

## AI Use at UC – UCUES results

The 2024 UC Undergraduate Student Experience Survey (UCUES) included several questions related to AI to assess the extent of AI tool usage among undergraduate students at UC campuses and to evaluate their understanding of guidelines for AI use in supporting learning.

### How often students used AI tools

Students were asked to report how often they used AI tools, such as ChatGPT, in academic settings. Overall, 65 percent reported using AI tools, with 50 percent occasional users (used several times per month or per year) and 4 percent frequent users using AI tools on a daily basis (see Table 1).

**KEY FACTS**

- Sixty-five percent of respondents reported using AI tools, with fewer than five percent using them daily and twelve percent weekly.
- Male students are more likely to use AI tools daily (7%) compared to female students (3%).
- The proportion of students who have used AI tools varies by campus, ranging from 60% to 69%.
- STEM students are more likely to use AI tools than their peers in arts and humanities.
- International students are the leading users of AI.
- Pell recipients are less likely to use AI tools.
- Frequent usage increases by student level and age.
- Students primarily use AI for brainstorming writing projects or presentations, researching topics, and studying for exams.
- Over 80% of students reported a good understanding of the policies regarding appropriate AI use to support learning.

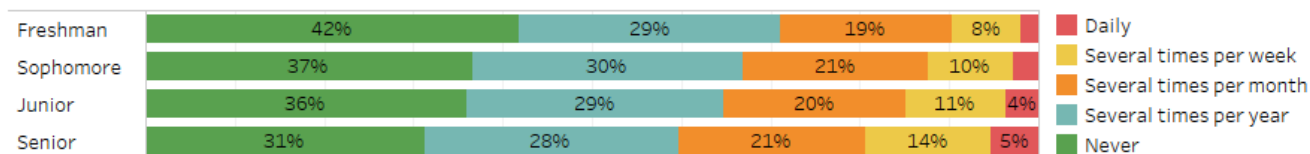
Table 1 How often students used AI tools

	Daily	Several times per week	Several times per month	Several times per year	Never
#	2,198	6,341	11,038	15,424	18,449
%	4%	12%	21%	29%	35%

The proportion of respondents who reported never having used AI tools varies by UC campus, ranging from 31 percent to 41 percent. Meanwhile, the percentage of respondents using AI tools daily ranged from 3 percent to 5 percent.

AI usage increases with student level, with nearly 70 percent of seniors reporting usage, compared to less than 60 percent among freshmen. The proportion of frequent users also rises with student level, from 2 percent among freshmen to 5 percent among seniors (see Figure 1).

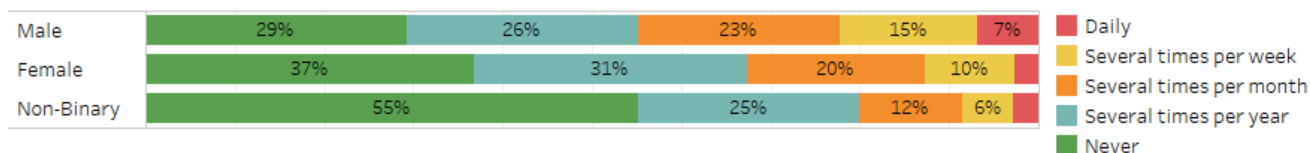
Figure 1 Frequency of AI use by student level



There is a gender gap in AI use. Over 70 percent of male respondents are using AI tools, compared to 63 percent of female students. AI use on a daily basis ranged from 7 percent for male students, compared to 3 percent for female students. Additionally, more than half of (55%) a

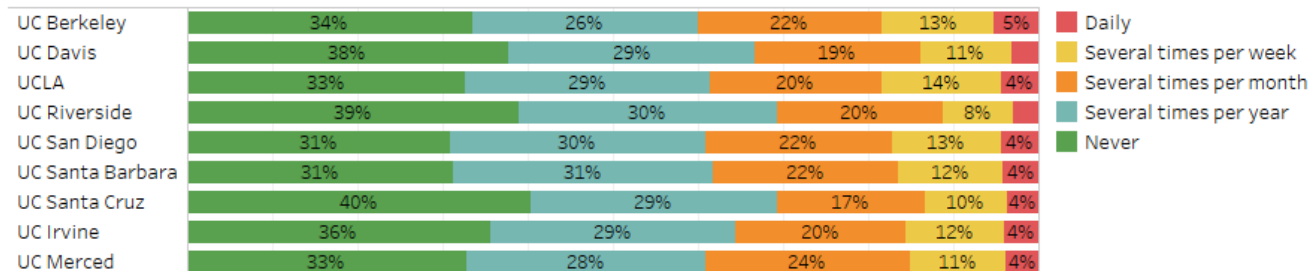
total of 1,050 non-binary respondents reported to have never used AI tools (see Figure 2). The gender difference in AI usage may in part be influenced by disciplinary differences (see Figure 4). Engineering and computer science fields are predominantly male (63%), while other disciplines tend to have a majority of female students (at least 50%). Within Engineering, 79 percent of male students compared to 76 percent female have used AI tools; 10 percent of male students use it daily, compared to 6 percent of female Engineering students. This demographic distribution suggests a complex interplay between gender and discipline, impacting AI usage patterns among students.

