The State of the Instructional Materials Market: 2019 Report

Spring 2020

EdReports.org

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Acknowledgments

About the Project Lead

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About EdReports.org

EdReports.org is an independent nonprofit designed to improve K-12 education. EdReports.org increases the capacity of teachers, administrators, and leaders to seek, identify, and demand the highest-quality instructional materials. Drawing upon expert educators, our reviews of instructional materials and support of smart adoption processes equip teachers with excellent materials nationwide. EdReports and associated marks and logos are the trademark property of EdReports.org, Inc.

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Executive Summary

Instructional materials make a difference for student achievement. Research shows that students learn primarily through their interactions with teachers and content, and that quality curriculum influences classroom practice and ultimately student outcomes. For example, a 2018 study illustrated that teachers using standards-aligned materials engaged students in mathematical practices at a significantly higher rate than teachers who did not use an aligned curriculum.

Educators know how much materials matter, but they do not always have access to the quality content that their students deserve. In a survey from Scholastic, teachers identified having high-quality instructional materials and textbooks as a top funding priority yet only 18 percent of teachers report that their district's or school's instructional materials are aligned to college and career-ready standards.

When teachers don't have access to great materials, they spend valuable time searching for them online or creating content themselves. A 2017 RAND analysis found that 96 percent of teachers use Google and 75 percent of teachers use Pinterest to find lessons and materials. These materials are mostly unvetted and of varying quality. Inconsistent access to aligned materials impacts student learning in schools across the country, but is more frequent in schools that have a higher proportion of low-income students and students of color the most, perpetuating inequities.

Because of the critical role materials play in student learning and closing achievement gaps, it is vital for all stakeholders to have a better understanding of the materials market—specifically, whether high-quality, standards-aligned programs are available and how teachers are using them. At EdReports, our 2019 State of the Market research aims to provide just that.

This annual study draws upon data from EdReports reviews, information about publisher and copyright dates, and data from the American Instructional Resources Survey (AIRS) on ELA and math curriculum use during the 2018-2019 school year to better understand the following questions:[1],[2]

- How aligned to college and career-ready standards are the materials on the market?

- What do we know about what is being regularly used in classrooms?

- Is there a relationship between the length of time that an EdReports review has been available for a program and the percent of market share for that program (i.e. does information on curriculum influence purchasing)?

Key Findings

In less than five years, EdReports has reviewed more than 90 percent of the known K-12 mathematics and English language arts materials market.

1. Aligned materials are available

The availability of standards-aligned materials is increasing. Of the core English language arts materials EdReports has reviewed:

- 45 percent meets expectations for alignment

- 37 percent partially meet expectations for alignment

- 18 percent do not meet expectations for alignment

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1.   The AIRS was fielded to the RAND Corporation's (2019) nationally representative American Teacher Panel in spring 2019..
2.   All comparative statistics on the 2018 market are drawn from results reported in the EdReports State of the Instructional Materials Market 2018 report. Our definition of market share is based on the percent of teachers who report using a given curriculum once a week or more in their classroom.

Of the mathematics materials EdReports has reviewed:

- 31 percent meet expectations for alignment

- 28 percent partially meet expectations for alignment

- 42 percent do not meet expectations for alignment

2. Despite availability, aligned materials are not being widely used in classrooms

- Only 16 percent of ELA materials used by teachers in classrooms are aligned

- Only 26 percent of math materials used by teachers in classrooms are aligned

We found a small increase in the percentage of aligned instructional materials used by teachers from 2018-2019. Even small changes in percentage points represent tens of thousands of teachers and hundreds of thousands of students who now have access to high-quality materials.

3. Information about curriculum shapes the market: newer materials are more likely to be aligned

Our data continues to show that newer materials are more likely to meet expectations for standards alignment. Further, the longer programs that meet expectations for alignment are in the field, the more likely they are to be used in the classroom. Our analysis suggests that as more independent information about the alignment and quality of materials has become available, districts and schools are demanding materials that meet these expectations.

4. New data offers a better understanding of the materials market

In addition to learning more about the quality and availability of aligned instructional materials, our 2019 research illuminated more information about the different kinds of materials being used in classrooms. One finding is that even though new materials are more aligned, many schools still have older curriculum in place. For example, in English language arts, 9.2 percent of materials used regularly were published before 2012. These older materials were developed before the adoption of college and career-ready standards. EdReports has not reviewed these materials because they do not claim alignment to the standards that were created after the programs were published. With one in 10 classrooms using materials that are nearly a decade old, this means that millions of students across the country are missing out on almost a decade of innovations, progress, and new content.

A Call to Action

The time to invest in high-quality, aligned instructional materials is now. Over the past five years, materials have improved and access to independent information about available programs has never been higher. We also know more about the impact quality materials can have on preparing students for college and careers.

Many states and districts have committed to robust, comprehensive adoption practices that result in selecting materials that are both standards-aligned and support local needs. As exciting as these stories are, we know there is much more work to be done. The reality that only 16 percent of the ELA materials and 26 percent of math materials used in classrooms are aligned tells us that too few schools have aligned resources, professional learning, and the systemic supports they need. States, districts, and educators must all play a role in ensuring all students have access to the content that can make a difference in their lives.

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Tables and Figures

Tables and Figures (Continued)

The State of the Instructional Materials Market: 2019 Report

I. Aligned materials are increasingly available

With reviews for more than 90 percent of the known English language arts and mathematics materials market,[3] we see that there is an increasing variety of standards-aligned materials for districts to choose from and for teachers to use. For example, Table 1 illustrates that nearly half of all K-12 yearlong, core comprehensive ELA programs and almost a third of K-12 mathematics programs meet EdReports' expectations for alignment. Educators have more choices than ever before as they begin selection processes.

Table 1.

Summary statistics for EdReports Grade-Level Reports by Standards-Alignment Rating

	Meets		Partially Meets		Does Not Meet		All Ratings	
	n	**%**	**n**	**%**	**n**	**%**	**n**	**%**
ELA & Math K–12	**199**	**334.0**	**192**	**32.8**	**195**	**33%**	**595**	**100**
ELA Core	**92**	**44.7**	**77**	**37.4**	**37**	**18**	**206**	**100**
K–5	36	34.3	45	42.9	24	22.9	105	100
6–8	32	54.2	21	35.6	6	10.2	59	100
9–12	24	57.1	11	26.2	7	16.7	42	100
ELA Foundational Skills	**0**	**0.0**	**9**	**60.0**	**6**	**40.0**	**15**	**100**
K–2	0	0.0	0	60.0	6	40.0	15	100
Math	**107**	**30.6**	**97**	**27.7**	**146**	**41.7**	**350**	**100**
K–5	37	25.3	43	29.5	66	45.2	146	100
6–8	34	34.7	26	26.5	38	38.8	98	100
9–12	36	34.0	28	26.4	42	49.6	106	100

EdReports' review process follows a sequence of three gateways that reflects the importance of standards alignment to the fundamental design elements of the materials and considers other attributes of high-quality curriculum as recommended by educators. This report considers whether expectations were met for Gateways 1 and 2, which attend to characteristics of standards alignment. Are the instructional materials aligned to the standards? Are all standards present and treated with appropriate depth and quality required to support student learning? For more information on EdReports' rubrics and definitions for standards alignment, please visit www.EdReports.org/reports/rubrics-evidence.

While materials continue to improve and quality options are increasingly available, it is important to point out that there are variations in strengths even among aligned materials. Districts have different challenges and different demands. Investigating materials deeply to see specific strengths and gaps helps to ensure the final decision serves local priorities and will address student needs.

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3   We define the "known market" as foundational skills ELA programs and comprehensive, yearlong ELA and math programs for which we have market data. This excludes materials that are created directly by teachers or supplemental materials curated from public spaces such as Google or Pinterest. Excluding known supplemental and informal materials, 80 percent of all ELA materials and 87 percent of all math materials used in classrooms qualify as the known market.

II. There is a generally positive trend for use of quality instructional materials

While districts have an increasing number of aligned materials to choose from, the data illustrates real challenges in ensuring students have access to those quality programs. The discrepancy between what is available and what is in use is shown in Figures 1 and 2 for math and Figures 3 and 4 for ELA. In mathematics, despite about one-third of curricula options meeting alignment expectations, only 26 percent of the materials teachers are working with are aligned to college and career-ready standards. Further, the data show a higher proportion of materials in use for materials that partially meet (29 percent) and do not meet expectations (29 percent).

> Only 26 percent of math materials and 16 percent of ELA materials teachers are working with are aligned to college and career-ready standards.

