RAND SURVEY PANELS

Research Report

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AI Use in Schools Is Quickly Increasing but Guidance Lags Behind

Findings from the RAND Survey Panels

The rapid proliferation of generative artificial intelligence (AI) has created a fast-moving, real-time social experiment at scale. AI uses for school are numerous, with some students using AI for their homework and some teachers using AI to create lesson plans, receive feedback on their instruction, or complete such administrative tasks as grading and writing recommendation letters.

Surveys have found that the use of AI among students and educators is increasing. During the 2022–2023 school year, 58 percent of responding teachers indicated that they use AI for school or personal reasons, with that number jumping to 70 percent in the 2023–2024 school year (Laird, Dwyer, and Woelfel, 2025). Meanwhile, surveyed high school students' reported use of AI for school increased by 13 percentage points between the 2022–2023 and 2023–2024 school years (Laird, Dwyer, and Woelfel, 2025).

However, school training and policies on AI—as with any new and rapidly proliferating technology—are lagging. As of fall 2024, about half of districts reported providing some AI training options for teachers (Diliberti, Lake, and Weiner, 2025), virtually all of which were optional for teachers.

In this report, we provide a first-of-its-kind update on AI in education that triangulates survey data from nationally representative samples of five populations: K–12 teachers, school leaders, school district leaders, students in middle and high school, and their parents. We augment this quantitative data with interviews of school district leaders to provide an overview of the extent to which AI is being used in schools; guidance around its use in schools; and perceptions of improper use of AI and its potential effects on students.

KEY FINDINGS

- **Artififical intelligence (AI) use for schoolwork is rapidly increasing.** In 2025, 54 percent of students and 53 percent of English language arts, math, and science teachers indicated that they used AI for school. These are increases of more than 15 percentage points compared with surveys in the past one to two years.
- **More parents and more students expressed concern that using AI harms critical-thinking skills compared to school district leaders.** Sixty-one percent of parents, 48 of middle schoolers, and 55 of high schoolers but only 22 of district leaders agreed with the statement that greater use of AI will harm critical-thinking skills.
- **Half of students reported being worried that they will be falsely accused of using AI to cheat in school.** Greater proportions of high school students compared with middle school students reported having such a worry.
- **Training for students on the use of AI for schoolwork is scarce.** Thirty-five percent of district leaders reported that they provided students with any training on AI. Over 80 percent of students reported that teachers have not explicitly taught them how to use AI for schoolwork.
- **Fewer than half of principals reported having an AI use policy.** Forty-five percent of principals reported school or district policies or guidance on the use of AI in schools, and 34 percent of teachers reported school or district policies on the use of AI related to academic integrity.

Data Sources and Methods

This report draws on survey data that RAND collected from the following eight nationally representative samples:[1]

- 1,261 middle school and high school students surveyed in January–February 2025 as part of the American Youth Panel (AYP)
- 852 middle school and high school[2] students surveyed in February–March 2025 as part of the AYP
- 984 parents of 12–17-year-olds surveyed in February–March 2025 as part of the American Parent Panel (APP)
- 967 K–12 public school teachers of all subjects surveyed in October 2024 as part of the American Teacher Panel (ATP)
- 8,601 K–12 public school English language arts (ELA), math, and science teachers surveyed in April–June 2025 as part of the ATP
- 3,668 principals surveyed in March–April 2025 as part of the American School Leader Panel (ASLP)
- 289 school district leaders surveyed in October–November 2024 as part of the American School District Panel (ASDP)
- 232 school district leaders surveyed March–May 2025 as part of the ASDP.

Throughout this report, we provide tabulations of survey responses. In some cases, we combine response options (e.g., "strongly agree" and "agree") for simplicity. We weighted all the tabulations so that results are nationally representative of the population of interest based on known national distributions of key demographic variables.[3] We additionally provide results by school grade level (i.e., elementary school, middle school) for the AYP, ATP, and ASLP surveys. AYP and ASLP respondents were categorized based on self-reported grade enrollment, and we categorized ATP respondents by connecting their school to the Common Core of Data (National Center for Education Statistics, undated). Charts in this report include 95 percent confidence intervals to help identify the precision of our estimates and aid comparison across panels and subgroups of respondents within panels. Confidence intervals for stacked bar charts can be found in the appendix.

We complement the survey results with findings from interviews conducted in spring 2025 with ten school district leaders throughout the country. Nine of these leaders lead rural districts, which range in

size from fewer than 200 students to just more than 1,500 students. One leads a large suburban district serving more than 150,000 students. The interviews covered a variety of topics related to student AI usage in K–12 school districts, including district-provided training for students, visions for student AI literacy, hopes and concerns about AI's role in education, and the supports and barriers shaping student use. These interviews lasted between 20 minutes and 40 minutes and were audio-recorded and transcribed. Researchers coded the data using deductive themes based on the interview protocol and employed an analytic matrix to track patterns across respondents. Because of the small sample size of school district leader interviews, the qualitative results are unrepresentative of school district leaders as a whole and of district leaders of rural and suburban districts, and urban districts as they are not represented in the interviews. These interview data help provide context to the interpretation of the survey results.

Although our surveys cover a large swath of education stakeholders, there are important limitations to our analyses and considerations to take into account when interpreting the results. See the "Limitations" section at the end of this report for more details.

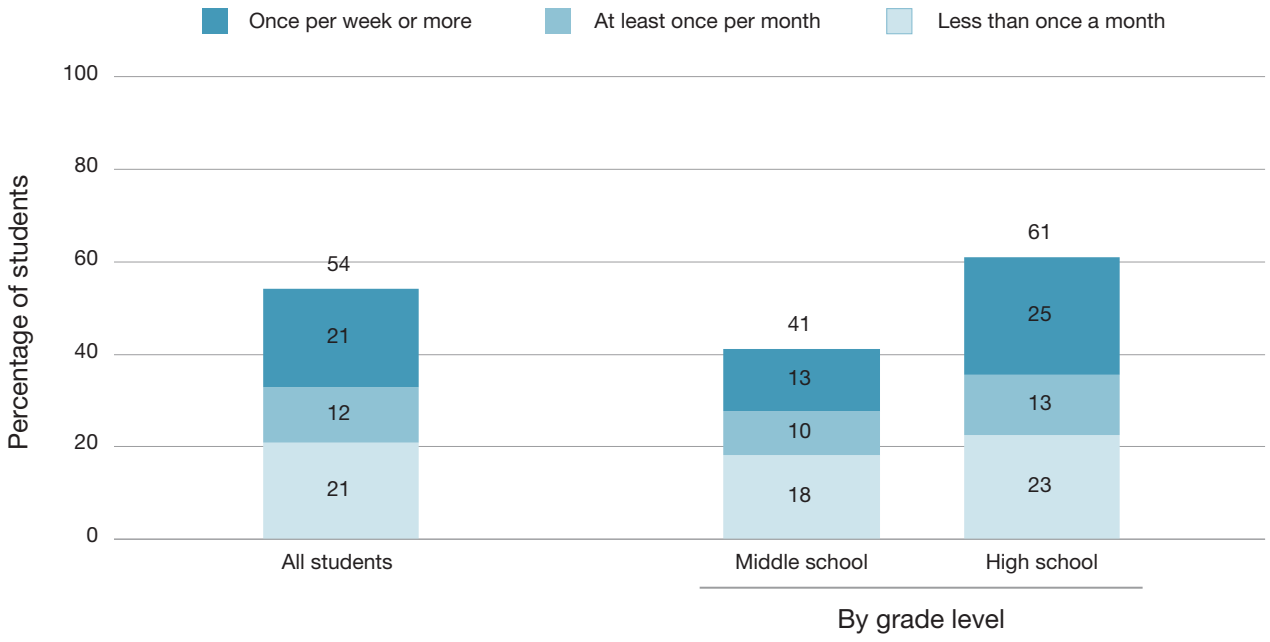
More Than Half of Students and Teachers Used AI in 2025, Implying Rapid Growth in AI Use

