Weighted Percentage
State department of education website	34
Common Core State Standards Initiative (corestandards.org)	23
Teachers Pay Teachers	19
Using a search engine (e.g., Google)	16
Edutopia	15
Edmodo	12
Scholastic Teacher	11
Achieve the Core	10
NCTE (National Council of Teachers of English)	7
Resources obtained through a search on Pinterest	7

NOTE: This table presents the top ten most-selected digital materials. Responses for "Other" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use digital materials.

Math Curriculum Materials

17. Select the following math curricula that are provided by your school or district, either as a requirement or recommendation, this school year (2018–2019).

17a. Top Ten Elementary School Math Curricula (*n* = 594)

Curriculum Name	Weighted Percentage
EngageNY (NYSED)	8
Go Math (Houghton Mifflin Harcourt)	7
enVision Math 2.0—2016 (Pearson)	6
Curricula my school or district created	6
Eureka Math (Great Minds)	6
enVision Math—2012 (Pearson)	5
Curricula teachers create themselves	5
Zearn (Zearn, Inc.)	5
Ready (Curriculum Associates)	4
Bridges In Math (Math Learning Center)	3

NOTE: This table presents the top ten most-selected instructional materials. Responses for "Other" and "N/A" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use the materials listed.

17b. Top Ten Middle School Math Curricula (*n* = 727)

Curriculum Name	Weighted Percentage
Go Math (Houghton Mifflin Harcourt)	9
Engage NY (NYSED)	7
Curricula my school or district created	7
Curricula teachers create themselves	7
enVision Math 2.0–2016 (Pearson)	6
Eureka Math (Great Minds)	6
Big Ideas Math (Big Ideas Learning, LLC)	6
Glencoe Math (McGraw-Hill Education)	5
Edgenuity (Edgenuity, Inc.)	5
Ready (Curriculum Associates)	4

NOTE: This table presents the top ten most-selected instructional materials. Responses for "Other" and "N/A" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use the materials listed.

17c. Top Ten High School Math Curricula (*n* = 253)

Curriculum Name	Weighted Percentage
Curricula my school or district created	5
Curricula teachers create themselves	4
Pearson Traditional (Pearson)	2
Edgenuity Traditional (Edgenuity, Inc.)	2
Glencoe Traditional (McGraw-Hill Education)	2
Edgenuity Integrated (Edgenuity, Inc.)	2
Pearson Integrated (Pearson)	2
Engage NY (NYSED)	2
Holt McDougal Larson Traditional Series (Houghton Mifflin Harcourt)	2
Saxon Algebra I, Geometry, Algebra II (Houghton Mifflin Harcourt)	1

NOTE: This table presents the top ten most-selected instructional materials. Responses for "Other" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use the materials listed.

18. Please select the digital materials that are required or recommended by your school or district for math instruction this school year (2018–2019).

18a. Top Ten Math Digital Materials (*n* = 1,573)

Digital Material	Weighted Percentage
Khan Academy	47
Kahoot!	41
BrainPOP	32
Quizlet	29
i-Ready (Curriculum Associates)	22
ixl.com	22
MobyMax	21
Prodigy	16
Study Island	13
YouTube	11

NOTE: Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use digital materials.

19. Please select the digital materials that are required or recommended by your school or district for math teachers to use in planning their instruction this school year (2018–2019).

19a. Top Ten Math Digital Planning Materials (*n* = 1,572)

Digital Material	Weighted Percentage
Khan Academy	47
Kahoot!	41
BrainPOP	32
Quizlet	29
i-Ready (Curriculum Associates)	22
ixl.com	22
MobyMax	21
Prodigy	16
Study Island	13
YouTube	11

NOTE: This table presents the top ten most-selected digital materials. Responses for "Other" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use digital materials.

Science Curriculum Materials

20. Select the following science curricula that are provided by your school or district, either as a requirement or recommendation, this school year (2018–2019).

20a. Top Ten Science Curriculum Materials (*n* = 1,581)

Curriculum Name	Weighted Percentage
Curricula my school or district created	25
Curricula teachers create themselves	22
N/A—No particular curriculum is provided as a requirement or recommendation.	17
FOSS Next Generation Middle School (Delta)	12
STEMscopes (Accelerate Learning, Inc.)	12
Harcourt Science (Houghton Mifflin Harcourt)	10
Pearson Science (Pearson)	10
Glencoe Life Science (McGraw-Hill Education)	9
McGraw-Hill Science (McGraw-Hill Education)	9
Amplify Science (Amplify)	7

NOTE: This table presents the top ten most-selected instructional materials. Responses for "Other" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use the materials listed.