Figure 1

Mathematics Instructional Materials Reviewed by EdReports

Meets Expectations	30.6
Partially Meets Expectations	27.7
Does Not Meet Expectations	41.7

Figure 2

Mathematics Materials Regularly Used by Teachers

Meets Expectations	26.4
Partially Meets Expectations	29
Does Not Meet Expectations	28.5
Under Review or in Pipeline	1.4
Pre-2012 Materials (Not Reviewed)	1.7
Not Reviewed (2012 ed or later)	0.5
Other Curriculum	12.6

Math Instructional Materials
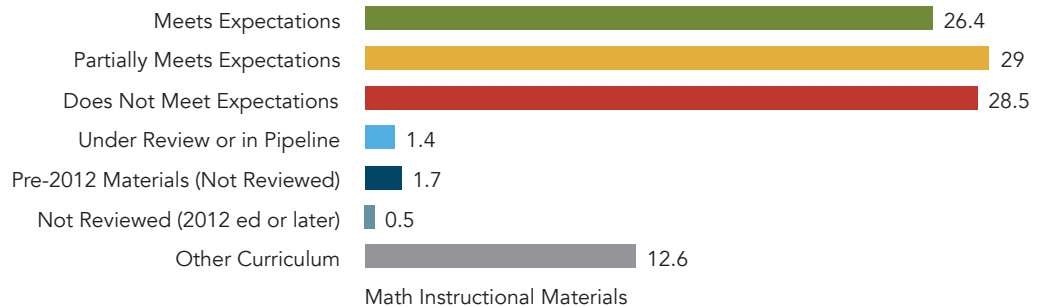
NOTES: Percentages for "other curriculum" reflect survey responses indicating use of materials other than programs explicitly listed on the questionnaire. Curricula in the "other" category likely comprise a mixture of materials that may or may not be reviewable by EdReports, including supplemental programs, intervention programs, and possibly yearlong core comprehensive programs.

In ELA, the data illustrates a similar challenge in ensuring the use of quality materials. Forty-two (42) percent of ELA programs EdReports has reviewed are aligned, yet only 16 percent of materials regularly used in classrooms meet EdReports expectations. Even as materials improve in both ELA and mathematics, too many students are not benefiting from the progress in the market.

A NOTE ON SCIENCE MATERIALS

In 2019, EdReports released its first reviews of middle school science materials. Each science review covers three grade levels (6-8). Of the eight middle school science programs reviewed, one meets expectations for alignment, one partially meets expectations, and six do not meet expectations.

We do not yet have national grade-level information about the science materials in use in order to analyze market share or the percent of materials that have been reviewed. We look forward to producing more reviews in the future and plan to source additional information in future RAND surveys to inform a clearer picture of the state of the science instructional materials market.

Figure 3

ELA Instructional Materials Reviewed by EdReports

Rating	Value
Meets Expectations	44.7
Partially Meets Expectations	37.4
Does Not Meet Expectations	18

Materials by Alignment Rating
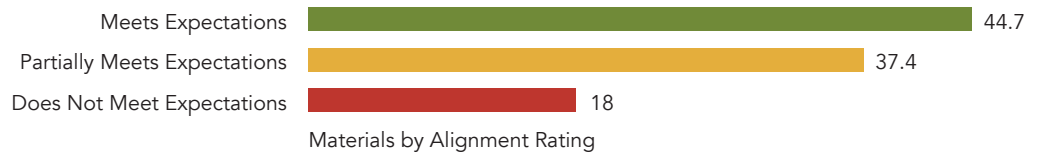
Figure 4

ELA Materials Regularly Used by Teachers

Category	Value
Meets Expectations	15.7
Partially Meets Expectations	31.5
Does Not Meet Expectations	10.8
Under Review or in Pipeline	12
Pre-2012 Materials (Not Reviewed)	9.2
Not Reviewed (2012 ed or later)	0.2
Other Curriculum	20.5

ELA Instructional Materials
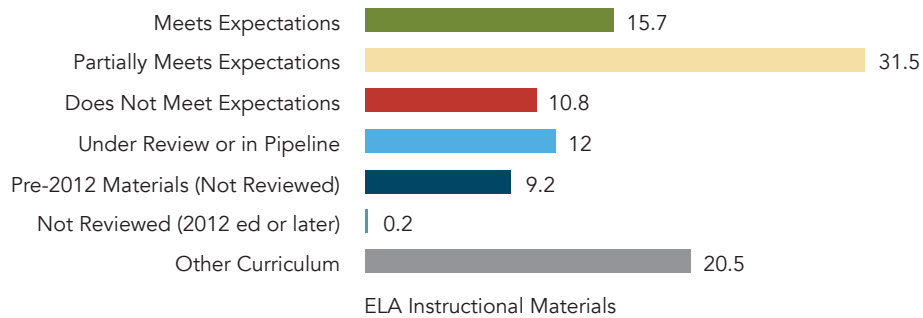
NOTES: A summary of percentages for curricula reviewed by EdReports and market share of the known market by standards-alignment rating, grade band, and content are presented in Appendix A Table A1. Figures A1 through A6 present market share estimates by EdReports standards-alignment rating and review status for each content area grade band.

Percentages for "other curriculum" reflect survey responses indicating use of materials other than programs explicitly listed on the questionnaire. Curricula in the "other" category likely comprise a mixture of materials that may or may not be reviewable by EdReports, including supplemental programs, intervention programs, and possibly yearlong core comprehensive programs.

Despite these challenges, there are signs of promise as well. While far too few students are regularly exposed to aligned curricula, the numbers are for the most part trending in the right direction. As shown in Figures 5 and 6, the percent of aligned materials in use increased for both mathematics and English language arts between 2018 and 2019. In ELA, the increase was one percentage point and in mathematics it was just over three percentage points.

The data also shows that over the past year, the use of ELA materials that do not meet expectations for alignment are declining in classrooms, where there was a drop of nearly six percentage points.

Even small changes in percentage points represent tens of thousands of teachers and hundreds of thousands of students who now have access to quality materials.

Use of Aligned Materials Increases from 2018 to 2019

Figure 5

Percent change from 2018 to 2019 in K-12 ELA materials in use in classrooms by standards-alignment rating.

Percentage Point Change 2018 to 2019

	2018	2019	DIFF
Meets Expectations	15%	16%	+1.0
Partially Meets Expectations	29	32	+2.4
Does Not Meet Expectations	11	17	−5.8
Under review / In review pipeline	1	12	+10.5
Known series not reviewed	0	9	+9.4
Unspecified 'other' curriculum	21	38	−17.6

● 2018   ● 2019

Figure 6

Percent change from 2018 to 2019 in K-12 Math materials in use in classrooms by standards-alignment rating.

Percentage Point Change 2018 to 2019

	2018	2019	DIFF
Meets Expectations	23%	26%	+3.4
Partially Meets Expectations	28	29	+0.6
Does Not Meet Expectations	28	29	+0.1
Under review / In review pipeline	0	1	+1.0
Known series not reviewed	2	3	−1.3
Unspecified 'other' curriculum	13	16	−3.8

● 2018   ● 2019
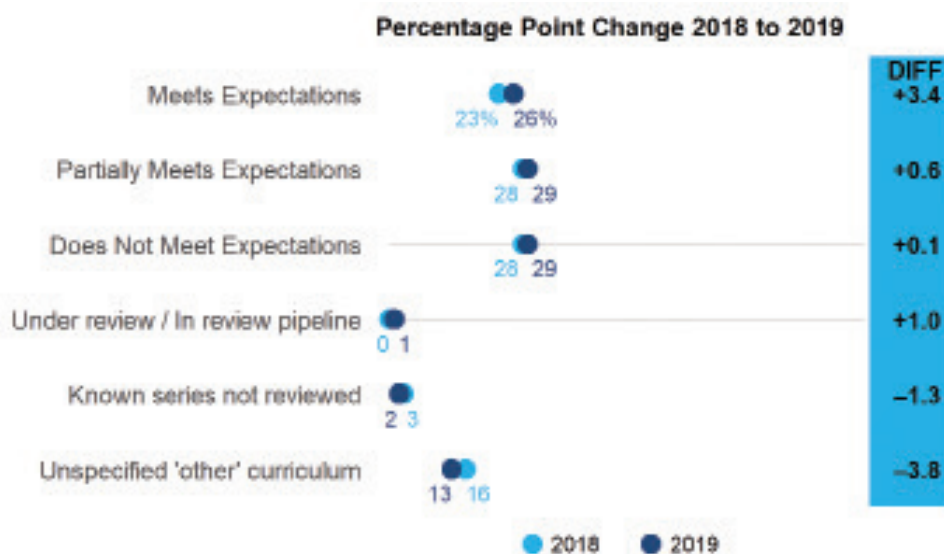
NOTES: The 2019 AIRS survey provides an improved understanding of the market with a listing of more than twice as many specified ELA programs and more than 40 percent more specified math programs than were presented on the 2018 survey. In addition, although both years provided a response option for "other" curriculum not listed, the 2019 survey also provided explicit response options for unspecified ELA leveled reader series, and for ELA and math, response categories for self-created curricula, school- or district-created curricula, and a declaration that no particular curriculum is used regularly. Table A presents curriculum response options on the 2018 and 2019 surveys.

