Curricula of Many Sources:

Educational Resources in U.S. K–12 Education, 2023

Julia E. Seaman and Jeff Seaman

Bay View Analytics®

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Contents

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ACKNOWLEDGMENTS

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EXECUTIVE SUMMARY

This is the 4th report in a series tracking curricula discovery, selection, and adoption processes in U.S. K-12. This series has followed the direct impact of the global COVID-19 pandemic on classroom materials, tracking the rise of digital learning and the subsequent return to the classroom.

This survey was conducted in April 2023, with a total of 1,205 teachers and 487 administrators. The respondents come from all 50 states.

The key takeaways from this year's survey are:

- While over 90% of teachers only teach fully in-person classes, the majority are incorporating digital tools and materials in their classrooms, such as student devices, online grading, and digital attendance tracking.
- A growing number of teachers are using digital textbooks, with up to 77% offering the required textbook in a digital format, compared to 68% last year.
- Teachers combine multiple sources of materials to make their curricula; self-made materials (as compared to commercial materials) remain the most common source for non-textbook student materials used in classrooms.
- Teacher ratings for their curricula have slightly improved over the past two years but still show many areas for improvement; 50% of teachers give failing grades for included non-textbook student materials and instructor support materials.
- Professional development was offered to over 90% of teachers last year, but almost a third of teachers give the professional development they received a failing grade.
- Awareness of OER and licensing has increased over the year to 1 in 4 teachers, and the awareness numbers show a return from the loss last year for both OER and Creative Commons.

STUDY RESULTS

In-Person and Remote Teaching

Over 90% of teachers only teach in-person, a small increase over 2021-22, suggesting almost all the schools have returned to the classroom after the pandemic.

Teacher: 2022-23 Teaching Modality

8%

92%

- No, I provided all instruction in-person

- Yes, I provide some remote, hybrid, or not in-person teaching
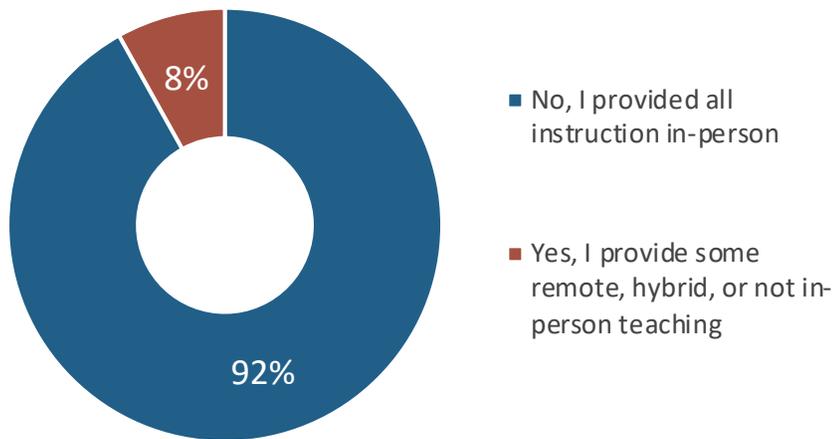
In 2022-23, the vast majority of respondents are teaching all of their classes in-person. There are just 8% of teachers reporting that at least one of their classes are remote, hybrid, or some other form of digital instruction.

The minority of teachers who aren't teaching exclusively in-person are taking a varied approach to instruction. Some K-12 teachers exclusively teach all their classes online for the whole year. More commonly, some teachers implement remote or hybrid learning for a specific class or specific student(s), and not necessarily for the entire class or the whole year.

Teacher: Teaching Modality of Instruction by Year

Year	All instruction in-person	Some remote, hybrid, or not in-person teaching
2020-21	24%	76%
2021-22	90%	10%
2022-23	92%	8%

■ All instruction in-person   ■ Some remote, hybrid, or not in-person teaching
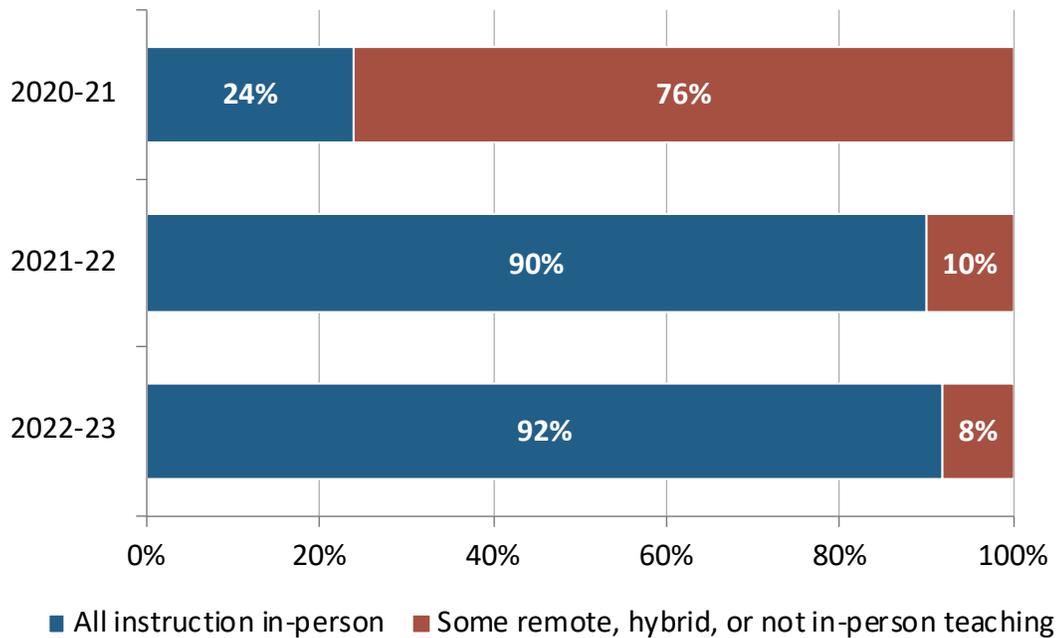
During the 2020-21 academic year, most teachers said that their classrooms were fully or partially remote. Despite this drastic change, the very next year showed an almost complete return to the classroom once pandemic restrictions ended. The 2022-23 results are very similar to those reported in 2021-22. There was a 2% increase among those teaching completely in-person, indicating that almost all the classrooms that were going to go back to fully in-person instruction did so as soon as it was possible.

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Textbook Formats

> **Textbooks are required by 72% of K-12 teachers, and 77% of those are available in a digital format. The growth in digital textbook formats comes with a parallel decrease in print-only formats being offered to students.**

Textbooks are a core instructional material across K-12 classrooms. Textbooks are usually provided to students by the school or district at the beginning of the year, and students return these textbooks at the end of the year.

Teacher: Required Textbook in Class

- 29% No Textbook used
- 72% Textbook Required
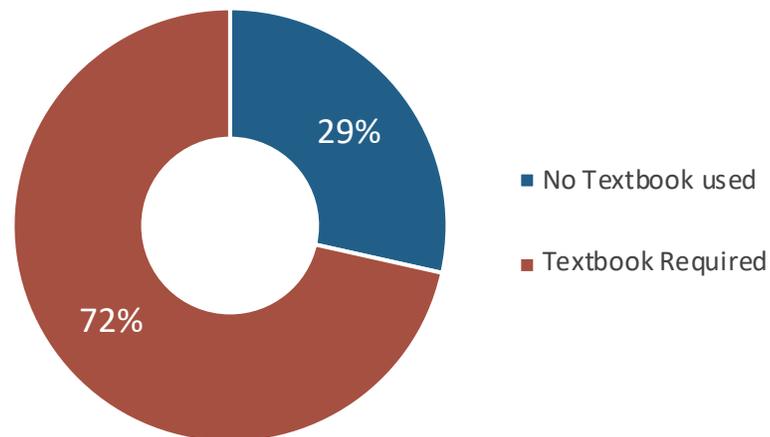
In 2022-23, textbooks remained one of the most common materials used by K-12 teachers. Across all teacher respondents, 72% said that they require textbooks in their classrooms.

Textbooks are increasingly available in digital formats alongside traditional print versions. There are many factors that have supported the rise of digital textbooks. Many schools improved their technological infrastructure to support universal internet access and digital learning, both before and then spurred on by the pandemic experience. Almost all schools and teachers have also adopted one-to-one student devices – computers and tablets are common – that improve accessibility for classroom materials like digital textbooks.