Figure 1 shows that, in winter 2025, 54 percent of middle school and high school students said that they use AI to some extent for their schoolwork, and 21 percent indicated that they use it at least once per week or more. AI use increased with grade level: 41 percent of middle school students and 61 percent of high school students said that they use AI to any extent for their schoolwork.

These estimates are much higher than those from prior years. As a point of comparison, approximately

FIGURE 1

Student-Reported Frequency with Which They Use AI for Schoolwork



SOURCE: Authors' analysis of data from AYP samples.

NOTE: This figure depicts responses to the following survey question: "How often do you use AI to help with your schoolwork?" The response options were as follows: (1) never, (2) less than once a month, (3) at least once per month, (4) at least once per week, and (5) daily. The response "never" is not shown, and the options "at least once per week" and "daily" are combined in the figure and represented by the "once per week or more" category shown above. *N* (all) = 921; *n* (middle school) = 321; *n* (high school) = 531.

37 percent of students ages 13 to 24 indicated in summer 2024 that they use AI for school and schoolwork (Flanagan et al., 2025), implying an increase of more than 15 percentage points in usage in one year.[4]

District leaders' estimates of student AI use are approximately in line with student-reported AI use, suggesting that leaders have an accurate understanding of the amount of AI used in their district. When we asked them in spring 2025 to estimate the percentage of students in their district who use generative AI to help them with their schoolwork, district leaders' average estimate was 46 percent of their students, which falls in the range of middle schoolers' estimates (42 percent) and high schoolers' estimates (61 percent).

Figure 2 shows that in spring 2025, 53 percent of ELA, math, and science teachers reported using AI to any extent for instructional planning or teaching, with about 13 percent of teachers using it at least once a week. As with students, teachers' use of AI also increased with the grade level; elementary teachers were the least likely to use AI (42 percent), followed by middle school teachers (64 percent), and high school teachers (69 percent).

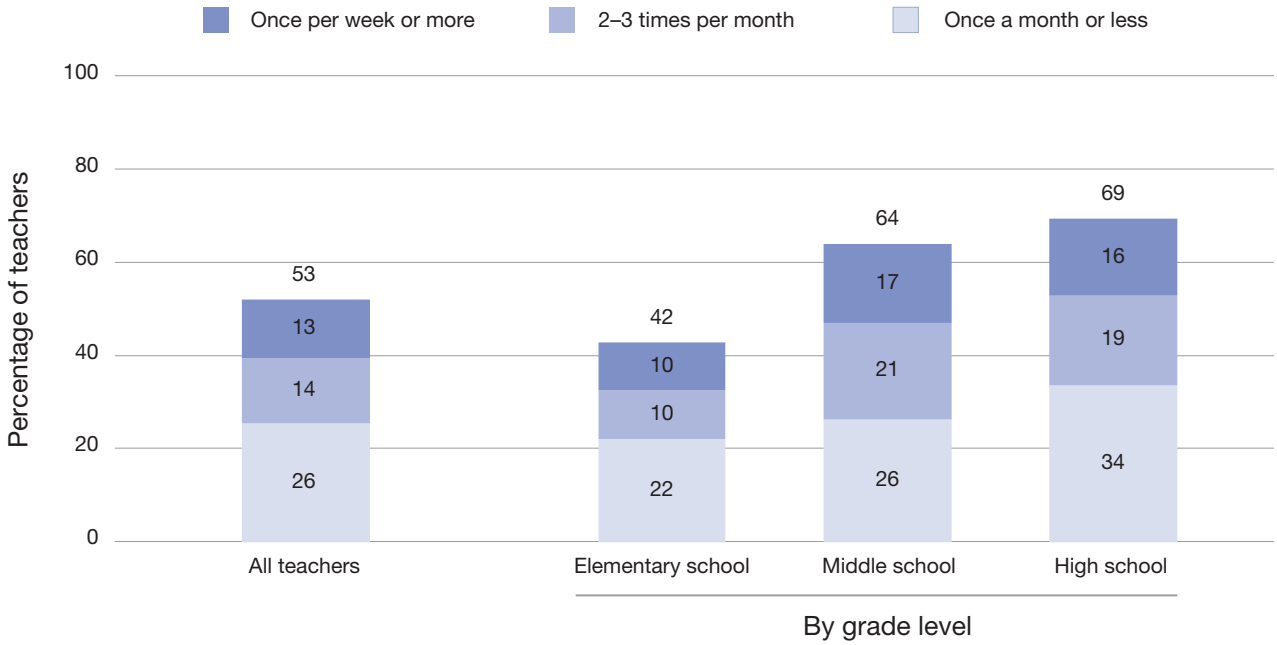
Teachers' reported use of AI in spring 2025 increased by over 25 percentage points from the year before, when only 25 percent of ELA, math, and science teachers reported that they use AI for instructional planning or teaching during the school year (Kaufman et al., 2025).[5]

Parents and Students Were Much More Pessimistic About the Effects of AI Compared with District Leaders

Although students and educators are increasingly using AI in schools and for schoolwork, little is known about their perceptions of the effects of that use. Figure 3 presents the percentage of students, par-

FIGURE 2

Teacher-Reported Frequency with Which They Use AI for Instructional Planning and Teaching