III. Information about curriculum shapes the market:
newer materials are more likely to be aligned

As was also observed in our [2018 State of the Market](#) report, our data continues to show that newer materials are more likely to meet expectations for standards alignment (see Figure 7). The longer programs that meet expectations for alignment are in the field, the more likely they are to be used in the classroom.

Figure 7

Series Age by Materials Alignment

Meets Expectations for Alignment	3.5
Partially Meets Expectations for Alignment	4.2
Does Not Meet Expectations for Alignment	4.6

Mean Years in the Field
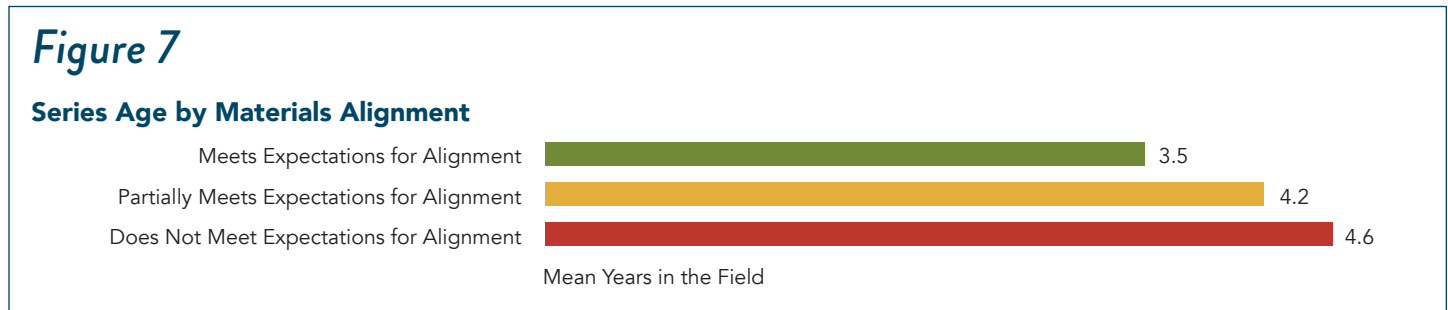
When thinking about the factors that affect market share for aligned materials, a reasonable assumption is that the number of years that materials have been on the market will lead to increased use. The longer the materials are on the market, the more adoption cycles will have occurred, the more familiarity teachers have with new products, and the more word-of-mouth recommendations might spread. We analyzed the data to see if the age of a material was associated with the percent market share for that material and found that there was a statistically significant positive relationship (see Appendix B, Table B1, Model 1).

In addition to time, our analysis suggests that as more independent information about the alignment and quality of materials has become available, districts and schools are demanding materials that meet these expectations. We examined the data to see if there was an association between how long an EdReports report has been available for a curricular program and the percentage of teachers who report using that program. The analysis focused on how long programs have been on the market (series age), how long EdReports reviews of these programs have been available (report age), and how series age and report age interact in the prediction of the percent market share of programs.

Aligned materials gain a 1 percent increase in teachers who report using these materials regularly. With more than three million teachers in public schools nationwide, a 1 percent increase constitutes an increase that translates into tens of thousands of teachers using aligned materials annually.

Our research suggests that there is an association between the length of time one of our reports has been available for an aligned program and the use of that aligned program in the classroom. This relationship becomes significant after a report for an aligned program has been published for a year. At that point, aligned materials gain a 1-percent increase in teachers who report using these materials regularly. With more than 3 million teachers in public schools nationwide, a 1-percent increase constitutes an increase that translates into tens of thousands of teachers using aligned materials annually. The effect of report age on percent market share holds even after controlling for the effect of the age of the series, with a significant interaction indicating that the effect for the age of the report increases with the age of the program. IV. A Better Understanding of the Materials Market.

Figure 8a-b

Plots illustrating the interaction of series age and report age for materials rated "meets expectations" for standards alignment

Data source: RAND 2018 American Teacher Panel

Data source: RAND 2019 American Teacher Panel
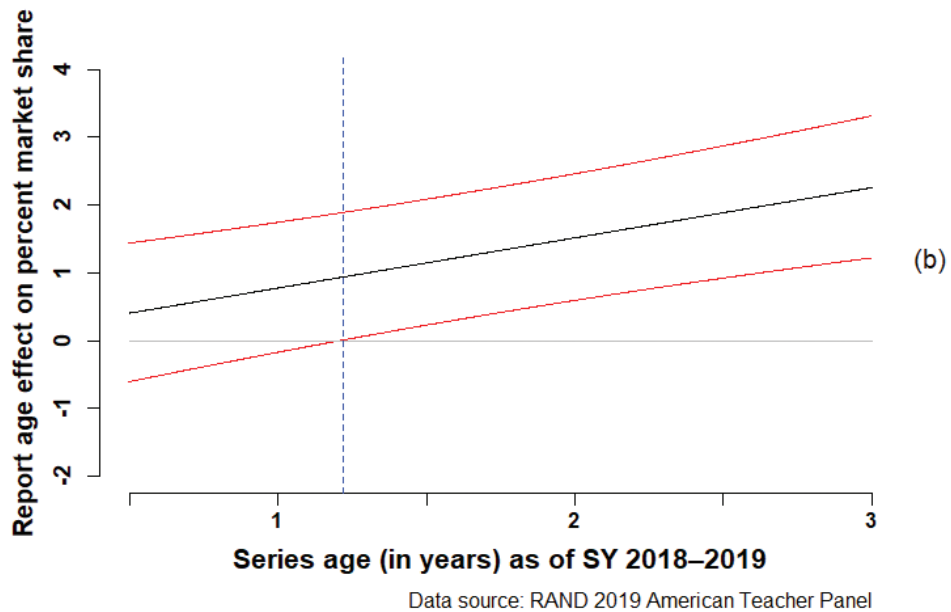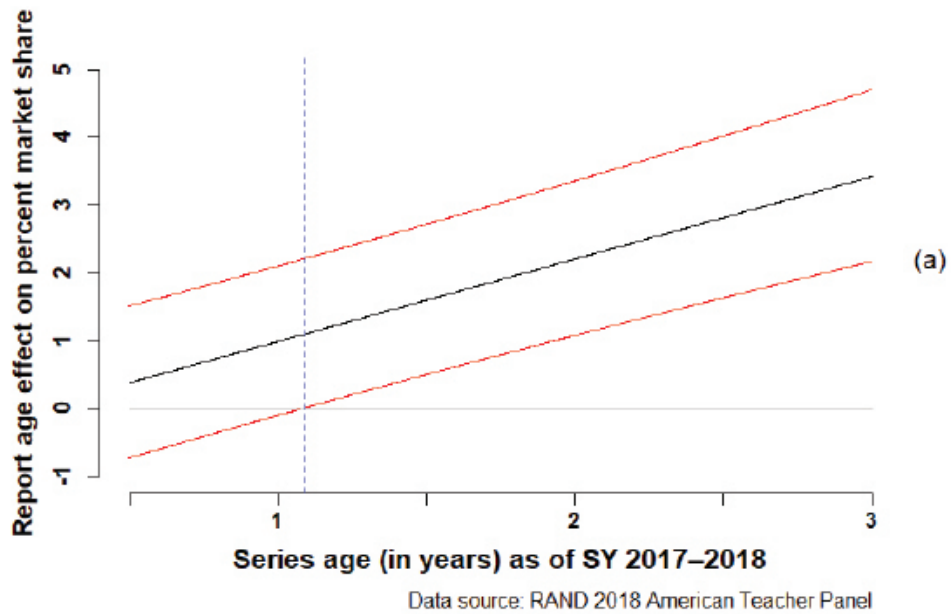
Notes: With red lines representing the 95 percent confidence interval, for 2019 we observe an estimated effect for report age of approximately 1-percent market share that is statistically different from zero at $p < .05$ for materials more than one year in age. The moderating effect of series age produces an increase in the estimated positive effect of report age, resulting in the estimated effect for report age to increase by approximately 0.7-percent market share for each additional year in age of the series The 2019 effect of report age and interaction effect between series age and report age replicate findings from the 2018 data.