Teacher: Textbook Format by Year

Year	Digital-Only	Both	Print-Only
2021-22	19%	49%	32%
2022-23	21%	56%	23%
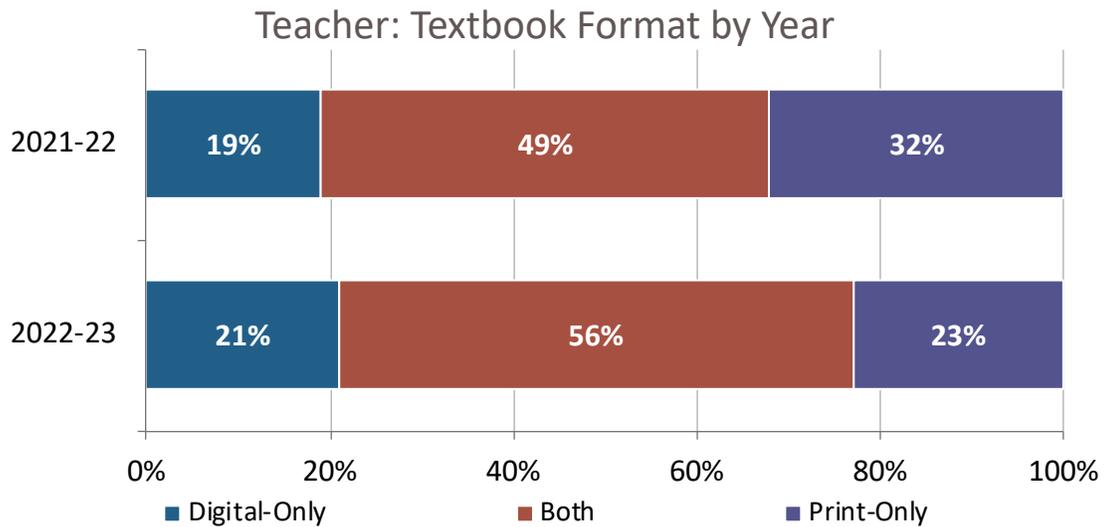
While most teaching is done in person, many teachers have adopted digital tools. Of those who require a textbook, 77% of those teachers offer the textbook in a digital format, at least as an option. This represents a growth of 9% in the use of digital textbooks from the 2021-22 academic year: 68% to 77%. Conversely, this corresponds to a drop of 9% in teachers who only offer print formats in their classrooms. Just over half of all teachers — the largest group — provide the required textbook as both print and digital formats for their students.

Curricula Sources

> **Most teachers continue to use items that are found online or self-created (compared to school-created or commercial options) as their non-textbook instructional materials.**

"Our school has created instructional materials, including an online book with all resources, including free resources... I don't see us moving back to publisher provided resources except for specialized classes."
-High School Mathematics Teacher

"I have been through several paper textbooks, none of them really match what can be found online and can easily be accommodated for different student needs. However, it is sometimes overwhelming to sift through the amount of information present in online programs."
-Middle School Natural Science Teacher

"The core problem with publisher materials is copyright. Sounds strange, right? I need to be able to freely edit and share at the department/district level anything I use, and not track or be accountable for how I use it, even if it happens to make its way outside of Canvas."
-High School Mathematics Teacher

"I find it difficult to utilize publisher provided materials as they often do not conform to my teaching style or the way I deliver content to students."
-High School Social Science Teacher

The curricula used in K-12 classrooms can come from multiple sources. Some curricula materials are provided by publishers, are district- or school-made, created by teachers, or found by teachers. The materials available have a wide range of costs, formats, and licensing requirements. Commercial materials are provided by external companies, generally purchased for use at the classroom, school, or district level. In addition, many materials are custom-made by a school district or by the teacher. While a lot of curricula may be shared between classrooms in a school or district, those created or sourced by teachers are often unique to their specific classrooms.

Teacher: Source of Non-Textbook Materials

Source	Percentage
Found Online	78%
Self-Created	77%
Department or School Created	42%
Commercial Online	30%
Commercial Print	26%
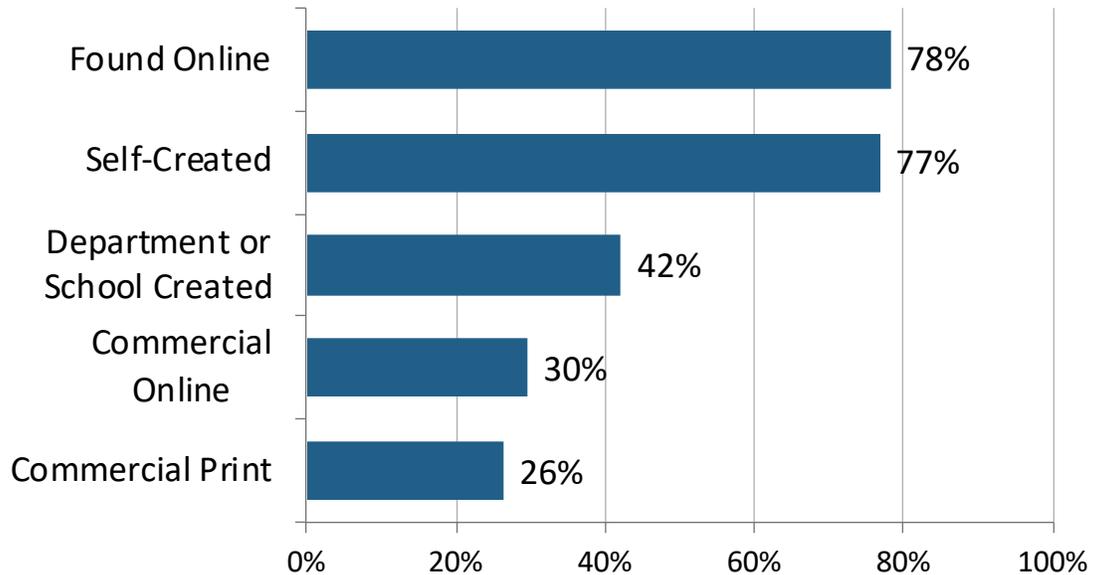
Teachers reported the sources for their non-textbook materials used in the classroom for 2022-23. The majority of teachers use items that they find online or create themselves. Materials created at a teacher's department, school, or district were the next major source for materials, followed by print and online options from commercial sources. For online materials, it is possible that most teachers are finding and using resources that are free to access, though it is not clear how many check the copyright and use agreements for these items.

Teachers searching out or creating their own materials is not new. These results are similar to those from the 2021-22 academic year, with the exception of a drop in materials acquired from commercial sources — there was a 5 - 6% drop in teachers who turned to commercial products.

Most teachers relied on multiple sources to complete their instructional materials. They most commonly report using two (34%) or three (31%) different sources. The most common combination of sources used are "found online" and "self-created." Only 6% of teachers use commercial (print and/or online) as their sole source of non-textbook materials.

Curricula Materials for Students

> **Teachers pull from diverse items to create their curricula materials, generally combining two or three materials aimed for student use. The most used items are student devices, online videos, and self- or school-created items like quizzes and homework.**

"Kids really should have access to a consistent resource for independent review and learning, be it a textbook, publisher website, or something else. It is extremely time-consuming and stressful for me as a teacher to constantly make lessons, slides, review materials, homework, and test questions."
High School Mathematics Teacher

"I use the textbook as a guide for the scope and sequence of content and standards, but I create my own lessons and supplement with non-publisher resources. During the pandemic I created video lessons that I make available to students for when they are absent or additional resource."
-High School Mathematics Teacher

"I find most publisher materials too be too static. I like to change up a lot based on student and class needs. I need more fluid materials."
-Middle School Natural Science Teacher

Curricula materials encompass the items used in the classroom by the teachers and students. This includes materials like textbooks, reading excerpts, and instructor gradebooks. These materials can be further split by those meant for use by students and those intended for use by instructors. Teachers reported on their frequency of use of materials for students over the school year.

Teacher: Student Materials Used Monthly

Material	Percentage
Student Tablets or Laptops	96%
Free Online Instructional Videos	90%
Self- or School-created Quizzes and Tests	89%
Self- or School-created Additional Reading…	83%
Self- or School-created Homework	76%
Educational video games	68%
SMART Boards	57%
Student Textbooks	54%
Publisher-Provided Quizzes and Tests	49%
Publisher-Provided Instructional Videos	44%
Online or virtual Labs	42%
Publisher-Provided Homework	39%
Publisher-Provided Mobile or Tablet Application	29%
Clickers or Polling Devices	16%

For items used monthly, almost all teachers (96%) use student tablets or laptops, making these the most common item, followed closely by free online videos (90%), likely displayed on these devices. The next largest categories are self- or school-created quizzes and tests (89%), additional reading (83%), and homework assignments (76%). Note that these materials can be in both print and digital formats.

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Teachers report using self- or school-created materials much more often than publisher-created materials. For example, 89% used self- or school-created quizzes compared to 49% who used publisher-provided quizzes.

