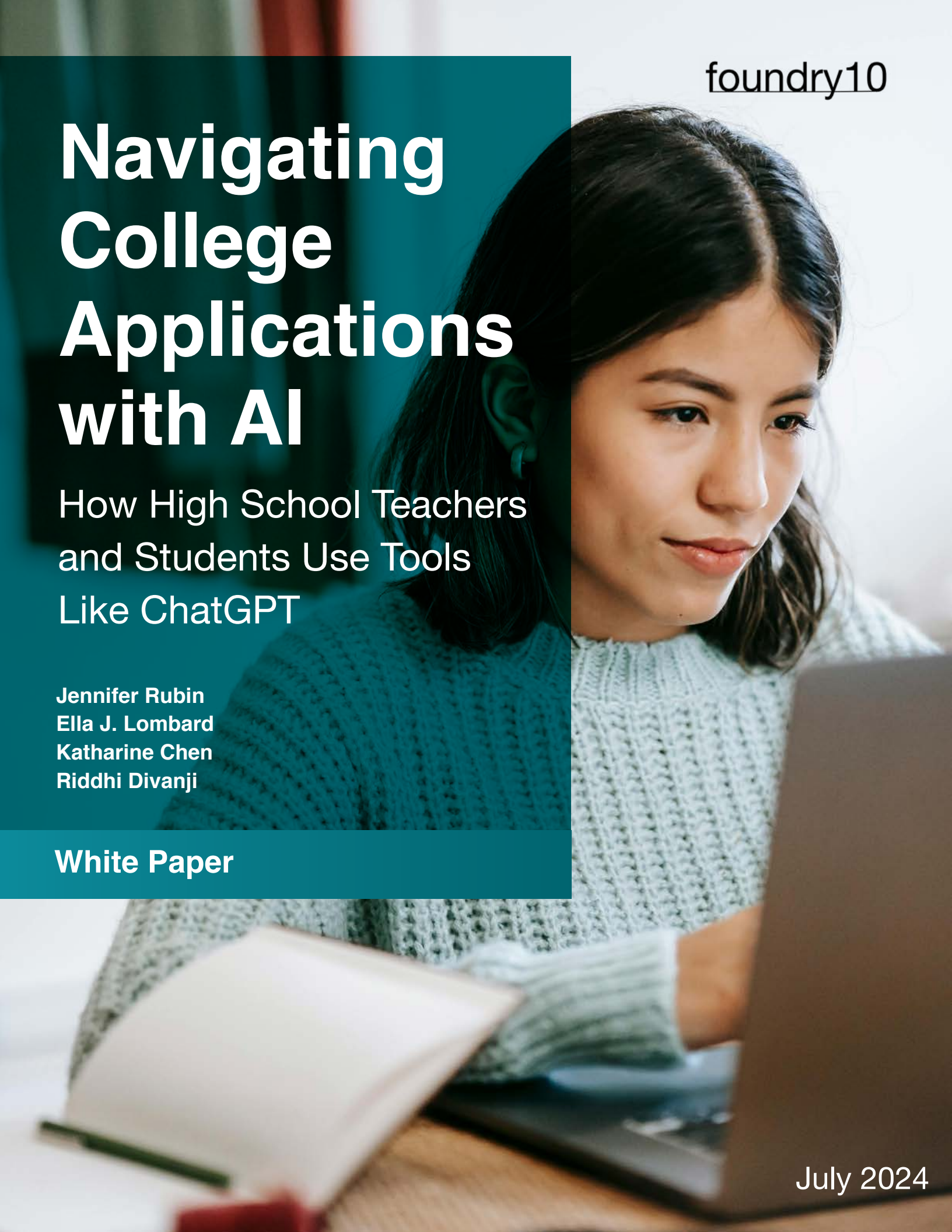


foundry10

Navigating College Applications with AI

How High School Teachers and Students Use Tools Like ChatGPT

Jennifer Rubin
Ella J. Lombard
Katharine Chen
Riddhi Divanji

White Paper

July 2024

About the Authors



Jennifer Rubin, Ph.D., Senior Researcher, jen@foundry10.org

Jennifer Rubin is the Principal Investigator of the Digital Technologies and Education Lab at foundry10. She holds a dual Ph.D. in Psychology and Gender and Women's Studies from the University of Michigan, where she explored how new media technologies mirror, magnify, and complicate self-presentation strategies for young people. Before foundry10, she worked as a Senior User Experience Researcher at Meta, leading foundational research on content recommendation systems. Jennifer is passionate about how technological advancements, such as artificial intelligence and emerging digital communities, can be used to improve the way we learn and collaborate.



Ella J. Lombard, Graduate Researcher, ella@foundry10.org

Ella Lombard is a graduate student researcher at foundry10 and a Ph.D. candidate in the Department of Psychology at the University of Washington. There, she studies how identity safety cues can reduce disparities for members of marginalized groups at school and work. She received her B.A. in Psychology and Creative Writing from Northwestern University. Ella is passionate about leveraging data-backed insights to improve student outcomes, promote learning, and increase educational equity.



Katharine Chen, Assistant Researcher, kat@foundry10.org

Katharine Chen is an assistant researcher at foundry10. Katharine is passionate about social psychology and approaching research from an intersectional lens. She received her bachelor's degree in Philosophy from Macalester College, with a concentration in Cognitive Science and a double minor in Psychology and Linguistics. Before coming to foundry10, Katharine volunteered at various youth-serving organizations in the Seattle area and worked as a writing tutor for her college.



Riddhi Divanji, Associate Researcher, riddhi@foundry10.org

Riddhi Divanji is an associate researcher and leads the Technology, Media, and Information Literacy team at foundry10. She holds an M.Ed. in Measurement and Statistics from the Department of Educational Psychology at the University of Washington College of Education. Her interests include investigating the use and value of emerging learning technologies in K-12 classrooms. Riddhi works at the intersection of research, educational programming, and philanthropy to ensure young people are equipped with the tools to safely, responsibly, and effectively consume and create with technology.

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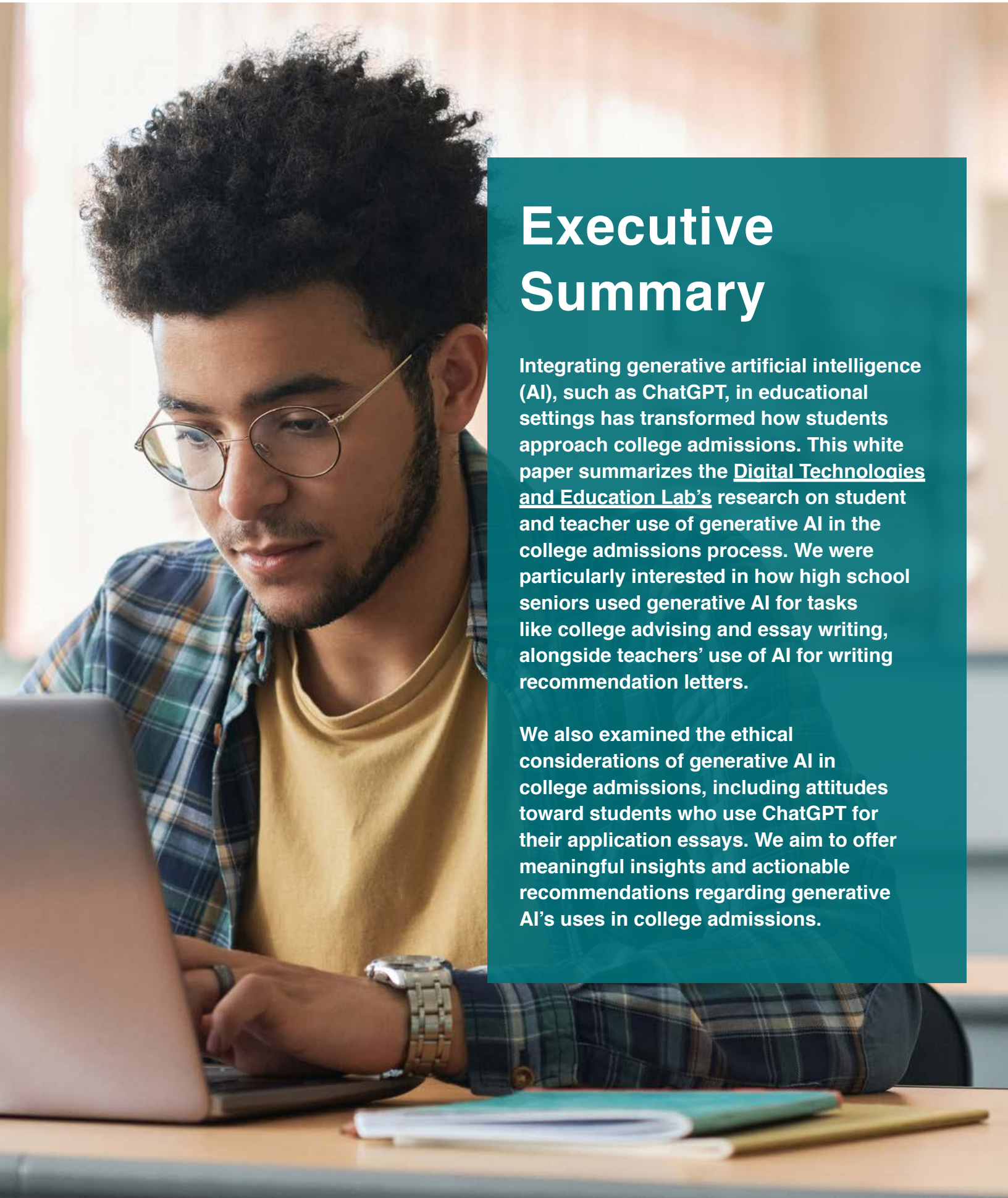
Suggested Citation

Rubin, J.D., Lombard, E., Chen, K., & Divanji, R. (2024). AI in College Admissions: Student and Teacher Insights [White Paper]. foundry10. https://www.foundry10.org/resources/navigating-college-applications-with-ai

ACKNOWLEDGEMENTS

This report is a collaborative effort based on the input and analysis of the following foundry10 team members.

- **Lisa Castaneda,** Co-Founder and CEO
- **Colin Katagiri,** Program Developer
- **Tania Dearden,** Education Programs Manager
- **Lucia Harman,** Graphic Designer
- **Hailey Williams,** Media Project Manager



Executive Summary

Integrating generative artificial intelligence (AI), such as ChatGPT, in educational settings has transformed how students approach college admissions. This white paper summarizes the Digital Technologies and Education Lab's research on student and teacher use of generative AI in the college admissions process. We were particularly interested in how high school seniors used generative AI for tasks like college advising and essay writing, alongside teachers' use of AI for writing recommendation letters.

We also examined the ethical considerations of generative AI in college admissions, including attitudes toward students who use ChatGPT for their application essays. We aim to offer meaningful insights and actionable recommendations regarding generative AI's uses in college admissions.

Key Takeaways

1

High school students and teachers cautiously adopted generative AI in college applications.

About 30% of student and teacher participants now use AI tools—students to enhance personal essays and teachers to write recommendation letters. This signals a cautious yet growing interest in using AI to navigate the college admissions process.

2

High school students and teachers had mixed views on the ethics of generative AI in college applications.