Figure 2 Frequency of AI use by gender



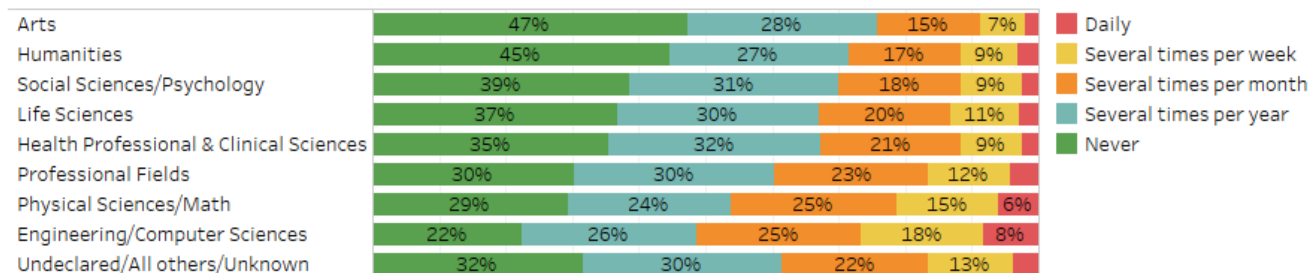
When analyzed by campus, there is little variation in the proportion of students using AI tools daily. Usage ranges from 69 percent at UC San Diego and UC Santa Barbara to 60 percent at UC Santa Cruz. Daily AI usage among UC undergraduates across campuses is consistently between 3 percent and 5 percent (see Figure 3).

Figure 3 Frequency of AI use by campus



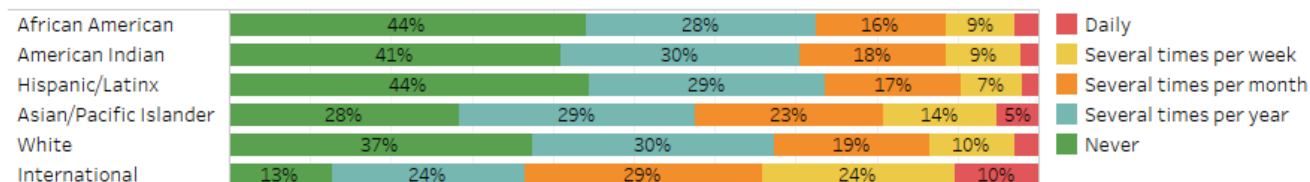
There is a significant difference in AI usage by discipline (see Figure 4). Students in the Arts are the least likely to use AI tools, with 53 percent reporting that they have ever used them. In contrast, engineering students are the most likely to use AI tools, with 78 percent indicating usage. Additionally, a higher proportion of engineering and computer science students (8%), as well as students in physical sciences and mathematics (6%), reported using AI tools daily, surpassing the system average of 4 percent.

Figure 4 Frequency of AI use by discipline



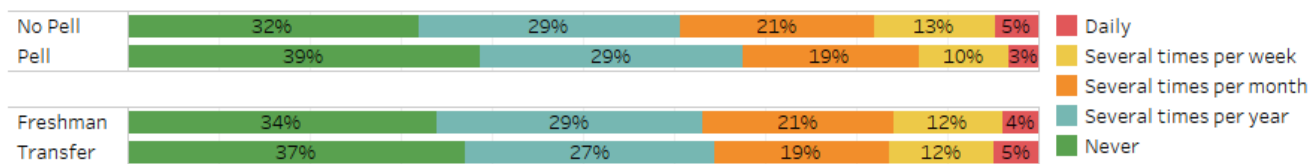
The usage patterns of AI among minority groups show similarities in the proportions of occasional and frequent users. Internationals comprise 10 percent frequent users and 77 percent occasional users. Asians follow, with 5 percent frequent users and 67 percent occasional users (see Figure 5).

Figure 5 Frequency of AI use by race/ethnicity



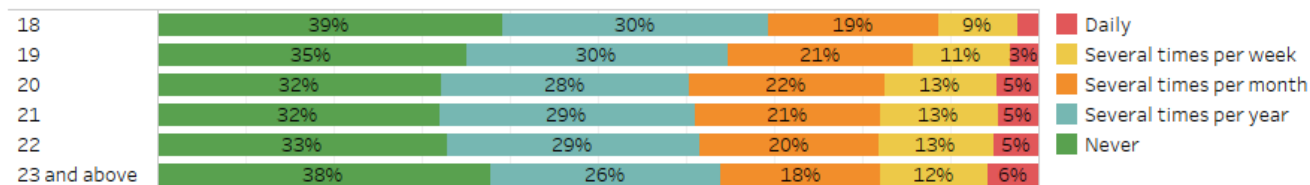
Pell Grant recipients are less likely to use AI tools than their peers, with a 7 percent difference in usage (61% vs. 68%). However, there is no significant difference in AI usage based on matriculation status – i.e., freshman and transfer status (see Figure 6).