There is a wide range of use for exclusively digital materials. In addition to almost all teachers having their students regularly use tablets or laptops, teachers commonly employ other digital tools: educational video games (68%), SMART boards (57%), and online labs (42%). The least used tool in our list was clickers or polling devices (16%).

Teacher: Student Materials Used Daily

Material	Percentage
Student Tablets or Laptops	72%
SMART Boards	49%
Self- or School-created Homework	31%
Self- or School-created Additional Reading...	31%
Self- or School-created Quizzes and Tests	24%
Student Textbooks	20%
Free Online Instructional Videos	18%
Educational video games	13%
Publisher-Provided Homework	11%
Publisher-Provided Mobile or Tablet Application	8%
Publisher-Provided Instructional Videos	7%
Publisher-Provided Quizzes and Tests	5%
Online or virtual Labs	4%
Clickers or Polling Devices	4%

While many materials are used monthly, there are only a few materials that are used every day by teachers. Further, the order of the most commonly daily materials is somewhat different than the common monthly materials. Teachers do not use most materials every day, and the daily use percentages are much smaller than their monthly use rates, as teachers employ the most appropriate materials to complement the day's lesson.

The materials most often used daily are student devices and SMART boards. For most teachers, if they use these items, they will use them daily. For example, 96% of teachers regularly employ student tablets or laptop at least once a month, with 72% using them daily (representing 75% of the monthly users). Similarly, 57% of teachers use SMART board users at least one a month, and 49% will use them daily (86% of the monthly users).

Exclusively digital materials are less likely to be used daily than other materials. For example, while most teachers will use online instructional videos (90%) at least once a month, only 18% use them daily (representing only 20% of monthly users). There is a comparable rate for educational video games, with 68% regular users but only 13% daily users (19% of monthly users). The rate is lower for online labs, where there are 42% monthly users and 4% daily users (9% of monthly users).

There are some differences in the pattern of use based on the source. A larger proportion of monthly users of self- and school-created materials use them on a daily basis than the proportion of publisher-provided materials. A bit more than one-quarter (27%) of monthly users of self- and school-created quizzes and tests use them daily, compared to only 10% of users of publisher quizzes and tests. Likewise, 41% of monthly users of self- and school-created homework use them daily, compared to only 28% of users of publisher-provided homework.

Curricula Materials for Instructors

> **Teachers regularly use many digital tools to help with teaching. Tools used by most teachers include online gradebooks and attendance tools, self- or school-created lecture slides, curriculum guides, and online videos.**

"Teachers can become discouraged with curriculum changes. They get used to curriculum and know how to use it and then it is time to change again."
-Principal

"We try to meet the needs of teacher teams as they arise. Typically, they know their craft well but need additional teaching materials or additional strategies to enhance lessons and learning."
-Curriculum Coordinator

In addition to the materials used directly with students, instructors have their own set of materials they rely on to help with teaching and planning. These materials generally assist the teachers to prepare the lesson content or manage classroom activities like recording grades and attendance. Many of these traditional tools now have digital versions available.

Teacher: Instructor Materials Used Monthly

Material	Percentage
Online or Digital Gradebook	89%
Online or Digital Attendance Tracking	88%
Self- or School-Created Lecture Slides	82%
Curriculum Guide	80%
Free Online Instructional Videos	79%
Publisher-Provided Instructors Manual	52%
Publisher-Provided Instructors Textbook	49%
Publisher-Provided Instructional Videos	44%
Publisher-Provided Lecture Slides	33%
Publisher-Provided Homework Rubrics	32%

Five of the surveyed options were used monthly by 4 in 5 teachers: online or digital gradebooks, online or digital attendance tracking, school- or teacher-created lecture slides, curriculum guides, and free online videos. Publisher provided materials were used by at most half of all teachers every month. The least used materials were publisher lecture slides (33%), and publisher homework rubrics (32%).

Teacher: Instructor Materials Used Daily

Material	Percentage
Online or Digital Attendance Tracking	82%
Online or Digital Gradebook	73%
Self- or School-Created Lecture Slides	45%
Curriculum Guide	40%
Publisher-Provided Instructors Manual	19%
Publisher-Provided Instructors Textbook	18%
Free Online Instructional Videos	18%
Publisher-Provided Lecture Slides	11%
Publisher-Provided Instructional Videos	8%
Publisher-Provided Homework Rubrics	5%
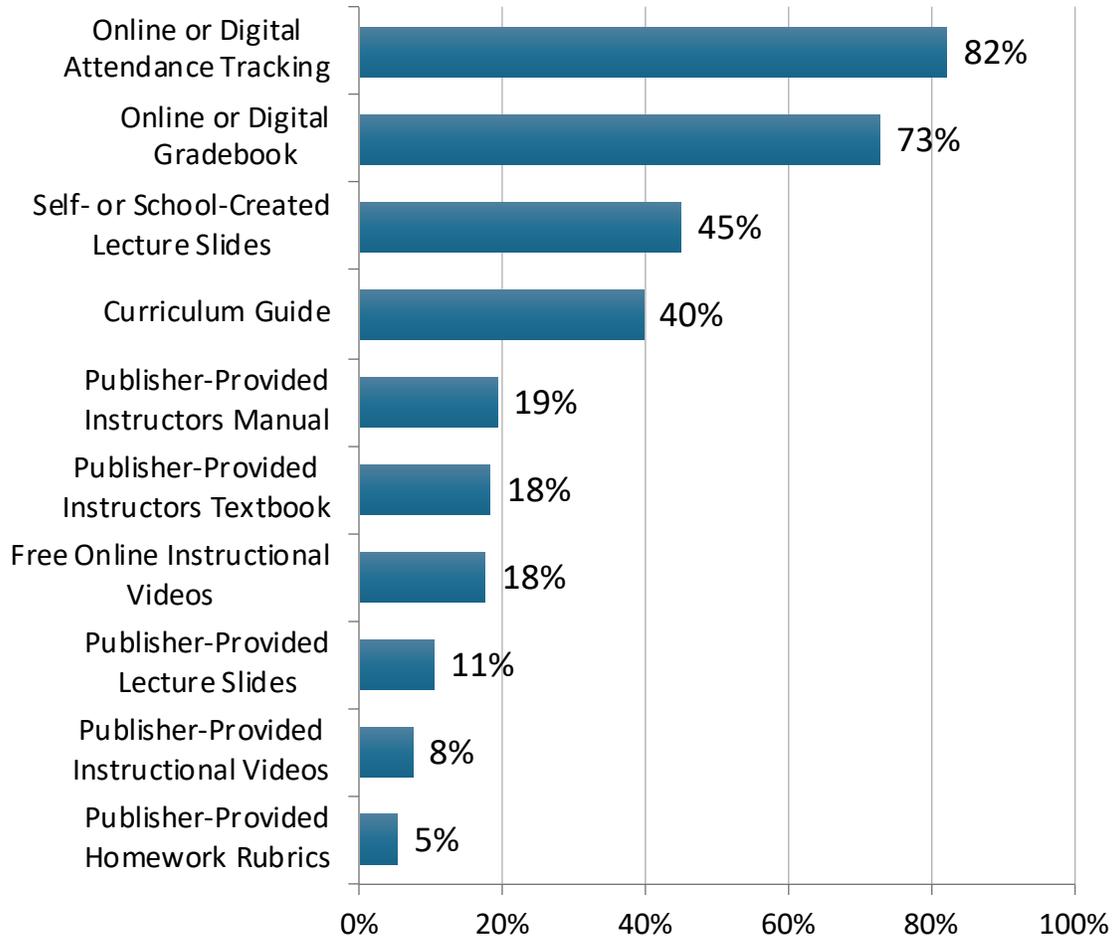
Much like student materials, not all instructor materials are used by teachers on a daily basis. The most common everyday items were attendance tracking tools and gradebooks. Almost all teachers who use these tools, use them daily. Lecture slides (45%) and curriculum guides (40%) are also commonly used daily. Publisher-provided materials are used much less often, with less than 20% of teachers saying they use them daily.

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Perception of Digital versus Print

> **K-12 teachers continue to show a preference for print materials over digital ones for themselves and their students. Though many report having no preference, and a small but significant group says they do prefer digital over print.**

"I am trying to pull away from all the devices and window dressing. It's getting to be too much, and the vehicle to instruction (the whistles and bells) are getting in the way of meaningful connection with the human beings in the classroom. They have their faces in a screen far too much as it is. Back to basics."
-High School Social Science Teacher

"Technology should not be used to replace great teacher instruction in the classroom. Teachers are responsible for designing and implementing a curriculum which actively engages children... no screen required."
-Pre-K to 3rd Grade Teacher

"I like digital, but I also really like having an actual book."
-4th to 5th Grade Teacher

"I think we need to go back to more old school methods to get away from a computer screen and reteach basic skills of life. I understand digital literacy, but kids today are too "over-connected" online and need the break to learn proper social behaviors and have less digital distractions."
-Middle School Social Science Teacher

In the previous report in this series for the 2021-22 school year, the majority of teachers reported that they prefer print materials to digital. The results for the 2022-23 academic year were nearly identical.