Statistical model results are presented in Appendix B Table B1. Plots for materials rated "partially meets expectations" are presented in Figure B1a-b and plots for materials rated "do not meet expectations" are presented in Figure B2a-b.

IV. A better understanding of the materials market

In addition to learning more about the quality and availability of aligned instructional materials, our 2019 research illuminated more information about the different kinds of materials being used in classrooms. In 2018, we identified 38 percent of materials regularly used in English language arts classrooms as "other." However, there was much about this category that we did not know and hoped to investigate further. An investigation into the 2018 write-in responses from the American Educator panel survey showed that this category included teacher- and district-created materials, supplemental programs, and some yearlong core comprehensive programs.

The 2019 AIRS survey provided an expanded listing of programs and increased precision for response options. As a result, for ELA we find an 18-percent decrease from 2018's findings in the percentage of materials grouped in the unspecified "other" curriculum category.

New materials are better, but one in 10 ELA classrooms are using pre-2012 materials

While questions still persist, additional data has provided more information about what is being used regularly in classrooms. One finding is that even though new materials are more aligned, many schools still have older curriculum in place. For example, in English language arts, 9.2 percent of materials used regularly were published before 2012. These older materials were developed before the adoption of college and career-ready standards. EdReports has not reviewed these materials because they do not claim alignment to the standards that were created after the programs were published. With one in 10 classrooms using materials that are nearly a decade old, this means that millions of students across the country are missing out on almost a decade of innovations, progress, and new content.

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One reason that we know districts are using older materials is that they are at the end of their adoption cycle. Adoption cycles commonly range from five to eight years, which means some districts that last chose materials in 2012 or 2013 have not yet made new adoption decisions. While we hope to see the number of districts using pre-2012 materials decrease based on local spending cycles, the fact remains that far too many students do not have access to the content they need to prepare for college and careers.

Our research has yielded important data to help guide our work and how we work with states and districts; however, we know further investigation is vital as we continue to pursue a deeper understanding of the materials market, what teachers are using in the classrooms, and the factors that contribute to student access to aligned content.

Calls to Action

Adopting and implementing high-quality instructional materials is more possible now than ever before. Below are recommendations for states and districts to support smart selection practices and get great materials into the hands of students.

Be a critical consumer of instructional materials:

1. Know your options

Choosing programs based on sales pitches from publishers, or the bells and whistles that attract attention, can and should be a thing of the past. Now, more than ever, districts have easy access to free, independent information on the alignment, usability, and design of instructional materials. EdReports has reviewed more than 90 percent of the K-12 English language arts and mathematics market. Additionally, we have an increasing number of reviews of K-8 science materials and ELA foundational skills supplemental programs. Our report center offers a large catalog of options for districts to explore while considering new materials to select.

2. Compare multiple sources of information

Beyond EdReports reviews there are other resources available to learn more about instructional materials. State-curated sites such as Louisiana Believes and Massachusetts' CURATE offer reviews and rubrics that shed light on materials under consideration or in use. Comparing multiple sources of information ensures districts have a comprehensive, accurate view of the materials you are hoping to adopt.

3. Apply local priorities to your adoption process

While it is exciting to consider the number of aligned programs on the market, alignment to content standards provides only one component among many in understanding which materials may best support teachers and students. Districts need a structured process to examine the materials through a local lens: How are they designed? Will they support the needs of your student population? Do they address district priorities such as cultural relevance, technology integration, and considerations for non-native English speakers?

These considerations are critical, and there is no one better prepared to examine the evidence in EdReports and investigate the materials closely than the educators in your district. They have the closest connection to your students and the best perspective on your specific non-negotiables and nice-to-haves.

Invest in practices that will support use of high-quality materials:

1. Engage educators in the materials adoption process

To support the use of quality materials in the classroom, educators should be meaningfully involved in all curriculum selection processes. Including teachers from each applicable grade level on their materials adoption committee is a start, but districts should also involve instructional coaches, English language development teachers, special education teachers, and district administrators. A diversity of perspectives and expertise will help ensure that *all* students' needs are considered.

Educator engagement should not be confined to the educators on the materials adoption committee. Districts can also conduct surveys and focus groups, reach teachers and principals at their schools, and organize opportunities for educators to give feedback on potential programs. We have seen districts such as Fife Public Schools and Newport-Mesa Unified School District offer different models for how to involve educators as leaders and contributors in an adoption process.

2. Invest in comprehensive professional learning and strong implementation plans

Simply selecting quality instructional materials is not enough. To ensure that materials are actually used, districts must think beyond their selection decision to professional learning supports and a strong implementation plan. True impact in the classroom only comes when we support teachers to know why materials are quality and how to use them effectively.

Baltimore City Public Schools provided extensive, ongoing training to literacy coaches, principals, and teachers as they prepared to implement a new ELA curriculum. While the district still faced challenges in implementation, these kinds of preparations can be the difference between materials that support student learning and those that stay on the shelf.

As we move forward, we remain committed to continuing our research into the instructional materials market and ensuring educators have access to independent information and resources that support smart adoption practices. Our continued work with states and districts illustrates that even with existing challenges, with the right resources and approaches we can invest in quality content that will prepare students to thrive in college, careers, and beyond.

How these Analyses were Conducted

Analyses of materials available drew upon information on the EdReports.org website for Reports < https://www.edreports.org/reports>. Data for series reviewed by EdReports were based on all reports published between March 4, 2015 and December 17, 2019 for materials with a 2019 copyright or older. Each high school math report is counted as three reports, corresponding with a traditional or integrated three-course sequence. All other reports are counted as one report each, corresponding with the specific grade-level of the report. For these analyses, series age is calculated as 2019 minus copyright year.

Analyses of materials used by teachers drew upon data from the RAND Corporation (2019) American Instructional Resources Survey (AIRS). The AIRS was completed by the American Teacher Panel May 14, 2019 to June 18, 2019. Data included national estimates as well as state-level aggregates for the following 12 states: CA, DE, FL, LA, MA, MS, NE, NM, NY, RI, TN, and WI.

The AIRS survey permitted teachers to report on all series that they used regularly. Because estimates of use were not based on exclusive series use, sums across series exceeded 100%. For our calculation, percent of use for each series was rescaled to the proportion of the sum of all percentages. Thus, the percentages for the summary statistics presented in this report are scaled to sum to 100%.

Survey respondents were presented a list of series titles that corresponded with the grade level (K–5, 6–8, or 9–12) and content area (ELA or math) of their teaching assignment. Across all grade bands, a total of 59 unique ELA and 92 unique math series titles were presented, for which respondents indicated the materials they used regularly (once a week or more) during the 2018–2019 school year.

For materials to be coded as meets expectations or does not meet expectations, all relevant grade-level reports needed to receive that particular rating. Materials were coded as partially meets expectations if there was at least one relevant grade that received

a rating higher than does not meet expectations and at least one relevant grade received a rating less than meets expectations.

We employed a multivariate, multilevel analytic framework, where three outcome variables—constituting market share of materials in each of EdReports standards-alignment ratings—were analyzed in tandem, with random effects by state. All statistical models were fit using the R nlme package (Pinheiro, Bates, Deb Roy, & Sarkar, 2018; R Development Core Team, 2018)., Interaction plots were generated using R-based tools (Preacher, Curran, & Bauer, 2006).

We fit a sequence of models to systematically inspect the individual and combined effects associated with different predictors. To account for the structure of the data, we include content area and grade band as covariates in all models. The predictors of primary interest were curriculum series age, EdReports report age, and the series age by report age interaction, which were sequentially added, whereby,

- Model 1 adds series age;

- Model 2 comprises Model 1 plus report age;

- Model 3 comprises Model 2 plus the series age by report age interaction; and

- Model 4 comprises Model 3 plus covariates for publisher size, adoption state status, textbook expenditure per student, number of students, student minority percent, state poverty percent.

Appendix B Table 2 provides a description of the independent variables used in the statistical models. Although we believe we have assembled a robust set of covariates to account for extraneous sources of variation in market share, we recognize that there may be important factors that we have not accounted for. Future efforts will seek to expand and improve upon this list of model covariates in order to maximize on the efficiency of our models and precision of our estimates.