21. Please select the digital materials that are required or recommended by your school or district for science instruction this school year (2018–2019).

21a. Top Ten Science Digital Materials (*n* = 1,581)

Digital Material	Weighted Percentage
Kahoot!	42
BrainPOP	38
Khan Academy	37
Quizlet	33
MobyMax	17
Study Island	14
ixl.com	12
Science Channel	8
Freckle	5
PhET Interactive Simulations	2

NOTE: This table presents the top ten most-selected digital materials. Responses for "Other" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use digital materials.

22. Please select the digital materials that are required or recommended by your school or district for science teachers to use in planning their instruction this school year (2018–2019).

22a. Top Ten Science Digital Planning Materials (*n* = 1,579)

Digital Material	Weighted Percentage
State department of education website	33
Next Generation Science Standards (www.nextgenscience.org)	31
Using a search engine (e.g., Google)	18
Teachers Pay Teachers	17
Edutopia	14
NSTA (National Science Teachers Association)	13
Edumodo	11
TeachingChannel	8
Achieve the Core	7
Resources obtained through a search on Pinterest	7

NOTE: This table presents the top ten most-selected digital materials. Responses for "Other" are not included in this list. Respondents were prompted to skip a question row if they did not use a resource. There may be some respondents who did not provide answers to this question because they do not use digital materials.

23. Is your school currently implementing the Next Generation Science Standards (NGSS)? (*n* = 1,569)

Response	Weighted Percentage
No	31
Yes	60
I don't know	10

24. Please indicate which approach comes closest to describing how your school currently approaches teaching science in grades 6–8. (*n* = 722)

Model	Weighted Percentage
Integrated or spiraled model	43
Traditional discipline or topic-specific model	57

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

25. 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* = 314)

Response	Weighted Percentage
No	14
Yes	44
I don't know	4
N/A—My school did not switch models during my time as principal	37

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

26. Do administrators and/or science teacher leaders conducting teacher evaluations . . . ? (*n* = 1,569)

Response	Weighted Percentage
Have training in observing an integrated approach to teaching science	9
Use a rubric specifically designed to observe science instruction (and not instruction in other subjects)	39

NOTE: An integrated or spiraled approach is one in which students are exposed to a combination of earth, life, and physical sciences at each grade level.

Supports for Curriculum Materials

27. In your school, are [ELA/math/science] teachers' required or recommended curricula and/or digital materials supported by any of the following resources (i.e., there is written documentation connecting resources with materials or specific units/lesson within their materials)? (Harvard University Center for Education Policy Research, 2017; *n* = 1,577)

	Weighted Percentage		
Support Type	ELA	Math	Science
Pacing guides	67	69	55
Lesson plans	65	64	59
Documents showing connections among lessons and units	32	32	27
Online learning software for students	38	43	25
Classroom assessments	68	72	57
Benchmark assessments	70	69	45
Remediation activities for students who are below grade level	47	45	21
Advanced activities for students who need enrichment	31	35	21
List of potential resources to consult for additional instructional activities	31	28	26
Suggestions for how to anticipate or interpret student thinking	18	18	13
Resources to guide use of scaffolds for ELLs or activities to address language development	32	24	17
Software or other technology to support teachers' use or modification of ELA/math/science curricula	28	31	20
Curriculum-aligned observation tool	25	23	18
N/A—Teachers' required or recommended curricula and/or digital materials are not supported by any of these resources	6	4	13

Perceptions of Main Materials

28. The required or recommended curricula and/or digital [ELA/math/science] materials used by teachers in my school . . . (*n* = 1,573)