Teacher: Agreement with Digital versus Print Statements

My students prefer print materials over digital
| 11% | 18% | 21% | 24% | 12% | 10% | 5% |

Students learn better from print materials than they do from digital
| 16% | 20% | 23% | 25% | 7% | 6% | 4% |

I prefer print materials over digital for teaching
| 18% | 19% | 20% | 24% | 8% | 5% | 7% |

0%   20%   40%   60%   80%   100%

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree
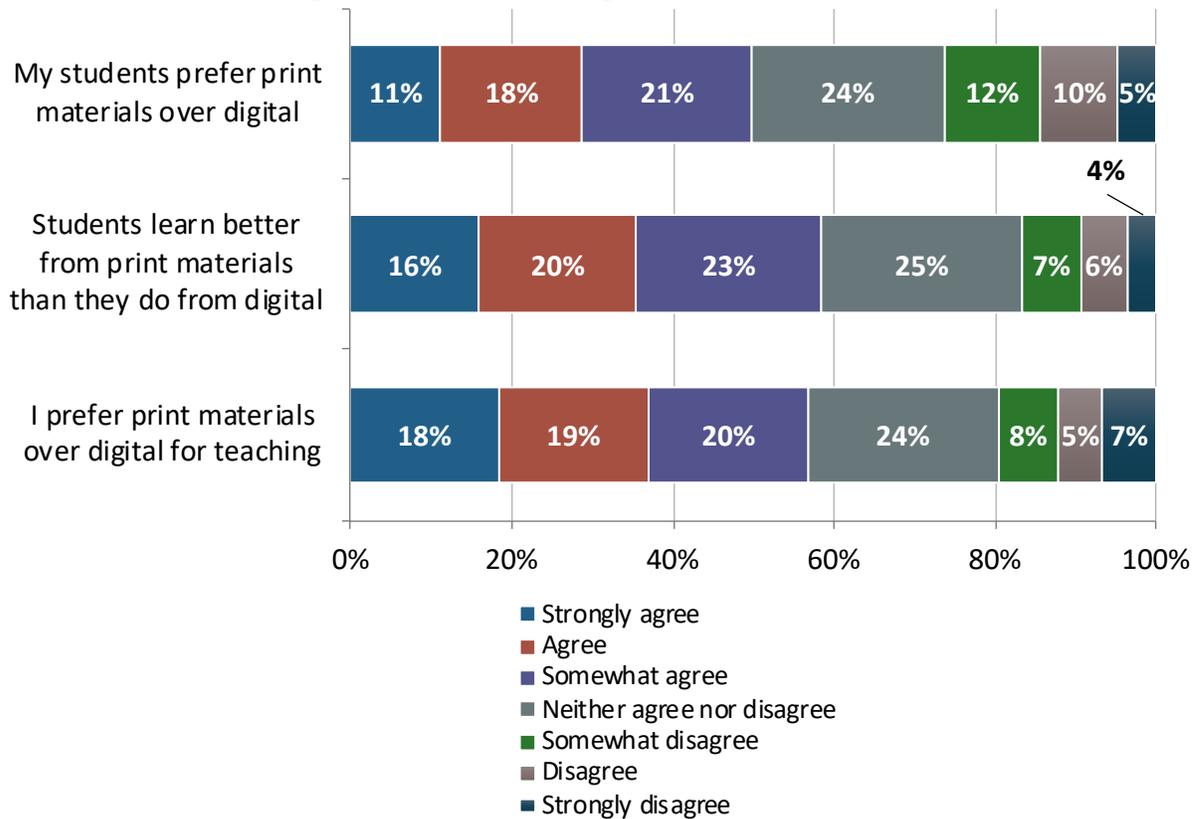
The majority of teachers expressed a preference ("agree" at some level to the statements) for print materials for themselves and for their students. They also believed that these print materials are more effective for student learning than digital ones. Over half of teachers agreed that "they prefer print materials over digital for teaching" (57%), and that "students learn better from print materials than they do from digital" (59%). Half of all teachers agreed that "students prefer print over digital" (50%). Only a small number of teachers disagreed — 20%, 17%, and 27%, respectively. Additionally, the number of teachers who strongly agree with these statements is larger than those who strongly disagree.

Curricula Quality

> **Teachers generally gave average to good scores for their curricula overall and on specific aspects like the scope, flexibility, and included materials. The lowest scores were given to included instructor materials.**

"The curriculum is poorly suited for the needs of my students. It is not engaging, oftentimes repetitive, filled with grammatical errors, hopelessly simplistic. I spent an inordinate amount of my time creating materials and learning activities for my students to reach standards."
-Middle School English Teacher

Curricula comes in many different shapes and sizes, and quality can vary for a number of reasons. In recent years, teachers needed to select and adapt curricula materials as they shifted from in-person to remote and back to in-person instruction. During this time period, administrators reported that they delayed or postponed curricula adoption decisions. Many of these factors factored into the decisions and opinions on the currently used curricula.

To judge effectiveness for their current curricula, teachers provided a rating on a scale of 0 to 100. The ratings were grouped by score, with any curriculum rated under 50 considered a failing grade.

Teacher: Curriculum Rating

90-100	80-89	70-79	60-69	50-59	Fail
22%	29%	19%	10%	8%	12%
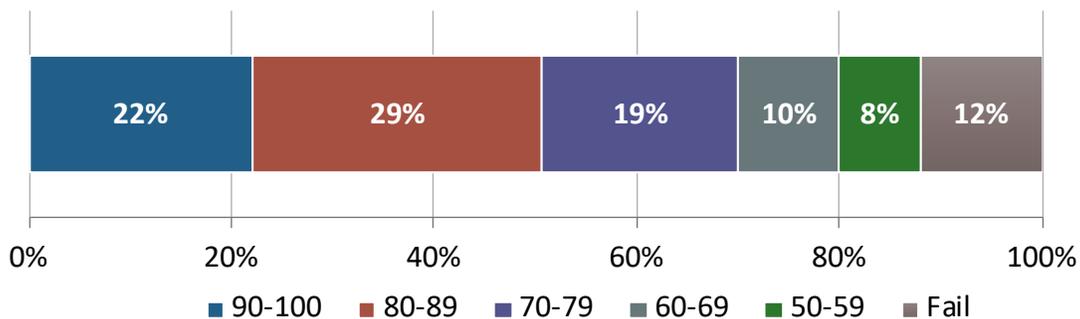
Twenty-two percent of faculty gave their current curriculum a score in the 90s, the equivalent of an A grade. An additional 48% rated their curricula in the B or C range. A smaller group, 18% of teachers, gave their curricula scores ranging from 50 to 69. Just over 1 in 10 teachers rated their curricula with a failing grade. The most common grade was in the 80s, and the average grade was 72; both scores indicate that there is room for improvement for curriculum in the eyes of most teachers.

Teacher: Curriculum Rating by Individual Aspects

Aspect	90-100	80-89	70-79	60-69	50-59	Fail
Scope and Coverage of Content	29%	15%	13%	9%	13%	20%
Flexibility to Meet My Teaching Needs	27%	20%	19%	9%	9%	15%
Included Instructional Support Materials	19%	16%	14%	9%	13%	29%
Included Student Materials Besides a Core Textbook	16%	20%	15%	12%	14%	24%