Figure 6 Frequency of AI use by Pell and matriculation status



Frequent users of AI tools increase with age; however, 18-year-olds and those older than 22 reported similar usage rates of 61 percent and 62 percent, respectively. Additionally, individuals aged 20 to 22 exhibited comparable percentages of AI usage (see Figure 7).

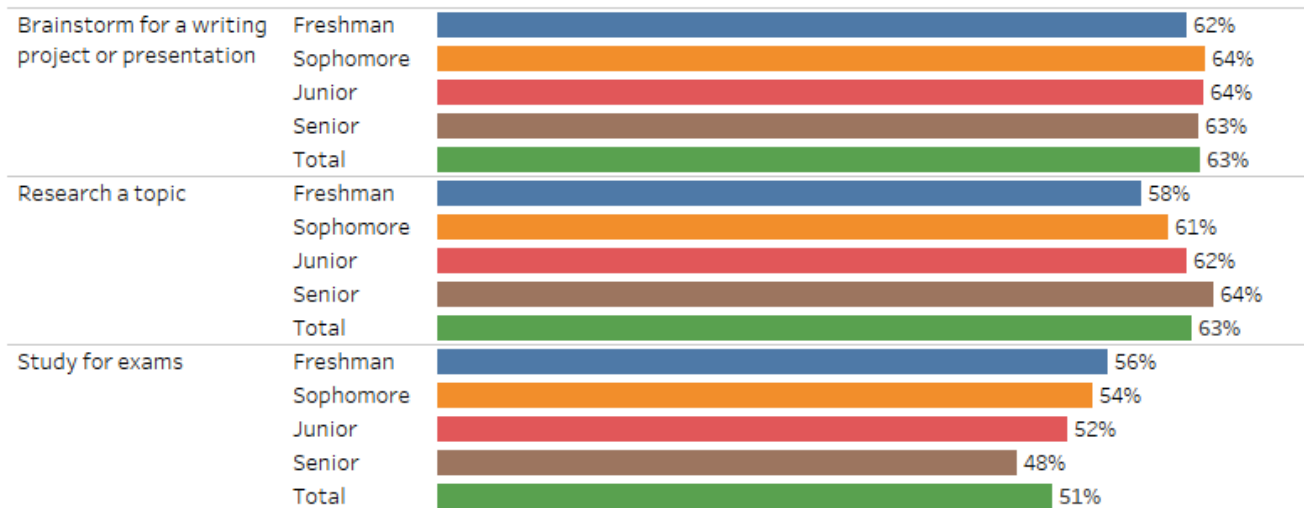
Figure 7 Frequency of AI use by age



## Purposes of using AI tools

Students were asked to report how they used AI tools to support their learning. Among the ten options provided, the top three reasons for using AI were: (1) to "brainstorm for a writing project or presentation," (2) to "research a topic," and (3) to "study for exams" (see Figure 8). Similar proportions of freshmen, sophomores, juniors, and seniors reported using AI tools for brainstorming. However, upper-division students were more likely to use AI for research than for studying for exams, compared to their lower-division counterparts. Please refer to Appendix 1 for the percentages of students selecting each of the ten options.

Figure 8 Top purposes of using AI tools to support learning



## Appropriate use of AI tools in coursework

Students were also asked about their level of agreement with statements regarding the use of AI tools like ChatGPT in their coursework (see Figure 9). Generally, over 80 percent of students indicated at least some agreement that they understood the appropriate use of AI tools for completing their coursework and that their professors had discussed this topic. Additionally, a majority agreed that they understood how AI tools could both assist and hinder their learning. However, a lower proportion of respondents—around 70 percent—reported knowing how to create effective AI prompts that yield the responses they need.

Figure 9 Understanding of appropriate AI use in coursework

	At least somewhat agree	At least somewhat disagree	NA
My professors have discussed when it is appropriate to use AI to complete my coursework.	82%	12%	5%
I understand when it is appropriate to use AI to complete my coursework.	90%	5%	5%
My professors' policies about the appropriate use of AI to complete my coursework are reasonable.	88%	6%	6%
I understand how AI generates responses.	81%	15%	4%
I understand how to create effective AI prompts that produce desired responses.	69%	24%	7%
I understand how the use of AI can enhance my learning.	81%	14%	5%
I understand how the use of AI can be detrimental to my learning.	90%	6%	4%

In summary, nearly two-thirds of students have used AI tools for their learning to some extent. The proportion of students who have ever used AI tools tends to increase with student level. A higher percentage of male students use AI tools compared to female students, and students in STEM fields are more likely to use AI tools than those in the arts and humanities. International students lead in both frequent and occasional usage of AI tools. Pell Grant recipients are less likely to use AI tools than their peers. Frequent usage increases with age. More than half of respondents reported using AI tools to brainstorm for a writing project or presentation, to research a topic, or to study for exams. Additionally, over 80 percent of students indicated that their professors have discussed policies regarding the appropriate use of AI in coursework, and they generally possess a good understanding of how to use AI to enhance their learning.

## Appendix

Appendix 1 Ten purposes of using AI tools to support learning