	Weighted Percentage		
	ELA	Math	Science
Help students master my state's [ELA/math/science] standards	88	87	78
Cover content addressed by benchmark and districtwide assessments sufficiently	87	88	77
Cover content addressed by my state-mandated assessment sufficiently	88	88	78
Meet the needs of students with IEPs or 504 plans	73	72	64
Meet the needs of ELLs	63	57	47
Provide teachers with a manageable number of topics to teach in a school year	83	79	75
Help teachers accelerate the learning of students who are performing below grade level	77	73	59
Provide suggestions for additional materials (e.g., pacing guides) or external resources for teachers' lessons	82	81	70
Are culturally relevant	76	69	64
Are closely aligned with my district's goals and vision for good teaching	88	88	78
Provide digital instructional materials for use by all students	76	79	64
Provide digital instructional materials for use by students who are below grade level	74	75	54
Provide digital instructional materials for use by ELLs	57	54	46
Provide texts and topics that are linguistically appropriate for ELLs	64	57	49
Are engaging for students	84	84	82
Are very user-friendly and easy for teachers to implement	84	86	76

NOTE: Response choices for these items were: not applicable for students in my school, strongly disagree, somewhat disagree, somewhat agree, and strongly agree. We display the percentage of leaders that reported that they somewhat agree and strongly agree to measure agreement with these statements.

29. The required or recommended [ELA/math/science] curricula and/or digital materials used by teachers in my school . . . (*n* = 1,562)

	ELA	Math	Science
Are too challenging for most students	23	25	19
Are at the right level for most students	81	82	75
Are not challenging enough for most students	24	22	22
Provide differentiated (i.e., scaffolded) materials to meet the needs of different students	74	72	58

NOTE: Response choices for this item were strongly disagree, somewhat disagree, somewhat agree, and strongly agree. We display the percentage of teachers that reported that they somewhat agree and strongly agree to measure agreement with these statements.

Teacher Professional Learning

30. Thinking about this school year (2018–2019), how often has your district or school provided the following types of professional learning activities to [ELA/math/science] teachers? (*n* = 1,517)

	Weighted Percentage					
	ELA		Math		Science	
Activity	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/math/science] teaching and learning	94	14	91	13	75	5
Workshops or trainings focused on teachers' use of their [ELA/math/science] instructional materials	88	12	85	11	69	4
General (not subject-specific) workshops or trainings	92	17	88	16	78	11
Coaching focused on [ELA/math/science] instruction	81	22	75	18	54	7
Coaching focused on teachers' use of their [ELA/math/science] instructional materials	77	19	73	16	53	6
Collaborative learning with other teachers (e.g., Professional Learning Communities) focused on [ELA/math/science] teaching and learning	93	41	90	37	75	23
Collaborative learning with other teachers (e.g., Professional Learning Communities) focused on using [ELA/math/science] instructional materials	91	37	88	34	72	21
Other	47	9	48	14	42	11

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.

31. Please indicate whether the following professional learning activities for [ELA/math/science] teachers were provided by district/school staff or an external vendor from outside of your district. (n = 1,509)

	Weighted Percentage		
Provided By	ELA	Math	Science
District or school staff	82	83	84
External vendor	18	17	16

32. How much more of the following resources do you think teachers need to support their [ELA/math/science] instruction, beyond what—if anything—has been provided to them? (*n* = 1,509)

	Weighted Percentage of School Leaders That Responded "A Lot More"		
Resources	**ELA**	**Math**	**Science**
Workshops or trainings focused on [ELA/math/science] teaching and learning	21	28	38
Workshops or trainings focused on teachers' use of their [ELA/math/science] instructional materials	18	23	34
General (not subject-specific) workshops or trainings	10	12	18
Coaching focused on [ELA/math/science] instruction	27	32	37
Coaching focused on teachers' use of their [ELA/math/science] instructional materials	23	26	32
Collaborative learning with other teachers (e.g., Professional Learning Communities) focused on [ELA/math/science] teaching and learning	28	28	35
Collaborative learning with other teachers (e.g., Professional Learning Communities) focused on teachers' use of their [ELA/math/science] instructional materials	26	25	32
Other	22	21	27

NOTES: Response choices for these items were: less, no more or less, a little more, and a lot more. This table shows the weighted percentage of respondents indicating that "a lot more" resources are needed to support instruction. For this item, leaders were instructed to describe other professional learning activities they think teachers need to support instruction. The responses for "Other" in this section is the weighted percentage of leaders who provided a written response to this survey item.