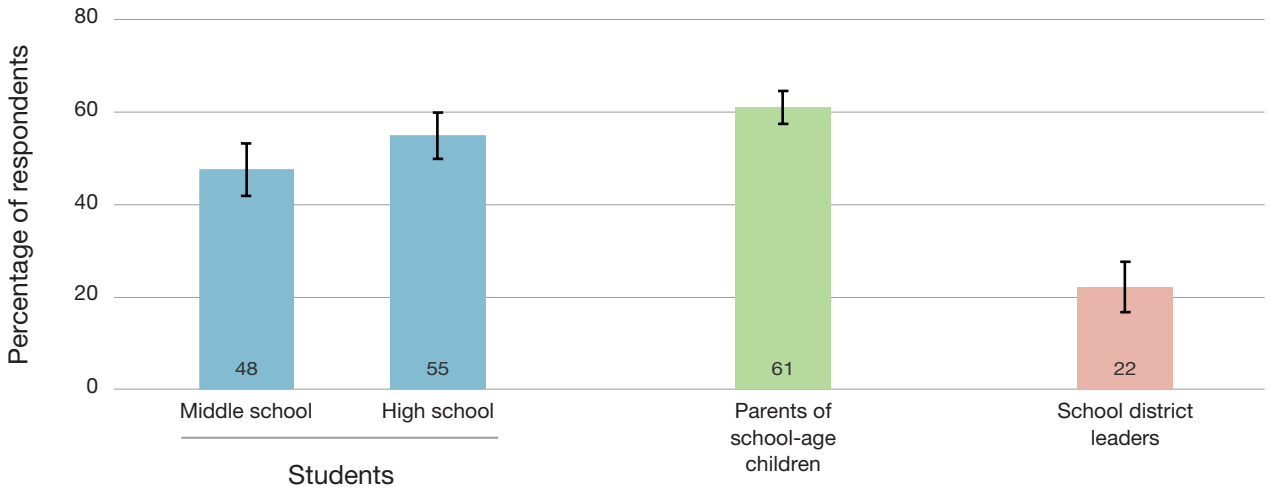


SOURCE: Authors' analysis of data from ATP samples.

NOTE: This figure depicts responses to the following survey question: "How frequently have you used AI tools or products as part of your [ELA/mathematics/science] instructional planning or teaching this school year (2024–2025)?" The response options were as follows: (1) never, (2) once a month or less frequently, (3) 2–3 times per month, (4) 1–2 times per week, and (5) 3 times a week or more. The response option "never" is not shown, and options "1–2 times per work" and "3 times a week or more" are combined in the figure. *N* (all) = 8,601; *n* (elementary school) = 4,830; *n* (middle school) = 1,804; *n* (high school) = 1,967.

FIGURE 3

Percentage of Students, Parents, and School District Leaders Who Agreed That AI Use Harms Student Critical-Thinking Skills



SOURCE: Authors' analysis of data from AYP, APP, and ASDP samples.

NOTE: This figure depicts responses to the following survey question: "How much do you agree with the following statement? The more students use AI (such as ChatGPT) for their schoolwork, the more it will harm their critical-thinking skills." The response options were as follows: (1) strongly disagree, (2) disagree, (3) neither agree nor disagree, (4) agree, (5) strongly agree, and (6) I don't know. Response option 6 was provided to only school district leaders. The figure presents the percentage of respondents who chose response options 4 and 5. *n* (middle school students) = 317; *n* (high school students) = 532; *n* (parents) = 983; *n* (school district leaders) = 289.

ents, and school district leaders who responded either "agree" or "strongly agree" with the following statement: "The more students use AI for schoolwork, the more it will harm their critical-thinking skills."

Figure 3 shows a disconnect between the perceptions of students and parents on the one hand, with the perceptions of school district leaders on the other. More than half of students were concerned that using AI more would harm their critical-thinking skills, and a greater percentage of high school students (55 percent) expressed that view compared with middle school students (48 percent), which also corresponds to greater AI use. An even greater percentage of parents of school-age children (61 percent) expressed the concern the higher uses of AI could harm students' critical-thinking skills. In contrast, only 22 percent of school district leaders agreed with that statement.

School district leader interviews indicate that leaders may be focusing on the positive effects of AI in their districts. For example, some leaders saw AI as a tool that could enhance students' creativity, streamline workflows, and improve instruction. One leader

The ambiguity around which AI use cases are considered cheating is compounded by students' uncertainty as to whether student use of AI for schoolwork is being monitored by their teachers.

noted that his district is focused on helping students see AI as a tool to "be more effective in learning and just making things more efficient overall." Additionally, many leaders underscored the importance of helping students learn how to prompt, iterate, and think critically with AI tools. District leaders were forward-thinking in connecting AI proficiency with success in higher education and the workforce. "People that have AI skills get hired and picked up almost immediately," one leader explained. "So we're trying to make sure that our students have those experiences and how they can use AI in workflows like you would in a business."

The Rules on Cheating with AI Are Ambiguous

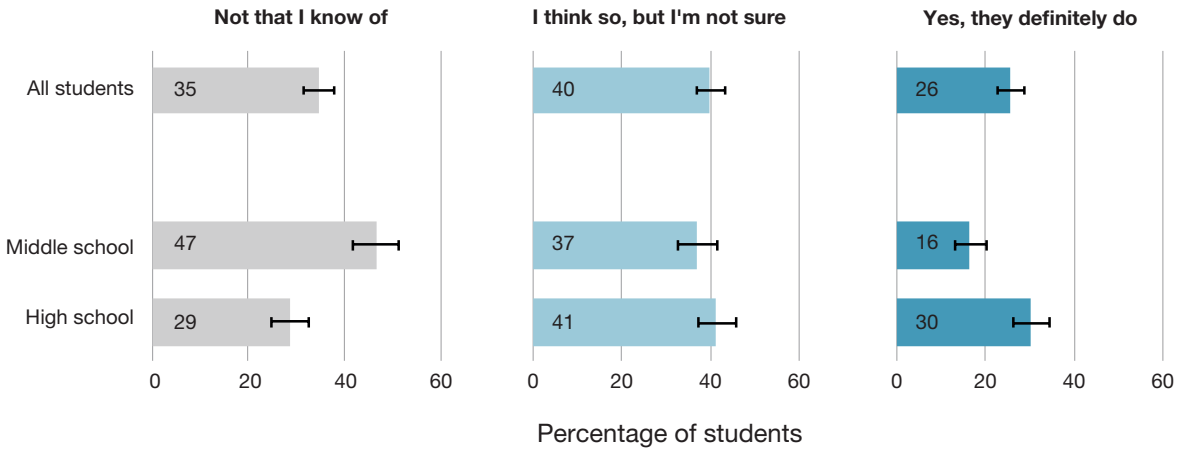
Students are operating in an environment in which educators and parents have not yet clearly defined which AI use cases are considered cheating. When we asked parents whether using AI for schoolwork is cheating, the vast majority (77 percent) indicated that it depends (not shown in figures). Relatively few parents said that they felt using AI for schoolwork was never cheating (7 percent), but almost one in five parents said using AI for schoolwork was always cheating (17 percent). The ambiguity around which AI use cases are considered cheating is compounded by students' uncertainty as to whether student use of AI for schoolwork is being monitored by their teachers. Figure 4 shows that 26 percent of students reported that teachers in their school definitely used tools to see to check whether students are using AI to help with homework and projects. More students (40 percent) were unsure, and the rest indicated that, as far as they know, teachers do not use such tools.

Part of this ambiguity might stem from the lack of clear policies or guidance related to AI and academic integrity. Figure 5 shows that less than half of principals, 45 percent, reported that their school or district has provided any policy or guidance to principals, students, or teachers on using AI products and tools, with few differences across grade levels.