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Appendix A

Table A1

Curricula Reviewed by EdReports and Market Share by Standards-Alignment Rating, Grade Band, and Content Area

		ELA		Math	
		Reviewed Materials[a] %	Market Share[b] %	Reviewed Materials[a] %	Market Share[b] %
All Grades (K–12)	Meets expectations	41.6	15.7	30.6	26.4
	Partially meets expectations	38.9	31.5	27.7	29.0
	Does not meet expectations	19.5	10.8	41.7	28.5
Foundational Skills (K–2)	Meets expectations	0.0	0.0	-	-
	Partially meets expectations	60.0	14.1	-	-
	Does not meet expectations	40.0	0.2	-	-
Elementary (K–5)	Meets expectations	34.3	9.6	25.3	35.3
	Partially meets expectations	42.9	17.4	29.5	32.8
	Does not meet expectations	22.9	15.8	45.2	17.1
Middle (6–8)	Meets expectations	54.2	21.9	34.7	26.3
	Partially meets expectations	35.6	21.3	26.5	46.4
	Does not meet expectations	10.2	15.1	38.8	16.8
High (9–12)	Meets expectations	57.1	20.2	34.0	13.1
	Partially meets expectations	26.2	39.1	26.4	10.5
	Does not meet expectations	16.7	0.0	49.6	54.2

a   Percentage of all reports published as of December 2019 for materials with a 2019 copyright of older.

b   Percentage of materials regularly used according to data from the AIRS (RAND Corporation, 2019). For pooling across grade bands we calculated weighted averages based on student membership per grade band. According to the National Center for Education Statistics (https://nces.ed.gov/ccd/) student membership proportions by grade band were elementary (46%), middle (23%), and high (31%).

Figure A1.

Elementary ELA market share by EdReports standards-alignment rating and review

Category	Percent of Market
Core Meets Expectations	9.6
F5 Meets Expectations	0.0
Core Partially Meets Expectations	17.4
F5 Partially Meets Expectations	14.1
Core Does Not Meet Expectations	15.8
F5 Does Not Meet Expectations	0.2
Under Review/In Review Pipeline	14.9
Not Reviewed (2012 ed. or later)	0.4
Not Reviewed (pre-2012 ed.)	7.5
Other Curriculum	20.2

Percent of Market
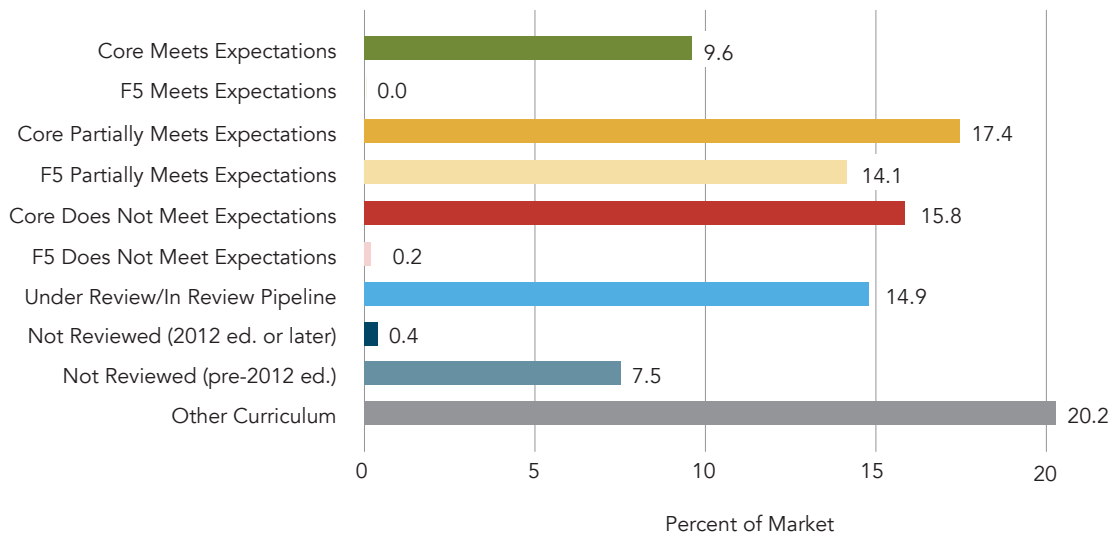
NOTES: Materials excluded from the calculations for Figure A1 were teacher/district-created materials and known supplemental programs not considered reviewable by EdReports. Excluded categories of non-reviewable materials constitute 31% of the total percent of elementary ELA materials teachers reported using regularly. Of this 31% of excluded materials, 79% comprised teacher/district-created materials and 29% comprised supplemental programs.

Figure A2.

Middle grades ELA market share by EdReports standards-alignment rating and review status

Category	Percent of Market
Meets Expectations	21.9
Partially Meets Expectations	21.3
Does Not Meet Expectations	15.1
Under Review/In Review Pipeline	13.3
Not Reviewed (2012 ed. or later)	0.3
Not Reviewed (pre-2012 ed.)	6.1
Other Curriculum	22.1

Percent of Market
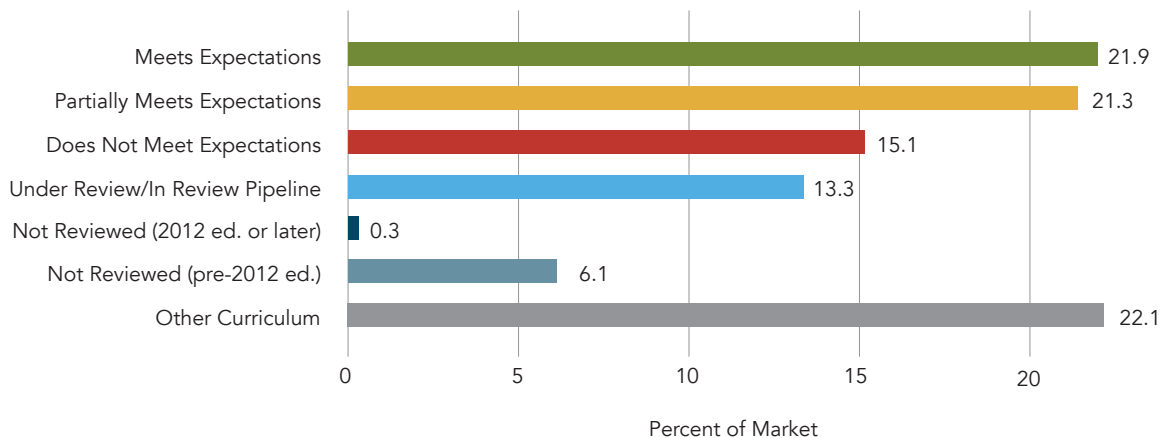
NOTES: Materials excluded from the calculations for Figure A2 were teacher/district-created materials and known supplemental programs not considered reviewable by EdReports. Excluded categories of non-reviewable materials constitute 45% of the total percent of middle grades ELA materials teachers reported using regularly. Of this 45% of excluded materials, 74% comprised teacher/district-created materials and 26% comprised supplemental programs.

Percentages are based on national estimates from the RAND Corporation (2019) American Instructional Resources Survey, administered to the American Teacher Panel nationally representative sample.

Figure A3.

High school ELA market share by EdReports standards-alignment rating and review status.

Category	Percent
Meets Expectations	20.2
Partially Meets Expectations	39.1
Does Not Meet Expectations	0.0
Under Review/In Review Pipeline	6.8
Not Reviewed (2012 ed. or later)	0.0
Not Reviewed (pre-2012 ed.)	14.0
Other Curriculum	19.8

Percent of Market

NOTES: Materials excluded from the calculations for Figure A3 were teacher/district-created materials and known supplemental programs not considered reviewable by EdReports. Excluded categories of non-reviewable materials constitute 58% of the total percent of high school ELA materials teachers reported using regularly. Of this 58% of excluded materials, 84% comprised teacher/district-created materials and 16% comprised supplemental programs.

Figure A4.

Elementary math market share by EdReports standards-alignment rating and review status.

