

State of the Market 2020

The Use of Aligned Materials



INTRODUCTION

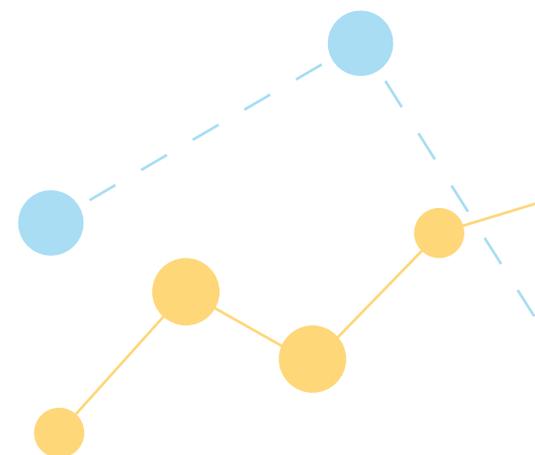
In 2020, we experienced a year unlike any other. The COVID-19 pandemic impacted families, schools, and teachers in innumerable ways. Every district had to adapt in order to reach all students, provide safe learning spaces, and continue support services. Finding new ways to select and use instructional materials throughout the year became a focal point as districts transitioned to remote and hybrid learning.

It will be a while until we understand the full effect school closures have had on students and teachers and what that means for curriculum in classrooms. Will districts make specific choices to address learning loss? Will digital products continue to be used at high rates even after students return to the classroom? Will school districts adopt and implement coherent instructional materials and support teachers to use them well? We will be analyzing and monitoring these questions and more throughout 2021 and beyond.

Despite the very real challenges of the past year, one thing remains clear: many educators remain committed to ensuring all students have access to high-quality materials. Because of the critical role materials play in accelerating student learning and closing gaps, it is vital for all stakeholders to have a better understanding of the materials market.

Our annual State of the Instructional Materials Market report aims to provide insight into how the market is changing. Specifically, the report focuses on the availability of programs aligned to college and career-ready standards and how regularly these aligned materials are being used in classrooms to influence instruction and prepare students for higher education and future professions.

This study draws upon data from EdReports reviews, copyright dates, and data from the RAND Corporation American Instructional Resources Survey (AIRS) on English language arts (ELA) and math curriculum use during the 2018-2019 and 2019-2020 school year.



KEY FINDINGS

1. Aligned instructional materials are increasingly available.

EdReports has reviewed **approximately 90 percent** of the known K-12 mathematics and ELA materials market.¹

- Of the mathematics materials EdReports has reviewed, 41 percent meet expectations for standards alignment, 27 percent partially meet expectations for alignment, and 32 percent do not meet expectations for alignment.
- Of the ELA materials EdReports has reviewed, 52 percent meet expectations for standards alignment, 32 percent partially meet expectations for alignment, and 16 percent do not meet expectations for alignment.

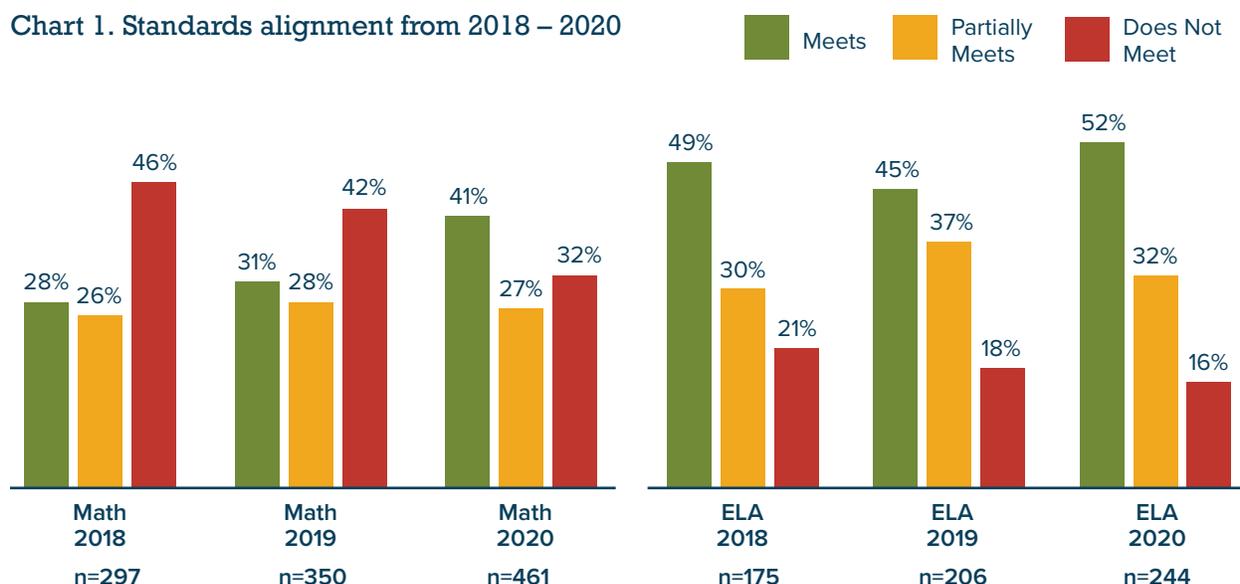
Based on this analysis, there are dozens of programs for districts to choose from that are both aligned to college and career standards and potentially address specific local priorities.

