Variation in High School Student, Parent, and Teacher Attitudes Toward the Use of Generative Artificial Intelligence

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Executive Summary

The use of Generative Artificial Intelligence (GenAI) has rapidly increased with the availability and awareness of tools like ChatGPT, Copilot, Gemini, and Claude. Our previous research brief in this series indicates 84% of high school students are using GenAI tools for their schoolwork, a notably high statistic given that students and parents are roughly split on whether the benefits of using GenAI are worth the risks. High school educators report substantial concerns about AI affecting student learning, but school and district leaders are still finding their way through policies and practices that would establish clarity on GenAI tool access and use for high school students (Adair et al., 2025).

In this brief, we build on our recent evidence from high school students, parents, and educators based on multiple College Board surveys administered between June 2024 and June 2025 by disaggregating the data reported in the prior research. Specifically, we explore differences in the frequency of GenAI use by high school students, sentiment toward GenAI tools in education, and GenAI policies across different student and parent demographics, student academic characteristics, and teacher and high school attributes.

Five themes emerge from our empirical analyses.

1. There are sizeable differences in high school students' frequent use of GenAI tools for schoolwork by race and Socioeconomic Status (SES), but small differences by gender. Male, Black and Hispanic, and graduate degree educated parents are more likely to feel it is better for students to use AI than not.

- Roughly two-thirds (65%) of Black and Hispanic high school students report using GenAI tools for schoolwork often or sometimes (described henceforth as "frequently") compared to 58% of Asian and 55% of White high school students. Parent reports of how often students use GenAI reveal a similar pattern by race and ethnicity.
- The percentage of students frequently using GenAI for schoolwork tends to increase with socioeconomic status (as measured by parental education), with parents who have a graduate degree standing out as particularly likely to report frequent GenAI use by their high school students.
- Frequent GenAI use for schoolwork is reported by 58% of male and 56% of female high school students, parity that contrasts with gender disparities in GenAI use among older individuals documented in other research.
- When asked if it is better for students to use AI than not, male parents of high school students are more likely to agree than female parents (by 19 percentage points), Black and Hispanic parents are the most likely to agree among racial and ethnic groups (by 5 to 12 percentage points), and parents with a graduate degree are the most likely to agree within parental education categories (by 20 percentage points or more).

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2. Higher-achieving high school students are more likely to report frequent GenAI use for schoolwork and more likely to agree that GenAI enhances their learning. Seniors are also more likely than younger students to be using GenAI in a variety of ways for their schoolwork.

- The percentage of high school students who report frequently using GenAI tools for schoolwork is 6 percentage points higher for those earning higher grades (mostly As or As and Bs) compared to students reporting more moderate grades (mostly Bs or Bs and Cs).
- Approximately 85% of high school students earning higher grades agree that students can benefit from GenAI to enhance their learning, compared to only 79% of students earning lower grades (mostly Cs or lower).
- High school students who have higher grades (compared to moderate or lower grades) or who are seniors (compared to freshmen) are roughly twice as likely to report using GenAI for all four of the most commonly reported school uses of GenAI in our surveys—brainstorming ideas, editing or revising essays, conducting research and finding sources, and explaining complex topics.

3. High school science, math, and computer science teachers are more likely than English, history, and social science teachers to view AI tools as having a positive effect on high school students' learning. Teachers with less experience are also more likely than teachers with over 20 years of experience to view AI tools as beneficial to learning.

- More than half of science (51%) and math and computer science (56%) teachers agree that AI tools help students learn at their own pace compared to about one-third (37%) of English teachers.
- Over half (54%) of new teachers with four years of experience or less agree AI tools help students become better writers through feedback and revision suggestions compared to 43% of teaching veterans with 20+ years of experience.

4. Public high school teachers and teachers at urban high schools are more likely to express favorable views about the learning benefits of AI tools than private high school teachers and rural teachers, respectively.

- Compared to private high school teachers, public school teachers are 5 percentage points more likely to agree that AI tools help students learn at their own pace and 6 percentage points more likely to agree that AI helps students develop better research skills.
- Teachers in urban high schools are 7 percentage points more likely than rural teachers to agree that AI can help students become better writers.

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5. Compared to private high school teachers, public high school teachers are substantially more likely to report that students and teachers cannot access AI tools on their school's network and that their school does not have a policy governing students' GenAI use. Differences in access to AI tools and GenAI policies also occur by school urbanicity and student body socioeconomic composition, respectively.

- Public high school teachers are 20 percentage points more likely to report that their school does not provide students and educators with access to AI tools and 23 percentage points more likely than private school teachers to report that their school has no student GenAI use policy.
- Teachers at high schools in towns and rural areas are 6 percentage points more likely than teachers at urban and suburban schools to report that students and educators do not have access to GenAI tools at school.
- Within public schools, examining the proportion of students eligible for free and reduced-price lunch (FRPL) reveals that schools with high FRPL proportions are 13 percentage points more likely than schools with low FRPL proportions to have no student GenAI use policy.

As we continue to track and report on data that describe how GenAI use, sentiment, and policies evolve, these findings push the discussion around GenAI in schools in important directions.

Students with more educated parents, stronger academic records, and those who are closer to graduation report both higher use of GenAI for schoolwork and more positive views of its value. Notably, the students most confident in GenAI's educational benefits are also those already performing well academically and nearing graduation, despite broader concerns about over-reliance on these tools.

High school teachers' views are split. Nearly all express worries about academic integrity and reduced deep learning, but perceptions of instructional benefits vary by experience and discipline. Newer teachers and those in STEM fields are more optimistic than veteran teachers and those in humanities and social sciences, mirroring long-standing patterns in technology adoption.

Access and policy environments differ sharply across schools. Private high school teachers are substantially more likely than public school teachers to report network access to GenAI tools, and private schools are more than twice as likely to both permit GenAI use and have policies governing it. Among public schools, those serving more students eligible for free and reduced-price lunch are least likely to have such policies in place.

Taken together, these patterns point to a new, more complex digital divide that is no longer centered solely on devices and broadband, but on access to, guidance around, and comfort with GenAI tools. We conclude this brief by discussing the implications of our results and outlining additional GenAI-focused research to help support the development and implementation of effective GenAI policies and practices in education settings.

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Tables and Figures

Introduction

Our prior research brief provided new evidence of U.S. high school students' use of Generative Artificial Intelligence (GenAI) by leveraging multiple surveys conducted in 2024 and 2025 with students, parents, and high school educators. Results suggest that nearly 60% of high school students often or sometimes use GenAI tools for schoolwork (Adair et al., 2025). That said, the report also highlighted that educators are concerned—about academic integrity, students' overreliance on technology, and hampered ability to think critically, engage deeply, and express original ideas. Our prior research also indicates that high schools and districts have relatively few guardrails in place, reporting that AI tools are broadly available to both students and educators, and that the majority of schools or districts allow GenAI use, but large percentages do not have a GenAI use policy or delegate policy setting to departments, grades, or individual educators. Because GenAI tools are still so new, we must continue to track these data and report how GenAI use, sentiment, and policies evolve. Simultaneously, the literature suggests there is more nuance in the data beyond aggregate trends over time.

Recent research suggests that student GenAI use and perceptions vary by student and parent characteristics (Powers-O'Brien & Rochman, 2025; Center for Digital Thriving, 2024; Madden et al., 2024). Likewise, teacher perceptions of GenAI differ by teacher characteristics (Diliberti et al., 2024), and school-level GenAI policy can differ by school attributes (Madden et al., 2024; Carnegie Learning, 2025). In this brief, we unpack our earlier results to understand the extent to which we find variation in our data around student GenAI use; student, parent, and educator perceptions of GenAI and learning; and school GenAI access and use policies. Specifically, we ask:

I. How does high school student use of GenAI for schoolwork and perceptions about such use differ by student and parent demographic characteristics?

II. How does high school student use of GenAI for schoolwork and perceptions about such use differ by student academic characteristics?

III. How do teachers' perspectives on student GenAI use for schoolwork differ by teacher characteristics?

IV. How do teachers' perspectives on student GenAI use for schoolwork differ by high school attributes?

V. How do high school policies on GenAI access and use differ by high school attributes?

The evidence unveiled here also prompts us to identify additional questions and areas for future research. Important questions remain about the effect of GenAI use on student learning, about the GenAI policies and practices high school students encounter when they graduate and enroll in college, and how guidance and supports around student use of GenAI continue to evolve over time.

Survey Data

The data in this new report are drawn from multiple College Board surveys conducted between June 2024 and June 2025 with students, parents, and teachers. To enhance reliability and increase sample sizes, student and parent survey responses have been aggregated across survey administrations. Table 1 summarizes each survey, including administration dates, target audience, and typical sample size. See appendix for full list of survey questions.

Table 1: Overview of College Board Surveys

Survey	Dates	Respondent Group	Approximate Sample Size
High School Student Survey	Jan., Feb., Mar., May 2025	U.S. high school students (9th-12th grade)	600 per survey; Aggregated to 2,400
High School Parent Survey	Jun., Sept., Dec. 2024; Mar., Jun. 2025	Parents of high school students	1,000 per survey; Aggregated to 6,200
Teacher Survey	Dec. 2024	AP teachers	1,600

Note: The High School Student and High School Parent Surveys are fielded such that invited participants are not aware that College Board is conducting the survey. As a result, these data cannot be linked to individual student characteristics or school attributes unless provided by survey respondents. By contrast, data from the Teacher Survey is fielded directly by College Board and can be connected to known school attributes.

Findings

Our empirical findings are organized into five subsections focused on our five core research questions. First, we examine demographic differences among both students and parents in their reports of student GenAI use for schoolwork and perceptions about such use. The data enable us to examine heterogeneity by gender, race/ethnicity, and socioeconomic status (as measured by parental educational attainment). Second, we reveal academic differences among students who report different frequency of GenAI use for schoolwork and different sentiment around GenAI use. These academic data on students' year in high school as well as self-reported high school grades reveal some new patterns that contribute to our understanding of GenAI use. Next, we tap into high school teachers' perspectives on their students' GenAI use. Specifically, the third subsection disaggregates teacher sentiment by years of experience and academic discipline. The fourth subsection widens the focus to high school attributes by looking for heterogeneity by high school control, the economic composition of the student body, and urbanicity. Finally, we conclude our findings by highlighting variation in high school policies that govern student access to and use of GenAI tools, disaggregated again by the same set of high school attributes.