School Leader Professional Learning

33. This school year (2018–2019), 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* = 1,506)

	Weighted Percentage	
Activity	**At least once a year**	**At least once a month**
ELA instruction	79	11
Math instruction	74	9
Science instruction	55	6
ELA curricula specifically	68	7
Math curricula specifically	64	6
Science curricula specifically	49	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. This school year (2018–2019), taking into account all the professional development opportunities in which you participated, please estimate the following: (*n* = 1,497)

Percentage of my professional development opportunities with …	**Weighted Mean**
Other school leaders	43
My school's teachers	51

NOTE: Respondents were asked to estimate the percentage of professional development opportunities spent with "other school leaders" and "my school's teachers." This table shows the weighted average of respondents' estimated percentages.

Standards-Aligned Instructional Content and Approaches

English Language Arts

35. Which of the following approaches for selecting reading texts aligns with your state's ELA and literacy standards? (Shanahan and Duffett, 2013; *n* = 1,513)

Approaches	Weighted Percentage
Select abridged or adapted versions of complex texts for students below grade level	37
Select grade-level texts that all students read as a class	63
Select texts for individual students based on their reading level	64
Select texts for a class based on qualitative factors such as knowledge demands, as well as quantitative factors, such as word and sentence length	31
Other	2
I don't know	13

NOTE: For this item, leaders were instructed to describe other professional learning activities they think teachers need to support instruction. The responses for "Other" in this section are the weighted percentage of leaders who provided a written response to this survey item.

36. Which of the following types of writing assignments align with your state's ELA and literacy standards? (*n* = 1,507)

Assignments	Weighted Percentage
Write an opinion piece or argument on a topic or text, supporting a point of view with reasons and sufficient evidence	82
Write an informative/explanatory text that develops a topic with relevant details and other information	83
Write a creative fictional scene that depicts characters and/or experiences in vivid detail	30
Write a narrative to develop real or imagined experiences with descriptive details and clear event sequences	66
Write a play about real or imagined characters that conveys a larger idea about	17
I don't know	8

Math

37. Which of the following major topics are emphasized at each grade level, according to your state standards for math? (Achieve the Core, undated)

37a. Major Topics in Kindergarten (*n* = 812)

Topics	Weighted Percentage
Compare numbers	81
Tell and write time from analog and digital clocks to the nearest five minutes using a.m. and p.m.	73
Develop understanding of fractions as numbers	16
Understand meaning of addition and subtraction	13
I don't know	9

37b. Major Topics in 1st Grade (*n* = 821)

Topics	Weighted Percentage
Add and subtract within 20	87
Measure lengths indirectly and by iterating length units	57
Identify arithmetic patterns (including patterns in the addition or multiplication tables) and explain them using properties of operations	56
Extend understanding of fraction equivalence and ordering	18
I don't know	7

37c. Major Topics in 2nd Grade (*n* = 820)

Topics	Weighted Percentage
Represent and solve problems involving addition	85
Understand place value	81
Identify line of symmetry in two-dimensional figures	49
Apply and extend previous understandings of multiplication and division to multiply and divide fractions	21
I don't know	8

37d. Major Topics in 3rd Grade (*n* = 817)

Topics	Weighted Percentage
Develop understanding of fractions as numbers	77
Multiply and divide within 100	75
Understand meaning of addition and subtraction	66
Display numerical data in plots on a number line, including dot plots, histogram, and box plots	56
I don't know	8

37e. Major Topics in 4th Grade (*n* = 811)

Topics	Weighted Percentage
Extend understanding of fraction equivalence and ordering	83
Generalize place value understanding for multidigit whole numbers	79
Understand ratio concepts and use ratio reasoning to solve problems	49
Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates	39
I don't know	9

37f. Major Topics in 5th Grade (*n* = 787)

Topics	Weighted Percentage
Apply and extend previous understandings of multiplication and division to multiply and divide fractions	83
Understand the place value system	72
Recognize and draw shapes having specific attributes, such as a given number of angles or a given number of equal faces	65
Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation	50
I don't know	11

37g. Major Topics in 6th Grade (*n* = 605)

Topics	Weighted Percentage
Understand ratio concepts and use ratio reasoning to solve problems	73
Apply and extend previous understandings of arithmetic to algebraic expressions	67
Perform operations with numbers expressed in scientific notation	53
Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points	48
I don't know	18

37h. Major Topics in 7th Grade (*n* = 570)

Topics	Weighted Percentage
Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers	67
Use properties of operations to generate equivalent expressions	66
Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane	60
Generate the prime factorization of numbers to solve problems	52
I don't know	23

37i. Major Topics in 8th Grade (*n* = 576)

Topics	Weighted Percentage
Define, evaluate, and compare functions	66
Represent and analyze quantitative relationships between dependent and independent variables	66
Understand and apply the Pythagorean Theorem	64
Understand that a set of data collected to answer a statistical question has a distribution, which can be described by its center and overall shape	55
I don't know	22

Benchmark Assessments

English Language Arts

38. Which benchmark assessments do your students take over the course of this school year (2018–2019) to assess their progress in ELA?