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	314	43.3	218	30.0	194	26.7	726	100
ELA Core	127	52.0	77	31.6	40	16.4	244	100
K-5	60	40.0	60	40.0	30	20.0	150	100
6-8	39	56.5	21	30.4	9	13.0	69	100
9-12	28	60.9	11	23.9	7	15.2	46	100
ELA Foundational Skills	0	0.0	15	71.4	6	28.6	21	100
Math	187	40.6	126	27.3	148	32.1	461	100
K-5	71	35.5	64	32.0	65	32.5	200	100
6-8	59	45.0	31	23.7	41	31.3	131	100
9-12	57	43.8	31	23.8	42	32.3	130	100

1. We define the “known market” as foundational skills ELA programs and comprehensive, yearlong ELA and math programs in circulation for which we have data. This excludes materials that are created directly by teachers or the school or district in which they work, supplemental materials that do not comprise a comprehensive yearlong scope and sequence, and pre-2012 edition curricula. Excluding known supplemental and created materials, 80 percent of all ELA materials and 87 percent of all math materials used in classrooms qualify as the known market.

Chart 1. Standards alignment from 2018 – 2020



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.

2. 2020 saw significant gains in the regular use of standards-aligned materials.

A promising trend over the past year is the increase in teachers using aligned materials. Several analyses were conducted around the frequency of use.

In 2019, **30 percent** of mathematics teachers used at least one aligned curriculum. That number grew to **40 percent** in 2020. The increase is similar for English language arts teachers. From 2019 to 2020, an **11-percentage-point increase** in teachers using aligned ELA programs occurred.

Table 2: Teacher's use of standards-aligned materials at least once a week

	2019		2020	
	ELA	Math	ELA	Math
At least one aligned curriculum	14.8%	30.2%	25.8%	40.1%
At least one partially aligned curriculum	22.7%	26.9%	21.5%	19.1%
Nonaligned curricula	12.9%	19.9%	13.2%	18.6%
Unrated materials	49.4%	22.7%	39.5%	22.2%
Created by the classroom teacher	0.2%	0.4%	0.0%	0.0%

Figure 1. Percentage change from 2019 to 2020 in K-12 teacher use of ELA instructional materials by standards alignment rating