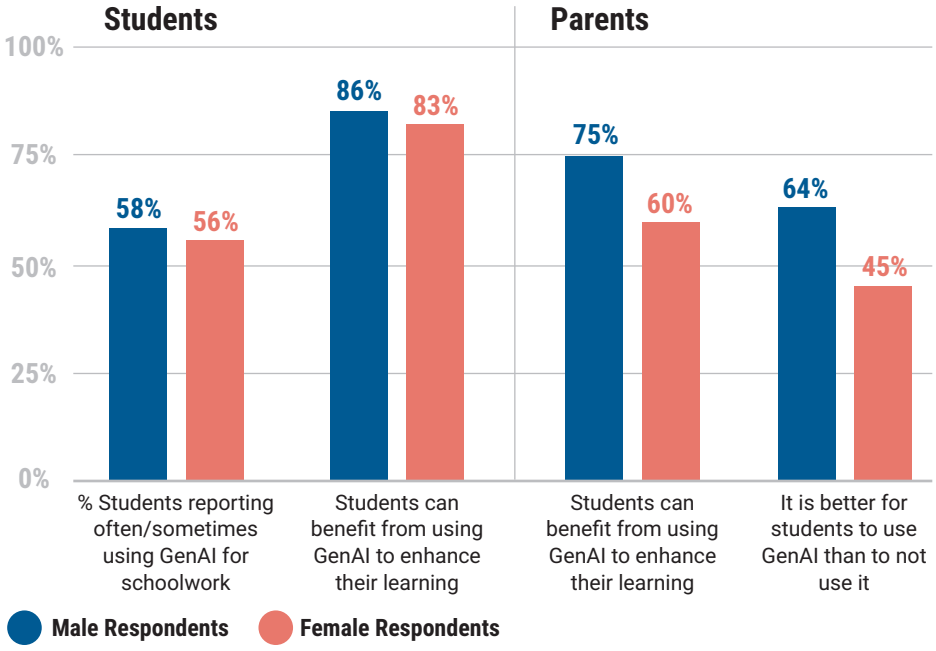
I. How does high school student use of GenAI for schoolwork and perceptions about such use differ by student and parent demographic characteristics?

Our previous report's May 2025 survey data on high school students' frequency of GenAI use suggests that 57% of high school students use GenAI[1] tools often or sometimes for schoolwork and 85% agree that students can benefit from using AI to enhance their learning (Adair et al., 2025). Here we examine whether there are differences in high school student use and sentiment by gender, race/ethnicity, and socioeconomic status. Parent perspectives are also examined across these demographics.

Student and Parent Gender

Male high school students are slightly more likely (2 percentage points) than females to report using GenAI tools often or sometimes for schoolwork. Figure 1 shows this small gender difference in reported GenAI use alongside other gender gaps in student and parent attitudes toward GenAI. Male high school students are also 3 percentage points more likely than their female peers to agree that a benefit from GenAI use is enhanced learning. **Parental sentiment toward GenAI benefits reveals greater heterogeneity by gender.** Male parents are 15 percentage points more likely than female parents to agree GenAI use can enhance student learning. Broad favorability toward GenAI is also substantially different between male and female parents of high school students, with male parents 19 percentage points more likely to agree that it is better for students to use GenAI than not to use it.

Figure 1: High school student GenAI use for schoolwork and student and parent sentiment around GenAI and learning, by respondent gender



Note: Students were asked "How frequently do you use generative AI tools for schoolwork?" (far left). The remaining questions in the above asked "How much do you agree or disagree with the following statement." Students and parents were asked to self-report their gender.

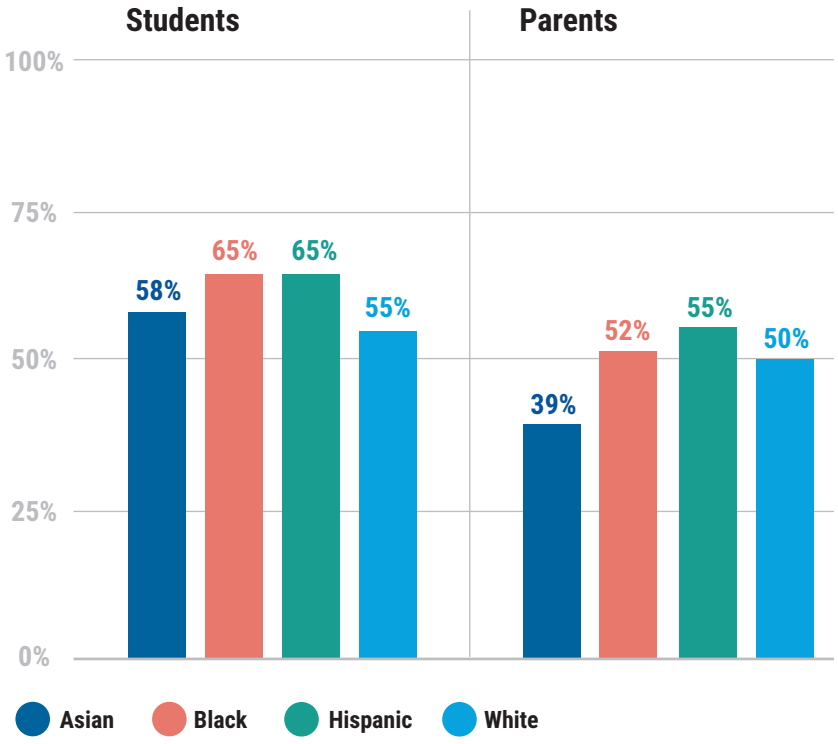
Source: High School Student Survey: Aggregated across January, February, March, and May 2025 survey administrations; High School Parent Survey: Aggregated across June, September, December 2024 and March, June 2025 administrations. Student sample size: 1,187-1,205; Parent sample size: 1,001-1,593.

[1] Typically, studies find that females rates or frequency of AI use is lower than males. Otis et al.'s (2024) review of 18 studies of adults and college students finds females are consistently less likely than males to use GenAI. While examinations of gender differences in GenAI use among high school students are more limited, research finds that among youth ages 14 to 22, females are again less likely to use GenAI (Center for Digital Thriving, 2024). A separate study of a more high school age population of 15- to 18-year-olds makes a distinction: reporting that females use GenAI less frequently than males overall, but are more likely to report using GenAI for academic work (Powers-O'Brien and Rochman, 2025). Both of these studies of youth find females and more likely than males to have negative views or concerns about the impact of GenAI. Monthly College Board student surveys from spring 2025 do not reveal a gender gap in GenAI use in the aggregated data displayed in the first panel of Figure 1, but there is some variation in the size of the gender gap in AI use between the monthly surveys (e.g., 15 and 5 percentage point AI use gaps favoring male high school student use in January and February surveys, respectively, and smaller than 1 percentage point differences in March and May surveys). Future research will explore gender differences among high school students in more detail to better understand variation over time and across survey instruments.

Student and Parent Race/Ethnicity

Black and Hispanic students are more likely to report using GenAI tools frequently for schoolwork than Asian and White students. Figure 2 indicates roughly two-thirds (65%) of Black and Hispanic high school students report using GenAI for schoolwork often or sometimes (also referred to as frequently in this report), while Asian and White high school students are 7 and 10 percentage points, respectively, less likely to report the same frequent use.[2] The second panel of Figure 2 indicates that parents of high school students generally report lower frequency of GenAI use by their student across all racial/ethnic subgroups than students report, but difference by parental race/ethnicity follow a similar pattern. Specifically, Black and Hispanic parents are more likely than Asian and White parents to report that their high school child frequently uses GenAI for schoolwork.[3]

Figure 2: The percentage of high school students and parents reporting students often/sometimes using GenAI for schoolwork, by respondent race/ethnicity



Note: Respondents were asked, "How frequently do you (does your child) use generative AI tools for schoolwork?". Survey respondents were asked to self-select their race and ethnicity in separate questions. Data for students who report Native American or Alaska Native, Native Hawaiian or Pacific Islander, Other race, or Prefer not to say are suppressed due to small sample sizes.

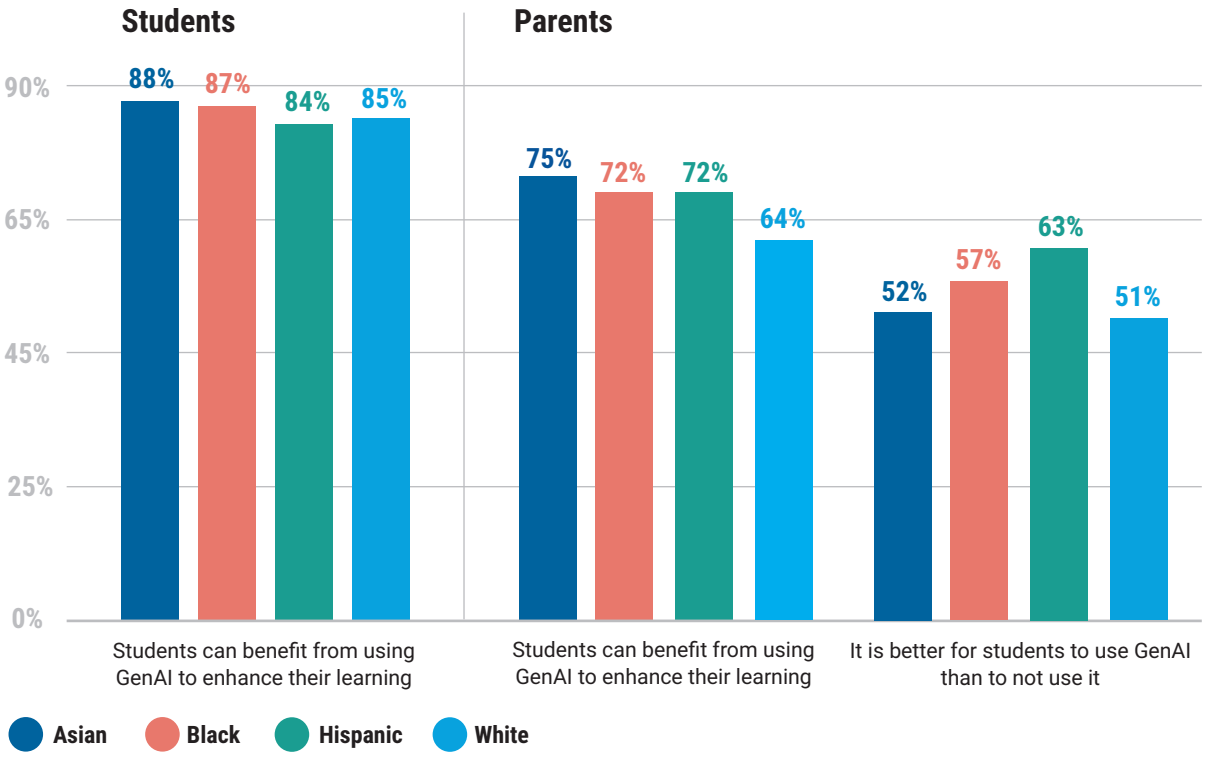
Source: High School Student Survey: Aggregated across January, February, March, and May 2025 survey administrations; High School Parent Survey: Aggregated across June, September, December 2024 and March, June 2025 administrations. Student sample size: 90-1,447; Parent sample size: 234-2,652.