Student and teacher participants had similar perceptions of how ethical it is for students to use generative AI tools to assist in writing college admissions essays, but they differed when it came to teachers using generative AI tools to help write recommendation letters. Students thought the ethics of teachers using generative AI tools to write recommendation letters were similar to that of students using them to write essays, whereas teachers perceived their use as more ethically acceptable than students' use.

3

High school students and teachers rated applicants using ChatGPT in college admissions essays as less authentic, competent, and ethical than those who received guidance from a college admissions coach.

Utilizing AI tools like ChatGPT to help write college admissions essays significantly impacted how student and teacher participants perceived an applicant's authenticity, competence, and ethics. Such perceptions revealed a general skepticism about the depth and originality of AI-assisted content, emphasizing a preference for more human-assisted methods in the college admissions process.

Introduction

Applying to college requires managing tasks such as application deadlines, standardized test preparation, essay writing, and financial planning. Generative AI tools like ChatGPT can simplify these aspects by enhancing essay writing with grammatical improvements (Barnard, 2023; Singer, 2023b) and enabling efficient research on colleges, interview preparation, and scholarship guidance without expert assistance.

This winter and spring mark the first full college admissions season since ChatGPT and other generative AI technologies have mainstream adoption. Despite the benefits that generative AI offers college applicants, challenges related to authenticity and ethics arise. Colleges and universities have noted that these tools can blur the lines between a student's capabilities and AI-assisted work (Jump, 2023). As a result, they may undermine the core goal of admissions: to evaluate students based on their skills, experiences, and potential (Lee, 2024).

The authenticity debate over using generative AI may obscure a more entrenched issue of inequity. Experts have noted that wealthier high school students often have access to extensive resources—such as alumni from their top choice schools, family, friends, and paid tutors—to help them outline, draft, and edit their college admissions applications (Singer, 2023a). This access enables them to write applications that are not only polished but also tailored to the preferences of admissions committees (Maglione & Cachero, 2023; Rosinger et al., 2020).

In contrast, proponents of generative AI argue that it could benefit students who lack access to preparatory resources, helping to equalize opportunities in the college admissions process (Blobaum, 2023).

Amid ongoing discussions about the impact of generative AI, colleges and universities have adopted varied approaches to its role in admissions, with some now establishing policies regarding the use of generative AI (e.g., bans on using AI in applications; Jones & Zinshteyn, 2023). Yet, despite the implementation of these policies, the specific ways in which students use generative AI in their college applications remain unclear.

Current Research

This white paper summarizes research conducted by the Digital Technologies and Education Lab at foundry10 about how high school students and teachers use generative AI in college admissions. We based the analysis in this report on nationwide online surveys of over 400 U.S. high school teachers and over 500 U.S. teens who applied to college in the current application cycle.

We were primarily interested in how high school seniors used generative AI for tasks like college advising and essay writing and how teachers use AI for writing recommendation letters. We also examined the ethical considerations of generative AI in college admissions, including perceptions toward students who use ChatGPT for application essays.

Our research is among the first to explore the role of generative AI tools in the college admissions process. Through this study, we aim to offer insights and recommendations regarding using AI tools in college admissions while considering the broader implications for equity and access.

How We Did This

We based the analysis in this report on a nationwide online survey of 425 U.S. high school teachers conducted from February 15 to March 18, 2024. The teachers surveyed are members of Sago's educator panel, a national sample of K-12 educators who offer insights based on their teaching experiences.

For student questions, we conducted a nationwide online survey of 523 U.S. teens ages 16-18 who applied to college in the current application cycle. The survey was conducted from February 15 to March 5, 2024. Sago recruited students under 18 via their parents, who were part of its parent panel. Both surveys were reviewed and approved by our internal Institutional Review Board (IRB), an independent committee of experts helping protect research participants' rights.

Experimental Component

In addition to the descriptive data we gathered, we included an experimental component to understand how different forms of assistance influence perceptions of a college admissions essay.

Participants were randomly assigned to view one of three scenarios regarding a student writing their college application essay: a college admissions coach condition (the student received assistance from a college admissions coach in writing the essay), a ChatGPT condition (the student received assistance from ChatGPT in writing the essay), and a control condition (the student received no assistance in writing the essay).

After reading the scenario, participants read the same introductory paragraph of a college admissions essay. They then answered questions assessing their perceptions of the essay, the applicant's abilities, and how accessible the applicant's essay approach would be to other students.

During analysis, we examined whether reading about a student who wrote their essay with the assistance of ChatGPT caused participants to evaluate the essay and student writer more negatively than reading about a student who wrote their essay with no external help or with the assistance of a hired college admissions coach.

Learn more about our survey methodology and hypotheses on page 32 →



Key Findings: Students

1. Students experimented with various AI tools yet reported infrequent use for schoolwork.

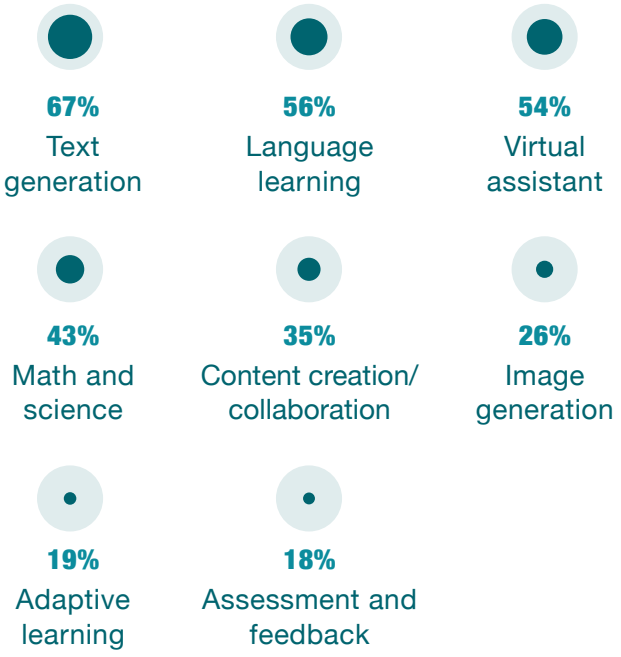
AI tool experimentation among students was widespread, yet the frequency of its use for academic purposes was notably low. Of our study's sample, 67% had experimented with text generation tools like ChatGPT, Bing, or Google Bard (see Figure A).

Despite this high rate of experimentation, the actual application of these tools in schoolwork was infrequent, with 35% of the respondents indicating they never used AI tools for their schoolwork and an additional 30% sharing they used them rarely (1-2 times a month; see Figure B).

While students were curious about generative AI tools, consistent usage was still low. Most of the sample used ChatGPT (64%). However, when asked about their frequency of use in the past month, most students reported rare engagement with the tool.

Of the students who had used ChatGPT, 43% used ChatGPT rarely (1-2 times a month), and 11% had never used ChatGPT during this period (see Figure C).

FIGURE A. Percentage of students who have tried different kinds* of AI tools



*Note: Participants were provided examples of tools within each category (e.g., ChatGPT as a "Text Generation" tool).

FIGURE B. Percentage of students who have used generative AI tools for schoolwork**

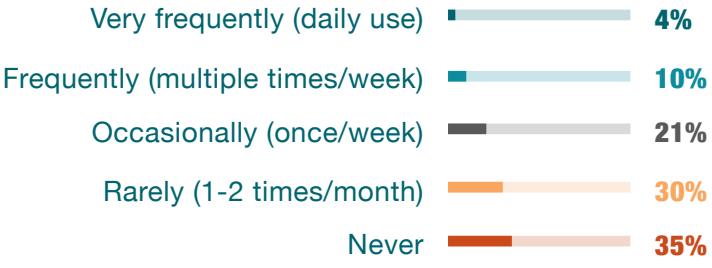
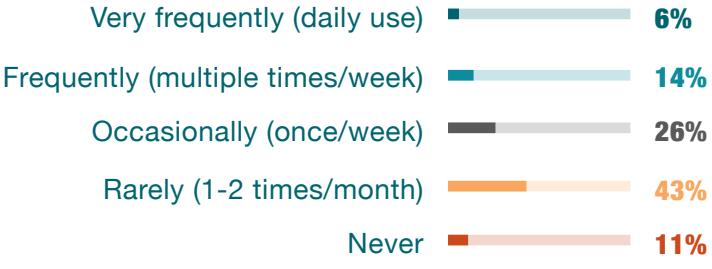


FIGURE C. Percentage of students who have used ChatGPT in the past month**



**Note: Percentages in Figure A and Figure B represent students who have used ChatGPT (N=335).

2. The accuracy of AI-generated content and ethical concerns were reasons behind the infrequent use of these tools for schoolwork.

The limited adoption of AI tools for schoolwork may be due to concerns about the quality of AI-generated content. Students reported doubts about the accuracy of AI-generated content (45%).

In the context of ChatGPT, students' perception of its output's accuracy was moderate, with an average rating of 65.46 out of 100, suggesting that while not entirely dismissive, students remain cautious about the reliability of AI-generated answers.

Alongside these accuracy concerns, students noted other factors limiting their use of AI in schoolwork, including 40% who mentioned restrictions due to school policies and 38% who expressed worries about potentially misusing AI tools. These concerns underscore the nuanced challenges and considerations students face in integrating AI tools into their education (see Figure D).

In contrast, when students engaged with AI tools for their schoolwork, they used them for specific tasks where the benefits may outweigh the perceived drawbacks. The top reasons students used AI tools in their schoolwork were to solve mathematical problems (28%), generate initial concepts for essays or reports (28%), and summarize textbook material (27%).

These activities suggest that students may recognize the value of AI in assisting with complex problem-solving, idea generation, and information synthesis (see Figure E).

FIGURE D. Reasons students haven't used AI tools in schoolwork

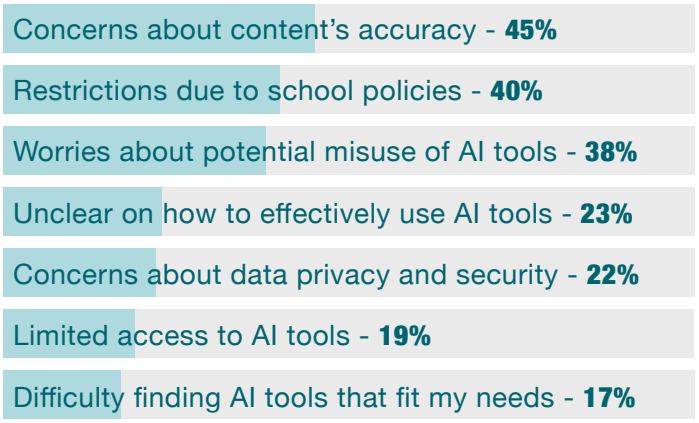
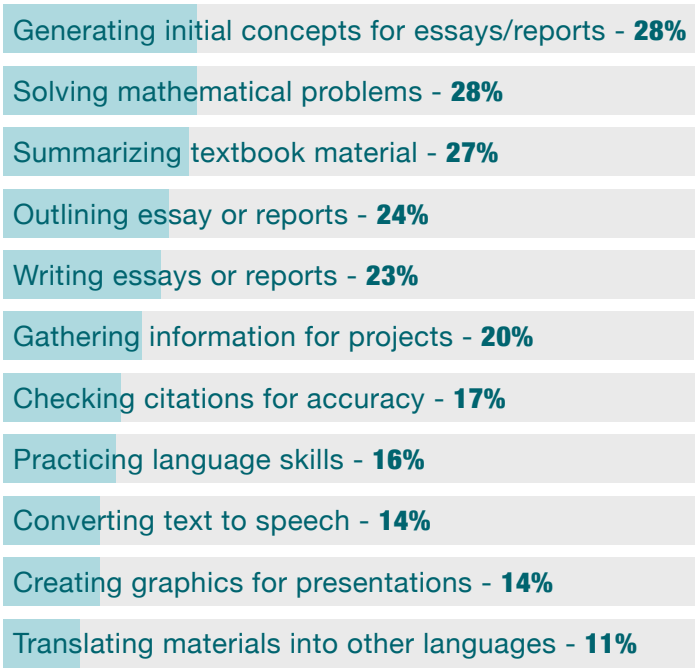


FIGURE E. Specific schoolwork tasks for which students have used AI tools



3. While most students relied on teachers and parents for help with their college applications, 30% reported using generative AI tools to assist in writing personal essays.