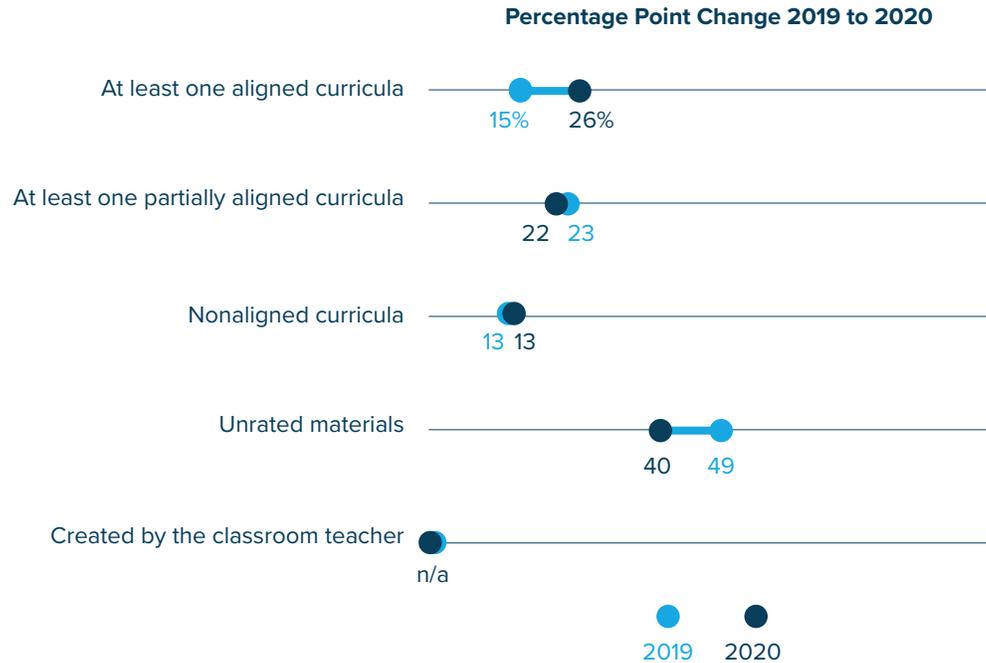
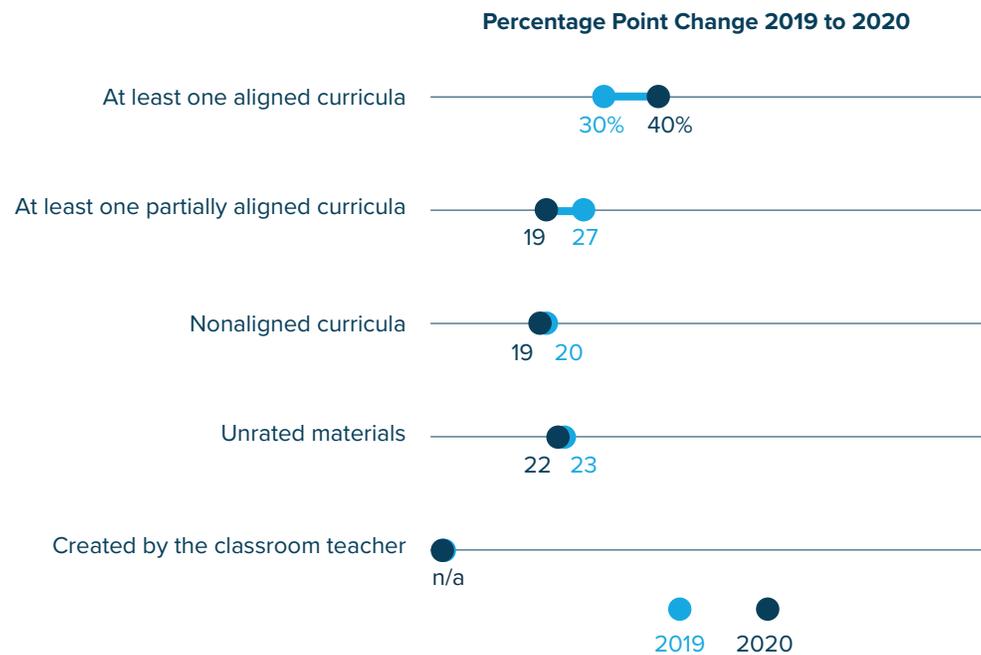


Figure 2. Percentage change from 2019 to 2020 in K-12 teacher use of math instructional materials by standards alignment rating



Teacher's use of standards-aligned materials at least 50 percent of the time

Once-a-week use for instructional materials is a low bar. But the data show not just an uptick in weekly use, but teachers using high-quality ELA and math materials at least 50 percent of the time, especially in math.