[2] Another study of 13-to-18-year-olds similarly found that Black and Latino students are more likely than White youth to use GenAI to help with homework (Madden et al., 2024).

[3] Note that the race/ethnicity of the high school student may not be the same as the race/ethnicity of the parent.

Students' perceptions about the benefits of GenAI vary less by race/ethnicity than their parents' perceptions. As Figure 3 reveals, when asking students and parents whether students can benefit from using GenAI to enhance their learning, the variation is student agreement is only 4 percentage points, ranging from 84% among Hispanic students to 88% among Asian students, while the racial/ethnic gap is 11 percentage points for parents (64% among White parents to 75% among Asian parents). Parents also demonstrate notable variation by race/ethnicity in their agreement that it is better for students to use GenAI than to not. For both parent questions displayed in Figure 3, White parents of high school students are the least likely to express positive sentiment about GenAI use.[4]

Figure 3: The percentage of high school students and parents completely or somewhat agreeing with statements about GenAI and learning, by respondent race/ethnicity



Note: Survey respondents were asked to self-select their race and ethnicity in separate questions. Data for students who report Native American or Alaska Native, Native Hawaiian or Pacific Islander, Other race, or Prefer not to say are suppressed due to small sample sizes.

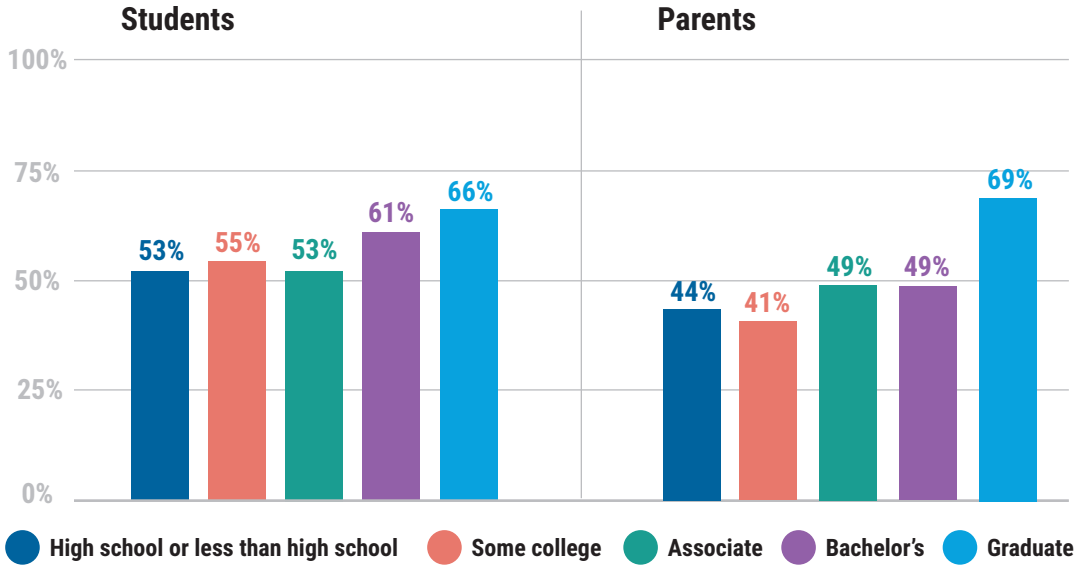
Source: High School Student Survey: Aggregated across January, February, March, and May 2025 survey administrations; High School Parent Survey: Aggregated across June, September, December 2024 and March, June 2025 administrations. Student sample size: 90-1,447; Parent sample size: 83-1,519.

[4] Another study of 13-to-18-year-olds similarly found that Black and Latino students are more likely than White youth to use GenAI to help with homework (Madden et al., 2024).

Socioeconomic Status

The percentage of students frequently using GenAI for schoolwork tends to increase as socioeconomic status (measured by parental educational) rises, with parents who have a graduate degree standing out as particularly likely to report high student use. Figure 4 shows slightly more than half of high school students who have a parent with less than a bachelor's degree report frequently using GenAI for schoolwork. The percentage of high school students reporting this level of GenAI use jumps to 61% and 66% for students who have a parent with a bachelor's or graduate degree, respectively.[5] The second panel of Figure 4 suggests a similar pattern among parent responses, but gaps in reported GenAI use frequency between those with more and less educational attainment grow from 13 percentage points among student responses to more than 20 percentage points among parent responses.

Figure 4: The percentage of high school students and parents reporting students often/sometimes using GenAI for schoolwork, by parent's highest degree attainment



Note: Respondents were asked to self-report their (parents') highest level of education.

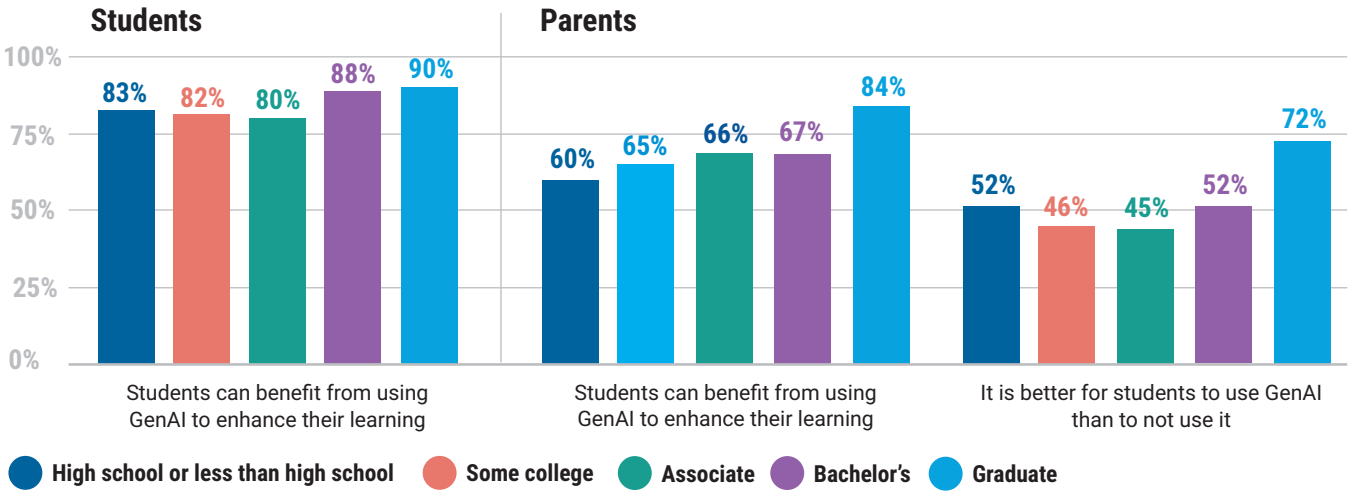
Source: High School Student Survey: Aggregated across January, February, March, and May 2025 survey administrations; High School Parent Survey: Aggregated across June, September, December 2024 and March, June 2025 administrations. Student sample size: 153-814; Parent sample size: 524-1,412.

Positive sentiment about GenAI use in high school also tends to increase with parents' educational attainment, with graduate degree-holding parents again standing out in the strength of responses for both students and parents. Figure 5 illustrates a notable 5 to10 percentage point boost in favorable sentiment toward GenAI for learning among high school students whose parents have a bachelor's or graduate degree. When parents are asked the same question about GenAI and high school student learning, parents with a graduate degree are 17 to 24 percentage points more likely to agree than parents with lower levels of educational attainment. Parents with graduate degrees are also up to 27 percentage points more likely to completely or somewhat agree that it is better for their high school student to use GenAI than not compared to parents with less educational attainment.[6]

[5] Research also finds that teens with a parent with a college degree or more are more likely to have used at least one type of GenAI (Madden et al., 2024).

[6] While Madden et al. (2024) split parents' education into two categories (parents with a college degree or more vs. parents with less than a college degree, which may mask the differences among college- and graduate school-educated parents that we observe), they also found that parents with higher levels of education are more likely to view GenAI positively. Specifically, parents in the higher educational attainment category are more likely to report that GenAI will have a positive impact on their teen's learning in school and are more likely to agree that it is necessary for K-12 students to learn GenAI-related skills for their future jobs.

Figure 5: The percentage of high school students and parents completely or somewhat agreeing with statements about GenAI and learning, by parent's highest degree attainment



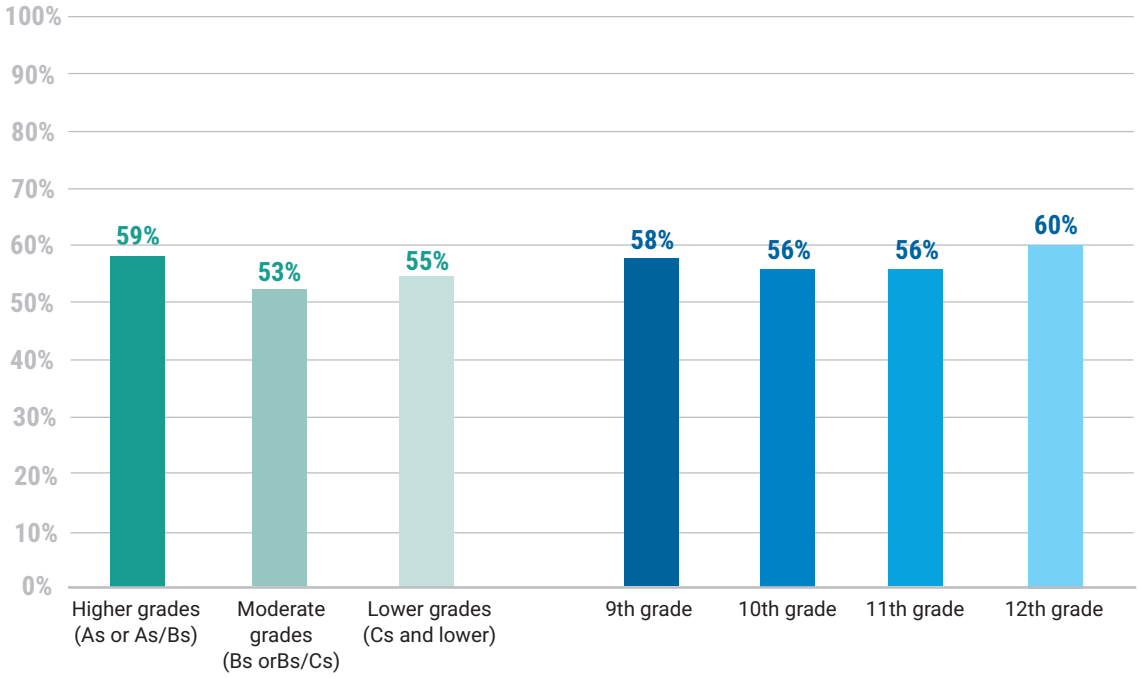
Note: Respondents were asked to self-report their (parent's) highest level of education.
Source: High School Student Survey: Aggregated across January, February, March, and May 2025 survey administrations; High School Parent Survey: Aggregated across June, September, December 2024 and March, June 2025 administrations. Student sample size: 122-672; Parent sample size: 228-816.