On average, students in the sample applied to four colleges during this application cycle. They mostly targeted public in-state universities (62%), indicating a preference for local schools. They also applied to community colleges (34%), public out-of-state universities (31%), private universities (26%), and highly selective universities (14%).

Most students relied on teachers (66%) and parents (65%) for help with their applications, with a minority using generative AI tools like ChatGPT (12%). Regarding writing personal essays for college applications, 30% of students reported using generative AI tools. Of these students, around 50% used AI for brainstorming essay topics, while 47% used it to create an outline. A smaller number (20%) generated a first draft using AI, and 33% employed AI to refine the phrasing of essays (see Figure F).

The most common reasons students used generative AI in writing admissions essays were to improve their overall quality (50%) and generate ideas (44%; see Figure G). In contrast, students chose not to use generative AI to write their essays due to concerns about the accuracy of the tools (39%) and ethical implications of using them (45%; see Figure H).

These findings reveal students' diverse strategies in drafting their college applications and underscore the evolving role of technology in shaping this process.

FIGURE F. Student* applications of generative AI in college admissions essays

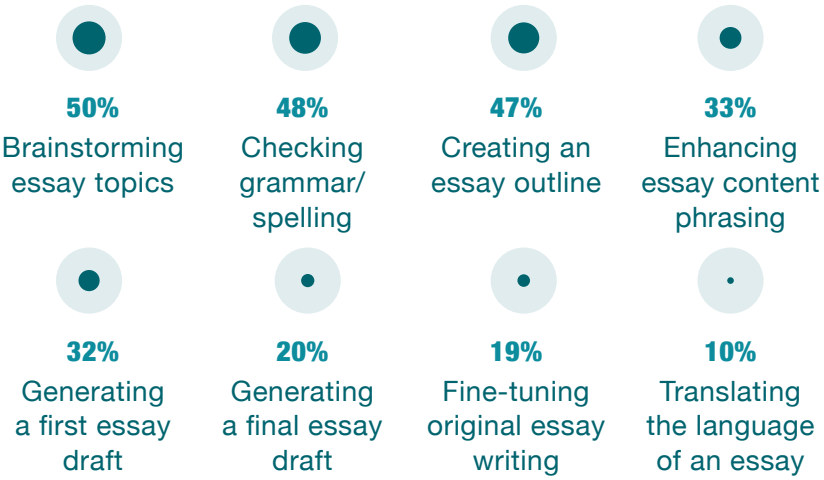


FIGURE G. Reasons students* used generative AI in college admissions essays

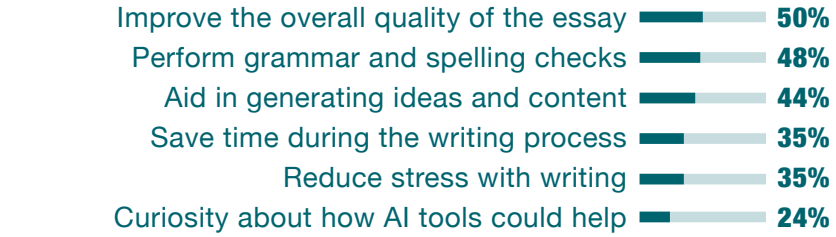
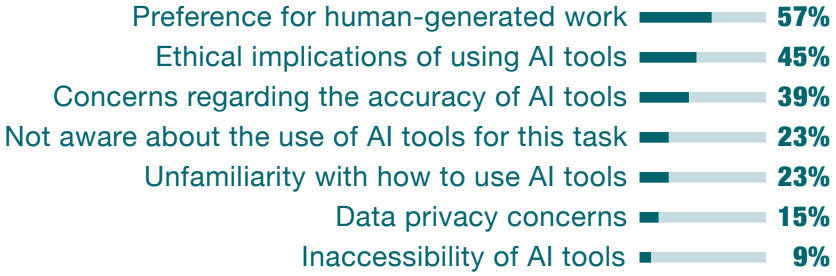


FIGURE H. Reasons students did not use generative AI in college admissions essays**



*Note: Figures F and G represent responses from students who indicated they had used generative AI in their college admissions essays (N=153).

Note: Figure H represents responses from students who indicated they had ***not* used generative AI in their college admissions essays (N=357).

4. Students have mixed views on the ethics of using generative AI tools in the college admissions process.

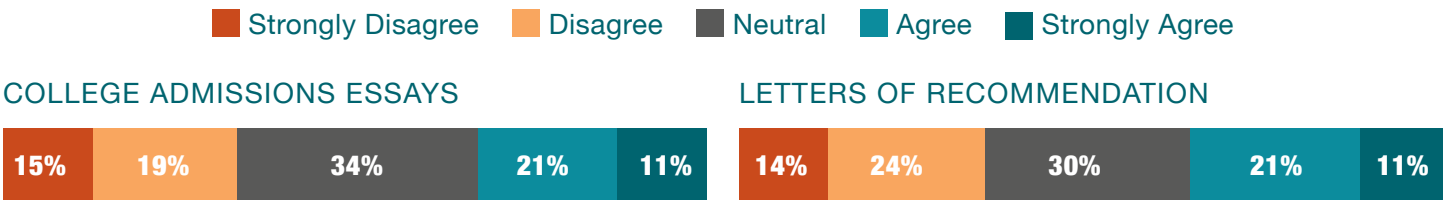
Students were split on whether it is ethically acceptable for teachers to use generative AI tools like ChatGPT in writing letters of recommendation for college admissions. About 38% disagreed that it was ethically acceptable, while 31% agreed. A significant portion, 30%, remained neutral (see Figure I).

Similar ambivalence was observed in the perceived ethical acceptability of students using generative AI for writing their college admissions essays. Around 34% disagreed with this practice, compared to 32% who agreed. Again, a notable 34% were neutral (Figure I).

In assessing generative AI's acceptability across various college admissions tasks, generative AI was generally rated moderately acceptable. Understanding financial aid and scholarships was rated highest in acceptability, and drafting personal essays was rated the lowest. Stress management and mindfulness, planning a college tour, and preparing for interviews all scored high in acceptability.

Tasks like crafting emails to admissions offices and generating portfolio materials were also considered relatively acceptable (for detailed scores, see Figure J).

FIGURE I. Student views on the ethical acceptability of using generative AI in college admissions



Note: Students were asked to provide their level of agreement with the following statements: 1) It is ethically acceptable for students to use ChatGPT to assist in writing their college admissions essays, and 2) It is ethically acceptable for teachers to use ChatGPT to assist in writing letters of recommendation for college admissions applications.

FIGURE J. Student ratings of the acceptability of using generative AI for college admissions tasks



Note: All items were measured on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree).
Higher scores indicate greater ethical acceptability. The average score for each task is provided.

5. Students who believe it is ethically acceptable and students from higher-income families are more likely to use generative AI in college admissions.

Students' beliefs and family income were related to the decision to use AI tools in college admissions. Students who believe it is ethical to use AI for essay writing were more inclined to utilize it. For every one-unit increase (out of five) in agreement with the statement "It is ethically acceptable for students to use generative AI (e.g., ChatGPT) to assist in writing their college admissions essays," students were more than twice as likely to have used AI to help write their college admissions essays.[1]

Additionally, a notable income disparity exists in AI usage, with students from middle-to-higher-income families being more likely to use AI in college admissions than those from lower-income households. Specifically, only about 22% of students from families earning $50,000 or less reported using generative AI tools in college admissions. In contrast, 40% of students from families earning $75,001-$100,000 engaged AI for this purpose. This is a 150% increase in odds of having used AI compared to students from families earning $50,000 or less.[2] Interestingly, the likelihood of using AI in college admissions dropped slightly among the highest-income families, ranging between 31%-37% in the highest household income categories, though this difference was not statistically significant.

Factors like race, gender, school type, comfort with AI, confidence in writing skills, and school support for the college admissions process or essay writing did not impact the decision to use generative AI in college admissions.[3]



Key Findings: Teachers

1. Teachers experimented with various AI tools in their teaching practice yet report only moderate comfort with this technology.

Teachers are increasingly using generative AI. About 45% of the teachers surveyed had used text generation tools like ChatGPT, Bing, or Google Bard (see Figure K on the following page). Teachers employed generative AI tools for various purposes, including generating content for in-class activities (20%), facilitating group brainstorming sessions (18%), and enhancing creative projects (17%; see Figure L on the following page).

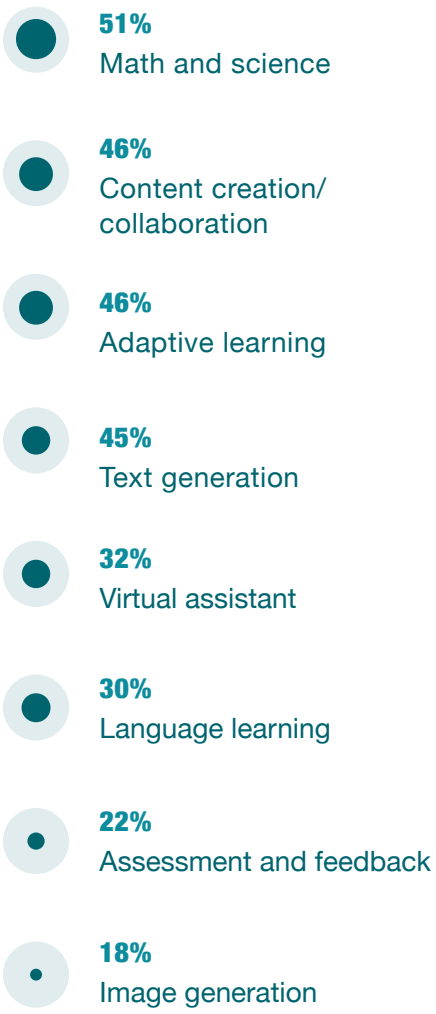
When asked what factors discourage their use of generative AI tools, teachers reported concerns about the potential for misuse by students (32%), the accuracy of AI-generated content (28%), and a lack of familiarity with AI tools (24%) as the top reasons (see Figure M on the following page).

Regarding frequency, there was a range of how often teachers incorporated generative AI tools in their teaching practices. Over a month, teachers reported using generative AI tools at the following rate: 35% never, 23% rarely (1-2 times a month), 18% occasionally (once a week), 13% frequently (multiple times a week), and 11% very frequently (daily use). This finding reflects a low level of integration into teaching routines, with the average frequency of use being 2.19 on a scale where 1 is “Rarely” and 5 is “Very Frequently.”