38a. Top Ten Elementary School ELA Benchmark Assessments (*n* = 804)

Benchmark Assessment	Weighted Percentage
District-created benchmark assessments	29
Fountas & Pinnell benchmark assessments	23
School-created benchmark assessments	19
Measures of Academic Progress (MAP) (NWEA)	19
Star Reading/Star Math (Renaissance Learning)	19
iReady Diagnostic (Curriculum Associates)	17
Star Assessments (Renaissance)	15
iReady Assessments (Curriculum Associates)	14
Dynamic Indicators of Basic Early Literacy Skills (Voyager Sopris Learning)	11
iReady Standards Mastery (Curriculum Associates)	10

NOTE: This table presents the top ten most-selected benchmark assessments. Responses for "Other" and "N/A" are not included in this list.

38b. Top Ten Secondary School ELA Benchmark Assessments (*n* = 708)

Benchmark Assessment	Weighted Percentage
School-created benchmark assessments	30
District-created benchmark assessments	30
Star Reading/Star Math (Renaissance Learning)	15
Measures of Academic Progress (MAP) (NWEA)	14
Star Assessments (Renaissance Learning)	13
ACT Aspire (ACT, Inc)	10
iReady Diagnostic (Curriculum Associates)	10
iReady Assessments (Curriculum Associates)	8
Smarter Balanced (SBAC) interim assessment bundles	7
Smarter Balanced (SBAC) interim comprehensive assessments	6

NOTE: This table presents the top ten most-selected benchmark assessments. Responses for "Other" and "N/A" are not included in this list.

Math

39. Which benchmark assessments do your students take over the course of this school year (2018–2019) to assess their progress in math?

39a. Top Ten Elementary School Math Benchmark Assessments (*n* = 768)

Benchmark Assessment	Weighted Percentage
District-created benchmark assessments	28
School-created benchmark assessments	22
Measures of Academic Progress (MAP) (NWEA)	17
iReady Diagnostic (Curriculum Associates)	17
iReady Assessments (Curriculum Associates)	14
Star Reading/Star Math (Renaissance Learning)	13
iReady Standards Mastery (Curriculum Associates)	10
Star Assessments (Renaissance Learning)	8
Smarter Balanced (SBAC) interim comprehensive assessments	6
Smarter Balanced (SBAC) interim assessment bundles	6

NOTE: This table presents the top ten most-selected benchmark assessments. Responses for "Other" and "N/A" are not included in this list.

39b. Top Ten Secondary School Math Benchmark Assessments (*n* = 683)

Benchmark Assessment	Weighted Percentage
School-created benchmark assessments	30
District-created benchmark assessments	30
Star Reading/Star Math (Renaissance Learning)	15
Measures of Academic Progress (MAP) (NWEA)	14
ACT Aspire (ACT, Inc.)	10
iReady Diagnostic (Curriculum Associates)	10
Star Assessments (Renaissance Learning)	13
iReady Assessments (Curriculum Associates)	8
Smarter Balanced (SBAC) interim assessment bundles	7
Study Island (Edmentum)	6

NOTE: This table presents the top ten most-selected benchmark assessments. Responses for "Other" and "N/A" are not included in this list.

Perceptions of Benchmark Assessments

40. To what extent do the [ELA/math] benchmark assessments your students take align with each of the following . . . (*n* = 1,469)

	Weighted Percentage	
Item	**ELA**	**Math**
Content of state [ELA/math] standards	89	89
Content of state-mandated [ELA/math] summative assessment	86	87
Format (i.e., types of problems and questions) of state-mandated summative assessment	78	82
The pacing and/or order, scope, and sequence that you used to cover [ELA/math] standards throughout the year	80	82

NOTE: Response choices for this item were: not at all aligned, a little aligned, mostly aligned, and totally aligned. We display the weighted percentage of leaders that reported that benchmark assessments their students take mostly and totally aligned with the statements in this item.