II. How does high school student use of GenAI for schoolwork and perceptions about such use differ by student academic characteristics?

GenAI use and perceptions vary somewhat by student demographic characteristics, but may also differ across high school students' academic performance and year in school. Figure 6 shows that the percentage of high school students who report using GenAI tools for schoolwork frequently is 6 percentage points higher for those who earning mostly As and Bs in high school compared to students reporting more moderate grades. There are fairly small differences by year in school with 12th graders 4 percentage points more likely than 10th and 11th grade students to report using GenAI for schoolwork often or sometimes.

In Section I, we documented some notable differences by race/ethnicity and socioeconomic status in the favorable sentiment toward GenAI as a way to enhance high school students' learning. Figure 7 examines this same sentiment by student academic attributes and finds that those reporting higher grades are 6 percentage points more likely to agree that GenAI enhances learning than students reporting lower grades. As with differences in reported frequency of GenAI use for schoolwork in Figure 6, 12th graders are 4-5 percentage points more likely to favorably view GenAI as an enhancement to their learning than 10th and 11th grade students.

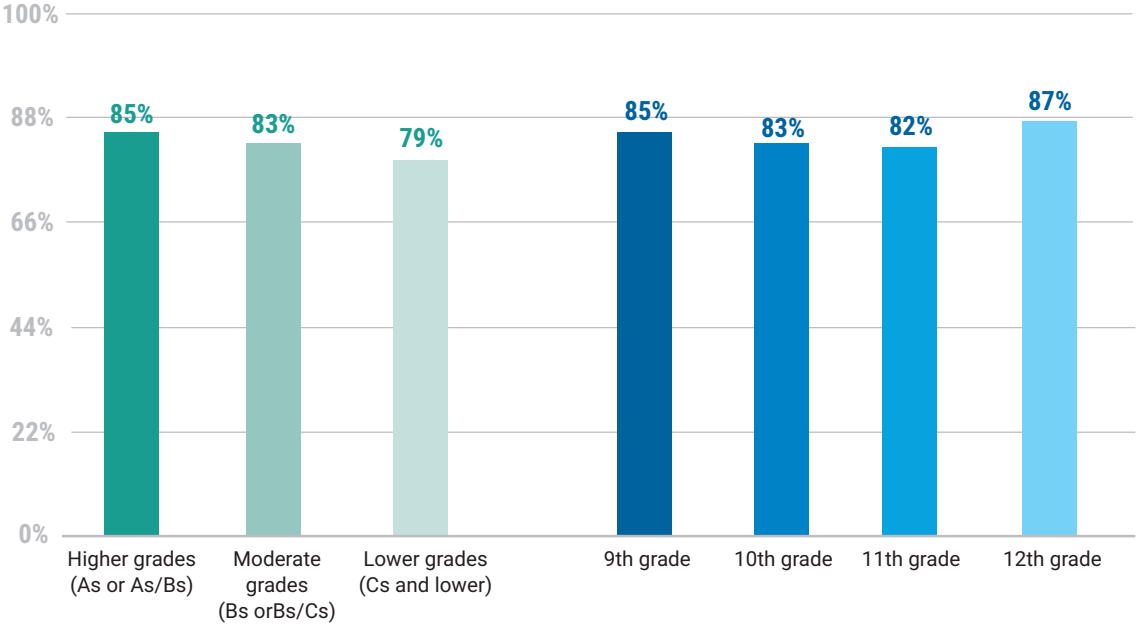
Figure 6: The percentage of high school students reporting often or sometimes using GenAI for schoolwork, by student grades and year in school



Note: Survey respondents were asked to self-report their achievement with the question, "On your last report card, what grades did you mostly get?".

Source: High School Student Survey: Aggregated across January, February, March, and May 2025 survey administrations. Sample size: 125-1,707.

Figure 7: The percentage of high school students reporting completely or somewhat agreeing that students can benefit from GenAI to enhance their learning, by student grades and year in school



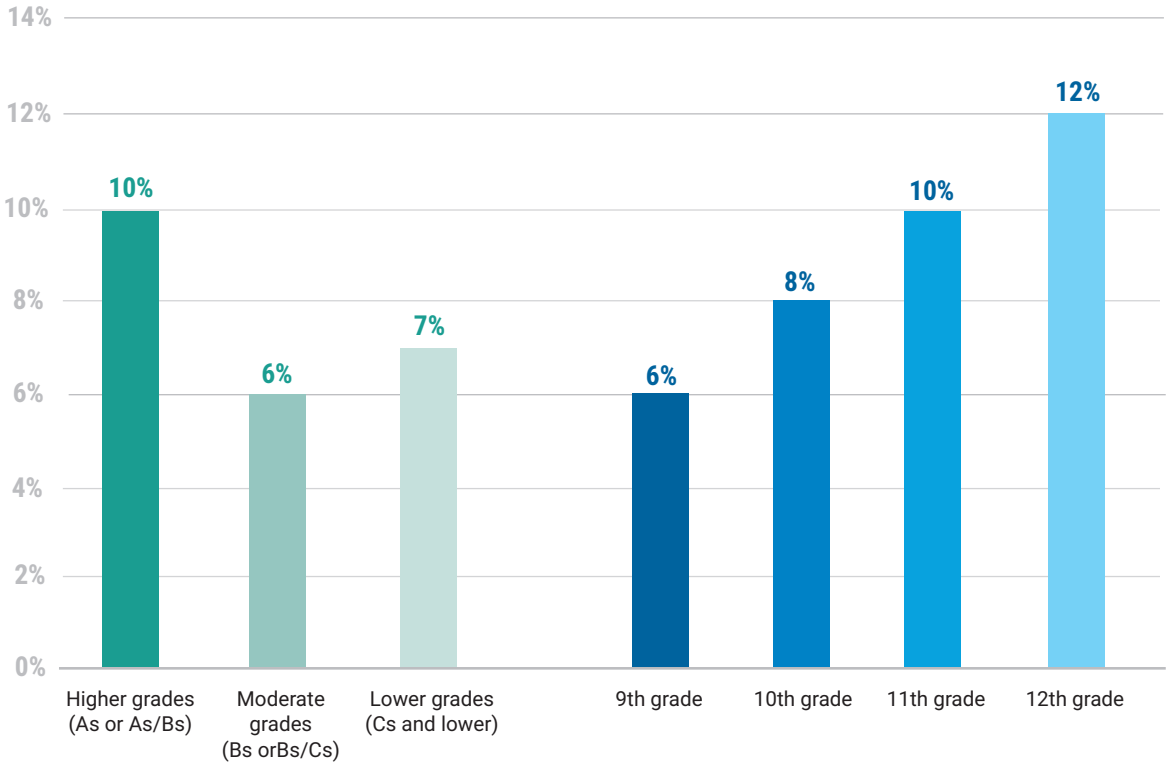
Note: Survey respondents were asked to self-report their achievement with the question, "On your last report card, what grades did you mostly get?"

Source: High School Student Survey: Aggregated across January, February, March, and May 2025 survey administrations. Sample size: 125-1,707.

Research confirms information-seeking is a top use of GenAI across many different samples and industries (Chatterji et al., 2025; Digital Education Council, 2025). When it comes to the ways in which high school students report using GenAI tools for schoolwork, our previous report documents more than 40% of students identified brainstorming ideas, editing or revising essays, conducting research and finding sources, and explaining complex topics (Adair et al., 2025). Roughly 9% of all high school student respondents select all four of these GenAI use cases, which may suggest an over-reliance on GenAI tools. Minimally, selecting all four of the most common GenAI uses for schoolwork suggests these tools are substantially intertwined with the way high school students work.

Figure 8 shows that high school students with higher grades and who are closer to finishing high school are notably more likely to identify all four common GenAI schoolwork use cases—brainstorming ideas, editing or revising essays, conducting research and finding sources, AND explaining complex topics. High school seniors are twice as likely as freshmen to report all four GenAI uses and those with As or As/Bs are also nearly twice as likely to do so as students with Bs or Bs/Cs.