Table 3: Teacher's use of standards-aligned materials at least 50 percent of instructional time

	2019		2020	
	ELA	Math	ELA	Math
At least one aligned curriculum	10.0%	25.2%	14.0%	31.7%
At least one partially aligned curriculum	15.2%	26.9%	13.9%	17.3%
Nonaligned curricula	7.9%	14.4%	9.5%	14.4%
Unrated materials	49.4%	25.2%	50.0%	32.6%
Created by the classroom teacher	17.4%	8.3%	12.6%	4.1%

Note. These statistics are based on filtering the sample to only those participants who reported using a given program for 50% or more of the instructional time. For 2019, this comprised 65.6% of the ELA national sample and 72.6% of the math national sample. For 2020, this comprised 79.2% of the ELA national sample and 80.6% of the math national sample.

Figure 3. Percentage change from 2019 to 2020 in K-12 teacher use of ELA instructional materials for 50 percent or more of the instructional time by standards alignment rating

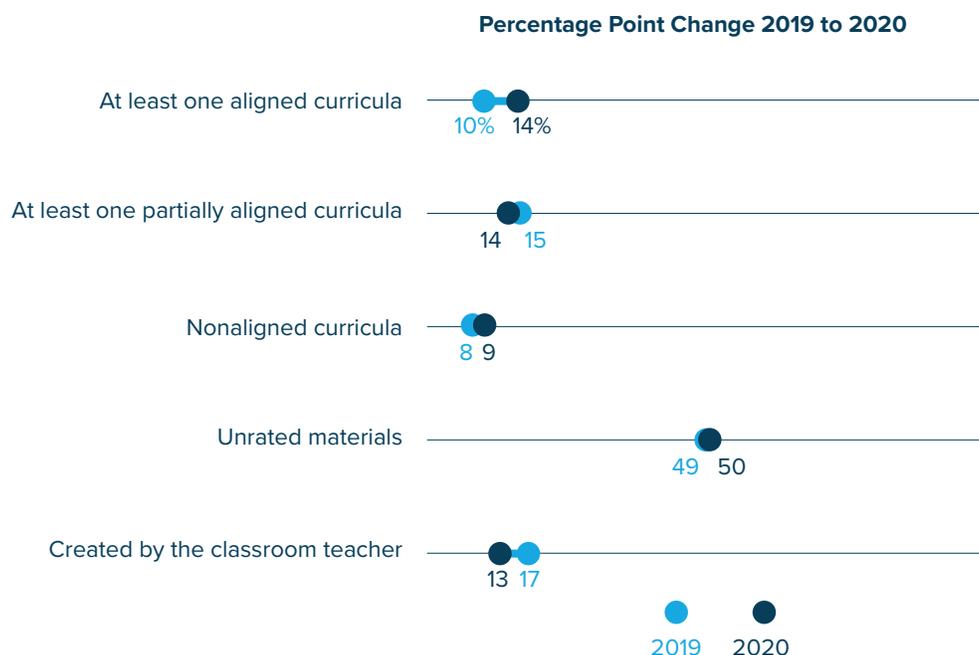
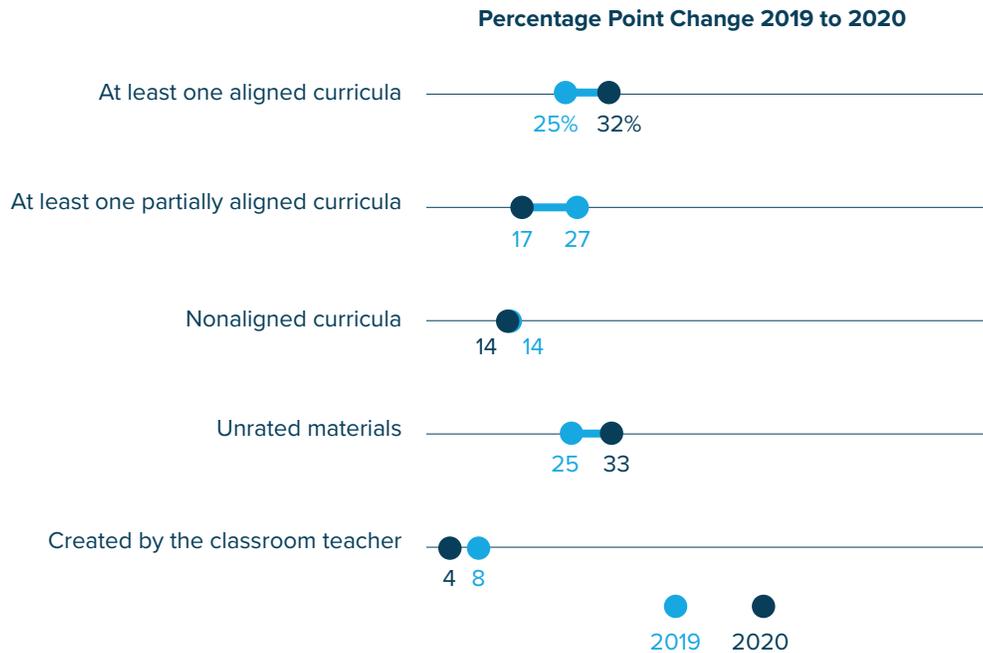