Interestingly, teachers’ comfort level with generative AI tools was moderate, with an average score of 3.18 on a scale of 1 (Not Comfortable) to 5 (Very Comfortable). This finding indicates that while teachers are open to using these tools, they may not yet be at ease with them, possibly due to the relatively new emergence of such technologies in education.



FIGURE K. Percentage of teachers who have tried different kinds* of AI tools



*Note: Participants were provided examples of tools within each category (e.g., ChatGPT as a "Text Generation" tool).

FIGURE L. Specific tasks for which teachers have used AI tools

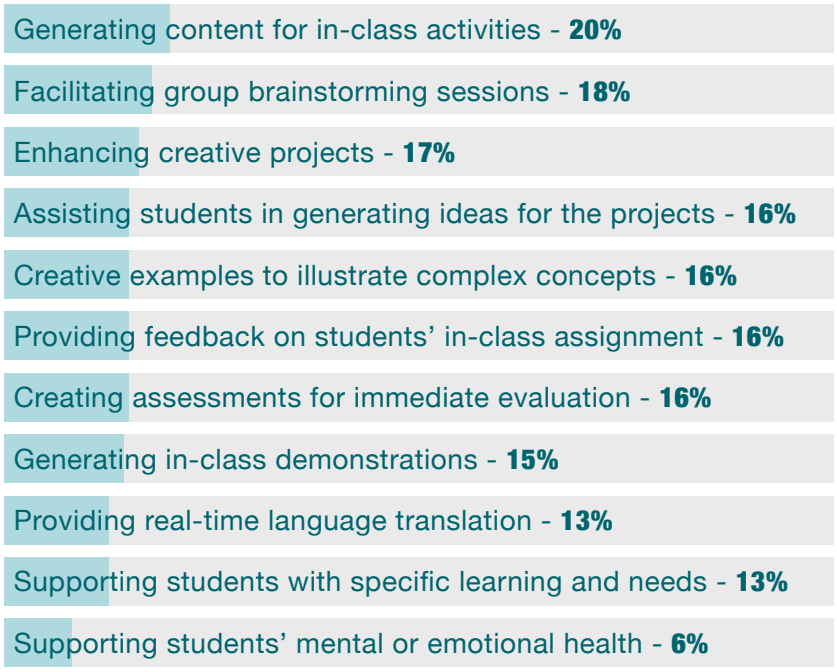
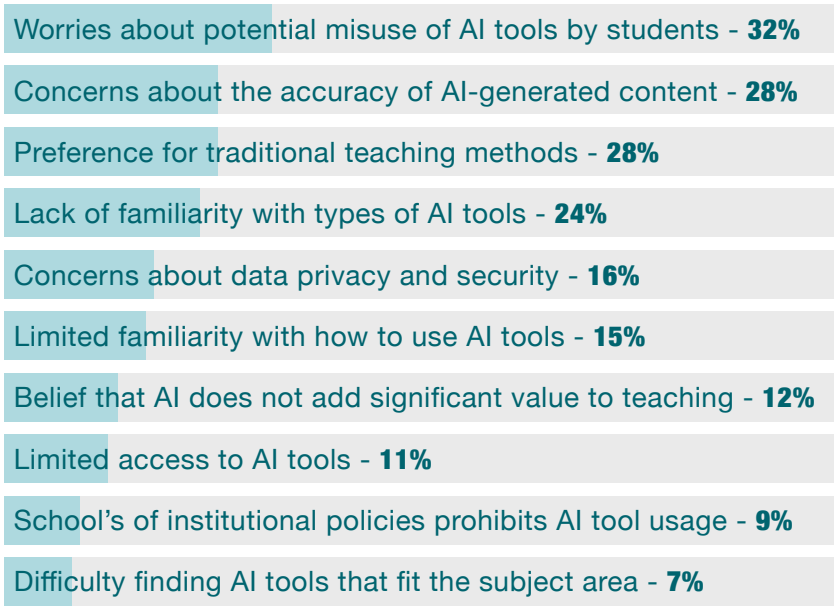


FIGURE M. Reasons teachers haven't used AI tools in classroom instruction



2. Teachers perceive more risks than opportunities with students using generative AI in their education.

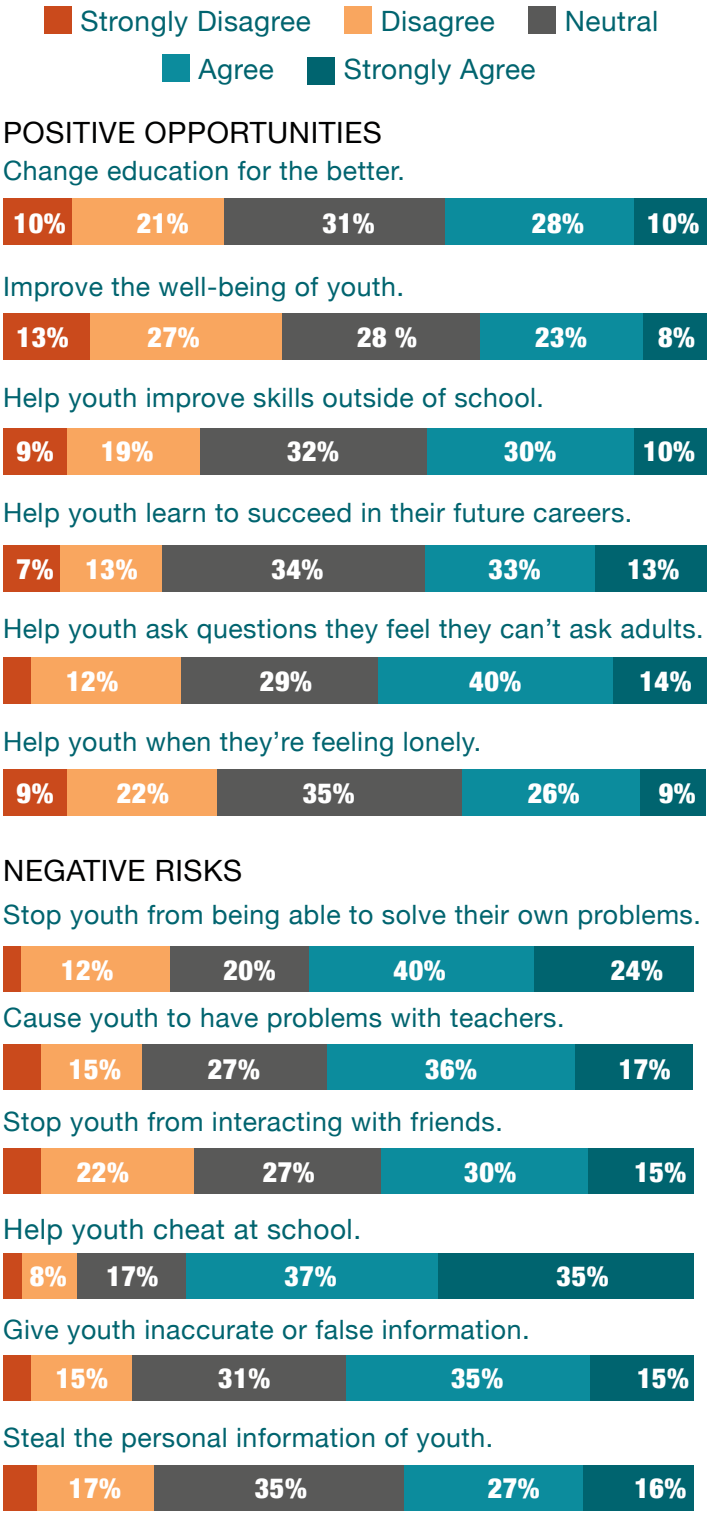
Teachers recognized the potential benefits of generative AI, with a slight majority (38%) believing that it could positively transform education. Yet, significant concerns remained about its impact on student development and academic integrity. A substantial 64% worried that AI could impair students' ability to solve problems independently.

Concerns about academic dishonesty were also prevalent, as 72% of teachers agreed AI could enable cheating among students. These apprehensions highlight the broader risks and ethical considerations that teachers associate with using generative AI in education.

Teachers also expressed concern about AI's broader implications for student development. While 23% saw AI potentially improving students' well-being, only 8% strongly agreed with this perspective. These reservations extended outside the traditional classroom setting: 40% of teachers recognized that AI could help young people improve skills outside of school, yet 31% remained neutral, reflecting uncertainty or caution. On a positive note, 53% believed that AI could be beneficial in encouraging students to ask questions they feel uncomfortable asking adults, highlighting AI's potential to support more open and inclusive communication.

While there was an acknowledgment of the importance of AI skills for future careers—with 46% agreeing or strongly agreeing—teachers were equally concerned about the immediate risks associated with AI's integration into the educational process. Over half (53%) shared they worry about AI causing friction between students and teachers, and 45% fear it could reduce student interpersonal interactions. These concerns are compounded by worries that AI might deliver inaccurate information (50%) or compromise students' data (43%; see Figure N).

FIGURE N. Teacher perceptions of opportunities/ risks with students using generative AI



Note: Measure developed by the Social and Technological Action Research Group at University of California, Irvine.

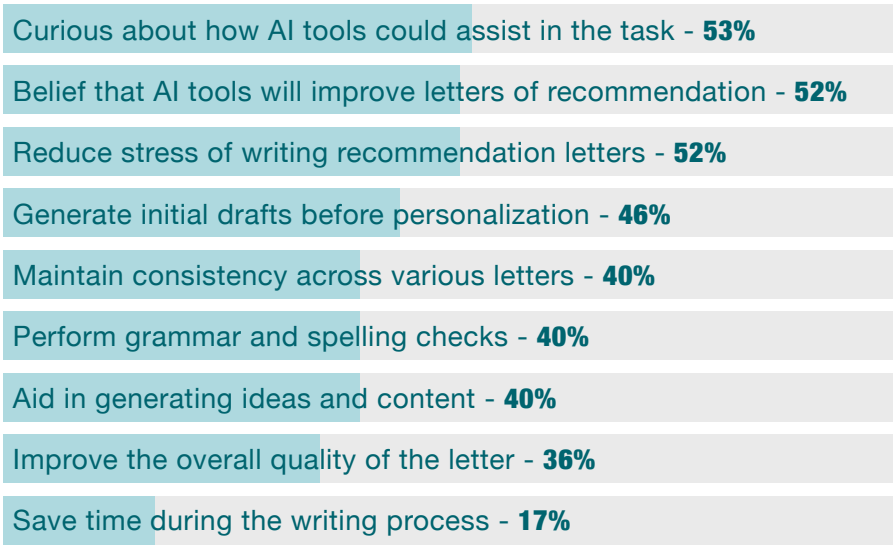
3. Teachers' use of generative AI for writing letters of recommendation reveals a cautious but growing adoption.

Approximately 31% of teachers utilized generative AI to assist in writing letters of recommendation for college admissions, reflecting a growing interest in this technology's capabilities. Among these adopters, the principal motivation was to streamline the writing process, with 36% citing enhanced letter quality. Additionally, 46% turned to AI for brainstorming content (see Figure O). The use of AI in this context is mainly pragmatic and aimed at enhancing efficiency and quality.