Figure 8: The percentage of high school students who report using all four of the most popular GenAI uses for schoolwork, by student grades and grade in school



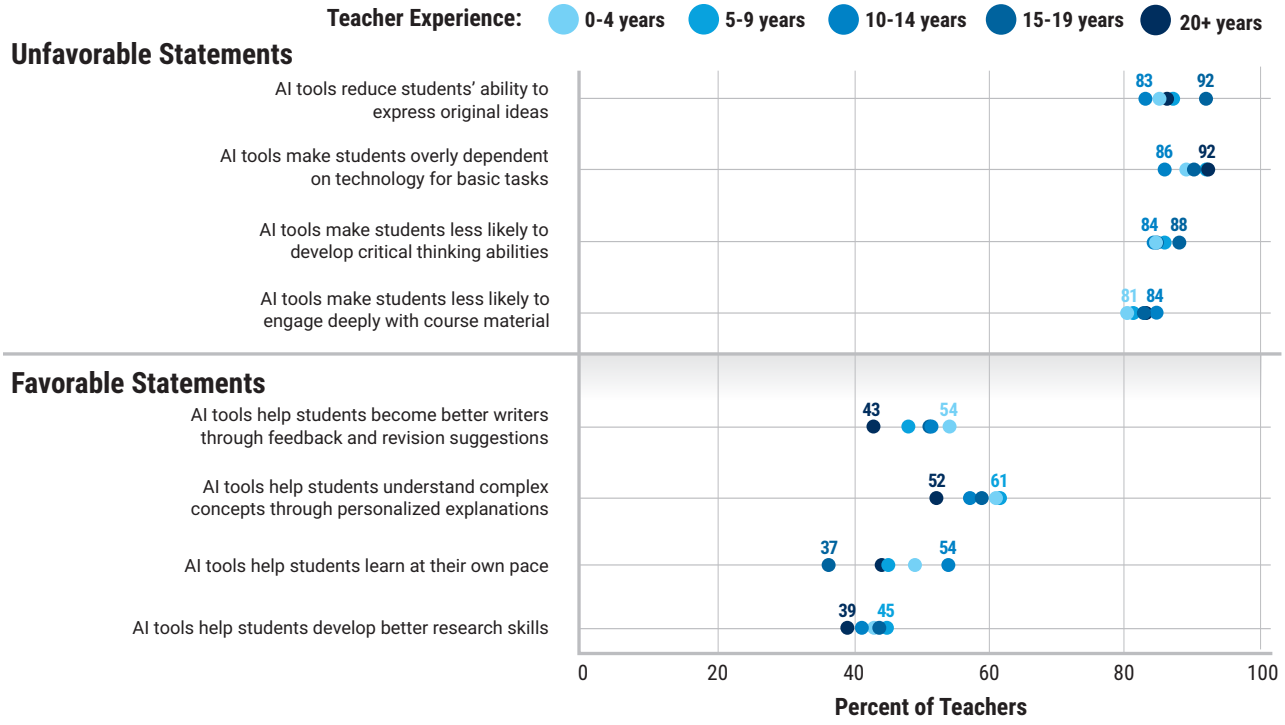
Note: Survey respondents were asked to self-report their achievement with the question, "On your last report card, what grades did you mostly get?" The four most popular GenAI uses for schoolwork were brainstorming ideas, editing or revising essays, conducting research and finding sources, and explaining complex topics. Other use cases included learning languages, writing code, and other.

Source: High School Student Survey: Aggregated across January, February, March, and May 2025 survey administrations. Sample size: 102-1,416.

III. How do high school teachers' perspectives on student GenAI use for schoolwork differ by teacher characteristics?

The high school teachers in our survey sample express consensus around their primary concerns with high school students' use of GenAI. **More than 80% of teachers frequently agreed that AI tools would make students overly dependent on technology for basic tasks, hamper critical thinking, reduce ability to express original ideas, and limit deep engagement with course materials. The top panel of Figure 9 suggests that there is also broad consensus about these concerns across teachers with different years of experience.** The top panel of Figure 9 suggests that **there is also broad consensus about these concerns across teachers with different years of experience.** The bottom panel of Figure 9, however, reveals less consensus about the promise of GenAI tools for high school students. Generally, more experienced high school teachers are less likely to agree than less experienced teachers that GenAI helps students understand complex concepts, become better writers, learn at their own pace, and develop better research skills. It is noteworthy that these GenAI uses in the bottom panel of Figure 9 are the most commonly cited by high school students as the way they utilize GenAI in their schoolwork. Teachers with 20 or more years of experience are frequently the least likely to agree with positive statements about AI and learning. In a separate survey question, the most tenured teachers are also more than twice as likely (15%) as teachers with 0 to 4 years of experience (7%) to believe AI should not be used by students in educational settings.[7]

Figure 9: The percentage of high school teachers who completely or somewhat agree with unfavorable and favorable statements about AI tools and learning, by years of teaching experience



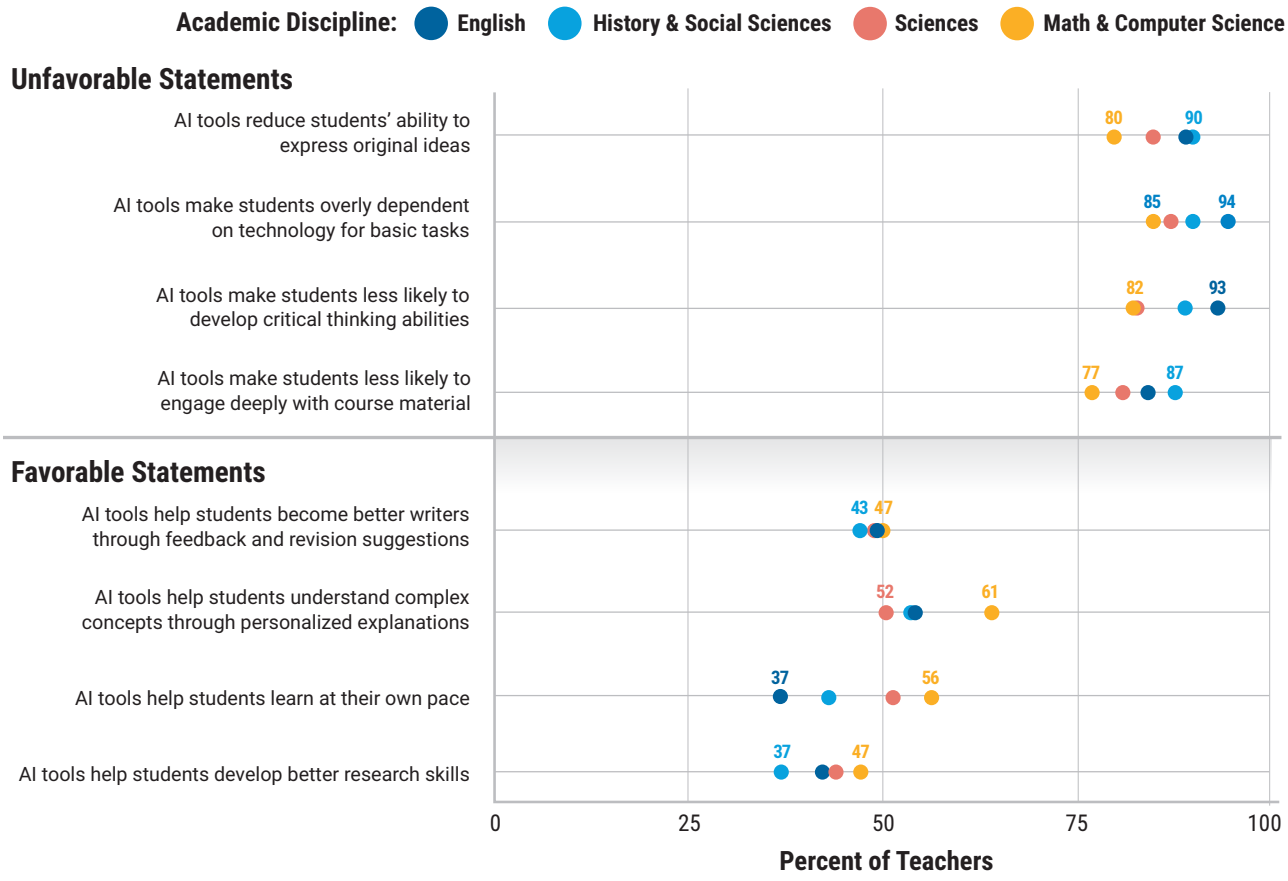
Note: Survey respondents were asked their level of agreement with a number of statements related to the use of AI via the randomized matrix question, "Please indicate your level of agreement with each statement about the impact of AI on student learning." Respondents also self-selected their years teaching AP courses in response to "How many years have you taught AP?".

Source: December 2024 AP Teacher survey. Sample size: 88-417.

[7] The survey question asked, "Which statement best describes your current stance on student use of generative AI tools?" These data refer to responses to "I believe AI should not be used by students in educational settings."

Turning to variation by high school teachers' academic discipline, English, history, and social science teachers typically [8] express less positive attitudes about AI tools' effect on learning than teachers in the sciences, math, and computer science. For example, the top panel of Figure 10 shows that English teachers and history and social science teachers are more likely to agree with unfavorable statements about AI, like AI tools make students less likely to develop critical thinking abilities, reduce students' ability to express original ideas, make students less likely to engage deeply with course materials, and make students overly dependent on technology for basic tasks. In the bottom panel of Figure 10, English, history, and social science high school teachers are also less likely to agree with favorable statements about AI, like AI tools help students understand complex concepts through personalized explanations, help students develop better research skills, and learn at their own pace (where the gap with science, math, and computer science high school teachers stretches to 19 percentage points).

Figure 10: The percentage of high school teachers who completely or somewhat agree with unfavorable and favorable statements about AI tools and learning, by teachers' academic discipline



Note: Survey respondents were asked their level of agreement with a number of statements related to the use of AI via the randomized matrix question, "Please indicate your level of agreement with each statement about the impact of AI on student learning." Respondents also self-selected their AP subject(s) they teach in the 2024-25 academic year.

Source: December 2024 AP Teacher survey. Sample size: 261-494.

[8] The exception is that teachers across all four academic disciplines have similar rates of agreement that AI tools help students become better writers, with 47 percent to 50 percent reporting agreement."I believe AI should not be used by students in educational settings."

Not surprisingly given these attitudes, **English teachers as well as history and social science teachers are more hesitant about students' AI use than are high school teachers in the sciences and math and computer science.** Specifically, English, history, and social science high school teachers are more likely to indicate they believe GenAI should not be used in education settings (by as many as 5 percentage points), prefer to limit AI use with students until better understanding its implications (by as many as 12 percentage points), and are more sure of their stance—as suggested by being less likely to indicate needing more information to form an opinion about student AI use (by as many as 12 percentage points).[9]

IV. How do high school teachers' perspectives on student GenAI use for schoolwork differ by high school attributes?

Teachers' perceptions of AI use also differ with high school context, including private or public control, student body economic composition, and urbanicity. This subsection of the findings focuses on sentiment differences of at least 5 percentage points. **Public high school teachers appear generally more positive than private high school teachers about AI tools and learning.** The top panel of Figure 11 shows that public high school teachers are less likely to agree with the unfavorable statement that AI tools reduce students' ability to express original ideas (by 5 percentage points). In the bottom panel of Figure 11, public school teachers are also more likely to agree with favorable statements about AI, such as AI tools help students develop better research skills (by 6 percentage points) and learn at their own pace (by 5 percentage points). The one statement where public high school teachers are at least 5 percentage points less likely to be positive than private school teachers about AI tools is "AI tools help students understand complex concepts through personalized explanations," where public high school teachers are 6 percentage points less likely to agree than private school teachers.