Figure 4. Percentage change from 2019 to 2020 in K-12 teacher use of math instructional materials for 50 percent or more of the instructional time by standards alignment rating



Despite improvement in the proportion of students receiving instruction from standards-aligned materials for at least half the week—14 percent of aligned ELA materials and 32 percent of aligned mathematics materials—more needs to be done to ensure college and career-readiness. Too many students are still without access to the content they need to prepare for their futures.

3. Along with gains in use of aligned instructional materials, there is a corresponding decrease of teachers using self-created materials.

On average, teachers spend up to 12 hours per week searching for and creating instructional resources (free and paid).² This is time that they could instead use adapting and implementing the materials as needed for their students. A decreasing number of teachers reported creating their own materials in 2020. For materials that are used for 50 percent or more of the instructional time, there was a 5 percentage point decrease in the use of materials created by the classroom teacher in English language arts and a 4 percentage point decrease in mathematics.

2. Goldberg, M. (2016). "Classroom Trends: Teachers as Buyers of Instructional Materials and Users of Technology." K-12 Market Advisors. Retrieved from: <https://mdreducation.com/reports/classroom-trends-teachers-buyers-instructional-materials-users-technology/>

Table 4: Teacher-created materials used for at least 50% of instructional time

	2019		2020	
	ELA	Math	ELA	Math
Created by the classroom teacher	17.4%	8.3%	12.6%	4.1%

[Research](#) demonstrates that when teachers do not have access to the aligned content that they deserve, they search for it online or create it themselves, leading to inconsistent quality that impacts low-income students and students of color the most.

A [2019 Fordham Institute study](#) analyzed lessons and supplements on several of the most popular online sites that educators often turn to in the absence of high-quality, aligned programs. The study found that unvetted online materials lack “clarity and instructional guidance for teachers...and many resources fail to align to the academic standards to which they claim alignment” and that 86 percent of “the materials do a very poor job of offering teachers support for teaching diverse learners.”³

According to TNTP’s research in the [Opportunity Myth](#), the percentage of on-grade-level assignments students encounter is higher when teachers use a district-provided curriculum rather than resources selected from unvetted resources online or those that are self-created.⁴

We know teachers are often asked to do a challenging job without the tools they need for success. Districts and states have a responsibility to ensure not only that teachers are supported with strong aligned materials but also with the professional learning and supports to implement those materials well. Fewer teachers resorting to unvetted resources or creating their own materials is an indication that more students may have access to the content that can truly prepare them for college and careers.

Districts and states have a responsibility to ensure not only that teachers are supported with strong aligned materials but also with the professional learning and supports to implement those materials well.

3. Polikoff, Morgan with Jennifer Dean. “The Supplemental-Curriculum Bazaar: Is What’s Online Any Good?” Washington, DC: Thomas B. Fordham Institute (December 2019). Retrieved from: <https://fordhaminstitute.org/national/research/supplemental-curriculum-bazaar>
 4. TNTP. (2018). “The Opportunity Myth.” Retrieved from: <https://opportunitymyth.tntp.org/>

Why are teachers not using high-quality materials even when their schools and districts provide them?