Conversely, several teachers refrained from employing generative AI to write recommendation letters. Twenty-eight percent reported unfamiliarity with the tools as a barrier, highlighting a potential area for professional development.

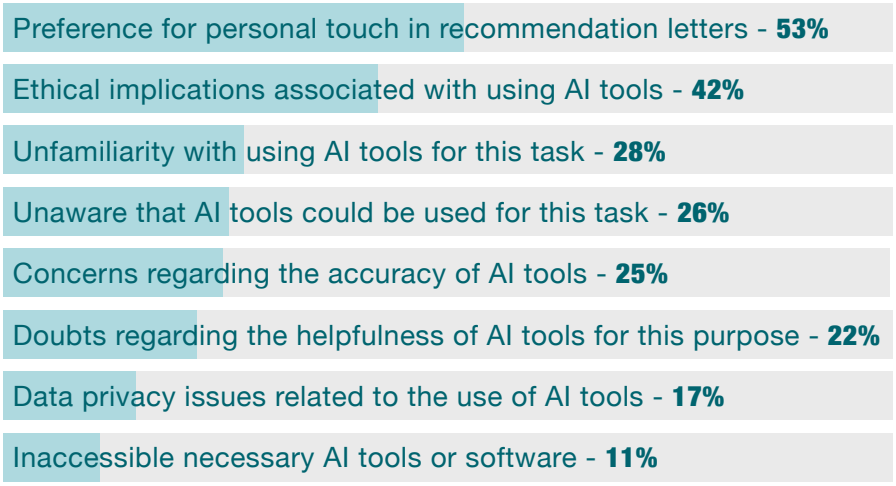
Ethical concerns were significant, with 42% questioning the appropriateness of AI use in this process. The most prominent reason was the preference for a personal touch (53%), suggesting that the authenticity of a handcrafted letter remains paramount (see Figure P).

FIGURE O. Reasons teachers* used generative AI in writing letters of recommendation



*Note: Only teachers who indicated they had used generative AI in writing letters of recommendation responded to this question (N=130).

FIGURE P. Reasons teachers did not use generative AI in writing letters of recommendation**



Note: Only teachers who indicated they had ***not* used generative AI in writing letters of recommendation responded to this question (N=267).

4. Like students, teachers have mixed views on the ethics of using generative AI tools in the college admissions process.

Teachers' views on the ethics of using generative AI in college admissions varied, with particular tasks receiving notably higher levels of approval. Researching colleges and universities held the highest level of acceptability. Close behind were tasks like understanding financial aid and scholarships and planning a college tour.

Respondents expressed a moderate level of acceptability for using ChatGPT in writing letters of recommendation, with an average rating of 3.26 on a scale of 1 (Not Acceptable) to 5 (Very Acceptable), which is significantly above the midpoint.[4]

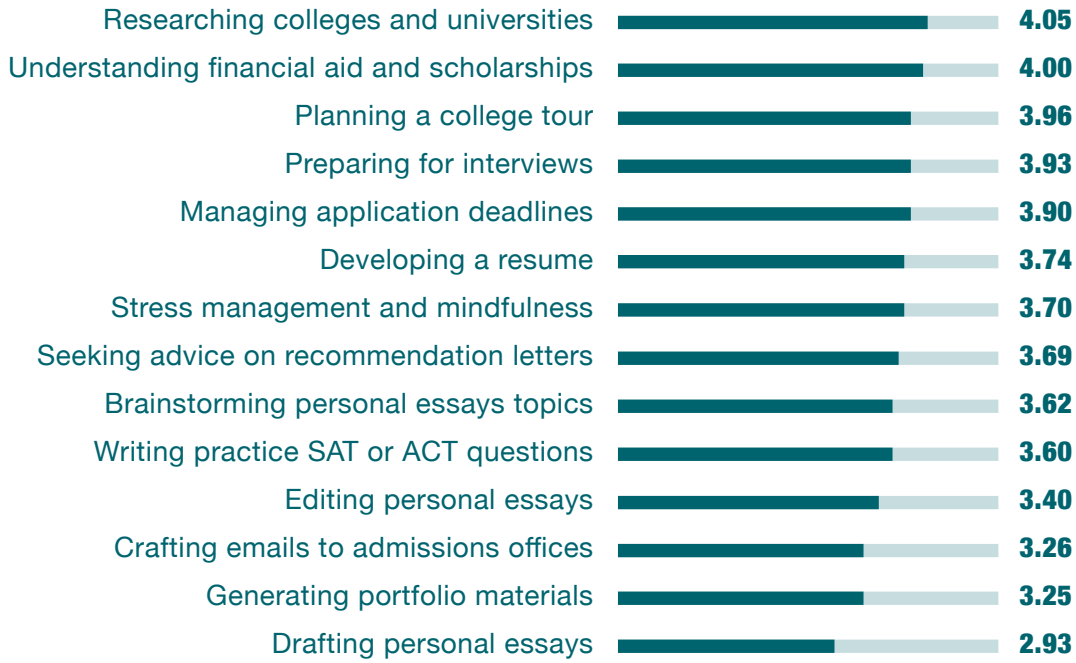
These findings suggest that—while some teachers see the benefits of using these tools—there is also hesitation.

Teachers' views on the ethical acceptability of students using ChatGPT in writing their college admissions essays were more neutral, with an average score of 2.91 out of 5 (not significantly different from the midpoint[5]).

Teachers may be especially cautious about students using AI for personal and potentially impactful documents. Drafting personal essays and writing emails to admissions officers received the lowest acceptability rating.

These scores reflect a nuanced perspective among teachers: they acknowledge the utility of AI tools for facilitating the college application process while advocating for students' work when personal expression and authenticity are crucial (see Figure Q).

FIGURE Q. Teacher ratings of the acceptability of using generative AI for college admissions tasks



Note: The average score for each task is provided.

Comparisons Between Teachers and Students

1. Students are more comfortable with generative AI tools than teachers.

Students reported higher levels of comfort with generative AI tools (M = 3.40, SD = 0.94) than teachers (M = 3.16, SD = 1.02).[6]

2. Both teachers and students want guidelines from colleges and universities about using generative AI tools in the admissions process.

Students (M = 3.90, SD = 1.03) and teachers (M = 3.87, SD = 1.04) agreed that colleges and universities should define specific boundaries around using generative AI in admissions.[7] However, teachers agreed more strongly than students that institutions should define boundaries for students (M = 4.13, SD = 0.93).[8]

3. Teachers and students agree about the ethics of students using AI for admissions essays. However, they disagree about the ethics of teachers using AI for recommendation letters.

Students (M = 2.93, SD = 1.19) and teachers (M = 2.91, SD = 1.33) had similar perceptions of how ethical it is for students to use generative AI tools to assist in writing college admissions essays, but they differed when it came to teachers using generative AI tools to help write recommendation letters.[9]

Students thought the ethics of teachers using generative AI tools to write recommendation letters were similar to that of students using it to write essays (M = 2.91, SD = 1.22)[10], whereas teachers perceived their use as more ethically acceptable than student use (M = 3.26, SD = 1.18)[11] (see Figures R and S).

Note: For all measures reported, participants rated items on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree).

FIGURE R. How ethical is it for teachers to use AI tools to write college recommendation letters?



FIGURE S. How ethical is it for students to use AI tools to write college essays?



Note: Error bars represent the standard error around each mean.

Experimental Findings

ABOUT THE EXPERIMENTAL COMPONENT

We incorporated an experimental component in this study to understand how different forms of assistance influenced perceptions of a college admissions essay.

Participants were randomly assigned to view one of three scenarios regarding a student writing their college application essay:

Scenario 1: ChatGPT
The student received assistance from ChatGPT in writing the essay.

Scenario 2: College Admissions Coach
The student received assistance from a college admissions coach in writing the essay.

Scenario 3: No Help
The student wrote the essay without help. (This was the control condition.)

For each scenario, participants read the same introductory paragraph as the student's application essay. Participants responded to all questions on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree) unless otherwise noted.

1. Participants perceived the essay as less authentic when they were told the applicant used ChatGPT compared to when they received assistance from a college admissions coach.

When students and teachers evaluated a paragraph from a college admissions essay, they perceived it as less authentic if the applicant received help from ChatGPT.[12] Even though the paragraph's content remained the same, if the applicant received help from ChatGPT, participants rated the essay as less authentic, with an average rating of 3.09 out of 5.

In comparison, when the applicant received support from a college admissions coach, the applicant's essay was perceived as more authentic, with an average rating of 3.68 out of 5.[13] Overall, this finding suggests that both students and teachers view the applicant's writing as less authentic when they use ChatGPT for assistance compared to other approaches, including a college admissions coach (see Figure T).[14]

FIGURE T. Average authenticity rating of essays from applicants based on sources of help



Note: Error bars represent the standard error around each mean. The applicant's essay was rated as less authentic when they used ChatGPT than when they used a college admissions coach ($p < .001$) or no help ($p < .001$). There was also a significant difference between how authentic the applicant's essay was rated when they used a college admissions coach and when they wrote the essay alone ($p < .001$).

2. When participants were told the applicant used ChatGPT to write their admissions essay, they perceived the applicant as less competent, agentic, and likable.

Both students and teachers perceived the applicant more negatively when they utilized ChatGPT to help write their college admissions essay than when they used a college admissions coach. When the applicant used ChatGPT to help write their essay, participants perceived the applicant as less competent, with an average rating of 3.42. Competence, agency, and likability were assessed on a scale from 1 (Not at All) to 5 (Very Much).[15]

However, when the applicant used a college admissions coach, they received an average competence rating of 3.86 out of 5.[16] Notably, the applicant was perceived as less competent when they used ChatGPT compared to when they used other forms of help (see Figure U).

Additionally, the applicant was seen as less agentic when they used ChatGPT to help write their college admissions essay.[17] To evaluate the applicant's level of agency, participants rated the extent to which the applicant appeared individualistic, competitive, and independent.

When students and teachers were told the applicant had used ChatGPT for help, the applicant received an average rating of 3.16 out of 5. Once again, this was lower than when the applicant used the help of a college admissions coach, which had an average rating of 3.64 out of 5[18] (see Figure V).

FIGURE U. Average competence rating of applicants based on sources of help



Note: Error bars represent the standard error around each mean. The applicant was rated as less competent when they used ChatGPT than when they used a college admissions coach ($p < .001$) or no help ($p < .001$). There was also a significant difference between how competent the applicant was rated when they used a college admissions coach and when they wrote the essay alone ($p = .02$).

FIGURE V. Average agency rating of applicants based on sources of help



Note: Error bars represent the standard error around each mean. The applicant was rated as less agentic when they used ChatGPT than when they used a college admissions coach ($p < .001$) or no help ($p < .001$). There was no significant difference between how agentic the applicant was rated when they used a college admissions coach and when they wrote the essay alone ($p = .17$).

Following this trend, the type of assistance an applicant used influenced how much participants liked them.[19]

When the applicant used ChatGPT, they received an average rating of 3.27 out of 5 for likability, which was lower than the ratings received when they sought assistance from a college admissions coach (3.55 out of 5) (see Figure W).[20]

These ratings suggest that the use of ChatGPT for essay writing impacted participants' perceptions of authenticity, skills, and traits.