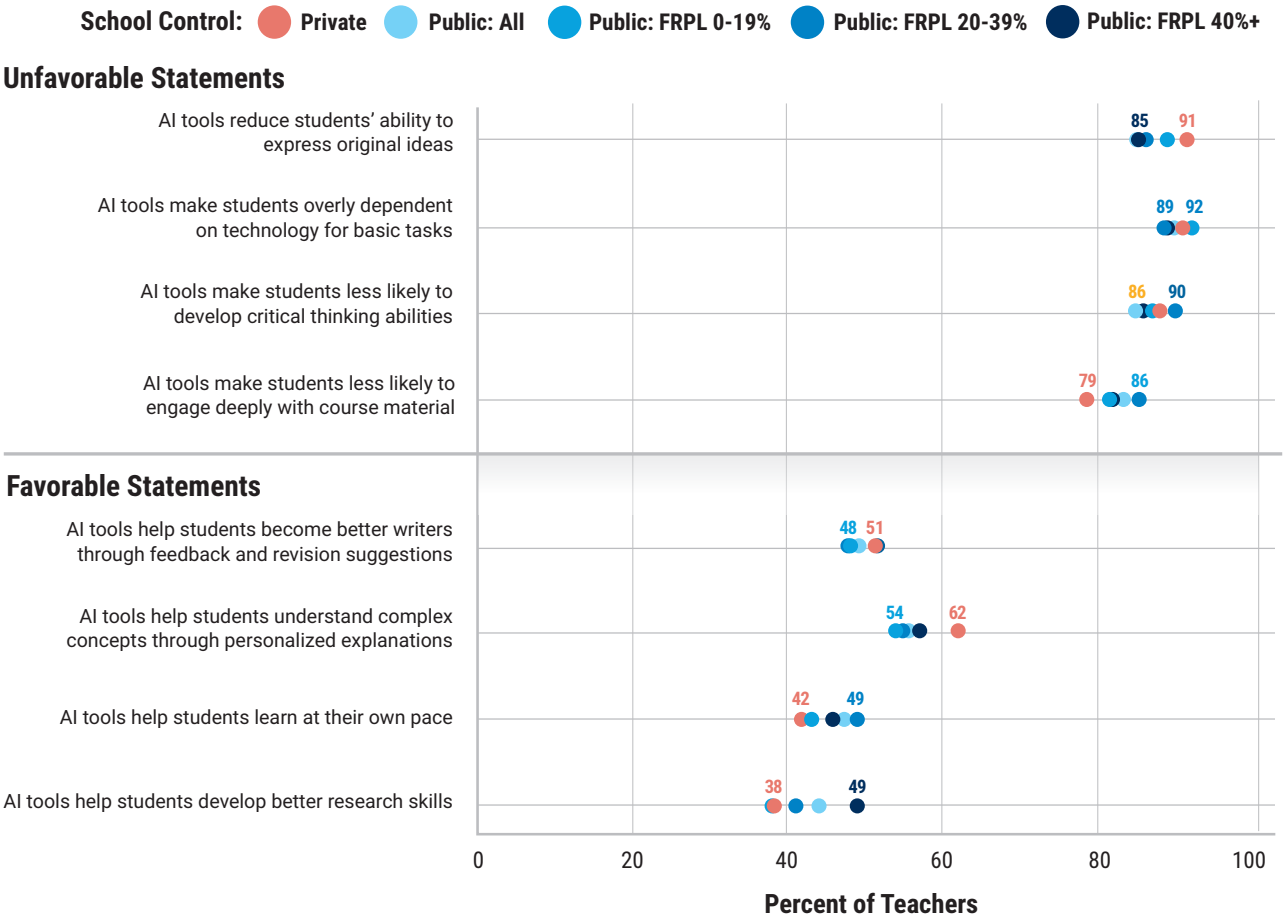
Differences among teachers of at least five percentage points also occur by the socioeconomic composition of public schools' student bodies. The data reveal that **teachers at schools with low rates of students eligible for free and reduced-price lunch (FRPL)**[10] **are less positive about AI tools for student learning than teachers at schools with medium and high FRPL rates, responding more like teachers at private high schools.** In fact, teachers at low FRPL high school fall within one percentage point of private school teachers on statements like, "AI tools help students develop better research skills" and "help students learn at their own pace," but are 11 percentage points away from fellow public school teachers at high FRPL schools are six percentage points away from teachers at medium FRPL schools on these same measures, respectively. Teachers at low FRPL schools also appear more hesitant about using AI. Specifically, they are 6 and 5 percentage points more likely than those in the medium and high FRPL categories to indicate they "prefer to limit AI use with students until we better understand its implications."[11]

[9] The survey question asks, "Which statement best describes your current stance on student use of generative AI tools?" Other response options included: "I'm cautiously exploring AI use with my students while developing best practices," "I support AI use but need more guidance on implementation to support my students," "I believe AI should not be used by students in educational settings," "I actively encourage appropriate AI use and have implemented specific guidelines," and "I need more information to form an opinion about student AI use." English, history, and social science high school teachers may be more certain of their stance because they are more likely to have used GenAI. According to research by Diliberti et al. (2024), K12 teachers in English Language Arts and Social Studies are more likely to have used AI tools or products in their own work, which the authors suspect may be the result of their being more likely to primarily develop their own lessons rather than existing instructional materials.

[10] The percentage of students eligible for free and reduced-price lunch (FRPL) is sourced from the National Center for Education Statistics. Data are categorized into low (FRPL<20%), moderate (20%<FRPL<40%), and high (FRPL>40%) where a 40% FRPL rate is historically the minimum threshold for the community eligibility provision that designated a school as high-need such that all students are offered breakfast and lunch at no charge. The community eligibility threshold was lowered to 25% in October 2023, but there is some concern that newly eligible schools do not have the resources and technical assistance needed to successfully implement the program universally.

[11] The survey question asked, "Which statement best describes your current stance on student use of generative AI tools?" Other response options included: "I'm cautiously exploring AI use with my students while developing best practices," "I support AI use but need more guidance on implementation to support my students," "I believe AI should not be used by students in educational settings," "I actively encourage appropriate AI use and have implemented specific guidelines," and "I need more information to form an opinion about student AI use."

Figure 11: The percentage of high school teachers who completely or somewhat agree with unfavorable and favorable statements about AI tools and learning, by school control and FRPL percentage

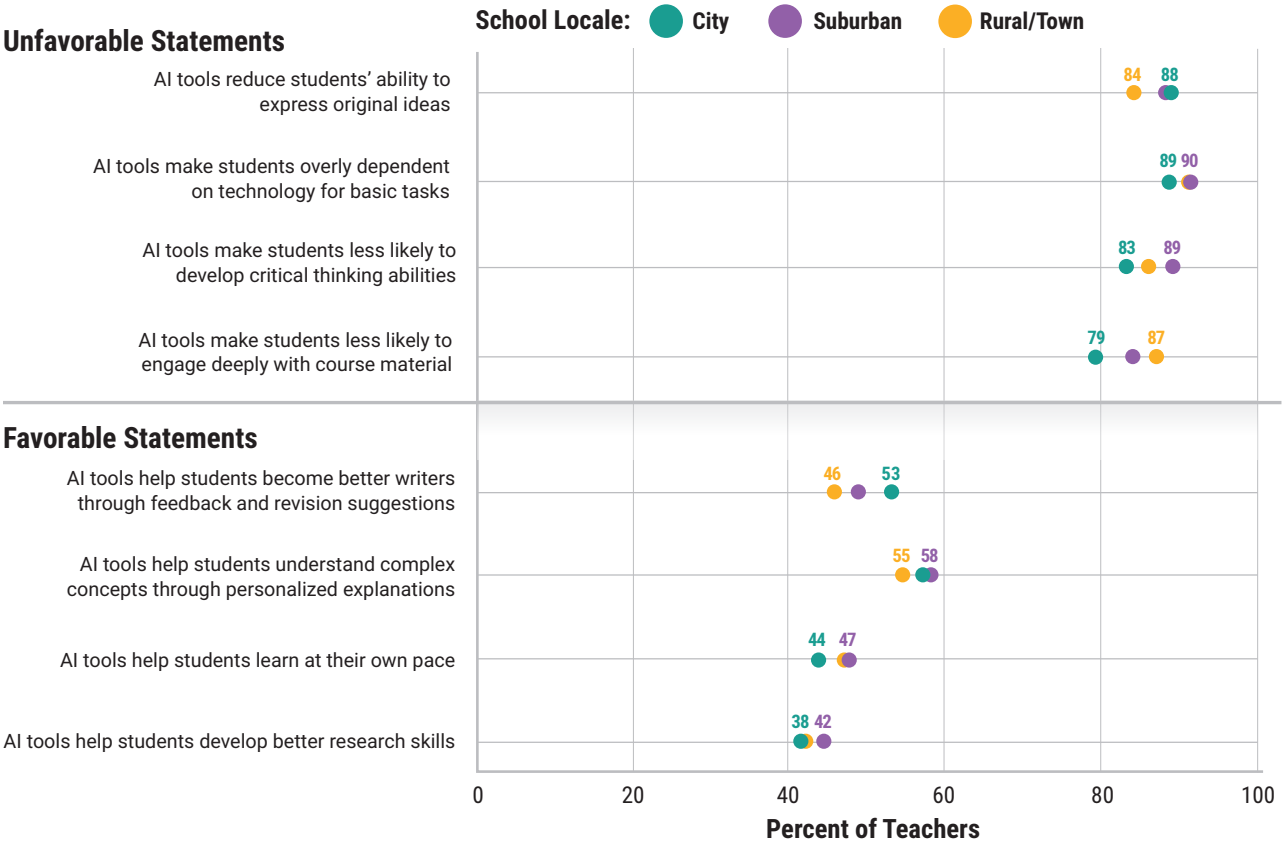


Note: Survey respondents were asked their level of agreement with a number of statements related to the use of AI via the randomized matrix question, "Please indicate your level of agreement with each statement about the impact of AI on student learning." Data on school control and FRPL percentage are sourced from the National Center for Education Statistics.

Source: December 2024 AP Teacher survey. Sample size: 140-490.

Turning to high school locale, **teachers at high schools in cities are more likely to hold positive views about the learning benefits of AI tools compared with their suburban and rural counterparts.** Figure 12 shows that, on unfavorable statements about AI, urban teachers are 8 percentage points less likely than rural teachers to agree that AI makes students engage less deeply with course material, and 6 percentage points less likely than suburban teachers to agree that AI tools make students less likely to develop critical thinking skills. Teachers in urban high schools are also 7 percentage points more likely than rural teachers to agree that AI can help students become better writers.