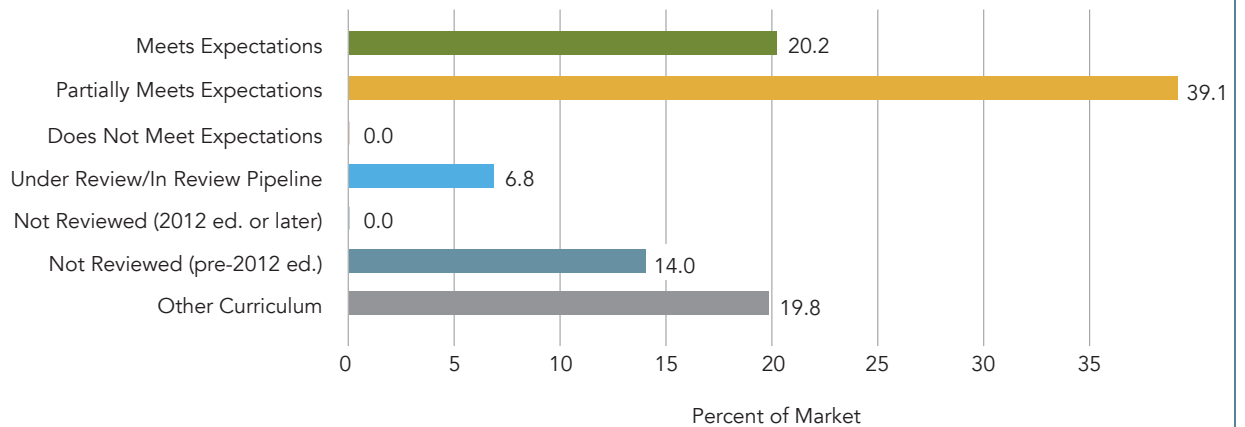| Category	Percent
Meets Expectations	35.3
Partially Meets Expectations	32.8
Does Not Meet Expectations	17.1
Under Review/In Review Pipeline	0.6
Not Reviewed (2012 ed. or later)	0.0
Not Reviewed (pre-2012 ed.)	3.7
Other Curriculum	10.5

Percent of Market

NOTES: Materials excluded from the calculations for Figure A4 were teacher/district-created materials and known supplemental programs not considered reviewable by EdReports. Excluded categories of non-reviewable materials constitute 18% of the total percent of elementary math materials teachers reported using regularly. Of this 18% of excluded materials, 99% comprised teacher/district-created materials and 1% comprised supplemental programs.

Percentages are based on national estimates from the RAND Corporation (2019) American Instructional Resources Survey, administered to the American Teacher Panel nationally representative sample.
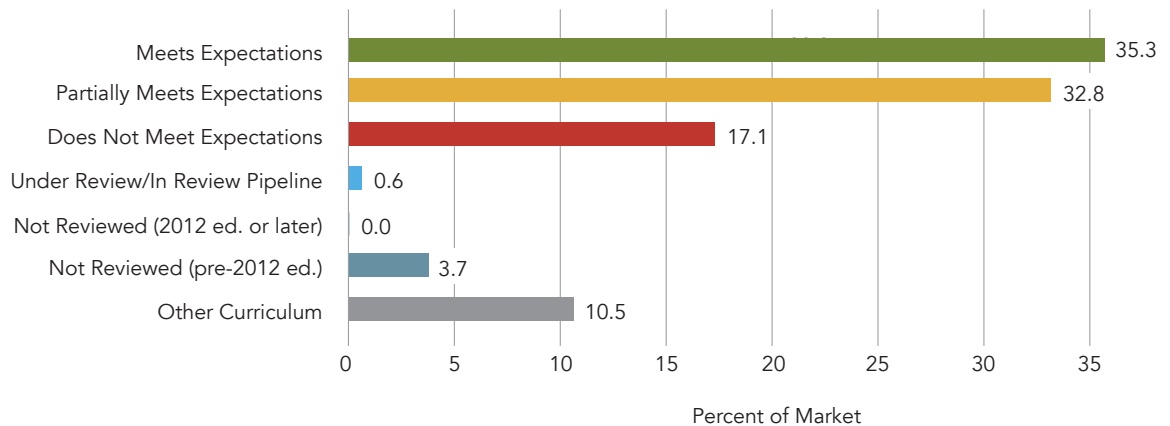
Figure A5.

Middle grades math market share by EdReports standards-alignment rating and review status.

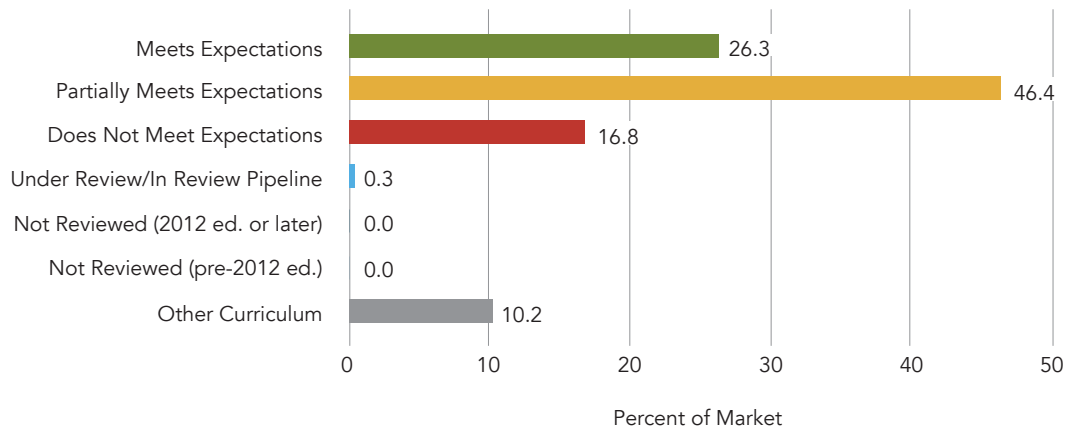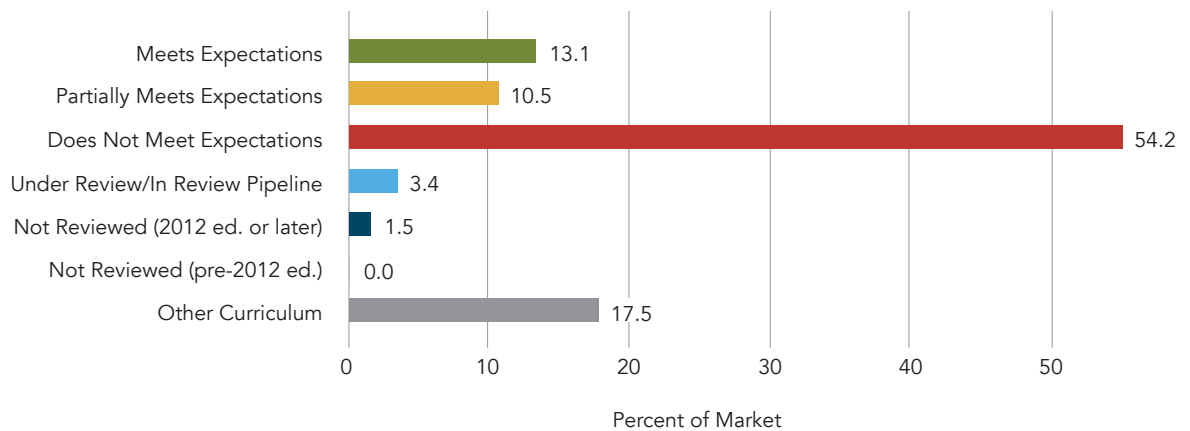| Category	Percent of Market
Meets Expectations	26.3
Partially Meets Expectations	46.4
Does Not Meet Expectations	16.8
Under Review/In Review Pipeline	0.3
Not Reviewed (2012 ed. or later)	0.0
Not Reviewed (pre-2012 ed.)	0.0
Other Curriculum	10.2

NOTES: Materials excluded from the calculations for this figure were teacher/district-created materials and known supplemental programs not considered reviewable by EdReports. Excluded categories of non-reviewable materials constitute 20% of the total percent of middle grades math materials teachers reported using regularly. Of this 20% of excluded materials, 100% comprised teacher/district-created materials.

Figure A6.

High school math market share by EdReports standards-alignment rating and review status

Category	Percent of Market
Meets Expectations	13.1
Partially Meets Expectations	10.5
Does Not Meet Expectations	54.2
Under Review/In Review Pipeline	3.4
Not Reviewed (2012 ed. or later)	1.5
Not Reviewed (pre-2012 ed.)	0.0
Other Curriculum	17.5

NOTES: Materials excluded from the calculations for this figure were teacher/district-created materials and known supplemental programs not considered reviewable by EdReports. Excluded categories of non-reviewable materials constitute 38% of the total percent of high school math materials teachers reported using regularly. Of this 38% of excluded materials, 100% comprised teacher/district-created materials.

Percentages are based on national estimates from the RAND Corporation (2019) American Instructional Resources Survey, administered to the American Teacher Panel nationally representative sample.

Table A2

Comparison of Curriculum Response Options on the RAND 2018 Measure to Learn and Improve and 2019 American Instructional Resources Survey

	Number of Response Options	
	2018	**2019**
ELA	-	-
Elementary series	17	39
Middle grades series	20	35
High school series	7	19
Math	-	-
Elementary series	22	34
Middle grades series	27	36
High school series	29	40
Unspecified materials	-	-
Leveled reader series	-	3[b]
Curricula I create myself	-	6[a]
Curricula my school or district created	-	6[a]
Other curricula not listed	6a	6[a]
N/A - I do not use a particular curriculum regularly	-	6[a]

Note: Science curriculum titles were presented on the 2019 survey but are excluded from analysis in the current report.

a   Response option presented once for each content-grade strata.

b   Response option presented once for each ELA grade band.