■ 90-100   ■ 80-89   ■ 70-79   ■ 60-69   ■ 50-59   ■ Fail
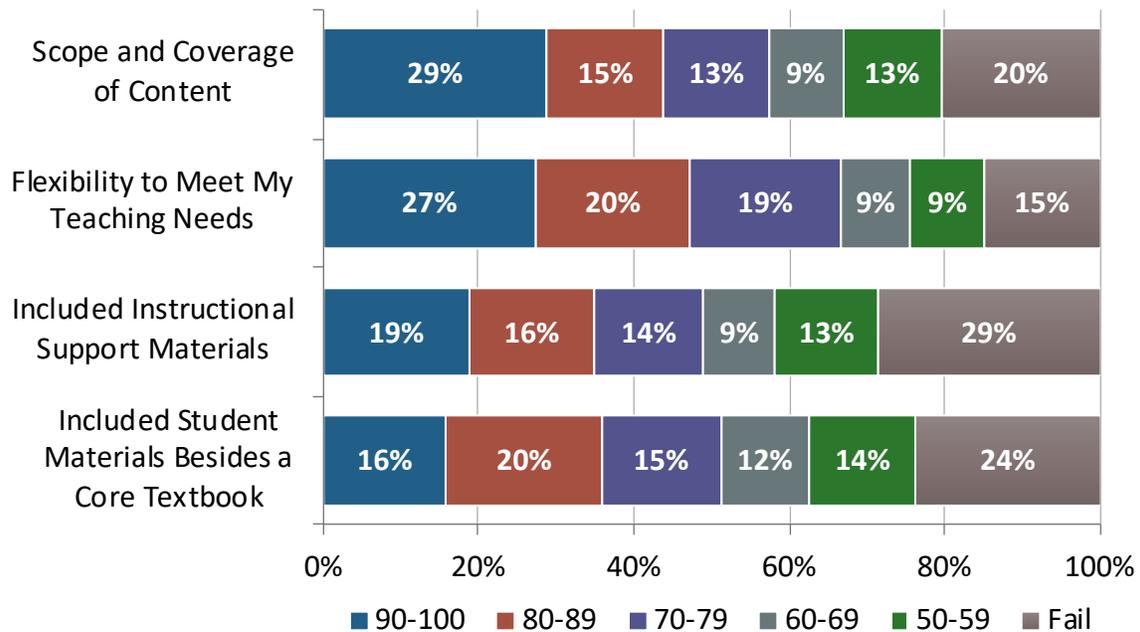
To take a closer look at the breakdown of the ratings, respondents rated individual aspects of their curricula. Teachers gave the fewest failing grades (15%) and most good grades (47% providing a rating of 80 or higher) to their curricula's "flexibility." The next best rated aspect was for "scope and coverage of content," receiving the most scores above 90 (29%) though also a significant number of failing grades (20%).

Teachers gave the poorest ratings to support materials beyond the textbook: both instructor materials and non-textbook student materials had failing grades from more than 20% of all teachers. More teachers gave failing grades than those giving a score of above 90 for both these aspects.

As the previous results in this report demonstrate, teachers frequently used many non-textbook materials both for their students and their own instruction. However, teachers report that they most often use materials they create themselves, or those that were created by their school or district. The high use of self-created materials may be related to their lack of flexibility to fit individual classrooms and the perceptions of poor quality or lack of options for those provided by the curricula creator (commercial or otherwise).

Professional Development

Almost all teachers had access to professional development during the 2022-23 school year. However, the professional development effectiveness is not meeting expectations, as almost a third of faculty gave a failing score, a sentiment echoed by administrators.

"I plan and deliver the majority of PD for our staff. It's challenging to find the time during the school year to bring everyone together for meaningful work, but we do our best."
-Curriculum Coordinator

"Our PD in departments is as good as the supervisor makes it to be. Our math department has strong PD that brings in external presenters who are experts in the field. Other departments do not devote the time to curriculum or best practices in the same way."
-Assistant Principal

"I rarely attend professional development. I have been teaching for 38 years, and there is nothing new under the sun. There are just new labels for things."
-High School Mathematics Teacher

"There are many veteran teachers who do not come to professional development with the mindset that they can learn and grow. Many feel that they already know the information, and do not come to professional development with an open mind."
-Literacy Coach

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Teacher: Access to Professional Development in 2022-23
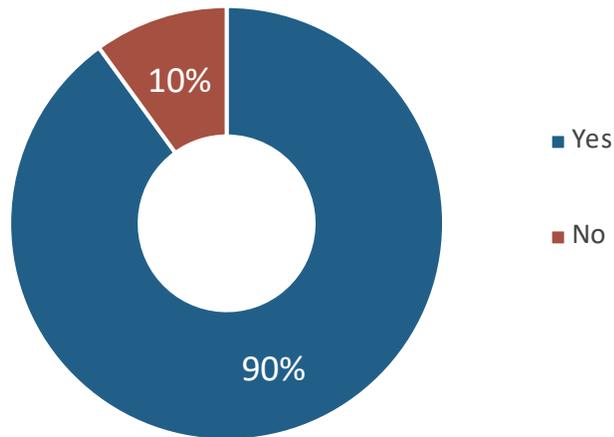
Ninety percent of teachers said they had access to professional development in the 2022-23 academic year. This result mirrors our administrator survey, where 96% reported that some form of PD was provided to teachers in the last year.

Administrator: Professional Development Topic Provided (select all)

Topic	Percentage
Specifically related curriculum	75%
General pedagogical practices	71%
Remote and online teaching practices	27%
Other	4%
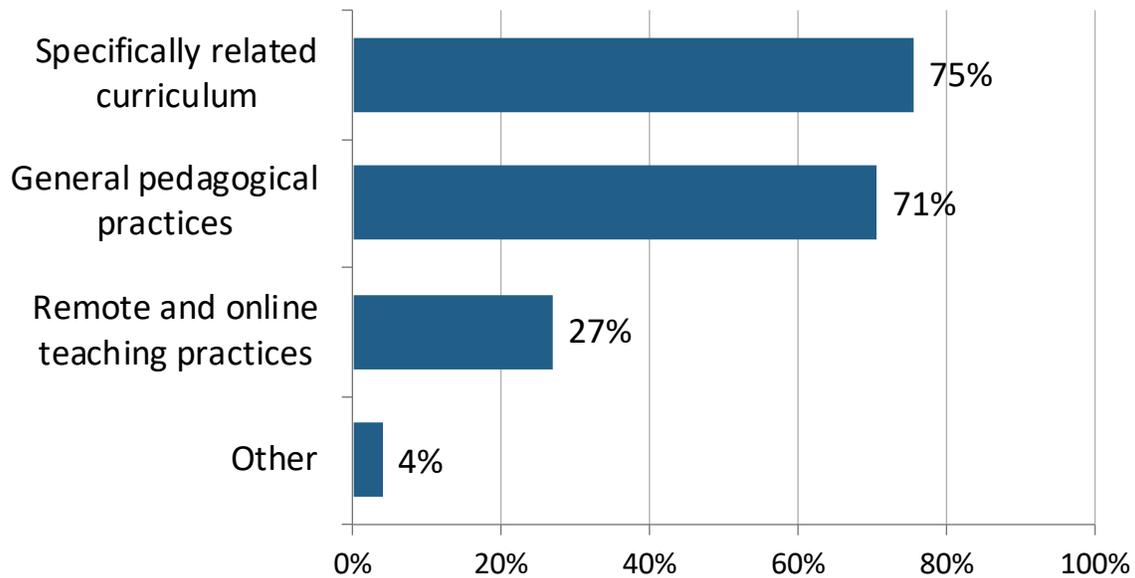
The most common professional development offered was related to teaching practices. Seventy-five percent of administrators reported that the professional development delivered to their teachers was specifically related to the curricula being taught in their classrooms. Seventy-one percent of respondents stated that the professional development fit general pedagogical practices, though not related to a particular curriculum.

The other major topic of professional development was around remote and online teaching practices. A bit over a quarter of administrators (27%) report providing options for professional development on digital teaching, even as almost all teachers are providing exclusively in-person instruction in 2022-23. However, the number of administrators that report remote practices professional development has dropped by almost half, from 50% in 2021-22 to 27% in 2022-23.

Professional Development Rating

	90-100	80-89	70-79	60-69	50-59	Fail
Administrator	14%	19%	18%	11%	17%	22%
Teacher	17%	16%	12%	9%	15%	31%
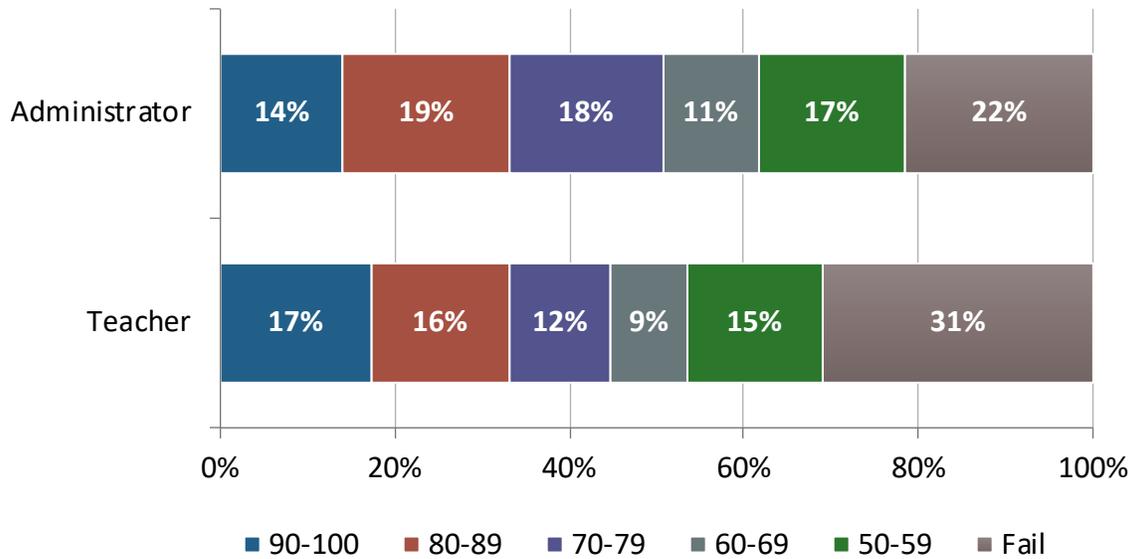
Both teachers and administrators did not give particularly favorable scores to the professional development they were provided. The most common rating was a failing grade (less than 50 out of 100), provided by 22% of administrators and 31% of teachers. A wide range of scores indicates that there is no general consensus about professional development, and the large proportion giving low scores indicate substantial room for improvement.