School Culture

Learning Environment

41. Thinking about this school year (2018–2019), indicate your agreement with each of the following statements about your school. (Elmore, Forman, and Stosich, 2016; *n* = 1,512)

Statement	**Weighted Percentage**
People in this school are eager to share information about what does and does not work.	91
Making mistakes is considered part of the learning process in our school.	94
In this school, teachers feel comfortable trying out new research-based teaching approaches.	87
In this school, it is easy to speak up about what is on your mind.	92
People in this school are usually comfortable talking about problems and disagreement about teaching and learning.	85
Teachers in this school frequently observe other teachers and are comfortable being observed (even if the observation is unannounced).	57
Teachers have a “can do” attitude.	91
Teachers are continually learning and seeking new ideas.	91
Teachers have a strong understanding of the state standards for the content areas they teach.	87
Teachers have a clear idea of the district’s goals for instructional improvement in their subject area.	83
My new teachers were prepared to skillfully use and modify curriculum materials when they started at my school.	63

NOTE: Response choices for this item were: strongly disagree, somewhat disagree, somewhat agree, and strongly agree. We display the weighted percentage of leaders that reported that they somewhat agree and strongly agree with the statements in this item.

Principal Support and Evaluation of Teachers

42. Which subject areas do you evaluate in your school? (*n* = 1,511)

Subject	Weighted Percentage
ELA	95
Math	94
Science	85
Other	33

43. Indicate your agreement with each of the following statements describing connections among elements of your instructional system. (*n* = 1,511)

Element	Weighted Percentage
Formal evaluation rubrics for ELA teachers are closely connected with instructional goals for ELA.	70
Formal evaluation rubrics for math teachers are closely connected with instructional goals for math.	69
Formal evaluation rubrics for science teachers are closely connected with instructional goals for science.	61
Formal evaluation rubrics for teachers align with my definition of good instruction.	92
Teacher observation protocols I use are connected with my state standards and district goals.	89
Teacher observation protocols I use take into account teachers' use of curriculum.	88
The rubric my district uses for principal evaluation aligns with my definition of good leadership.	84
The rubric my district uses for principal evaluation includes a focus on standards-aligned curricula and curriculum supports.	77
Curriculum, instruction, and supplemental materials are well coordinated across the different grade levels at this school.	83
There is consistency in curriculum, instruction, and supplemental materials among teachers in the same grade level at this school.	88

NOTE: Response choices for this item were: strongly disagree, somewhat disagree, somewhat agree, strongly agree, and I don't know. We display the weighted percentage of leaders that reported that they somewhat agree and strongly agree with the statements in this item.

District Communications

44. Thinking about this school year (2018–2019), indicate your agreement with each of the following statements about your district. (*n* = 1,511)

Statement	Weighted Percentage
The district has clear expectations for school-based planning.	72
The district conveys the importance of using the standards-aligned curriculum.	88
The district has a clear vision for improving student outcomes and provides clear direction on how to achieve that vision.	73
The district helps me build school capacity for ongoing professional learning and planning related to standards-aligned curricula.	76
The district helps me create time and/or opportunities for teacher collaboration on planning and/or improvement of instruction.	73
The district helps me create time and/or opportunities for teacher collaboration on use and modifications of their instructional materials.	72

NOTE: Response choices for this item were: strongly disagree, somewhat disagree, somewhat agree, and strongly agree. We display the weighted percentage of leaders that reported that they somewhat agree and strongly agree with the statements in this item.

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About This Report

This technical report provides additional information about the sample, survey instruments, and resultant data for the 2019 American Instructional Resources Surveys (AIRS) that were administered to principals and teachers in spring 2019 via the RAND Corporation's American Educator Panels (AEP).

The AIRS focused on instructional resources used and supported in English language arts, mathematics, and science K–12 classrooms across the United States; 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 or visit www.rand.org/aep.

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.

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For more information and research on these and other related topics, please visit gatesfoundation.org.

More information about RAND can be found at www.rand.org. Questions about this technical report or about the AIRS project should be directed to jkaufman@rand.org, and questions about RAND Education and Labor should be directed to educationandlabor@rand.org.

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