Policies and guidance related to AI and academic integrity were less common. As of fall 2024, only 34 percent of teachers nationally said that their school or district had put such policies in place. Adoption of these policies was nearly twice as common in high schools (49 percent) compared with elementary schools (22 percent). The vast majority of these teachers said that these policies were limited rather than clear and comprehensive.

FIGURE 4

Student-Reported Awareness of Teachers Using Tools to Detect AI Use in Schoolwork

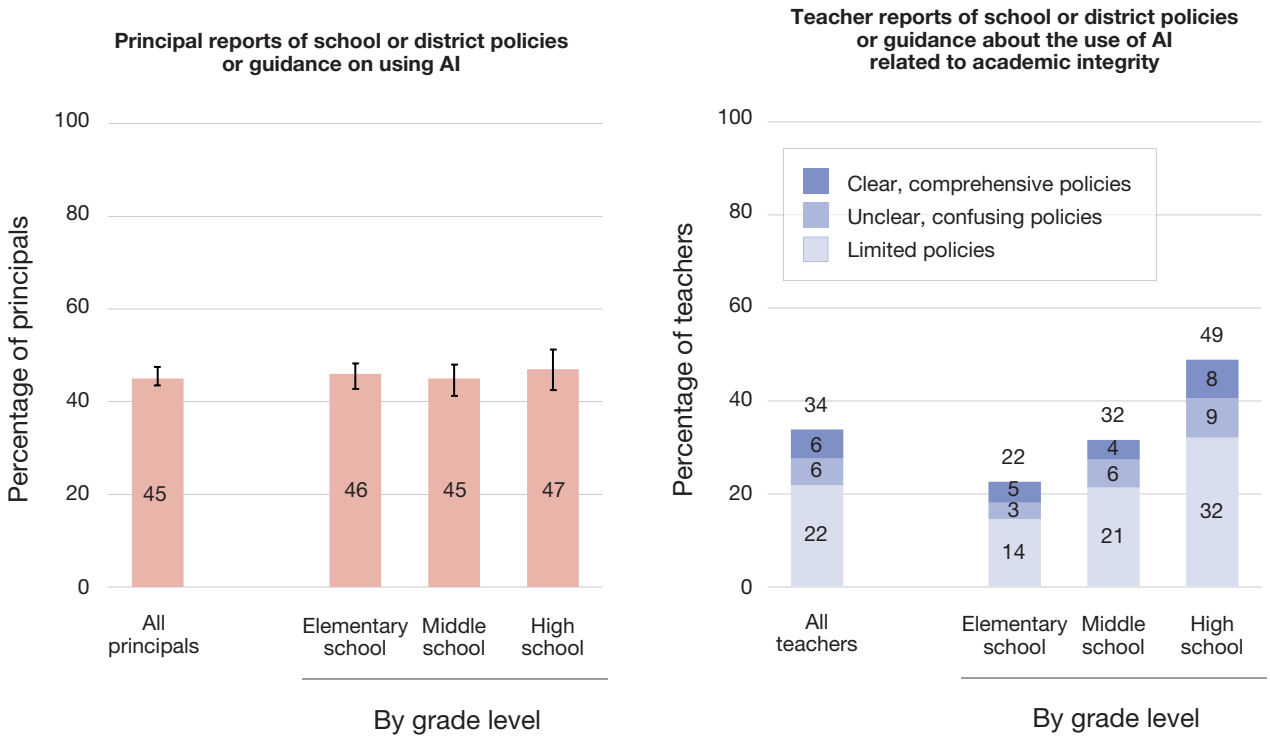


SOURCE: Authors' analysis of data from AYP samples.

NOTE: This figure depicts responses to the following survey question: "Do teachers in your school use tools to check whether students are using AI to help with homework and projects? The response options were as follows: (1) Not that I know of, (2) I think so, but I'm not sure, and (3) Yes, they definitely do. *N* (all) = 1,333; *n* (middle school) = 463; *n* (high school) = 798.

FIGURE 5

Percentage of Principals and Teachers Who Reported School or District Policies and Guidance on AI



SOURCE: Authors' analysis of data from ASLP sample and ATP sample.

NOTE: This figure depicts responses to two survey questions. The first question was as follows: "This school year (2024–2025), has your school or district provided any policy or guidance to principals, students, or teachers on how artificial intelligence (AI) products and tools—including ChatGPT—can be used?" The response options were yes or no. *N* (all principals) = 3,659; *n* (elementary school principals) = 1,688; *n* (middle school principals) = 1,184; *n* (high school principals) = 787. The second question was as follows: "Has your district or school put in place policies or guidance about the use of generative AI tools related to academic integrity?" The response options were as follows: (1) Yes, they have put in place very clear, comprehensive policies, (2) Yes, they have put limited policies in place, (3) No, they have put in place unclear or confusing policies, (4) No, they have not provided any policy or guidance, and (5) I'm unsure if there are any policies currently in place. *N* (all teachers) = 960; *n* (elementary school teachers) = 453; *n* (middle school teachers) = 175; *n* (high school teachers) = 310.

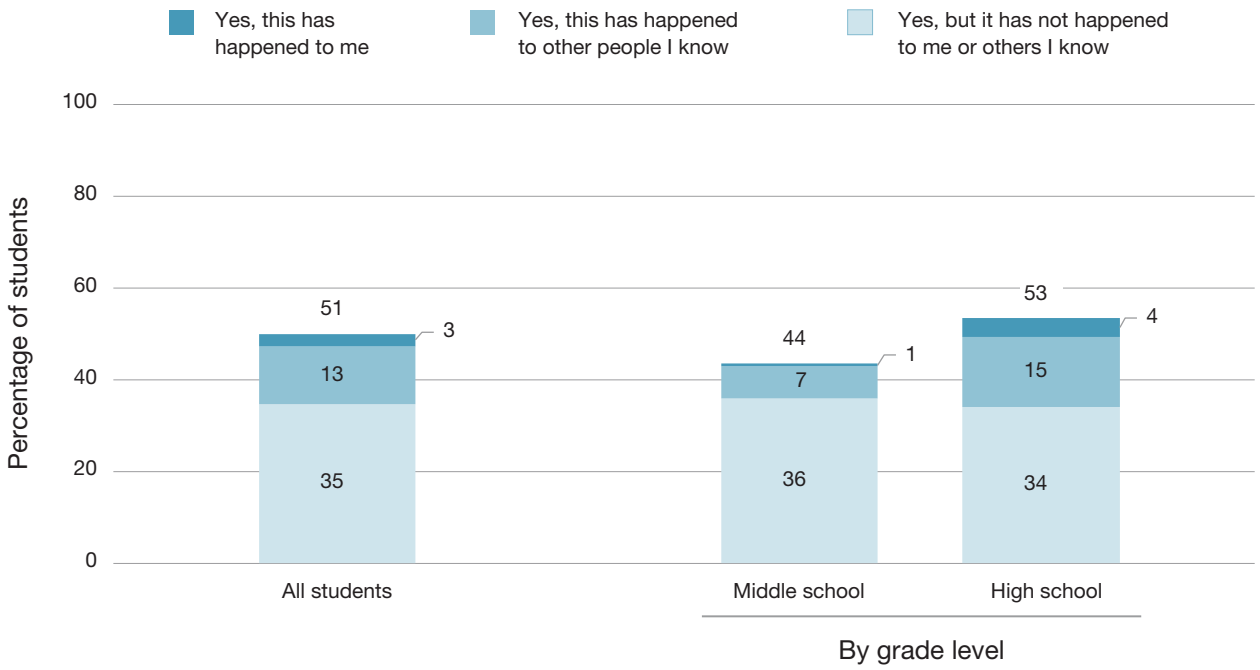
The absence of clear operating rules about AI use may be creating anxiety for students. Figure 6 shows that 51 percent of students overall indicated that they were worried that they might be accused of cheating with AI even if they did not, with 16 percent of students reporting that they were worried either because they knew someone who had been falsely accused of cheating with AI or they themselves had been falsely accused of cheating with AI. Percentages of students who said they were worried increase at higher grades, which corresponds with the increase in use of AI with age. This anxiety may heighten as more students begin using AI regularly in classroom contexts in which expectations and guidelines for its use remain unclear.