Teacher: Average Rating for PD by Year

Year	Rating
2020-21	51%
2021-22	55%
2022-23	58%
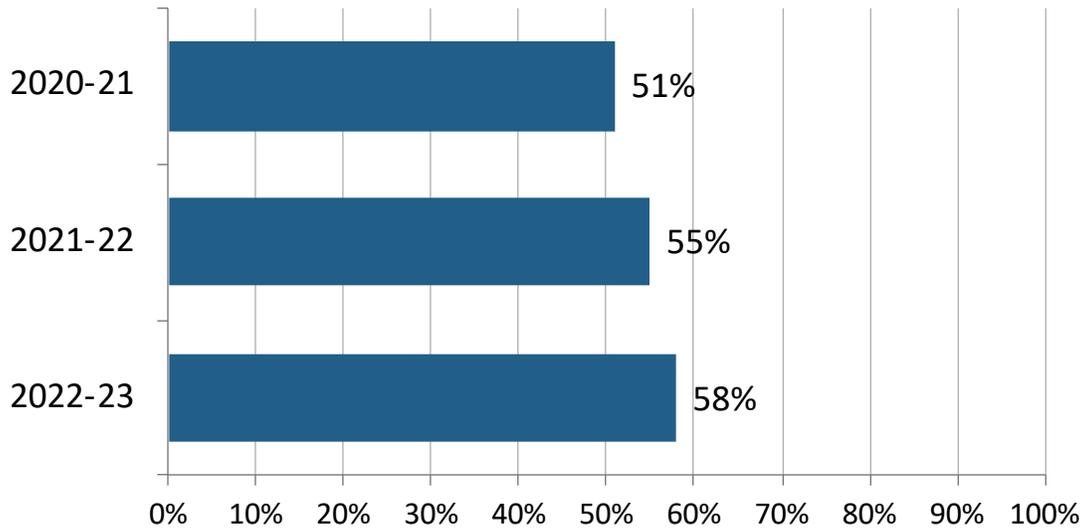
The average score assigned by teachers was barely above passing, at 58. Administrators rated professional development a little higher: the average score from administrators was 64. The teacher's current ratings, while low overall, are actually an improvement over those for the last two years.

OER and Licensing Awareness

> **OER awareness grew slightly year-over-year to 28%, returning to the pre-pandemic levels after a small decline last year.**

"It is incredibly important to involve teachers in the decision-making process for instructional materials. It would be beneficial for my admin team and teachers to learn more about OER, where to access these resources, etc."
-Principal

"OER can be difficult to navigate. Teachers often struggle to find what they need."
-Principal

Measuring awareness of open educational resources (OER) can be complicated. Many teachers are not aware of specific details and definitions for licensing, even as they use them. Some may confuse "open" with "free," and assume all free resources are OER. We use a combination of OER awareness and licensing awareness to account for these issues.

Teacher: Awareness of Licensing

	Very Aware	Aware	Somewhat Aware	Unaware
Copyright	31%	38%	20%	10%
Public Domain	23%	34%	24%	19%
Creative Commons	15%	22%	22%	41%
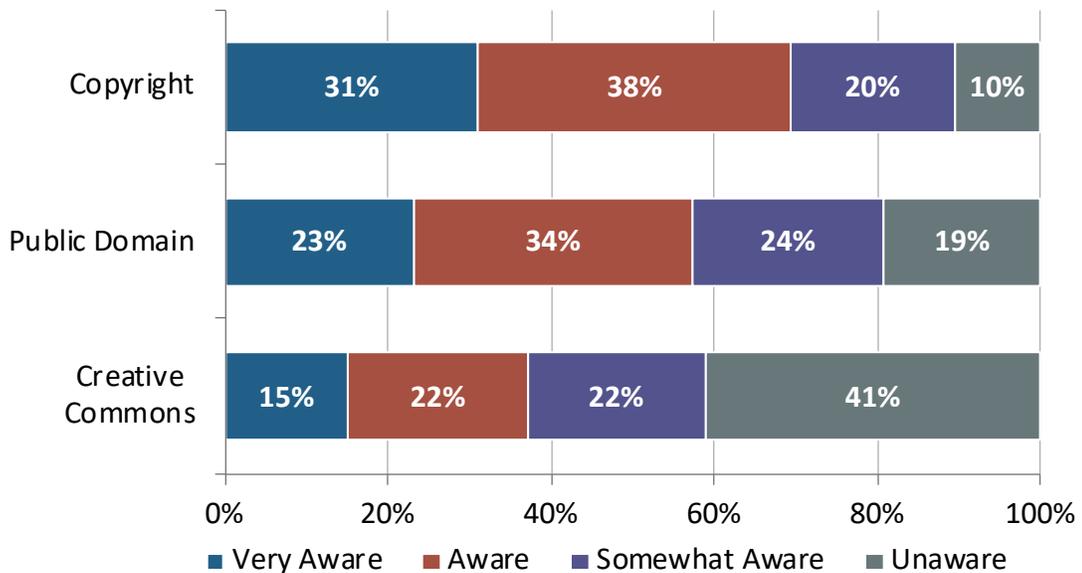
Awareness of specific licensing differs based on the type of license. Copyright has the greatest level of awareness (69%), followed by Public Domain (57%) at the "very aware" and "aware" levels. A much smaller group are aware of Creative Commons (37%) at the same levels.

To gauge awareness of OER, reports in this series have used a consistent question, which has proven to have the best balance in differentiating among the varying levels of awareness, without leading those with no previous knowledge of the concept. The specific wording has remained consistent to support year-to-year comparisons to the earlier surveys.

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Teacher: OER Awareness

- ■ I am very aware of OER and know how they can be used in the classroom
- ■ I am aware of OER and some of their use cases
- ■ I am somewhat aware of OER but I am not sure how they can be used
- ■ I have heard of OER, but don't know much about them
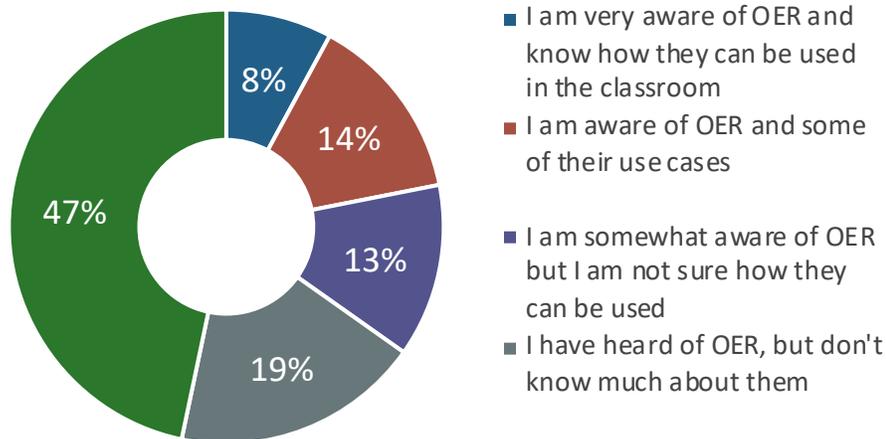
Less than half of all teachers (47%) are unaware of OER at any level. Of the teachers who are aware, many are at low level of awareness: 19% have "heard of" OER, and 13% are "somewhat aware." For high levels of awareness, "very aware" or "aware," total OER awareness is at 22%.

Because many respondents have a less than precise understanding of OER and can confuse OER with "free" or "open source," this series of reports has used a second indicator of awareness, one that combines awareness of the term OER and awareness of licensing. Respondents who report that they are unaware of Creative Commons licensing are removed from the "aware" categories, creating a stricter index of OER awareness that includes only those who are aware of both the term and the type of licensing that goes along with it.