The materials that are chosen matter. Research shows that students learn primarily through their interactions with teachers and content, and that standards-aligned instructional materials influence classroom practice and the instruction students receive.

Each year, an increasing number of aligned instructional materials are available for districts to select. However, even with the availability of good-quality programs, there are still challenges with use in classrooms. Discrepancies between what districts adopt and what teachers actually use in the classroom can happen for a variety of reasons.

1. Teachers' perceptions of what makes instructional materials engaging, appropriately challenging, and usable vary. A [2021 study by the RAND Corporation](#) found that teachers do not regard themselves as implementers of curricula but as curators, modifiers, or creators of instructional materials.⁵ As such, the extent to which teachers use standards-aligned materials has a lot to do with personal preference, which can lead to inequities in the classroom. For example, “the prevalence of remediation-based modifications was higher among teachers in schools with higher proportions of students eligible to receive free or reduced-price lunch, Black students, and Hispanic students, suggesting that teachers might perceive these groups of students as more likely to need or benefit from remediation-type strategies.” The [Opportunity Myth](#) found that these perceptions lead to students of color and those from low-income backgrounds to be less likely than white and higher-income students to be in classrooms with grade-appropriate assignments. Furthermore, assignments teachers select or create tend to be lower quality than what the district or state provided.⁶

2. Teachers are not engaged in how materials are being selected. The process by which instructional materials are selected can have a direct impact on their use in the classroom. Often, teachers are not involved or consulted about potential new programs and instead have these materials simply delivered to them after the fact. Districts that see the most success in the use of aligned, high-quality materials give teachers a real voice in choosing a new curriculum. Leaders engage educators on the adoption teams as advocates for and trainers on the new resources. Clear and consistent communication is also conveyed to all teachers, whether they are directly involved in the adoption or not, about why the materials were selected, how the materials would support student learning, what work is required in order to implement them well, and what support will be provided.

3. Teachers are not supported with high-quality sustained professional development. Materials are only as good as the professional learning provided to implement them. A 2019 report by the [Center for Education Policy Research at Harvard](#) found that teachers in their study received anywhere from one to three days of training total before the implementation of new instructional materials.⁷ Practices like this lead to brand-new aligned materials sitting unused in closets across the country. Instead, districts should consider instituting long-term, comprehensive professional learning on both the program components and pedagogical strategies for teaching the materials.

Planning ahead, empowering educators, engaging stakeholders, and connecting [strong professional learning throughout the adoption process](#) can be the difference between materials sitting on a shelf or becoming one of the most crucial tools educators have to improve student learning. True impact in the classroom comes only when we support teachers to know why materials are good quality and how to use them effectively.

5. Wang, Elaine Lin, Andrea Prado Tuma, Sy Doan, Daniella Henry, Rebecca Ann Lawrence, Ashley Woo, and Julia H. Kaufman. “Teachers’ Perceptions of What Makes Instructional Materials Engaging, Appropriately Challenging, and Usable: A Survey and Interview Study.” Creative Commons Attribution 4.0 International Public License, 2021. Retrieved from: https://www.rand.org/pubs/research_reports/RRA134-2.html

6. TNTP. (2018). “The Opportunity Myth.” Retrieved from: <https://opportunitymyth.tntp.org/>

7. Blazar, D., Heller, B., Kane, T., Polikoff, M., Staiger, D., Carrell, S.,...& Kurlaender, M. (2019). “Learning by the Book: Comparing math achievement growth by textbook in six Common Core states.” Research Report. Cambridge, MA: Center for Education Policy Research, Harvard University. Retrieved from: https://cepr.harvard.edu/files/cepr/files/cepr-curriculum-report_learning-by-the-book.pdf

RECOMMENDATIONS

Access to standards-aligned instructional materials will play a critical role in accelerating learning and addressing gaps through and after the COVID-19 pandemic. We offer the following recommendations to support states and districts to identify and leverage high-quality instructional materials to support students and teachers.