Interviews indicate that school district leaders are aware of these complex issues. Six of the ten leaders acknowledged that teachers were concerned with students using AI to cheat on schoolwork and ambiguity about which AI uses cases even constitute cheating. "There are pockets [of teachers] that would say AI is not individual students' work," one leader noted. Another observed that students themselves viewed AI as cheating and were hesitant to use it for schoolwork.

This ambiguity is driving a sense of urgency among district leaders to define acceptable AI use. Six district leaders reported developing training and policies to clarify expectations for both educators and students. One district leader reported that their district is drafting a policy allowing teachers to

FIGURE 6

Percentage of Students Worried of Being Falsely Accused of Cheating With AI



SOURCE: Authors' analysis of data from AYP sample.

NOTE: This figure depicts responses to the following survey question: "Are you worried you might be accused of using AI to cheat, even if you didn't?" The response options were as follows: (1) No, (2) Yes, but it has not happened to me or other people I know, (3) Yes, this has happened to other people I know, and (4) Yes, this has happened to me. *N* (all) = 1,332; *n* (middle school) = 462; *n* (high school) = 764.

define what counts as cheating in their classrooms. Another reported being focused on shifting student mindsets, helping them see AI as a tool rather than a shortcut. As one leader explained, "We can either push [AI] away and kids are going to figure out how to use it anyway, or we can embrace it and teach them to use it responsibly." Leaders, however, may be looking for support in writing these policies. Two leaders expressed the need for clearer guidance from state education agencies, particularly on defining responsible AI use. "If the state can, at their level, begin to give us some sample standards of incorporating AI, then that gives us some choice," a leader said.

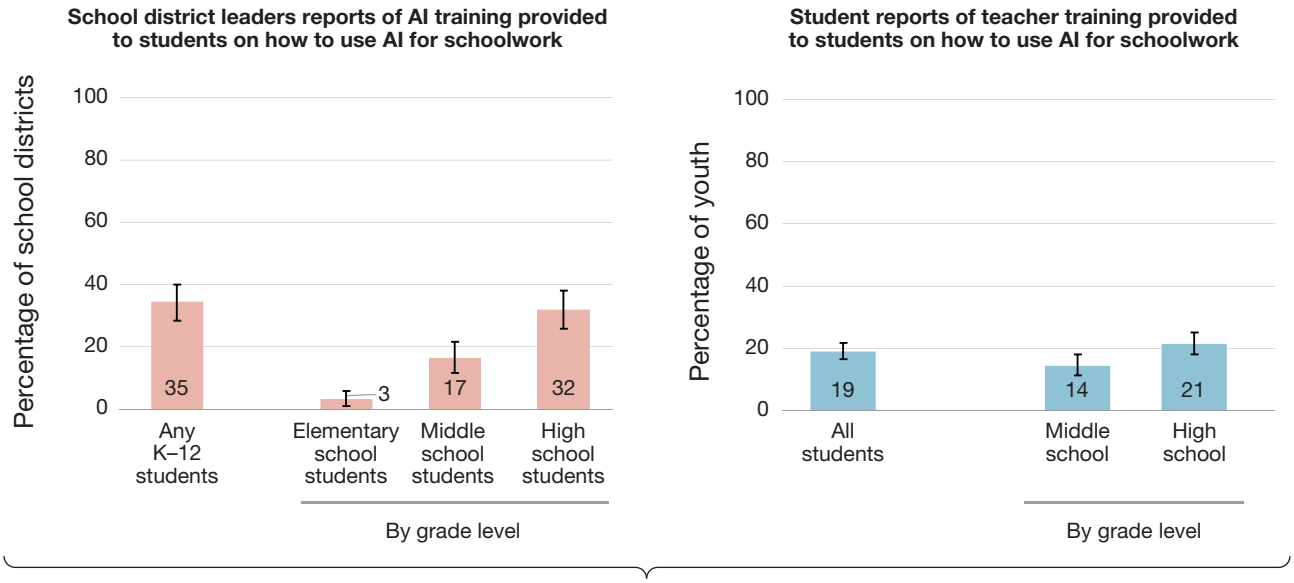
Training on How to Use AI in Schools Is Scarce

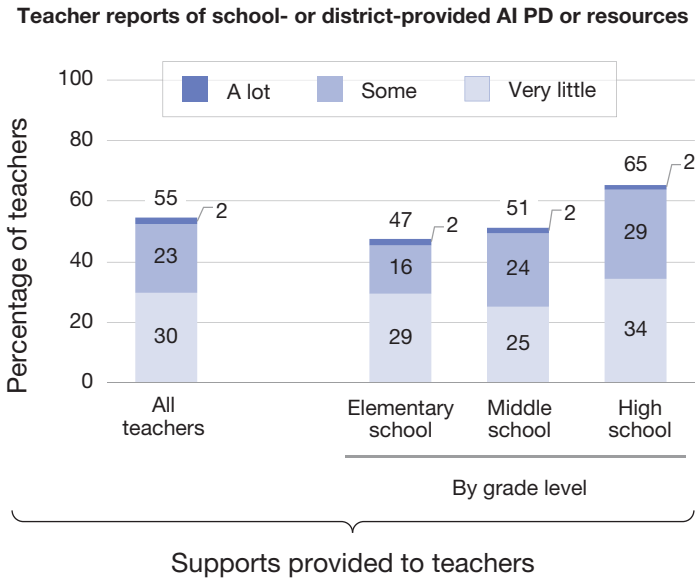
Currently, schools are behind in training students on the proper use of AI for school and schoolwork. Figure 7 illustrates that, in spring 2025, only 35 percent of district leaders indicated that they provided students training on how to use AI for school or career preparation. Training was most common at the secondary level, but even there, only about one in three district leaders indicated that they provide training to their high school students. Such training was even rarer in middle and elementary schools, where just 16 percent and 3 percent, respectively, of school district leaders indicated that they provide training.