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Teacher: OER Awareness (Strict)

- 7%
- 12%
- 9%
- 12%
- 60%

■ I am very aware of OER and know how they can be used in the classroom

■ I am aware of OER and some of their use cases

■ I am somewhat aware of OER but I am not sure how they can be used

■ I have heard of OER, but don't know much about them
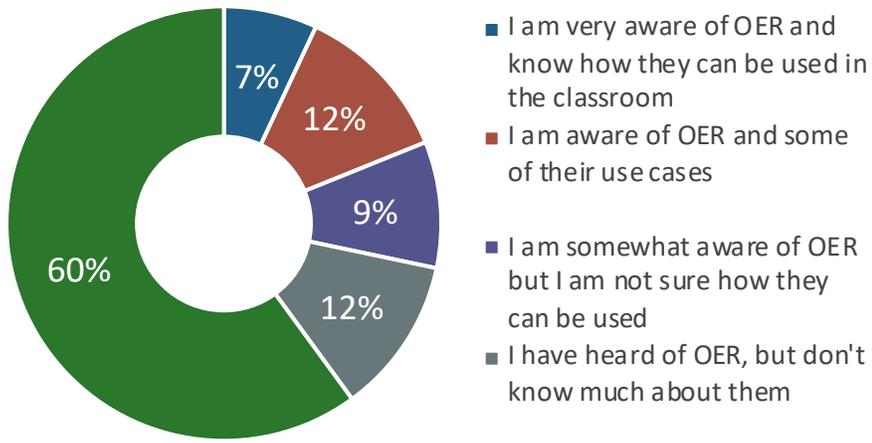
The level of OER awareness drops when controlled for Creative Commons awareness: the total proportion of those "unaware" grows by 12%, to 60%. There are corresponding declines in all categories of awareness, with the largest decline in those who have "heard of" or are "somewhat aware" of OER. The stricter measure of OER awareness for those reporting they are "aware" at some level is 28%.

Teacher: OER Awareness (Strict) by Year

2018-19	5%	12%	10%
2020-21	5%	12%	11%
2021-22	4%	9%	9%
2022-23	7%	12%	9%

■ I am very aware of OER and know how they can be used in the classroom
■ I am aware of OER and some of their use cases
■ I am somewhat aware of OER but I am not sure how they can be used
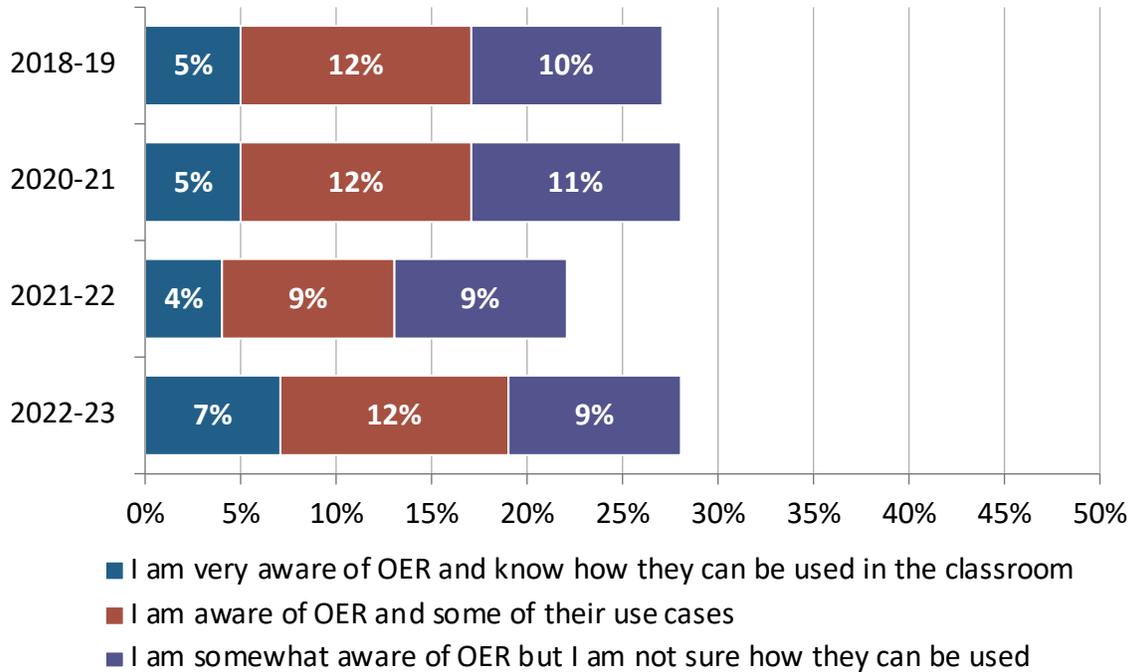
There was a slight decline in OER Awareness using our stricter measure in the 2021-22 academic year as compared to previous years, but awareness in the 2022-23 academic year has since returned to pre-pandemic levels. The largest increase was in respondents at the "very aware" and "aware" levels. This suggests that the level of awareness in K-12 may be deepening, despite the small rate of overall growth.

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SUMMARY

While last year was a return to the classroom, this year may be considered the full "return to normal" as many of our measures are at their pre-pandemic levels. This is especially true for our measure of OER awareness, which bounced back from a small dip last year.

We also saw continuing evidence that digital tools are entering and being adopted in K-12 classrooms. Digital textbooks, standalone or as an option with print, now represent the majority of required textbooks. There are many regularly used digital materials, like student devices and instructor grading and attendance tools. However, it is interesting to note that most digital options being used are not new categories of teaching tools, but rather replacements for physical media.

Teachers report that they combine many different materials to supplement the textbook (or even replace it). These materials are most often sourced from online sources or self-created, bypassing commercially available materials. This suggests that externally created curricula is not currently meeting all the needs of teachers – especially for non-textbook materials. Teachers spend a lot of time creating their own materials, often when there is not an appropriate option available, or they aren't aware of what options are available.

K-12 professional development is also an area that needs improvement. Both teachers and administrators do not give high ratings to the current state of professional development. Previous research has shown that professional development, when implemented well, can greatly improve teacher perception and implementation of curricula. The post-pandemic K-12 classrooms, while very similar to pre-pandemic, have evolved and will need new professional development to support current and future teachers.

Next Steps

K-12 classrooms are also consistently changing, leading to more areas for further research. Will teacher perceptions about digital materials improve as the material evolves, and teachers have more experience using them? Will most digital adoption continue to replace print/physical materials, or will we begin to see novel digital tools to enhance teaching and learning? Can OER and openly licensed materials find a foothold to grow in K-12? We plan to address these topics and more in our research next year, and into the near future.

METHODOLOGY

Analysis for this report includes responses from 1,205 teachers and 487 administrators. These responses come from 50 states. The respondents represent 1,109 different school districts.

The survey is designed to be representative of all public-school districts in the United States that operate schools. Information on these districts comes from the Common Core of Data (CCD) from the U.S. Department of Education's National Center for Education Statistics (http://nces.ed.gov/ccd/ccddata.asp).

Teachers and administrators were invited to participate in the survey through an email invitation. The selected groups were chosen randomly from a commercial source of email addresses. During the survey response period, participants may have also received a reminder email asking them to participate in the research. Both the invitation and the reminder message contained a unique URL that, when clicked, would load the survey form in a web browser and pass the unique survey ID.

The invitation email, reminder email, and survey itself described the research project as well as the funding source for the study (The William and Flora Hewlett Foundation), and who was conducting it ("researchers at Bay View Analytics"). They were also told: "All survey respondents are provided complete anonymity; the William and Flora Hewlett Foundation does not see individual-level results. No personally identifiable information is released."

The questionnaires used in this study build on those used in previous Bay View Analytics studies on K-12 educators and about the curriculum adoption processes. There were new questions added for this year's survey, as well as repeated questions from earlier reports in this project and others.

OER awareness was measured using the same approach as previous reports in this series, with questions about awareness of licensing mechanisms along with a general question on OER awareness.

DEFINITIONS

In addition to examining the curriculum adoption process, this study explores materials classified as open educational resources (OER). Creative Commons defines OER as:

Open Educational Resources (OER) are teaching, learning, and research materials that are either (a) in the public domain or (b) licensed in a manner that provides everyone with free and perpetual permission to engage in the 5R activities.