FIGURE W. Average likability rating of applicants based on sources of help



Note: Error bars represent the standard error around each mean. The applicant was rated as less likable when they use ChatGPT than when they used a college admissions coach ($p < .001$) or no help ($p < .001$). There was no significant difference between how likable the applicant was rated when they used a college admissions coach and when they wrote the essay alone ($p = .31$).



3. The approach of applicants who used ChatGPT was rated as less ethical and less beneficial than other approaches, including using a college admissions coach.

The applicant's approach to writing their college admissions essay was viewed as less ethical when they used ChatGPT than other forms of assistance.[21]

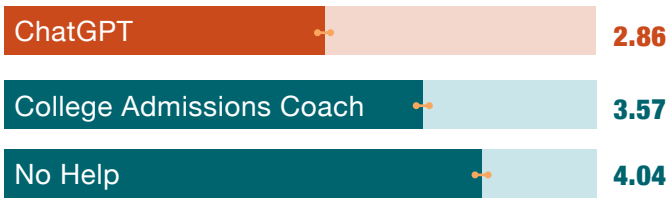
When the applicant used ChatGPT, this approach received an average rating of 2.86 out of 5.

In comparison, participants rated using a college admissions coach as a more ethical approach (with an average rating of 3.57[22]), despite the applicant receiving help in both scenarios (see Figure X).

In addition, the applicant's approach to writing the essay was perceived as less beneficial when they used ChatGPT than other methods.[23] When the applicant used ChatGPT, they received an average rating of 3.5.

This score was lower than the perceived benefit of using a college admissions coach, with an average rating of 3.88 (see Figure Y).[24] The ratings suggest that using ChatGPT to aid in writing college admissions essays is viewed more unfavorably than using other approaches regarding ethics and the perceived benefit to student writing.

FIGURE X. Average ethicality rating of applicant's approach



Note: Error bars represent the standard error around each mean. The applicant's approach was rated as less ethical when they used ChatGPT than when they used a college admissions coach ($p < .001$) or no help ($p < .001$). There was also a significant difference between how ethical the applicant's approach was rated when they used a college admissions coach and when they wrote the essay alone ($p < .001$).

FIGURE Y. Average benefit rating of applicant's approach



Note: Error bars represent the standard error around each mean. This applicant's approach was rated as less beneficial when they used ChatGPT than when they used a college admissions coach ($p < .001$) or no help ($p < .001$). There was no significant difference between how beneficial the applicant's approach was rated when they used a college admissions coach and when they wrote the essay alone ($p = .41$).

4. Though participants perceived the applicant and the essay more negatively when using ChatGPT, they rated this approach more accessible than a college admissions coach.

It is important to note that, although using ChatGPT was associated with viewing the applicant and their writing more negatively in many ways, participants rated the approach of using ChatGPT to help write the applicant's essay as more accessible than other forms of assistance typically used in the college application process, such as a college admissions coach (see Figure Z).[25]

Participants rated the approach of using a college admissions coach as the least accessible, with an average rating of 3.42. In contrast, using ChatGPT was an approach that was seen as more accessible, receiving an average rating of 3.82 (see Figure Z).[26]

FIGURE Z. Average accessibility rating of applicant's approach



Note: Error bars represent the standard error around each mean. The applicant's approach was rated as less accessible when they used a college admissions coach than when they used ChatGPT ($p < .001$) or no help ($p < .001$). There was no significant difference between how accessible the applicant's approach was rated when they used ChatGPT and when they wrote the essay alone ($p = .15$).

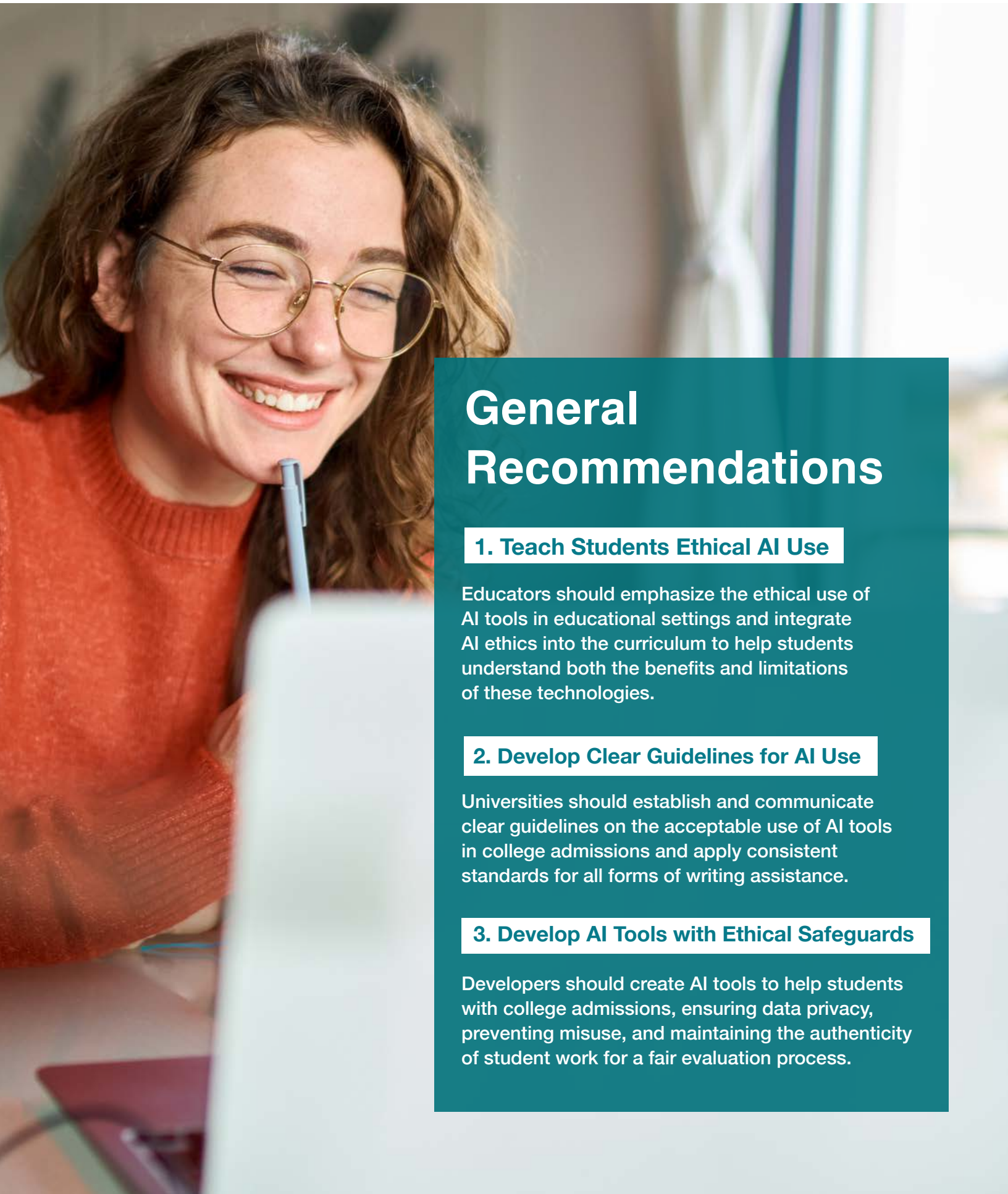
5. Results were similar across different applicant names, races, and genders.

Participants were randomly assigned to see one applicant name from among 24 possible names representing four racial/ethnic groups (Black/African American, Asian American, Latino/a/x, and White) and two genders (girls/women and boys/men; names from Pope, 2023).

This analysis increases the generalizability of our results by allowing us to take an initial look at whether people perceive applicants who use ChatGPT differently based on applicant identity.

Applicant name[27], race[28], and gender[29] did not influence participants' perceptions of applicants who used ChatGPT compared to a college admissions coach.





General Recommendations

1. Teach Students Ethical AI Use

Educators should emphasize the ethical use of AI tools in educational settings and integrate AI ethics into the curriculum to help students understand both the benefits and limitations of these technologies.

2. Develop Clear Guidelines for AI Use

Universities should establish and communicate clear guidelines on the acceptable use of AI tools in college admissions and apply consistent standards for all forms of writing assistance.

3. Develop AI Tools with Ethical Safeguards

Developers should create AI tools to help students with college admissions, ensuring data privacy, preventing misuse, and maintaining the authenticity of student work for a fair evaluation process.

Recommendations for Educators

Teach students ethical AI use and address perceiver bias.

Our research revealed that while 30% of students used AI tools to assist in writing their personal essays for college applications, there were significant concerns about the authenticity and ethics of AI-assisted work. Additionally, AI-assisted essays were perceived as less authentic, and students were viewed as less competent than those who received help from a college admissions coach.

Educators should emphasize the ethical use of AI tools in educational settings while addressing the potential biases students might face when using these tools by:

- **Incorporating AI ethics into curriculum.** By fostering critical thinking and ethical decision-making skills, educators can help students navigate potential ethical dilemmas and understand the impact of AI on their personal and academic lives. Discussions and activities around the responsible use of AI will support maintaining academic integrity and ensuring AI tools enhance, rather than undermine, student learning and development.
- **Raising awareness of bias.** Educators should inform students about the potential biases and perceptions they may encounter when using AI tools in their applications. Understanding these biases can help students decide when and how to use AI tools.
- **Engaging in and applying professional development.** Schools can offer professional development sessions focused on the ethical use of AI, understanding biases, and strategies to support educators and students in using AI tools responsibly.

Facilitate conversations about ethical AI use among students, teachers, and college admissions administrators.

Our findings indicated that students and teachers had differing perceptions regarding the ethical use of AI tools in the college admissions process. Teachers generally found it more acceptable to use AI to help with writing recommendation letters than students did to help with crafting their admissions essays.

This discrepancy highlights the need for open, inclusive conversations among students, teachers, and college admissions administrators to define and understand ethical AI use fairly and consistently. Facilitating these discussions can help bridge the gap in perceptions and lead to the development of clear, equitable guidelines that address the concerns of all stakeholders.

These conversations should also consider the nuances of AI use, such as whether teachers should disclose their use of AI in recommendation letters, similar to how students might need to cite AI assistance in their essays.

Addressing these ethical dilemmas in a collaborative environment can foster transparency and trust. This dialogue is essential for creating policies that uphold academic integrity while recognizing the evolving role of AI in education.

Address socioeconomic and equity disparities in AI use.

Our research found that students from families with an annual income of $75,001-$100,000 were more likely than students from families making less than an annual income of $50,000 to use AI tools in the college admissions process. While we did not consider the geographic region, which is likely important to understanding families' financial experiences, our findings suggest that socioeconomic status may influence AI usage. This finding highlights the need to address equity issues in AI access and application. Further research should investigate how differential access to educational resources impacts why and whether lower-and higher-income students choose to use AI tools in their education.

Equitable access to AI tools and targeted support for under-represented students in high school are essential to creating a more inclusive admissions process. College preparation services, such as essay coaching, often cost between $79 and $349 per hour in the U.S. (Kierkegaard, 2024). These costs can be prohibitive for many families, making AI a potentially more accessible tool for college admissions.

Educators can help integrate AI literacy into the curriculum by offering training sessions on effective AI use and resources for students to practice using these tools. By addressing these equity considerations, educators can help level the playing field by ensuring all students, regardless of socioeconomic background, can access college preparation tools.