Teachers are not making up for the lack of district training to students. Only 19 percent of students reported that their teachers were providing them guidance on how to use AI for schoolwork. Smaller percentages of middle school students (14 percent) reported that they received guidance compared with high school students (21 percent). In middle school and high school, guidance is therefore relatively rare. The stark contrast between usage and training implies that many students are determining for themselves what is considered proper use of AI for schoolwork.

FIGURE 7

Reports of Student Training on AI and the Provision of AI Professional Development and Resources to Teachers





SOURCE: Authors' analysis of data from ASDP, AYP, and ATP samples.

NOTE: This figure depicts responses to three survey questions. The first question was as follows: "Has your district provided training either this school year or last school year to your students about the use of generative AI (like ChatGPT) to help them complete their schoolwork and/or career readiness?" The response options were yes or no. *N* (school district leaders) = 232. The second question was as follows: "Have any of your teachers taught you how to use AI for schoolwork?" The response options were yes or no. *N* (all students) = 1,332; *n* (middle school students) = 463; *n* (high school students) = 797. The third question was as follows: "How much professional development or other resources has your school or district offered to help you adapt your teaching to the arrival of generative AI tools?" The response options were as follows: (1) They've offered a lot of professional development and/or resources, (2) They've offered some professional development and/or resources, (3) They've offered very little professional development and/or resources, and (4) They have not offered professional development and/or resources. *N* (all teachers) = 959; *n* (elementary school teachers) = 453; *n* (middle school teachers) = 175; *n* (high school teachers) = 309.

One of the possible reasons that teachers are not providing training to children is that most have not received training in the form of professional development (PD) themselves. In fall 2024, only 55 percent of teachers nationally reported that their school or district had provided PD or resources to help them adapt their teaching to the arrival of generative AI, although this PD was more common for high school teachers (65 percent) than elementary school teachers (47 percent). Even among these teachers who have received training around how to adapt their teaching to the arrival of AI, relatively few teachers (35 percent) reported that they found this training somewhat or very helpful.

School district leader interviews corroborate findings that students are generally not being trained on AI, with eight of the ten district leaders reporting that they have yet to train students on how to use AI in school. Instead, leaders reported that they are prioritizing training teachers to learn about and feel comfortable with AI before training students to use AI tools to support their learning or complete homework—an approach also reported by school district leaders in the 2023–2024 school year (Diliberti, Lake, and Weiner, 2025).

District leaders reported being in different places with training their teachers, with some still in the early stages of developing AI policies and planning professional learning, with training rollouts anticipated in the coming school year, and others reported that teacher training efforts were already underway, ranging from introductory AI 101 sessions focused on awareness and basic use to more in-depth training to help teachers explore how AI can be integrated into instruction. Importantly, our teacher survey data suggest that AI policies are likely more helpful when they are combined with training. Among teachers who had access to AI training, 37 percent said that they felt their AI policies were helpful. However, among teachers who did not have access to AI training, only 13 percent found their AI policies helpful; instead, over half (53 percent) found their policies unhelpful. This suggests a path forward for school district leaders seeking to roll out AI-related teacher supports.

Summary and Recommendations

Since the widescale availability and adoption of AI in fall 2022, AI use in education has been increasing rapidly. Our findings show that 54 percent of students in winter 2025 reported using AI for schoolwork to any extent, an increase of more than 15 percentage points compared with a survey of youth conducted one year earlier (Flanagan et al., 2025).

Despite the rapid increase in students' AI use, districts are rarely providing them with training on how to use AI. Only 35 percent of district leaders reported training their students on AI, and only 19 percent of students reported that their teachers gave them guidance on how to use AI for schoolwork. This disconnect between AI use and student guidance is particularly stark in high schools where 61 percent of students reported using AI, but student and district leader survey responses indicated that about one-third of high school teachers are providing guidance to students on how to use AI. Teacher training is also scarce—only about half of teachers said that they received PD or training on how to adapt their teaching to AI.

The lack of robust guidance and policies is understandable given the rapid changes in AI; however, the ambiguity around the proper use of AI may be contributing to concern and anxiety among students. Parent responses indicate that there is a great amount of ambiguity as to which AI use cases should be considered cheating, reflecting a lack of common agreement as to which AI use supports learning and which circumvents it.

With no clear operating rules and a general lack of awareness of whether teachers are using tools to monitor students' use of AI for assignments, half of students reported being worried that they will be falsely accused of cheating with AI. Even more concerning, over half of students reported believing that using AI will degrade their critical-thinking skills. Strikingly, the concern about the deleterious effects of AI increases with grade level, which correlates to the higher use of AI in those grades. Also striking is the relative optimism of district leaders compared with students and parents about the effect of AI use on critical-thinking skills.

Interviews with school district leaders indicate that they are aware of the complex issues surrounding AI, the need for more policies and training, and the urgency to establish policies. The leaders themselves may need more support in crafting that guidance and training. District leaders are at different stages of crafting policies. Currently, their general approach is to first train teachers on AI use before training students. Their more optimistic perceptions of the effect of AI use on critical thinking may be explained by their view that AI will be essential for the future or work and that AI can complement, not supplant, learning. However, this view of AI does not appear to have been adequately communicated to students and parents, an issue that is potentially linked to the need for more training in schools.

In light of these findings, we recommend the following:

- **Trusted sources, such as states, should provide guidance on what effective AI policies and training look like.** Interviews with school district leaders indicate that there may be a shared urgency to create a coherent policy on AI use and train teachers and students on how to use AI in productive ways; however, school district leaders themselves may need support from their state or networks of states in crafting those policies and trainings. Efforts are underway, with 26 states providing AI guidance for K–12 schools (AI for Education, undated). Although the depth and breadth of that guidance vary, many states address definitions of AI, ethical and safety considerations, and implementation recommendations. As more states develop these guidelines and others continue to refine them as the field advances, states must effectively communicate them to educators and provide support in enacting them.
- **Training and guidance need to explain how to use AI to complement, not supplant, learning.** There is a real concern among students and parents that widespread use of AI can come at the detriment of critical-thinking skills. This concern may reflect the view that AI will be used to supplant learning, perhaps by using AI tools to mechanically solve problems and complete assignments at the detriment of learning the underlying theory and skills needed to complete the assignments in the absence of these tools. The guidance and training created by district and school leaders should explicitly distinguish between the two use cases and explain how to avoid the former while encouraging the latter.
- **In the short term, teachers and students need clarity on what constitutes cheating with AI.** It takes time to write nuanced policies and guidance and to then train teachers and students on them. However, in the meantime, the prevalence of AI now means that schools need to communicate guidance about cheating in particular. Currently, our data suggest that these policies related to academic integrity are relatively rare and often limited. Describing clear examples of acceptable and unacceptable use could help bridge the gap.
- **Elementary schools should not be overlooked when providing students guidance on AI use.** When surveying school district leaders, we found that high school is the most common grade level where they currently train students on AI use (32 percent), followed by middle school (17 percent). Only 3 percent of responding district leaders said that their

District leaders reported being in different places with training their teachers, with some still in the early stages of developing AI policies and planning professional learning.

district provides elementary school children with training. We found a similar pattern for teachers; elementary teachers were half as likely as high school teachers to receive AI-related PD or resources. District leaders should not overlook elementary schools in the short term, given that (1) elementary school is a time to teach foundational skills and when students form foundational habits and (2) almost half of elementary school teachers are at least experimenting with AI tools. If educators provide elementary school students with a coherent foundation for thinking about and using AI, students and schools may experience fewer issues around AI as students get older and as AI capabilities advance.