Appendix B

Table B1.

Statistical Model Results

	Model 1		Model 2		Model 3		Model 4	
	Estimate (*SE*)	*p*	Estimate (*SE*)	*p*	Estimate (*SE*)	*p*	Estimate (*SE*)	*p*
	Meets Expectations							
Curriculum series age[a]	1.294 (0.256)	< .001	0.241 (0.454	.596	0.543 (0.453)	.231	0.603 (0.457)	.187
EdReports report age[b]	-	-	1.334 (0.476))	.005	1.577 (0.473)	.001	1.517 (0.476)	.002
Curriculum series age[a] **× EdReports reports age**[b]	-	-	-	-	0.790 (0.185)	<.001	0.740 (0.187)	<.001
Math curriculum	2.579 (0.604)	< .001	2.492 (0.602	<.001	1.356 (0.650)	.037	1.617 (0.663)	.015
Middle grades market	−2.351 (0.760	<.001	−2.673 (0.764)	.001	−2.629 (0.753)	.001	−3.155 (0.860)	<.001
High school market	−4.104 (0.832)	.002	−3.891 (0.830)	<.001	−2.898 (0.851)	.001	−3.298 (0.887)	<.001
Publisher size[c]	-	-	-	-	-	-	0.065 (0.045)	.151
Mandated adoption state	-	-	-	-	-	-	0.169 (1.471)	.909
Advisory adoption state	-	-	-	-	-	-	1.966 (1.833)	.284
Textbook expenditure per students[d]	-	-	-	-	-	-	0.069 (0.027)	.012
Student membership[e]	-	-	-	-	-	-	−0.947 (0.566)	.095
Student minority percent[f]	-	-	-	-	-	-	−0.023 (0.030)	.444
State poverty percent[g]	-	-	-	-	-	-	0.279 (0.222)	.209
Constant	5.510 (0.864)	<.001	5.903 (0.874)	< .001	5.345 (0.873)	< .001	12.717 (5.94)2	.033

	Model 1		Model 2		Model 3		Model 4	
	Partially Meets Expectations							
Curriculum series age[a]	0.088 (0.188)	.641	–0.121 (0.189)	.523	–0.378 (0.218)	.083	–0.287 (0.212)	.177
EdReports report age[b]	-	-	1.241 (0.250)	< .001	1.491 (0.271)	< .001	0.591 (0.302)	.051
Curriculum series age[a] × EdReports reports age[b]	-	-	-	-	–0.275 (0.117)	.019	–0.290 (0.114)	.011
Math curriculum	–0.750 (0.688)	.276	–2.683 (0.778)	.001	–2.342 (0.789)	.003	–0.805 (0.809)	.320
Middle grades market	–0.062 (0.681)	.928	–0.298 (0.669)	.656	–0.222 (0.668)	.740	–0.309 (0.725)	.670
High school market	–0.709 (0.774)	.360	–0.030 (0.772)	.970	–0.109 (0.770)	.887	–0.175 (0.773)	.821
Publisher size[c]	-	-	-	-	-	-	0.178 (0.030)	< .001
Mandated adoption state	-	-	-	-	-	-	0.091 (1.185)	.939
Advisory adoption state	-	-	-	-	-	-	–1.181 (1.480)	.425
Textbook expenditure per students[d]	-	-	-	-	-	-	–0.025 (0.022)	.250
Student membership[e]	-	-	-	-	-	-	0.392 (0.457)	.391
Student minority percent[f]	-	-	-	-	-	-	0.073 (0.024)	.003
State poverty percent[g]	-	-	-	-	-	-	–0.126 (0.179)	.483
Constant	4.227 (0.611)	< .001	5.911 (0.694)	< .001	6.293 (0.711)	< .001	– 0.428 (4.824)	.929

	Model 1		Model 2		Model 3		Model 4	
	Does Not Meet Expectations							
Curriculum series age[a]	−0.029 (0.092)	.752	−0.192 (0.098)	.050	−0.226 (0.100)	.025	−0.382 (0.104)	< .001
EdReports report age[b]	-	-	0.767 (0.181)	< .001	0.930 (0.211)	< .001	0.610 (0.219)	.005
Curriculum series age[a] × EdReports reports age[b]	-	-	-	-	−0.093 (0.062)	.136	−0.070 (0.061)	.255
Math curriculum	−1.063 (0.609)	.081	−2.097 (0.646)	.001	−1.816 (0.672)	.007	0.032 (0.779)	.967
Middle grades market	0.104 (0.557)	.852	−0.148 (0.551)	.789	−0.208 (0.552)	.707	0.140 (0.610)	.819
High school market	2.268 (0.618)	< .001	2.684 (0.616)	< .001	2.466 (0.633)	< .001	1.951 (0.658)	.003
Publisher size[c]	-	-	-	-	-	-	0.115 (0.026)	< .001
Mandated adoption state	-	-	-	-	-	-	1.130 (1.026)	271
Advisory adoption state	-	-	-	-	-	-	−0.643 (1.288)	.618
Textbook expenditure per students[d]	-	-	-	-	-	-	−0.023 (0.019)	.222
Student membership[e]	-	-	-	-	-	-	0.230 (0.395)	.561
Student minority percent[f]	-	-	-	-	-	-	−−0.031 (0.021)	.136
State poverty percent[g]	-	-	-	-	-	-	0.024 (0.156)	.876
Constant	4.227 (0.611)	< .001	5.911 (0.694)	< .001	6.293 (0.711)	< .001	0.099 (4.215)	.981

Note: Data comprise 1,884 series by grade band market share estimates within 12 states.

a   The variable for curriculum series age was centered at copyright year 2016.

b   The variable for EdReports report age was centered at published date of January 31, 2017.

c   The variable for publisher size was centered at the sample median of 2.

d   The values for the textbook expenditure per student variable varied by state.

e   The values for the student membership variable varied by state grade band. Values were natural log transformed.

f   The values for the student minority percent variable varied by state grade band. Values for grade bands K–5, 6–8, and 9–12 were mean centered at 44.0, 42.1, and 41.4, respectively.

g   The values for the state poverty percent variable varied by state. Values were mean centered at 12.5.

Figure B1a-b

Plots illustrating the interaction of series age and report age for materials rated "partially meets expectations" for standards alignment.
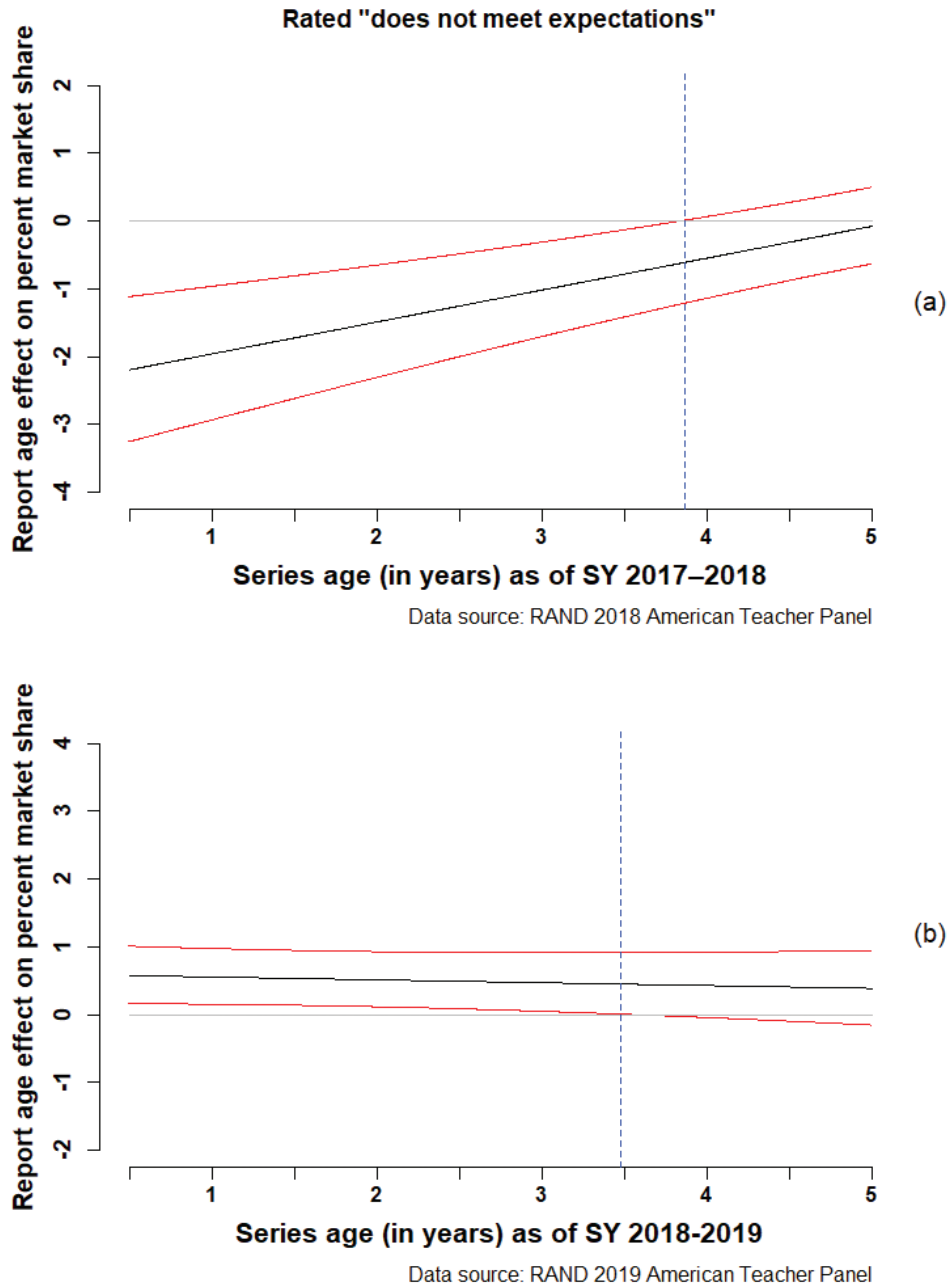