For additional educator recommendations, check out our previous research exploring teacher and student perspectives on using generative AI in education.



Recommendations for Colleges

Develop clear guidelines for AI use.

Colleges and universities should establish and communicate guidelines about the acceptable use of generative AI tools in admissions. This includes specifying how AI can be used in writing essays and recommendation letters to maintain academic integrity. Our research showed that both students and teachers expressed similar levels of agreement on the importance of these guidelines.

These guidelines could specify that AI tools can be used for initial brainstorming and drafting but require final submissions to reflect the student's work. For recommendation letters, teachers could be encouraged to use AI for organizational help but should ensure the content remains personalized and authentic. Colleges and universities could also offer online training sessions on ethical AI use, highlighting the importance of originality and integrity.

Address potential bias in citing AI assistance.

One common cornerstone of academic integrity policies is advising students to cite their use of AI tools. However, our results pointed to a potential inadvertent consequence of academic honesty—students who openly used AI to help write their college essays were perceived more negatively than those who did not.

This bias suggests that colleges and universities must carefully consider how such policies might unfairly disadvantage students and potentially motivate them to hide their use of AI.

To address this issue, institutions could implement a system where students submit a separate statement explaining the types of assistance they received, including AI tools, and how these tools helped them.

This statement would be reviewed by a different set of evaluators than those who assess the main application materials, creating a double-blind process. This approach can help ensure transparency and honesty without introducing bias in evaluating the applicant's work.

If colleges and universities choose not to use double-blind processes, they should educate admissions officers about how judging AI assistance more harshly than human assistance is a form of discrimination. Admissions officers should be instructed not to penalize students who disclose using AI as long as the nature of the use does not violate academic integrity policies.



Aim for consistency in guidelines around all types of writing assistance.

If colleges and universities require students to cite their use of AI, they should implement consistent guidelines for all forms of writing support. Our research found that while generative AI tools like ChatGPT provided more accessible assistance for writing college application essays, they were perceived more negatively than human tutors. Current norms often mandate that AI tools be cited, whereas human editors are typically not disclosed. To ensure fairness and transparency, universities should establish uniform guidelines on how students can receive and report writing assistance from all sources, not just AI tools.

Given the cost of college admissions coaching services, AI tools can offer a more accessible alternative. However, our findings indicated that students using AI tools like ChatGPT to assist with writing were perceived as less competent than those using a hired admissions coach.

This suggests a bias against AI-assisted work that colleges and universities must address in their guidelines to ensure fairness in the evaluation process. To create fair and comprehensive guidelines, universities could consider the following:

- **Transparency:** To maintain transparency, students must disclose any use of AI tools and human coaches in their application materials.
- **Scope of use:** Define specific boundaries for AI assistance and college admissions coaches, such as allowing these tools for initial brainstorming and drafting but requiring final revisions to be the student's work.
- **Evaluation consistency:** To avoid bias in the admissions process, ensure that the same standards apply to all types of writing assistance, whether from AI tools or human coaches.



Recommendations for Developers

Develop AI tools with ethical safeguards.

Students seek help in the college admissions process, and AI can be a valuable tool for meeting that need. However, ethical concerns and questions about academic integrity complicate using tools like ChatGPT. Recent AI tools, such as Khanmigo, have emerged with the explicit intention of aiding student learning. Our results suggest a market for AI tools designed to aid students in the college admissions process while safeguarding their data, preserving their individuality, and adhering to academic integrity standards.

Developers could create AI tools with robust ethical safeguards to address these concerns. These tools should be designed to help students brainstorm and draft essays without compromising the authenticity of their work. Additionally, developers could implement features that ensure data privacy and prevent misuse.

Educational institutions can also benefit from these tools if they come with built-in transparency mechanisms, such as requiring students to submit a statement explaining the assistance they received from AI. This statement can be reviewed separately to maintain a fair evaluation process. By incorporating these safeguards, AI tools can support students effectively while maintaining the integrity of college admissions.

Build customized coaching GPTs for college admissions.

Colleges and universities could consider developing their own customized AI coaching tools to guide students through their unique admissions processes. While general AI tools like Khanmigo provide broad support, a tailored coaching GPT can emphasize the values and traits that align with the university. This personalized approach ensures that applicants receive guidance that is directly relevant to the institution's expectations and culture.

These customized coaching GPTs can help students understand and navigate the unique aspects of the application process, from essay prompts to financial aid information, while highlighting the qualities that the institution values most in its students.

By integrating these tools into the admissions process, colleges and universities can provide an equitable support system that helps all applicants present their best selves in a way that aligns with the institution's goals. This approach may foster a stronger connection between prospective students and the institution's mission and values.



Conclusion

Generative AI's integration into the college admissions process marks a shift in how high school students and educators approach application tasks. This white paper underscores the potential of AI tools like ChatGPT, highlighting their role in aiding students with essay writing and teachers with crafting recommendation letters.

Our findings indicated that while both students and teachers are cautiously adopting these technologies, there remains a mix of enthusiasm and skepticism.

Students appreciate the accessibility and efficiency of AI tools, yet both groups recognize the challenges in ensuring authenticity and maintaining the integrity of the admissions process.

Generative AI may become a significant component in college admissions, potentially democratizing access to resources and support. However, educators and institutions must approach AI integration thoughtfully to fully realize these benefits. This includes maintaining consistent guidelines on the extent to which students can receive writing help from all sources, not just AI.

We believe the insights from this study can guide the development of policies that promote a fair and inclusive admissions process.

LOOKING FOR ADDITIONAL RESOURCES?

Check out our evidence-based resources guide for educators.

You can also read more about the Digital Technologies and Education Lab's work in this area.



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Methodology

We preregistered our methodology, hypotheses, and analysis plan for the experimental portion of the survey on the Open Science Framework (OSF). We note deviations from preregistered methodology and hypotheses where applicable.

Teacher Survey

The data in this report comes from a self-administered web survey of high school teachers in the United States. It was conducted online in English from February 15 to March 18, 2024. Of 702 teachers sampled, 227 participants were screened out as not eligible (e.g., did not consent to research, did not meet demographic characteristics, or failed attention check*). A total of 425 completed the survey, with a completion rate of 61%. Sago administered the survey to its educator panel of K-12 teachers. See participant demographic information on page 38.

Student Survey

We based the analysis of students' views on a self-administered web survey conducted from February 15 to March 5, 2024, with a sample of 524 U.S. teens ages 16 to 18. The survey was conducted by Sago in English using its parent panel. Of 938 students sampled, 415 were screened out as no longer eligible (e.g., did not consent to research, did not meet demographic characteristics, duplicate response, or failed attention check). A total of 523 completed the survey, with a completion rate of 55%. See participant demographic information on page 36.

IRB

We submitted the research plan for this project to our internal Institutional Review Board (IRB), an independent committee of experts specializing in helping protect research participants' rights. The IRB thoroughly vetted this research before data collection began (Approval ID 2023.018).



*We deviated from our preregistered methods by excluding participants who failed the attention check due to concerns about data quality with a high attention check failure rate. Experimental results are similar if participants who failed the attention check are retained.

Experimental Materials and Procedures

Participants completed a questionnaire administered through Qualtrics.

Participants were randomly assigned to view one of three scenarios regarding a student writing their college application essay: a college admissions coach condition (e.g., the student received assistance from a college admissions coach in writing the essay), a ChatGPT condition (e.g., the student received assistance from ChatGPT in writing the essay), and a control condition (e.g., the student wrote the essay without help.)

After reading the scenario, all participants read the same introductory paragraph as the student's application essay.

INTRODUCTION PARAGRAPH FOR ALL CONDITIONS

In our suburban home, the garden wasn't just a plot of land; it served as a living testament to the intricate wonders of nature. Evening after evening, I'd watch my parents—with meticulous care—nurture every plant, teaching me more than any textbook ever could. That patch of greenery evolved into a collaborative project, deepening my understanding of photosynthesis, the mesmerizing dance of pollinators, and the delicate balance of life. Witnessing the symbiotic relationships in our backyard solidified my fascination with plants and their integral role in our ecosystem. Driven by this passion, I'm eager to major in Botany at Elysium University, to study the myriad connections that govern our natural environment.

Scenario 1: **ChatGPT**	Scenario 2: **College Admissions Coach**	Scenario 3: **No Help**
[Student name] is a high school senior eagerly applying to colleges this year. While writing [his/her] admissions essay, [Student name] turned to ChatGPT, an AI-powered language model, for assistance. ChatGPT aided [him/her] in brainstorming ideas, refining content, and polishing the final draft. Please take a moment to read the introduction paragraph from [Student name]'s essay.	[Student name] is a high school senior eagerly applying to colleges this year. While writing [his/her] admissions essay, [Student name] turned to a college admissions coach, a person hired to help students with the college admissions process, for assistance. This coach aided [him/her] in brainstorming ideas, refining content, and polishing the final draft. Please take a moment to read the introduction paragraph from [Student name]'s essay.	[Student name] is a high school senior eagerly applying to colleges this year. While writing [his/her] admissions essay, [Student name] worked by [himself/herself] to brainstorm ideas, refine content, and polish the final draft. Please take a moment to read the introduction paragraph from [Student name]'s essay.

Dependent Variables

Participants responded to the following scales after reading the scenario and introduction paragraph. All items were measured on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree).

[Ethics]	*Adapted from Bloodgood et al., 2010 and Schwartz et al., 2013* ▶ The approach this student took to writing the essay is academically dishonest. ▶ The approach this student took to writing the essay is wrong.
[Competent]	▶ How competent is this student? ▶ How intelligent is this student?
[Perceived Benefits of Approach]	*Adapted from Loretto et al., 2016* ▶ This student's approach to writing the essay was beneficial to their writing. ▶ Using this student's approach was beneficial to their writing.
[Agentic]	▶ How individualistic is the student? ▶ How competitive is this student? ▶ How independent is this student?
[Likable]	▶ How much do you like this student? ▶ How much do you want to get to know this student? ▶ How popular would this student be with their peers?
[Authenticity]	*Adapted from Glikson & Asscher, 2022* ▶ The introduction paragraph represents this student's true feelings. ▶ This student's voice is authentic.
[Accessibility]	▶ The approach this student took to writing the essay is available to everyone. ▶ The approach this student took to writing the essay is easily accessible. ▶ Most students could use this student's approach to writing the essay if they wanted to.

Hypotheses

We had several hypotheses for the experimental component of this study:

Ethics

H1: We predict that there will be a significant main effect of the condition on perceived ethics.

H2: We predict that participants will perceive the "No Help" condition as most ethical, followed by assistance from a college admissions tutor, with assistance from ChatGPT perceived as least ethical.

Authenticity

H3: We predict that there will be a significant main effect of condition on authenticity.

H4: We predict that participants will perceive the introduction paragraph from the "No Help" condition as most authentic, followed by assistance from a college admissions tutor, with assistance from ChatGPT perceived as least authentic.

Accessibility

H5: We predict that participants will perceive assistance from a college admissions tutor as less accessible than assistance from ChatGPT.

Beneficial Impacts

H6: We predict that students will rate the beneficial impacts of assistance from ChatGPT higher than teachers.



Survey Participant Demographics

Students

Age
Student participants were between 16 and 18 years old* (*M* = 17.8, *SD* = 0.5).

*Two participants reported they were 37 and 53 years old. This is likely because some student participants are assisted in filling out the survey by their parents.