Limitations

This report provides an overview of the state of AI policy, training, and guidance in schools and examples of potential effects of the current lack of robust policies by connecting results of eight nationally representative surveys and interviews with a select number of school district leaders. As with any study, this analysis has important limitations that should be considered when interpreting the results.

First, all responses (both survey and interview) are self-reports from students, parents, school leaders, and district leaders. Self-reported responses are subject to *social desirability bias* where respondents respond in ways that they think the interviewer or survey provider wants instead of their true perspectives.

Second, respondents were generally given minimal definitions of AI and there could be important differences in how students, parents, teachers, school leaders, and district leaders conceptualize AI generally and specifically in education. Generally, the meaning of the term AI has evolved over time, and there is no universally agreed on definition of AI, even among experts (Kaplan, 2016). We include the exact question and response options in the figure notes to aid the interpretation of the responses. In only one set of questions do we specifically mention an example of generative AI, ChatGPT. The general public has had access to generative AI tools since fall 2022; however, AI has a long history of powering educational products (e.g., personalized learning platforms) and popular home products (e.g., virtual assistants on phones) (MIT Open Learning, 2024). Although it is possible that respondents conflated these traditional AI tools with generative AI tools when answering the survey questions, a majority of adults are unaware that AI tools power popular everyday products (Maese, 2025). Furthermore, our questions specifically reference the application of AI to aid school and schoolwork, which may further mitigate the possibility that respondents include the use of AI-powered everyday products, such as virtual assistants, in responding to the questions.

Third, we caution readers when interpreting results from the ASDP because the number of district leaders in the panel represent a very small share of the roughly 13,000 school districts in the United States. We weighted our sample of districts to make it representative of school districts across the country on observable characteristics, such as enrollment size, region, locale, and free or reduced-price lunch eligibility. Nevertheless, our weighted survey samples might not be entirely representative of districts nationally. It is highly likely that the public school districts that enroll in the ASDP and take our surveys differ from those who do not in meaningful ways that are impossible to measure. Nevertheless, we present the results to provide as complete a picture as possible.

Fourth, as stated previously, interviews were conducted with a small number of district leaders that constitute a convenience sample. Although the results of interviews can provide important clues that contextualize the survey results, they are unrepresentative of district leaders as a whole or rural and suburban district leaders generally and do not include the views of urban district leaders.

Fifth, we make comparisons to other surveys, some fielded previously by RAND researchers and some fielded by other researchers, to provide a general picture of the potential growth in AI use over time. When presenting our results, we highlight how the sample and question wording has differed between sources. These differences hinder exact estimates of the growth of AI use over time. However, given the lack of longitudinal surveys that ask ques-

tions of the same population consistently over time, we think these comparisons are instructive in providing a general sense of the rate of AI adoption and how that has changed in a relatively short period.

Lastly, the survey questions and interviews ask about the state of broad policies and guidance (i.e., training) and perceptions of issues surrounding AI use (i.e., cheating and effects on critical thinking). Although these are important issues in a broad sense, they are not comprehensive of the types of policies that district leaders may need to create nor are they comprehensive of the effects of AI on students. More research needs to be done to cover the breadth of these topics and determine the extent of divergence of perspectives among education stakeholders.

APPENDIX

Confidence Intervals

Tables A.1 through A.5 provide confidence intervals for the stacked bar charts presented in Figures 1, 2, 5, 6, and 7 in the main report.

TABLE A.1

Student-Reported Frequency with Which They Use AI for Schoolwork

Survey Response Option	Percentage of Respondents	Lower 95% Confidence Interval	Upper 95% Confidence Interval	*n*
All students				852
Less than once a month	21%	18%	24%	
At least once per month	12%	10%	15%	
Once per week or more	21%	18%	25%	
Middle school students				321
Less than once a month	18%	14%	23%	
At least once per month	10%	7%	13%	
Once per week or more	13%	10%	18%	
High school students				531
Less than once a month	23%	19%	27%	
At least once per month	13%	10%	17%	
Once per week or more	25%	21%	30%	

SOURCE: Authors' analysis of data from AYP sample.

NOTE: This table depicts responses to the following survey question: "How often do you use AI to help with your schoolwork?" The response options were as follows: (1) never; (2) less than once a month; (3) at least once per month; (4) at least once per week; and (5) daily. The option "never" is not shown, and the options "at least once per week" and "daily" are combined as "once per week or more."

TABLE A.2

Teacher-Reported Frequency with Which They Use AI for Instructional Planning and Teaching

Survey Response Option	Percentage of Respondents	Lower 95% Confidence Interval	Upper 95% Confidence Interval	*n*
All teachers				8,601
Once a month or less	26%	24%	27%	
2–3 times per month	14%	13%	15%	
Once per week or more	13%	12%	14%	
Elementary school teachers				4,830
Once a month or less	22%	20%	24%	
2–3 times per month	10%	9%	12%	
Once per week or more	10%	9%	12%	
Middle school teachers				1,804
Once a month or less	26%	23%	30%	
2–3 times per month	21%	17%	24%	
Once per week or more	17%	14%	20%	
High school teachers				1,967
Once a month or less	34%	31%	37%	
2–3 times per month	19%	17%	22%	
Once per week or more	16%	14%	19%	

SOURCE: Authors' analysis of data from ATP sample.

NOTE: This table depicts responses to the following survey question: "How frequently have you used AI tools or products as part of your [ELA/mathematics/science] instructional planning or teaching this school year (2024–2025)?" The response options were as follows: (1) never; (2) once a month or less frequently; (3) 2–3 times per month; (4) 1–2 times per week; and (5) 3 times a week or more. The response "never" is not shown, and the options "1–2 times per work" and "3 times a week or more" are combined as "once per week or more."

TABLE A.3

Percentage of Teachers Who Reported School or District Policies and Guidance on AI

Survey Response Option	Percentage of Respondents	Lower 95% Confidence Interval	Upper 95% Confidence Interval	*n*
All teachers				960
Limited policies	22%	19%	25%	
Clear, comprehensive policies	6%	4%	7%	
Unclear, confusing policies	6%	5%	8%	
Elementary school teachers				453
Limited policies	14%	11%	18%	
Clear, comprehensive policies	3%	2%	5%	
Unclear, confusing policies	5%	3%	7%	
Middle school teachers				175
Limited policies	21%	15%	27%	
Clear, comprehensive policies	6%	2%	10%	
Unclear, confusing policies	4%	2%	7%	
High school teachers				310
Limited policies	32%	26%	37%	
Clear, comprehensive policies	9%	6%	12%	
Unclear, confusing policies	8%	5%	11%	

SOURCE: Authors' analysis of data from ATP sample.