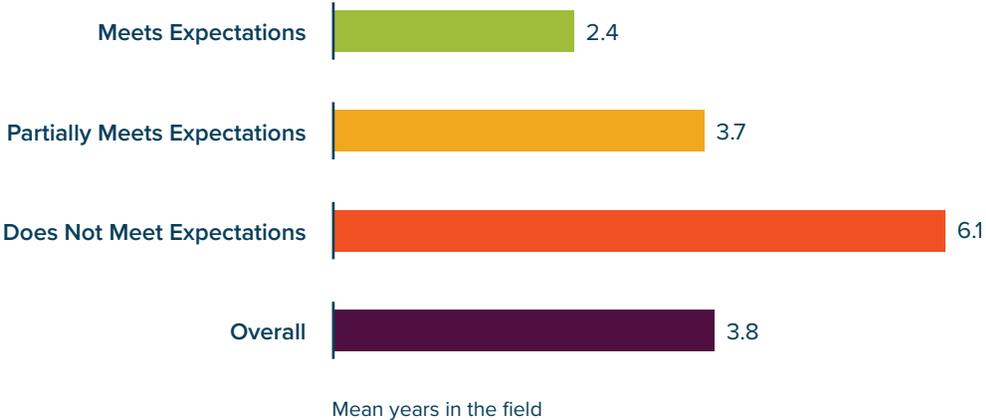
1. Invest in high-quality aligned instructional materials.

We are witnessing in real time the critical need for coherent, standards-aligned curricula that support students, teachers, and parents to know what content will be taught all year. Digital specifications, and now the ability to use materials remotely, have never been more important. There is also a growing demand and need for curriculum to better support the needs of different students, especially as schools reopen.

The data continues to demonstrate 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. High-quality options are abundantly available and, if selected, will have an impact on teaching and learning in school districts for many years to come.

High-quality options are abundantly available and, if selected, will have an impact on teaching and learning in school districts for many years to come.

Chart 2: Age of materials by standards alignment rating



2. Prioritize content.

Questions about technology get at the *how* and *where* of instruction, but what is taught remains paramount. Research shows that students learn primarily through their interactions with teachers and content and that high-quality curriculum influences classroom practice and ultimately student outcomes.

Technology is an important factor in supporting teachers and students during and after the pandemic. And it can be tempting to consider a product based on all the things it can do online. But if those attributes do not reflect the specific needs of students, or exceed the technological capabilities of a school or district, then they may not matter. Ultimately, the quality of the content is what will make a difference for student outcomes.

3. Leverage high-quality curriculum to accelerate learning.

Making sure all students and families have access to grade-level appropriate, engaging materials, instruction, and support is one important way we can prevent opportunity gaps from growing. When students have a foundation of high-quality content, teachers can then focus on accelerating learning instead of falling back on remediation tactics that research clearly shows do not work.

Addressing unfinished learning begins with understanding the demands of grade-level materials and content. Districts should begin by investing in professional learning so that educators are supported to study the standards alongside yearlong scopes and sequences. This approach allows educators to better understand what standards and topics will be covered when, how students will apply their knowledge of the standards, and how they will show that knowledge. This will require looking closely at the standards, the topics, and the tasks within a unit and throughout the year.

Educators should prioritize accelerating students' learning by ensuring their exposure to grade-appropriate content—so that every student can get back to grade level. Results may not be evident in a single year, but without the goal and a strategy for it, it will not happen at all.

4. Anchor professional learning in high-quality instructional materials.

The body of research and data on the impact of high-quality instructional materials is clear: curriculum choices matter. But how teachers use curriculum matters even more. And while our data show an increase of teachers regularly using aligned materials, more than 70 percent of classrooms are still not being exposed to quality content on a regular basis.

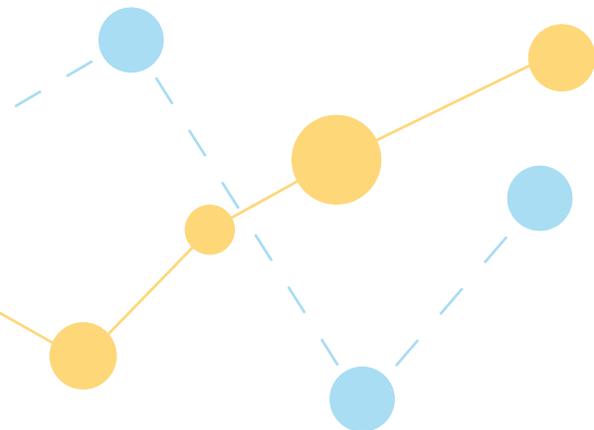
It is imperative that districts tailor professional learning to the curriculum so teachers are prepared to deliver the content regardless of the learning environment.