Figure 12: The percentage of high school teachers who completely or somewhat agree with unfavorable and favorable statements about AI tools and learning, by school locale



Note: Survey respondents were asked their level of agreement with a number of statements related to the use of AI via the randomized matrix question, "Please indicate your level of agreement with each statement about the impact of AI on student learning." Data on high school locale are sourced from the National Center for Education Statistics.

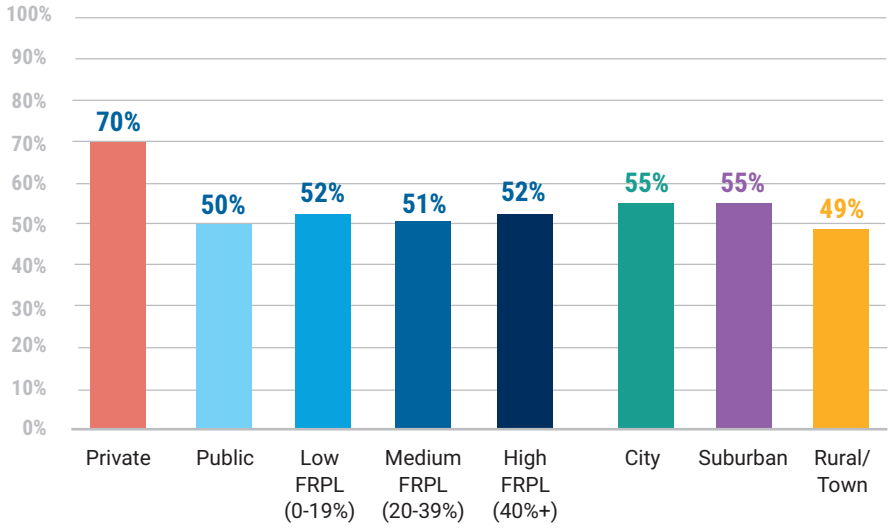
Source: December 2024 AP Teacher survey. Sample size: 307-619.

V. How do high school policies on GenAI use and access differ by high school attributes?

Permission to use GenAI tools for schoolwork along with the ability to access GenAI tools through one's school network can shape high school student use as well as student and teacher perspectives on GenAI use. We examine differences in policies that govern access to and use of GenAI across high schools with different attributes.

In our prior research, we found that **56% of all high school teachers report that students and teachers have access to AI tools on their school's network. Yet such access differs greatly between private and public schools**, minimally within public schools by FRPL rates, and somewhat by urbanicity, with rural schools less likely to provide such access. Specifically, as Figure 13 highlights, public high school teachers are 20 percentage points less likely than private school teachers to report that students and teachers have access to AI tools on their school network. That said, within public schools, differences by FRPL categories do not exceed more than one percentage point. Turning to urbanicity, teachers at high schools in towns and rural areas are 6 percentage points less likely than teachers in urban and suburban communities to report having access to AI tools through their school.

Figure 13: The percentage of high school teachers who report that AI tools are accessible on their school's network for both students and teachers, by school control, FRPL percentage, and locale



Note: Survey question asked, "Are generative AI websites or tools like ChatGPT blocked on your school's network for the 2024-25 academic year?" Data on school control, FRPL rate, and locale were sourced from the National Center for Education Statistics.

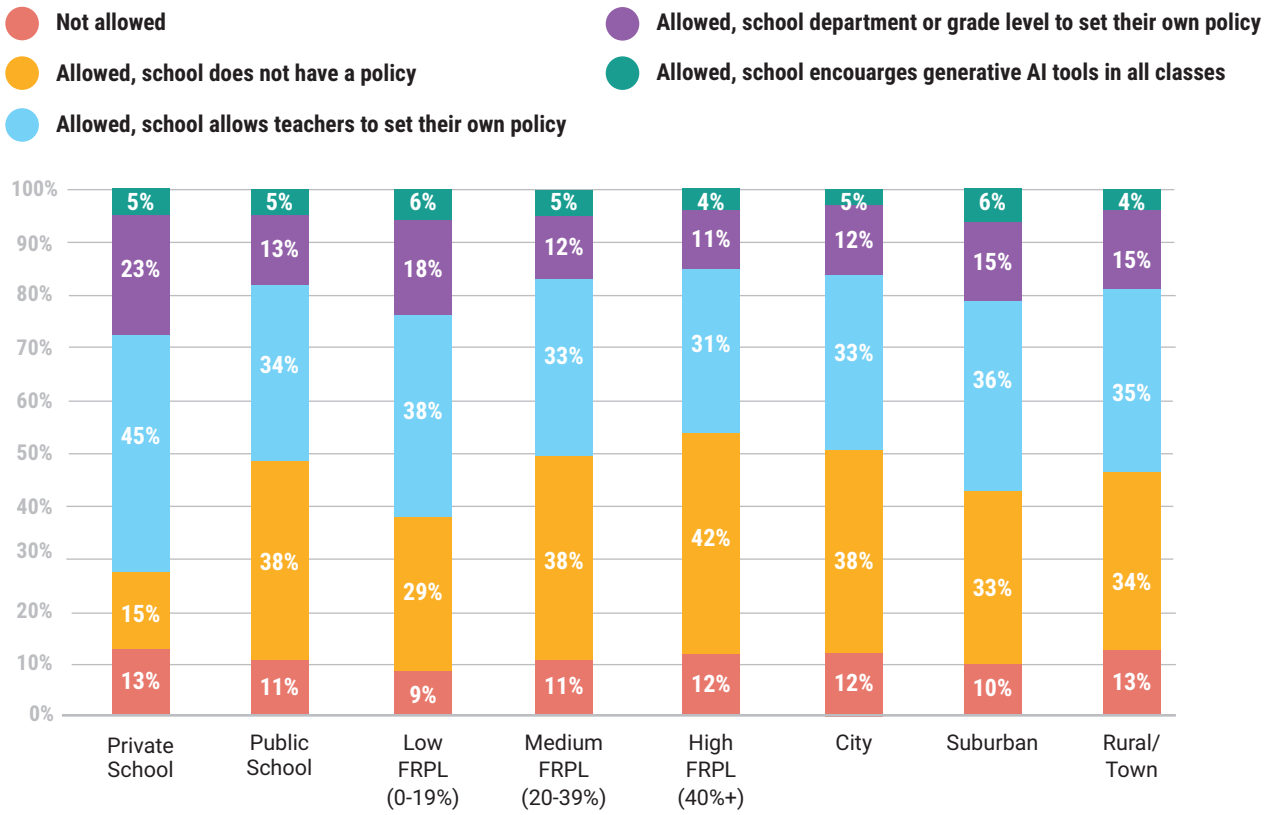
Source: December 2024 AP Teacher survey. Sample size: 307-619.

Access is one thing, use is another. When asked to characterize their school's student GenAI use policy, **12% of high school teachers report that GenAI tools cannot be used at all in their schools. Figure 14 shows that this percentage of teachers reporting that GenAI tools are not allowed fluctuates very little (from 9% to 13%) across high schools with different attributes.** There is also minimal variation by school attributes at the other end of the spectrum in terms of the percentage of teachers reporting their high school encourages GenAI tools in all classes (3% to 6%). More notable heterogeneity appears by school control and FRPL percentages when examining the percentage of high schools that allow GenAI use but have no school-wide GenAI policy. **Specifically, compared to private high school teachers, public school teachers are more than twice as likely (38% vs. 15%) to report that their high school allows students to use GenAI tools but that there is no school policy.** Public school teachers are also 11 percentage points less likely to say their school allows teachers to set their own policy and 10 percentage points less likely to say their school allows departments or grade levels to set their own policy.[12]

Within public high schools, schools with high FRPL rates are 13 percentage points more likely than those with low FRPL rates to report that their school allows use but has no school policy. Schools with high FRPL rates are also 7 percentage points less likely than low-FRPL rate schools to have teachers, departments or grade levels setting GenAI use policies.

[12] Carnegie Learning (2025) similarly reports that schools/districts meeting our high FRPL threshold are 12 percentage points less likely than schools/districts with lower FRPL rates to have an AI policy.

Figure 14: The percentage of high school teachers who affirm student GenAI use policies in their high school, by school control, FRPL percentage, and locale



Note: Teachers were asked, "What type of student generative AI use policy is in place at your school, if any?" Data on school control, FRPL rate, and locale were sourced from the National Center for Education Statistics.

Source: December 2024 AP Teacher survey. Sample size: 307-619.

Gaps by high school locale in Figure 14 are smaller (5 percentage points or less) for each part of the stacked bar, which covers the full range of survey response options. According to teachers, urban high schools are 5 percentage points more likely than suburban schools to allow GenAI tools without a school-wide policy and less likely to delegate GenAI policy decisions to teachers, departments or grade levels.

[13] Carnegie Learning (2025), examining not just high schools but all K12 schools, finds that rural schools are less likely that urban and suburban schools to have an AI policy.

Discussion

This research identifies more frequent use of and more favorable sentiment toward GenAI tools for schoolwork among students with more educated parents and those who are higher-achieving, closer to graduation, and Black and Hispanic. It is notable, given concerns about over-reliance on GenAI, that it is the academically stronger students and seniors who are the most likely to report using GenAI tools across all four of the most commonly identified uses for schoolwork and express greater confidence in the tools' educational value.

Teacher sentiment is fragmented. While concerns about academic integrity and diminished deep learning are nearly universal, perceptions of GenAI's instructional benefits diverge by years of experience and subject area. Newer teachers and teachers in STEM fields are more optimistic about the benefits of GenAI tools than their veteran and humanities/social science counterparts. These differences echo long-standing divides in comfort with classroom technology.

Access to GenAI tools differs markedly by school control, with private high school teachers 20 percentage points more likely to report access on the school network than public high school teachers. The policies that govern GenAI use also vary across high schools in important ways. Private high schools are more than twice as likely as public schools to allow GenAI tool use and have a policy governing that use. This gap in GenAI use policies is particularly large among those public high schools with higher rates of free and reduced-price lunch eligibility.