Gender	Percentage (Frequency)
Girl/Woman	50.5% (264)
Boy/Man	45.9% (240)
Non-Binary	2.5% (13)
Another gender not listed	0.4% (2)
Prefer not to say	0.8% (4)

Household Income	Percentage (Frequency)
$0 - $25,000	12.2% (64)
$25,001 - $50,000	15.3% (80)
$50,001 - $75,000	15.3% (80)
$75,001 - $100,000	14.7% (77)
$100,001 - $175,000	14.9% (78)
$175,001 - $250,000	5.2% (27)
$250,001 +	5.7% (30)
Chose not to answer or do not know	16.6% (87)

Race	Percentage (Frequency)
European American or White	42.6% (223)
Latino/a/x	20.3% (106)
African American or Black	19.1% (100)
Asian American or Asian	9.6% (50)
Multiracial	1.7% (9)
Middle Eastern American or Arab	1.5% (8)
Native American or American Indian	1.1% (6)
Pacific Islander	0.1% (1)
Other race not listed	1.1% (6)
Prefer not to say	1.7% (9)

Highest Caregiver Level of Education	Percentage (Frequency)
Did not graduate high school	4.6% (24)
Graduated high school	21.6% (113)
Completed some college	15.7% (82)
College graduate	42.4% (222)
Advanced degree	10.9% (57)
Not applicable, do not know, or chose not to answer	1.3% (7)

Community	Percentage (Frequency)
Suburb near a large city	36.9% (193)
Small city or town	28.1% (147)
Large city	15.3% (80)
Rural area	13.2% (69)
Prefer not to say	6.5% (34)

School Type	Percentage (Frequency)
Public	70.7% (370)
Private	11.9% (62)
Online school	7.8% (41)
Charter	4.4% (23)
Other school type not listed	1.7% (9)
Chose not to answer	3.4% (18)

Type of College (Applied)	Percentage (Frequency)
Public in-state university	62.1% (325)
Public out-of-state university	30.4% (159)
Private university	26.0% (136)
Community college	33.8% (177)
Liberal arts college	12.8% (67)
Technical or vocational college	13.8% (72)
Highly selective university	14.1% (74)
Online university/college	11.9% (62)
Something else (please specify):	1.7% (9)

Note. Students applied to between 0 and 36 colleges (M = 4.57, SD = 4.36).

Teachers

Age
Teacher participants were between 21 and 65 years old (*M* = 43.5, *SD* = 9.8)

Gender	Percentage (Frequency)
Woman	48.5% (206)
Man	51.29% (218)
Prefer not to say	0.2% (1)

Race	Percentage (Frequency)
European American or White	72.0% (306)
African American or Black	11.8% (50)
Latino/a/x	8.2% (35)
Asian American or Asian	3.3% (14)
Native American or American Indian	1.2% (5)
Middle Eastern American or Arab	0.5% (2)
Pacific Islander	0.5% (2)
Other race not listed	1.2% (5)
Prefer not to say	1.4% (6)

School Type	Percentage (Frequency)
Public	66.8% (284)
Private	26.8% (114)
Charter	2.9 (12)
Online school	1% (4)
Chose not to answer	1.4% (6)

Household Income	Percentage (Frequency)
$0 - $25,000	2.6% (11)
$25,001 - $50,000	7.1% (30)
$50,001 - $75,000	17.6% (75)
$75,001 - $100,000	23.8% (101)
$100,001 - $175,000	31.8% (135)
$175,001 - $250,000	9.6% (41)
$250,001 +	3.5% (15)
Chose not to answer	4.0% (17)

Highest Level of Education	Percentage (Frequency)
High school	1.6% (7)
Some college (no degree)	2.8% (12)
2-year/Associate's degree	5.4% (23)
4-year/Bachelor's degree	37.6% (160)
Graduate degree	51.5% (219)
Chose not to answer	0.9% (4)

Community (e.g., Urban/Rural)	Percentage (Frequency)
Rural area	13.2% (56)
Small city or town	22.6% (96)
Suburb near a large city	41.2% (175)
Large city	21.6% (92)
Chose not to answer	1.4% (6)

Subject	Percentage (Frequency)
English Language Arts/Literature	29.4% (125)
Social Studies	20.0% (85)
History	18.1% (77)
Religion	3.1% (13)
World Languages/Foreign Language	6.1% (26)
Special Education	11.3% (48)
Music	2.1% (9)
Art	5.9% (25)
Physical Education	4.2% (18)
Health	5.2% (22)
English as a Second Language/ Culturally and Linguistically Diverse Students/English Language Learners	7.5% (52)
Music/Band/Choir	0.7% (3)
Theatre/Film	1.6% (7)
Dance	0.7% (3)
Science	13.9% (59)
Math	20.2% (86)
General Education	8.5% (36)
Advisory/Homeroom	4.0% (17)
Something else (please specify)*	6.8% (29)

Years Teaching	Percentage (Frequency)
Less than 1 year	0.9% (4)
1-3 years	4.5% (19)
4-6 years	16.2% (69)
7-10 years	20.9% (89)
11-15 years	18.6% (79)
16-20 years	15.1% (64)
21-25 years	10.8% (46)
More than 25 years	11.8% (50)
Chose not to answer	1.2% (5)

Note. Participants were instructed to select all that applied, so percentages do not sum to 100.*

The most-represented subjects in the "Something else" category were Business (5), Mental Health Professionals (e.g., counselors; 4), Administrative Professionals (3), and Technology or Computer Science (2).

Supplement

Student Findings

[1] 105% increase, 95% CI [0.53, 0.92].

[2] 150% increase, 95% CI [0.22, 1.63], between families making < 50,000 and the $75,001-$100,000 bracket.

[3] bs < .38, ps > .16

Teacher Findings

[4] $t(420) = 4.53$, $p < .001$, $d = .22$

[5] $t(420) = -1.32$, $p = 0.19$, $d = -0.06$

Comparisons Between Teachers and Students

[6] $t(865.58) = -3.71$, $p < .001$, $d = 0.25$

[7] $t(892.67) = 0.30$, $p = 0.76$, $d = 0.03$

[8] $t(919.23) = 3.60$, $p < .001$, $d = 0.23$

[9] Interaction $F(1, 924) = 29.36$, $p < .001$, ηG2 = .005.

[10] $F(1, 924) = 0.19$, $p = .66$, $d_{av} = 0.02$

[11] $F(1, 924) = 48.17$, $p < .001$, $d_{av} = 0.28$

Experimental Findings

[12] A one-way Welch ANOVA revealed that the form of help the applicant received significantly impacted how authentic their essay was rated, $F(2, 629.21) = 71.78$, $p < .001$.

[13] A Games-Howell post hoc test revealed the applicant's essay received lower ratings of authenticity when the applicant used ChatGPT ($M = 3.09$, $SD = 1.07$) compared to when they used a college admissions coach ($M = 3.68$, $SD = 0.91$), p < .001, $d = 0.59$.

[14] For the results reported in the experimental findings section, we only report findings from students and teachers who could recall what form of help the applicant used correctly. In total, 384 participants did not correctly recall whether the applicant received help from ChatGPT, a college admissions coach, or no help, leaving us with 952 participants. Though we report results from only students and teachers who passed this attention check, the pattern of findings did not change when they were retained.

[15] A one-way Welch ANOVA revealed that the form of help the applicant received significantly impacted how competent the applicant was rated, $F(2, 628.88) = 49.04$, $p < .001$.

[16] A Games-Howell post hoc test revealed the applicant was rated as less competent when they used ChatGPT ($M = 3.42$, $SD = 0.89$) compared to a college admissions coach ($M = 3.86$, $SD = 0.77$), $p < .001$, $d = 0.53$.

[17] A one-way Welch ANOVA revealed that the form of help the applicant received significantly impacted how agentic the applicant was rated, $F(2, 628.78) = 43.59$, $p < .001$.

[18] A Games-Howell post hoc test revealed the applicant was rated as less agentic when they used ChatGPT ($M = 3.16$, $SD = 0.91$) compared to a college admissions coach ($M = 3.64$, $SD = 0.74$), $p < .001$, $d = 0.57$.

[19] A one-way ANOVA revealed that the form of help the applicant received significantly impacted how likable the applicant was rated, $F(2, 949) = 18.86$, $p < .001$.

[20] A Tukey HSD post hoc test revealed the applicant was rated as less likable when they used ChatGPT (M = 3.27, SD = 0.89) compared to a college admissions coach (M = 3.55, SD = 0.79), $p < .001$, d = 0.33.

[21] A one-way ANOVA revealed that the form of help the applicant received significantly impacted how ethical the applicant's approach was rated, $F(2, 947) = 99.82$, $p < .001$. The questions for the ethics scale were reverse-coded for ease of interpretation.

[22] A Tukey HSD post hoc test revealed the applicant's approach was rated as more unethical when they used ChatGPT (M = 2.86, SD = 1.1) compared to a college admissions coach (M = 3.57, SD = 1.11), $p < .001$, d = 0.65.

[23] A one-way Welch ANOVA revealed that the form of help the applicant received significantly impacted how beneficial the applicant's approach was rated, $F(2, 631.55) = 23.976$, $p < .001$.

[24] A Games-Howell post hoc test revealed the applicant's approach was rated as less beneficial when they used ChatGPT (M = 3.5, SD = 1.01) compared to a college admissions coach (M = 3.88, SD = 0.81), $p < .001$, d = 0.42.

[25] A one-way Welch ANOVA revealed that the form of help the applicant received significantly impacted how accessible the applicant's approach was rated, $F(2, 609.89) = 14.84$, $p < .001$.

[26] A Games-Howell post hoc test revealed the applicant's approach was rated as less accessible when they used a college admissions coach (M = 3.42, SD = 0.98) compared to ChatGPT (M = 3.82, SD = 0.84), $p < .001$, d = 0.43.

[27] The effect of condition (ChatGPT vs. College Admissions Coach) on perceptions of how ethical (b = -0.71, $p < .001$), accessible (b = 0.39, $p < .001$), authentic (b = -0.59., $p < .001$), and beneficial to their writing (b = -0.38, $p < .001$) the applicant's approach was, as well as how competent (b = -0.45, p < .001), agentic (b = -0.47, $p < .001$), and likable (b = -0.28, $p < .001$) the applicant was, remained significant when controlling for applicant name.

[28] In 2 (Condition: ChatGPT vs. College Admissions Coach) × 4 (student race: Black/African-American, Asian-American, Latino/a/x, White) between-subjects ANOVAs, there were no main effects of race or race × condition interactions on any of our outcome variables. The main effect of the condition remained significant across all tests.

[29] In 2 (Condition: ChatGPT vs. College Admissions Coach) × 2 (student gender: Girl vs. Boy) between-subjects ANOVAs, there were no main effects of gender or gender × condition interactions on our outcome variables. The main effect of the condition remained significant across all tests.

About foundry10

foundry10 is an education research organization with a philanthropic focus on expanding ideas about learning and creating direct value for youth. In collaboration with a wide range of partners, we surface, evaluate, and share opportunities to better support youth learning both inside and outside the classroom. Building on more than a decade of impactful work, our unique approach blends applied and experimental research, philanthropy, and education programs rooted in evidence-based best practices.

foundry10.org

(206) 686-9780

info@foundry10.org