Retain – make, own, and control a copy of the resource

Reuse – use your original, revised, or remixed copy of the resource publicly

Revise – edit, adapt, and modify your copy of the resource

Remix – combine your original or revised copy of the resource with other existing material to create something new

Redistribute – share copies of your original, revised, or remixed copy of the resource with others[1]

An important aspect of the examination of the use of educational resources is the licensing status of said materials: who owns the rights to use and distribute the material, and whether faculty members have the right to modify, reuse, or redistribute said content. The legal mechanism that faculty are most familiar with is that of copyright. The U.S. Copyright office defines copyright as:

A form of protection provided by the laws of the United States for "original works of authorship", including literary, dramatic, musical, architectural, cartographic, choreographic, pantomimic, pictorial, graphic, sculptural, and audiovisual creations. "Copyright" literally means the right to copy but has come to mean that body of exclusive rights granted by law to copyright owners for protection of their work. … Copyright covers both published and unpublished works.[2]

Of particular interest for this study is the copyright status of the primary textual material (including textbooks) that teachers select as core materials for their courses.

Copyright owners have the right to control the reproduction of their work, including the right to receive payment for that reproduction. An author may grant or sell those rights to others, including publishers or recording companies.[3]

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[1] https://creativecommons.org/about/program-areas/education-oer/
[2] http://www.copyright.gov/help/faq/definitions.html
[3] http://legal-dictionary.thefreedictionary.com/copyright

Not all materials are copyrighted. Some content may be ineligible for copyright, copyrights may have expired, or authors may have dedicated their content to the public domain (e.g., using Creative Commons public domain dedication[4]).

Public domain is a designation for content that is not protected by any copyright law or other restriction and may be freely copied, shared, altered, and republished by anyone. The designation means, essentially, that the content belongs to the community at large.[5]

An intermediate stage between traditional copyright, with all rights reserved, and public domain, where no rights are reserved, is provided by Creative Commons licenses. A Creative Commons license is not an alternative to copyright, but rather a modification of the traditional copyright license that grants some rights to the public.

The Creative Commons (CC) open licenses give everyone from individual authors to governments and institutions a simple, standardized way to grant copyright permissions to their creative work. CC licenses allow creators to retain copyright while allowing others to copy, distribute, and make some uses of their work per the terms of the license. CC licenses ensure authors get credit (attribution) for their work, work globally, and last as long as applicable copyright lasts. CC licenses do not affect freedoms (e.g., fair use rights) that the law grants to users of creative works otherwise protected by copyright.[6]

The most common way to openly license copyrighted education materials — making them OER — is to add a Creative Commons license to the educational resource. CC licenses are standardized, free-to-use, open copyright licenses.7

This study also examines an emerging, subscription-based distribution model typically called "inclusive access," though often going by various names with no single clear definition. The common elements across all the variants of subscription-based models are digital distribution, multiple textbooks and/or classrooms included under one contract, and students included unless they opt-out.

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[4] https://creativecommons.org/publicdomain/zero/1.0/
[5] http://whatis.techtarget.com/definition/public-domain
[6] Personal communication from Cable Green, PhD, Director of Open Education, Creative Commons
[7] State of the Commons report: https://stateof.creativecommons.org

APPENDIX TABLES

In-Person and Remote Teaching

Teacher: Teaching Modality	
No, I provided all instruction in-person	92%
Yes, I provide some remote, hybrid, or not in-person teaching	8%

Teacher: Teaching Modality of Instruction by Year	2022-23	2021-22	2020-21
All instruction in-person	92%	90%	24%
Some remote, hybrid, or not in-person teaching	8%	10%	76%

Textbook Formats

Teacher: Required Textbook in Class	
No Textbook used	29%
Textbook Required	72%

Teacher: Textbook Format by Year	2022-23	2021-22
Digital-Only	21%	19%
Both	56%	49%
Print-Only	23%	32%

Curricula Sources

Teacher: Source of Non-Textbook Materials	
Found Online	78%
Self-Created	77%
Department or School Created	42%
Commercial Online	30%
Commercial Print	26%

Curricula Materials for Students

Teacher: Student Materials Used Monthly	
Student Tablets or Laptops	96%
Free Online Instructional Videos	90%
Self- or School-created Quizzes and Tests	89%
Self- or School-created Additional Reading Materials	83%
Self- or School-created Homework	76%
Educational video games	68%
SMART Boards	57%
Student Textbooks	54%
Publisher-Provided Quizzes and Tests	49%
Publisher-Provided Instructional Videos	44%
Online or virtual Labs	42%
Publisher-Provided Homework	39%
Publisher-Provided Mobile or Tablet Application	29%
Clickers or Polling Devices	16%

Teacher: Student Materials Used Daily	
Student Tablets or Laptops	72%
SMART Boards	49%
Self- or School-created Homework	31%
Self- or School-created Additional Reading Materials	31%
Self- or School-created Quizzes and Tests	24%
Student Textbooks	20%
Free Online Instructional Videos	18%
Educational video games	13%
Publisher-Provided Homework	11%
Publisher-Provided Mobile or Tablet Application	8%
Publisher-Provided Instructional Videos	7%
Publisher-Provided Quizzes and Tests	5%
Online or virtual Labs	4%
Clickers or Polling Devices	4%

Curricula Materials for Instructors

Teacher: Instructor Materials Used Monthly	
Online or Digital Gradebook	89%
Online or Digital Attendance Tracking	88%
Self- or School-Created Lecture Slides	82%
Curriculum Guide	80%
Free Online Instructional Videos	79%
Publisher-Provided Instructors Manual	52%
Publisher-Provided Instructors Textbook	49%
Publisher-Provided Instructional Videos	44%
Publisher-Provided Lecture Slides	33%
Publisher-Provided Homework Rubrics	32%

Teacher: Instructor Materials Used Daily	
Online or Digital Attendance Tracking	82%
Online or Digital Gradebook	73%
Self- or School-Created Lecture Slides	45%
Curriculum Guide	40%
Publisher-Provided Instructors Manual	19%
Publisher-Provided Instructors Textbook	18%
Free Online Instructional Videos	18%
Publisher-Provided Lecture Slides	11%
Publisher-Provided Instructional Videos	8%
Publisher-Provided Homework Rubrics	5%

Perception of Digital versus Print

Teacher: Agreement with Digital versus Print Statements			
	I prefer print materials over digital for teaching	Students learn better from print materials than they do from digital	My students prefer print materials over digital
Strongly agree	18%	16%	11%
Agree	19%	20%	18%
Somewhat agree	20%	23%	21%
Neither agree nor disagree	24%	25%	24%
Somewhat disagree	8%	7%	12%
Disagree	5%	6%	10%
Strongly disagree	7%	4%	5%

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Curricula Quality

Teacher: Curriculum Rating	
90-100	22%
80-89	29%
70-79	19%
60-69	10%
50-59	8%
Fail	12%

Teacher: Curriculum Rating by Individual Aspects				
	Included Student Materials Besides a Core Textbook	Included Instructional Support Materials	Flexibility to Meet My Teaching Needs	Scope and Coverage of Content
90-100	16%	19%	27%	29%
80-89	20%	16%	20%	15%
70-79	15%	14%	19%	13%
60-69	12%	9%	9%	9%
50-59	14%	13%	9%	13%
Fail	24%	29%	15%	20%

Professional Development

Teacher: Access to Professional Development in 2022-23	
Yes	90%
No	10%

Administrator: Professional Development Topic Provided (select all)	
Specifically related curriculum	75%
General pedagogical practices	71%
Remote and online teaching practices	27%
Other	4%

Professional Development Rating		
	Teacher	Administrator
90-100	17%	14%
80-89	16%	19%
70-79	12%	18%
60-69	9%	11%
50-59	15%	17%
Fail	31%	22%

Teacher: Average Rating for PD by Year	
2020-21	51%
2021-22	55%
2022-23	58%

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OER and Licensing Awareness

Teacher: Awareness of Licensing

	Very Aware	Aware	Somewhat Aware	Unaware
Creative Commons	15%	22%	22%	41%
Public Domain	23%	34%	24%	19%
Copyright	31%	38%	20%	10%

Teacher: OER Awareness

I am very aware of OER and know how they can be used in the classroom	8%
I am aware of OER and some of their use cases	14%
I am somewhat aware of OER but I am not sure how they can be used	13%
I have heard of OER, but don't know much about them	19%
I am not aware of OER	47%

Teacher: OER Awareness (Strict)

I am very aware of OER and know how they can be used in the classroom	7%
I am aware of OER and some of their use cases	12%
I am somewhat aware of OER but I am not sure how they can be used	9%
I have heard of OER, but don't know much about them	12%
I am not aware of OER	60%

Teacher: OER Awareness (Strict) by Year

	2018-19	2020-21	2021-22	2022-23
I am very aware of OER and know how they can be used in the classroom	5%	5%	4%	7%
I am aware of OER and some of their use cases	12%	12%	9%	12%
I am somewhat aware of OER but I am not sure how they can be used	10%	11%	9%	9%