The combined evidence suggests an emerging digital divide that is more nuanced than the first-generation divide centered on broadband and device availability. There are at least three areas of tensions for policymakers and practitioners to grapple with on this front. First, the data suggest that there is both unequal access to potential instructional benefits of AI tools as well as unequal protection from its potential risks. Higher-SES families and higher-achieving students appear to be leveraging GenAI more, possibly compounding existing advantages in tutoring, editing support, and access to personalized academic help but also possibly increasing risk. In contrast, high schools with typically fewer resources are more likely to lack policies or guardrails. This may leave their students without the necessary guidance to effectively and ethically use GenAI for learning, possibly reducing their opportunity to benefit from GenAI but also possibly mitigating against its risks. Second, the variation in teacher sentiment about GenAI across subject areas and years of experience combined with delegation of GenAI policies to teachers, departments, or grade levels means that students likely receive inconsistent messages about what GenAI is for, when to use it, and how to use it responsibly. Supporting teacher preparation and comfort with AI tools is a critical step toward the implementation of more promising AI practices and greater consistency for students. Finally, unequal adoption and lack of clear policies around GenAI tools in high schools drive inequalities that may have disparate impacts. Private high schools and higher-SES public schools appear more likely to provide AI access alongside structured policies, conditions which may be more conducive to productive experimentation and learning how GenAI tools can be effective tools of learning but may also increase risk.

The central tension of the current moment is that GenAI use is outpacing clarity on its educational value. This brief and our prior brief (Adair et al., 2005) document that students, parents, and educators tend to believe that GenAI can help students' learning and that learning to use GenAI tools in high school is valuable. At the same time, students, parents, and educators are concerned about GenAI use, and particularly it's potentially negative impact on students' learning skills. Prevalence of both viewpoints, often held simultaneously by the same individuals, makes it challenging to know whether a cautious or full-steam-ahead approach is better. Deeper investigation is recommended in several areas.

Many of the same questions we have tackled in this research and the prior brief for high school students and educators can be examined for college students and faculty. Uncovering similarities and differences in GenAI use and sentiment across secondary and postsecondary contexts will help inform policies and practices that make sense in both environments. Restrictive high school policies followed by permissive college policies (or the reverse) sets students up for a rocky transition that is already challenging in other ways. It would be similarly useful to better understand employers' expectations and policies around GenAI tools in the workplace to inform students' transition into the labor market, whether directly or by way of college. The transitions to college and work also beg the question of how students are using GenAI to support and strengthen their applications to these next stages as well as how colleges and employers are relying on AI to evaluate those applications.

Our research touched on gender differences in use and sentiment among both high school students and parents. There is more to learn about why some data reveal sizeable gender gaps around GenAI and others do not. Is the key to understanding this variation a deeper dive into what people perceive as GenAI use or a set of more defined, count-based measures of frequency of use? The limitations of survey data may also require us to look to administrative data on actual use for a cleaner understanding of gender differences.

The field is rapidly accumulating evidence—both experimental and observational—to understand the effects of AI use on learning. Meta-analyses and regular syntheses of this quickly growing literature are helpful ways to examine where we might begin to see consensus and where results are context-dependent. Additional research on classroom-level uses would provide insights about what works, for which types of students, and under what conditions. Quantitative and qualitative data that examine classrooms on the front lines of GenAI disruption (e.g., classes with papers and projects historically prepared outside of class) may reveal promising future experiments as well as insights on the mechanisms behind survey results.

With high school student and school adoption of GenAI outpacing consensus among educators and school leaders, the GenAI benefits and harms that occur will hinge on the choices we make now. The field needs evidence-based policies and practices that encourage innovation while protecting core learning goals and preventing new sources of inequality. More research is essential to guide those decisions in this moment of uncertainty.

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Appendix: Survey Items

The data included in this report are from the following survey questions. The detail provided here includes all response options for each question, though all these response options may not be included in the figures noted within the report and/or response options may have been collapsed.

Student Survey Questions

What is your gender?

- o Female
- o Male
- o Non-binary
- o Other

Which grade are you currently in?

- o 9th grade
- o 10th grade
- o 11th grade
- o 12th grade

Which of the following best describes your ethnic background?

- o Hispanic/Latino
- o Other
- o Prefer not to say

Which of the following best describes your race?

- o Asian
- o Black or African-American
- o Native American or Alaska Native
- o Native Hawaiian or Other Pacific Islander
- o White
- o Other race
- o Don't know/Prefer not to say

Which best describes your school?

- o Public
- o Private
- o Charter

On your last report card, what grades did you mostly get?

- o As
- o As and Bs
- o Bs
- o Bs and Cs
- o Cs
- o Cs and Ds
- o Ds
- o Ds and Fs
- o Not sure

How frequently do you use generative AI tools for schoolwork?

- o Often
- o Sometimes
- o Rarely
- o Never

Which generative AI tools have you used to help with school assignments or homework? Please select all that apply.

- o ChatGPT
- o Grammarly
- o Microsoft Copilot
- o Khanmigo
- o PowerBuddy
- o Duolingo
- o Class Companion
- o Other

How have you used generative AI tools for schoolwork? Please select all that apply.

- o Conducting research and finding sources
- o Brainstorming ideas
- o Explaining complex topics
- o Editing or revising essays
- o Learning languages
- o Writing code
- o Other

How much do you agree or disagree with the following statement? Students can benefit from using generative AI to enhance their learning

- o Completely agree
- o Somewhat agree
- o Somewhat disagree
- o Completely disagree
- o Not sure

In which of the following areas do you think AI can benefit students the most?

- o Personalized learning
- o Tutoring support
- o Feedback on assignments or writing
- o College planning
- o Career guidance
- o Automated grading
- o Other
- o Not sure

Parent Survey Questions

What is your highest level of education?

- o PreK to 8th grade
- o Some high school, no diploma
- o High school graduate
- o Some college credit, no degree
- o Trade/tech/vocational training
- o Associate degree
- o Bachelor's degree
- o Master's degree
- o Doctorate degree
- o Professional degree

What is your gender?

- o Female
- o Male
- o Other
- o Prefer not to say

Are you of Spanish/Hispanic/Latino origin?

- o No, not of Spanish/Hispanic/Latino origin
- o Yes, Cuban
- o Yes, Mexican
- o Yes, Puerto Rican
- o Yes, another Spanish/Hispanic/Latino origin

Which of the following best describes your race?

- o Asian
- o Black or African-American
- o Native American or Alaska Native
- o Native Hawaiian or Other Pacific Islander
- o White
- o Other race
- o Don't know/Prefer not to say

How frequently does your child use generative AI tools for schoolwork?

- o Often
- o Sometimes
- o Rarely
- o Never
- o Not sure

How much do you agree or disagree with the following statement? Students can benefit from using generative AI to enhance their learning

- o Completely agree
- o Somewhat agree
- o Somewhat disagree
- o Completely disagree
- o Not sure

How much do you agree or disagree with the following statement? It's better for students to use generative AI for schoolwork than to not use it

- o Completely agree
- o Somewhat agree
- o Somewhat disagree
- o Completely disagree
- o Not sure

In which of the following areas do you think AI can benefit students the most?

- o Personalized learning
- o Tutoring support
- o Feedback on assignments or writing
- o College planning
- o Career guidance
- o Automated grading
- o Other
- o Not sure

Teacher Survey Questions

Which of the following AP courses are you teaching in the 2024-25 school year? (please select all that apply)

- o AP African American Studies
- o AP Art History
- o AP Biology
- o AP Calculus AB
- o AP Calculus BC
- o AP Chemistry
- o AP Chinese Language and Culture
- o AP Comparative Government & Politics
- o AP Computer Science A
- o AP Computer Science Principles
- o AP English Language & Composition
- o AP English Literature & Composition
- o AP Environmental Science
- o AP European History
- o AP French Language and Culture
- o AP German Language and Culture
- o AP Human Geography
- o AP Italian Language and Culture
- o AP Japanese Language and Culture
- o AP Latin
- o AP Macroeconomics
- o AP Microeconomics
- o AP Music Theory
- o AP Physics 1
- o AP Physics 2
- o AP Physics C: Electricity and Magnetism
- o AP Physics C: Mechanics
- o AP Precalculus
- o AP Psychology
- o AP Research
- o AP Seminar
- o AP Spanish Language and Culture
- o AP Spanish Literature and Culture
- o AP Statistics
- o AP 2-D Art and Design
- o AP 3-D Art and Design
- o AP Art & Design: Drawing
- o AP United States Government & Politics
- o AP United States History
- o AP World History: Modern
- o I am not teaching any AP courses in the 2024-25 school year

How many years have you taught AP?

- o Less than a year
- o 1-4 years
- o 5-9 year
- o 10-14 years
- o 15-19 years
- o 20-24 years
- o 25-29 years
- o 30 years or more

What type of student generative AI use policy is in place at your school, if any?

- o Our school allows teachers to set their own generative AI policy
- o My school doesn't have a policy for generative AI
- o Our school allows each department or grade level to set a generative AI policy
- o Generative AI tools cannot be used at all
- o Our school encourages generative AI tools in all classes

Which statement best describes your current stance on student use of generative AI tools?

- o I actively encourage appropriate AI use and have implemented specific guidelines
- o I support AI use but need more guidance on implementation to support my students
- o I'm cautiously exploring AI use with my students while developing best practices
- o I prefer to limit AI use with students until we better understand its implications
- o I believe AI should not be used by students in educational settings
- o I need more information to form an opinion about student AI use

Please indicate your level of agreement with each statement about the impact of AI on student learning.

Completely agree / Somewhat agree / Somewhat disagree / Completely disagree

- o AI tools help students develop better research skills
- o AI tools make students less likely to develop critical thinking abilities
- o AI helps students understand complex concepts through personalized explanations

Teacher Survey Questions (continued)

- AI makes students overly dependent on technology for basic tasks
- AI helps students learn at their own pace
- AI reduces students' ability to express original ideas
- AI helps students become better writers through feedback and revision suggestions
- AI makes students less likely to engage deeply with course material

Are generative AI websites or tools like ChatGPT blocked on your school's network for the 2024-25 academic year?

- Yes, all generative AI tools are blocked for students and teachers
- Yes, some specific AI tools are blocked for students or teachers
- Yes, only some school or district-sponsored AI tools are permitted for students or teachers
- No, AI tools are accessible on my school's network for both students and teachers

What generative AI tools are permitted for student use? (please select all that apply)

- Microsoft Co-Pilot
- OpenAI ChatGPT
- Google NotebookLM
- Google Gemini
- Anthropic Claude
- Midjourney
- Adobe Firefly
- Other
- I don't know / not sure

And what is the policy for staff use of Generative AI?

- The policy allows for responsible and ethical use of AI by staff at their discretion
- The policy allows for responsible and ethical use of AI by staff in select circumstances
- The policy prohibits staff use of generative AI
- Other

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