Rated "partially meets expectations"

Data source: RAND 2018 American Teacher Panel

Data source: RAND 2019 American Teacher Panel
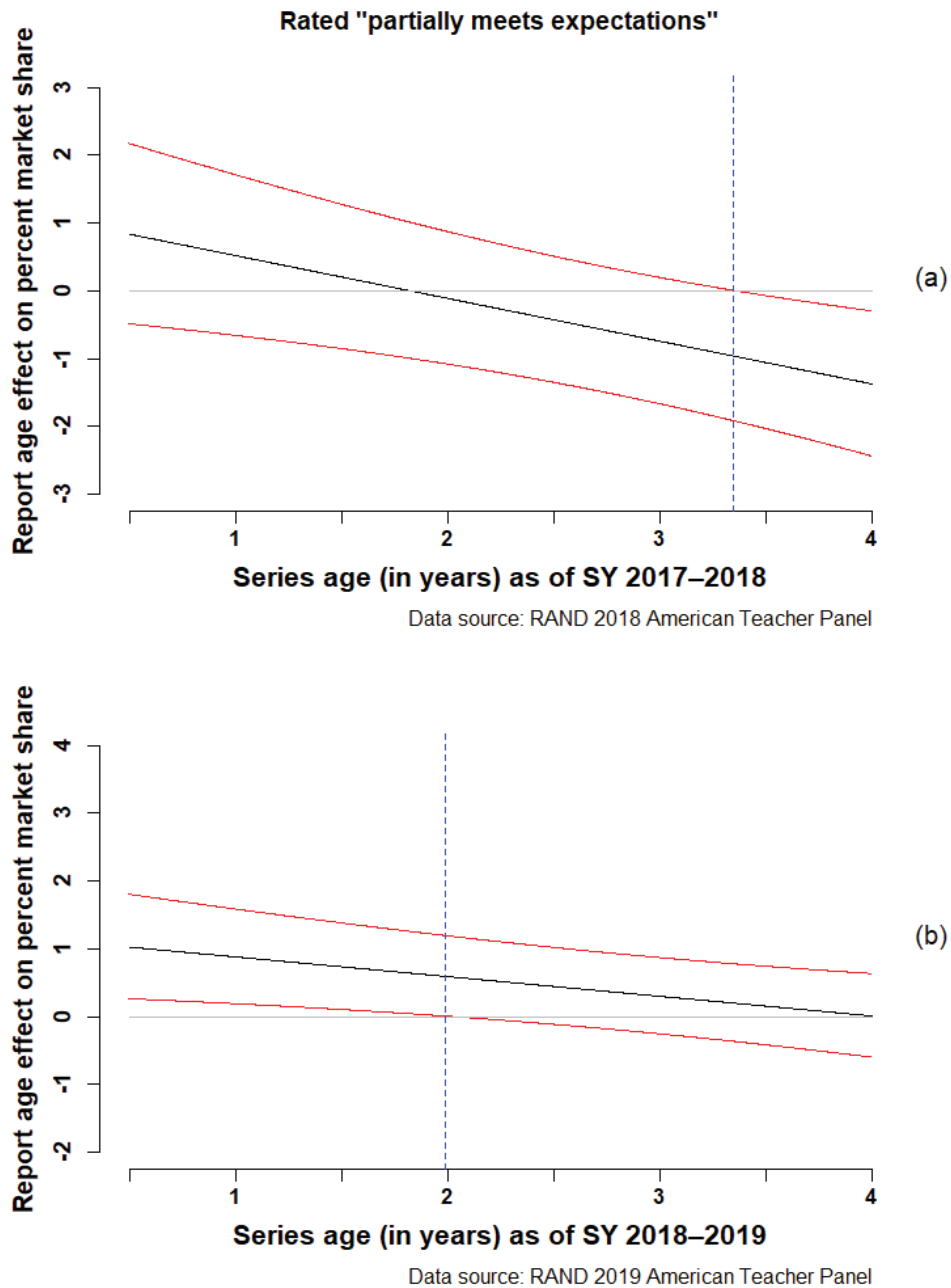
NOTES: Using a p < .05 level of significance, for 2019 we observe an estimated effect for report age of approximately 0.6% market share for materials less than two years in age. The moderating effect of series age produces an increase in the estimated effect of report age, resulting in the estimated effect for report age to increase in magnitude by approximately 0.3% market share for a series one year or newer. Although the region of significance varied between **years,** the relationship between series age and report age on predicting percent market share for 2019 replicate findings from the 2018 data.

Figure B2a-b

Plots illustrating the interaction of series age and report age for materials rated "does not meet expectations" for standards alignment.

Data source: RAND 2018 American Teacher Panel

Data source: RAND 2019 American Teacher Panel

NOTES: Using a p < .05 level of significance, for 2019 we observe an estimated effect for report age of approximately 0.5% market share for materials three years in age. No moderating effect of series age was detected, with a non-significant point estimate of –0.07% market share for each year in age of the series. The 2019 results do not replicate findings from the 2018 data.

Table B2.

Description of Independent Variables in Statistical Models

Independent Variable	Description
Curriculum series age	**Age of series,** calculated as 2020 minus the copyright year and centered at copyright year 2016.
EdReports report age	Age of report for series, calculated at January 31, 2020 minus date of published report in year units, centered at January 31, 2017. Given the data pertain to school year 2018–2019, the zero point for report age can be interpreted as a report that was published 1.5 Years prior to the start of the pertaining school year.
Math curriculum	Indicator for math content area: 0 (ela), 1 (*math*)
Middle grades market	Indicator for middle grades grade band: 0 (*elementary*), 1 (*middle grades*)
High school market	Indicator for high school grade band: 0 (*elementary*), 1 (*high school*)
Publisher size	The number of series titles per publisher, centered at the sample median of 2.
Mandated adoption state	Indicator for mandated adoption state list: 0 (*non-adoption*), 1 (*mandated adoption*)
Advisory adoption state	Indicator for advisory adoption state list: 0 (*non-adoption*), 1 (*advisory adoption*)
Textbook expenditure per students	Textbook expenditure per student by state in dollars, based on a 2014–2016 three-year average (NCES). Missing values for Illinois were mean imputed at 54.6.
Student membership	Number of students per state by grade band for school year 2016–2017 (NCES). Values were natural log transformed.
Percent student minority	Percent of minority students per state by grade band for school year 2016–2017 (NCES). Values for grade bands K–5, 6–8, and 9–12 were mean centered at 44.0, 42.1, And 41.4, respectively.
Percent poverty	State percent below poverty based on a 2015–2017 three-year average (U.S. Census Bureau).

Note: NCES = Data source is National Center for Education Statistics <https://nces.ed.gov/ccd/>. U.S. Census Bureau = Data sources is United States Census Bureau <https://www.census.gov/library/publications/2018/demo/p60-263.html>