While we know standards-aligned curriculum and professional development both can contribute to teacher and student success, numerous studies show that they have a greater effect together than alone. A recent [meta-analysis](#) by Heather Hill and her colleagues looking at 95 research studies on STEM programs found that implementing curriculum with professional development—specifically with support around learning how to use materials and improving teachers content knowledge and knowledge of student learning—led to stronger student outcomes.⁸

Implementation can be complicated under normal circumstances, but the ambiguity of what school will look like in the foreseeable future compounds the challenge. That’s why it is imperative that districts tailor professional learning to the curriculum so teachers are prepared to deliver the content regardless of the learning environment.

CONCLUSION

Instructional materials matter for student success. They mattered before the COVID-19 health crisis, and they will matter even more as schools begin to understand the impact of closures on student learning. The analyses here demonstrate significant progress made to improve instructional materials, and highlight the distance left to ensure all students have the content they need to prepare for their future.



8. Lynch, K., Hill, H. C., Gonzalez, K. E., & Pollard, C. (2019). “Strengthening the Research Base that Informs STEM Instructional Improvement Efforts: A Meta Analysis. Providence, RI: Educational Evaluation and Policy Analysis.” Retrieved by: <https://www.annenberginstitute.org/publications/strengthening-research-base-informs-stem-instructional-improvement-efforts-meta>

METHODOLOGY

Analyses of materials available drew upon information on the EdReports.org website for Reports (www.edreports.org/reports). Data for series reviewed by EdReports were based on all reports published between March 4, 2015, and December 31, 2020, for 2020 edition or older materials. 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 2020 minus edition year.

Analyses of materials used drew upon micro-level data from the RAND Corporation American Instructional Resources Survey (AIRS) for years 2019 and 2020, completed by the American Teacher Panel in the spring of each year.^{9,10} Technical documentation is available for the [AIRS 2019](#) and [AIRS 2020](#).

Two methods for calculating the percentage of teachers that use standards-aligned materials determined by EdReports' ratings are presented. The first method based estimates on the highest-rated curriculum teachers reported to use regularly (at least once a week). The second method based estimates on the highest-rated curriculum teachers reported to use for 50 percent or more of their instructional time. The categories of materials reported (at least one aligned curriculum, at least one partially aligned curriculum, nonaligned curricula, unrated materials, created by the classroom teacher) are rank ordered, whereby teachers were designated into a lower category only if they do not meet criteria to be designated at a higher-order category.

9. RAND American Educator Panels, American Teacher Panel, "American Instructional Resources Survey." RAND2019_05may_AIR0519T, RAND Corporation, Santa Monica, CA, May 05, 2019.

10. RAND American Educator Panels, American Teacher Panel, "American Instructional Resources Survey." RAND2020_05MAY_AIR0520T, RAND Corporation, Santa Monica, CA, May 05, 2020.

ACKNOWLEDGMENTS

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We would also like to thank the hundreds of EdReports educator reviewers who produce comprehensive reports of instructional materials on behalf of teachers and students across the country. It is through their dedication and hard work that the education field has access to credible, evidence-based information to equip teachers with excellent materials nationwide.

About the Project Lead

Mark LaVenía is a Data Strategist at EdReports and a Strategic Data Project Fellow alumnus through the Center for Education Policy Research at Harvard University. Prior to joining EdReports, Mark was a methodologist at the Learning Systems Institute at Florida State University, where his responsibilities consisted of executing experimental research designs, instrument development, statistical analysis, and report writing. His interests in education research and data analysis stem from his early-career experience as an elementary school teacher, serving as a special education teacher and site-based literacy coach, and graduate training as an Institute of Education Sciences Predoctoral Interdisciplinary Research Training Fellow through Florida State University's Florida Center for Reading Research. Mark earned a Ph.D. in Educational Leadership and Policy from Florida State University.

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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