NOTE: This table depicts responses to the following survey question: "Has your district or school put in place policies or guidance about the use of generative AI tools related to academic integrity?" The response options were as follows: (1) Yes, they have put in place very clear, comprehensive policies; (2) Yes, they have put limited policies in place; (3) No, they have put in place unclear or confusing policies; (4) No, they have not provided any policy or guidance; and (5) I'm unsure if there are any policies currently in place. The last two reponse options are not shown.

TABLE A.4

Percentage of Students Worried of Being Falsely Accused of Cheating with AI

Survey Response Option	Percentage of Respondents	Lower 95% Confidence Interval	Upper 95% Confidence Interval	*n*
All students				1,261
Yes, but this has not happened to me or other people I know	35%	32%	38%	
Yes, this has happened to other people I know	13%	10%	15%	
Yes this has happened to me	3%	2%	4%	
Middle school students				463
Yes, but this has not happened to me or other people I know	36%	32%	41%	
Yes, this has happened to other people I know	7%	5%	10%	
Yes this has happened to me	1%	0%	2%	
High school students				798
Yes, but this has not happened to me or other people I know	34%	30%	38%	
Yes, this has happened to other people I know	15%	12%	19%	
Yes this has happened to me	4%	3%	5%	

SOURCE: Authors' analysis of data from AYP survey.

NOTE: This table depicts responses to the following survey question: "Are you worried you might be accused of using AI to cheat, even if you didn't?" The response options were as follows: (1) No; (2) Yes, but it has not happened to me or other people I know; (3) Yes, this has happened to other people I know; and (4) Yes, this has happened to me.

TABLE A.5

Teacher Reports of School- or District-Provided AI PD or Resources

Survey Response Option	Percentage of Respondents	Lower 95% Confidence Interval	Upper 95% Confidence Interval	*n*
All teachers				959
Very little	30%	27%	33%	
Some	23%	20%	25%	
A lot	2%	1%	3%	
Elementary school teachers				453
Very little	29%	25%	34%	
Some	16%	13%	20%	
A lot	2%	1%	4%	
Middle school teachers				175
Very little	25%	18%	32%	
Some	24%	18%	31%	
A lot	2%	0%	4%	
High school teachers				309
Very little	34%	29%	40%	
Some	29%	24%	35%	
A lot	2%	0%	3%	

SOURCE: Authors' analysis of data from ATP survey.

NOTE: This table depicts responses to the following survey question: "How much professional development or other resources has your school or district offered to help you adapt your teaching to the arrival of generative AI tools?" The response options were as follows: (1) They've offered a lot of professional development and/or resources; (2) They've offered some professional development and/or resources; (3) They've offered very little professional development and/or resources; and (4) They have not offered professional development and/or resources.

Notes

[1] All figures in this report, unless otherwise indicated, feature information drawn from this list of eight samples on the dates shown.

[2] Specifically, we surveyed a nationally representative sample of youth ages 12 to 21 enrolled in K–12 schools. The vast majority of youth who received these questions were between the ages of 12 and 17. A small portion of students who were 12 years old reported being in grade 5, and a small portion of high school students were older than 17.

[3] Specific variables depend on each panel and the population of interest. Generally, such variables as school urbanicity, percentage of students eligible for free or reduced-priced lunch, enrollment, school size, grade level, and where applicable personal characteristics (e.g., gender, race/ethnicity, and years of experience) are included. Technical documentation for these most recent panels are forthcoming.

[4] Whereas the AYP asked students how often they used AI for schoolwork, Flanagan et al. (2025) asked respondents to indicate whether they used AI for various purposes or in various settings. Thirty-seven percent of respondents indicated that they use it for school and studying. However, direct measure of AI growth was hindered because survey samples consisted of slightly different age ranges of students and survey questions were asked in different ways.

[5] Kaufman et al. (2025) surveyed the same population of teachers as those represented in this report, although they asked about AI use in a different way. Whereas we asked teachers to indicate the extent to which they use AI for their instructional planning or teaching, Kaufman et al. (2025) asked teachers to indicate (1) whether they had ever heard about AI tools and products; (2) their use of AI tools and products outside the job (but not for instructional planning and teaching); and (3) their use of AI tools or products for instructional planning and teaching. Differences in the wording in surveys hinder a direct measure of growth in usage over time.

References

AI for Education, "State AI Guidance for K12 Schools," webpage, undated. As of September 1, 2025: https://www.aiforeducation.io/ai-resources/state-ai-guidance

Diliberti, Melissa Kay, Robin J. Lake, and Steven R. Weiner, *More Districts Are Training Teachers on Artificial Intelligence: Findings from the American School District Panel*, RAND Corporation, RR-A956-31, 2025. As of August 26, 2025: https://www.rand.org/pubs/research_reports/RRA956-31.html

Flanagan, Sean, Sophia Seifert, Jennifer Herard-Tsiagbey, Nikhil M. Tiwari, Liz Glaser, Tara Strelevitz, and Alexander D. Harris, *State of Young People: Youth Perspectives on Social Divisiveness, Civics, Artificial Intelligence, and Mental Health in 2024*, America's Promise Alliance, February 2025.

Kaplan, Jerry, *Artificial Intelligence: What Everyone Needs to Know*, Oxford University Press, 2016.

Kaufman, Julia H., Ashley Woo, Joshua Eagan, Sabrina Lee, and Emma B. Kassan, *Uneven Adoption of Artificial Intelligence Tools Among U.S. Teachers and Principals in the 2023–2024 School Year*, RAND Corporation, RR-A134-25, 2025. As of August 26, 2025: https://www.rand.org/pubs/research_reports/RRA134-25.html

Laird, Elizabeth, Maddy Dwyer, and Kristin Woelfel, *Out of Step: Students, Teachers in Stride with EdTech Threats While Parents Are Left Behind*, Center for Democracy and Technology, 2025.

Maese, Ellyse, "Americans Use AI in Everyday Products Without Realizing It," Gallup, January 14, 2025.

MIT Open Learning, "Exploring the Shift from Traditional to Generative AI," *MIT xPro* blog, October 22, 2024. As of August 9, 2025: https://curve.mit.edu/exploring-shift-traditional-generative-ai

National Center for Education Statistics, "2022–23 Common Core of Data (CCD) Universe Files," dataset, U.S. Department of Education, undated.

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About This Report

This report is part of a series of short reports intended to provide brief, descriptive analyses of survey results of immediate interest to education policymakers, practitioners, and researchers. In the 2024–2025 school year, we administered surveys to school district leaders as part of RAND's American School District Panel (ASDP), to teachers as part of the American Teacher Panel (ATP), to parents as part of the American Parent Panel (APP), and to students as part of the American Youth Panel (AYP). All of these panels are designed and maintained by RAND Survey Panels, a data collection service at RAND dedicated to collecting and disseminating state-of-the-art, population-representative survey data to support research that addresses the most pressing public policy challenges. For more information on RAND Survey Panels and the specific panels featured in this report, visit https://www.rand.org/surveypanels.

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