Students, AI, and Skill Development Survey Report



September 27, 2024 Prepared for VPA Layla Alhussainy by Department of Research and Advocacy

Overview

This survey ran on the UASU Perks platform, September 11-23, and reached 1,565 respondents.

- Of the students who have been interviewed for jobs in the past year, 17% have been asked about genAI. (When they feel it's appropriate, whether and how they have used it.)
- 43% agree that their faculty is doing enough to help them prepare for the workplace, other than AI issues. Only 30% agree that their faculty is doing enough to help them prepare for a workplace that includes AI.
- 71% disagree that genAI will lead to more good jobs in their field.
- 75% agree that students who use genAl for writing will develop weaker writing skills.
- 65% agree that if a student mentions they used chatGPT while writing an essay, they assume that student cheated.
- 90% feel confident that they know the rules/standards for using genAl in their specific courses this semester. However, that falls to 80% for writing assistant software that is more intensive than a standard spell-check.
- 17% do not feel comfortable asking their instructors about the rules/standards for using AI (compared to 12% who do not feel comfortable asking instructors about things like grading, academic integrity, or the syllabus).
- Deaf respondents were much less likely to be confident knowing the rules/limits for AI writing assistant software, much less likely to feel comfortable asking their instructors about their class's rules and mechanics (for AI or for other topics), much less likely to agree that their faculties were preparing them for the workplace (in relation to AI or not), more likely to be asked about genAI usage and attitudes in job interviews, much less likely to assume cheating if someone mentions using genAI while writing a paper, much more likely to believe that genAI will create more good jobs in their field, and much less likely to believe that AI will pose a threat to humans in the next 50 years. Several of these trends also applied to the much larger group of students who identify as "another identity that should be protected on similar grounds as disability." This suggests unexplored questions and unmet needs around Deafness and, most likely, neurodiversity.

Demographics

"Working from the question in the University's Student Diversity Census, do you identify as any of the following?"

- A person with a disability: 8.4%
- A Deaf person: 0.8%
- Another identity that should be protected on similar grounds as disability: 3.9%
- An able-bodied or non-disabled person: 63.3%
- Prefer not to say: 23.6%

"What is your gender?"

- Woman: 59.7%
- Man: 23.1%
- Non-binary or another gender identity: 6.6%
- Prefer not to say: 10.6%

"Are you transgender?"

- Yes: 4.0%
- No: 87.7%
- Prefer not to say: 8.3%

"Do you feel confident that you know the rules and limits for using generative AI ('genAI' like ChatGPT or Gemini) in your courses this semester?"

- Very confident: 52%.
- Somewhat confident: 38%.
- Not very confident: 7%.
- Not at all confident: 3%.
- Noteworthy variation by year of study: None.
- Faculties of concern: None.
- Noteworthy variation by gender: None.
- Noteworthy variation by disability: Total rate of confidence fell from 89% to 79% for students who have another identity that should be protected on similar grounds as disability. This may speak to a need for increased clarity for neurodivergent students, who may or may not self-identify as a person with a disability. Meanwhile, students with disabilities were considerably more likely to be very confident than other students.

"One common point of confusion and potential risk is around AI tools (e.g. writing assistant software) that aren't as wide-ranging as chatGPT but still go farther than a standard spell-check. Do you feel confident that you know the rules and limits for using AI writing assistant software (other than chatGPT etc.) in your courses this semester?"

- Very confident: 39%, much lower than in the previous question.
- Somewhat confident: 41%.
- Not very confident: 16%.
- Not at all confident: 4%.
- Noteworthy variation by year of study: 'Very confident' was relatively high (42-47%) for students in third and fourth year, but fell to 28-35% for students in fourth year or higher, suggesting the possibility that older students may be having trouble adjusting.
- Faculties of concern: Medicine and Dentistry, Nursing, Pharmacy and Pharmaceutical Sciences, KSR.
- Noteworthy variation by gender: Generally none, though transgender students did appear somewhat more likely to feel confident.
- Noteworthy variation by disability: Although 80% of respondents were somewhat or very confident, only 61% of Deaf respondents were confident, and only 72% of respondents who identified with another identity that should be protected on similar grounds as disability. This strongly suggests a need to explore how and why students with accessibility needs use these kinds of software.

"On a scale of 1 to 5, do you feel comfortable asking your instructors about how the course works (e.g. syllabus, grading, cheating/academic integrity, rules other than things to do with AI)?"

- 1 (not at all comfortable): 5%.
- 2:8%.
- 3 (somewhat comfortable): 35%.
- 4: 25%.
- 5 (very comfortable): 28%.
- Average score: 3.6.
- Noteworthy variation by year of study: Slight but steady increase (average 3.6 in first and second year, 3.7 in third and fourth year, 3.8 in fifth year or higher).

- Faculties of concern: Business (3.4), Native Studies (3.0), Nursing (3.2).
- Noteworthy variation by gender: Men slightly higher than women or non-binary students (3.8 versus 3.6 and 3.7). No variation between cisgender and transgender respondents.
- Noteworthy variation by disability: This is an area of concern.
 - A Deaf person: 2.5.
 - A person with a disability: 3.7.
 - An able-bodied or non-disabled person: 3.7.
 - Another identity that should be protected on similar grounds as disability:
 3.6.

"On a scale of 1 to 5, do you feel comfortable asking your instructors about rules/standards for AI use in their classes?"

- 1 (not at all comfortable): 7%.
- 2: 10%.
- 3 (somewhat comfortable): 34%.
- 4: 20%.
- 5 (very comfortable): 28%.
- Average score: 3.5.
- Noteworthy variation by year of study: Fairly distributed across years of study with the highest being 3.7 in fifth year or higher, an even split with 3.5 for first & second years, and 3.4 for second and fourth years.
- Faculties of concern: Nursing (3.1), KSR (3.2), Native Studies (3.2), and Pharmacy and Pharmaceutical Sciences (3.1).
- Noteworthy variation by gender: Women slightly lower than men or non-binary students, (3.47 versus 3.63 and 3.55 respectively). No difference between transgender and cisgender respondents (3.54 and 3.55 respectively).
- Noteworthy variation by disability: Area of concern.
 - A Deaf person: 2.4.
 - A person with a disability: 3.7.
 - An able-bodied or non-disabled person: 3.6.
 - Another identity that should be protected on similar grounds as disability:
 3.1.

"Agree or disagree? 'My faculty is doing enough to help me prepare for the workplace, other than issues related to Al.'"

- Strongly agree: 8.8%
- Somewhat agree: 34.4%
- Neither agree nor disagree: 36.9%
- Somewhat disagree: 13.9%
- Strongly disagree: 6.0%
- Noteworthy variation by year of study: Disagreement rose by year of study.
 - 1st year: 49.9% agree vs. 13.5% disagree.
 - 2nd year: 41.8% agree vs. 16% disagree.
 - 3rd year: 41.5% agree vs. 23.6% disagree.
 - 4th year: 37.3% agree vs. 25.9% disagree.
 - 5+ year: 42.1% agree vs. 28% disagree.
- Faculties of concern: Agree vs. disagree respectively.
 - Business 37.6% vs. 18.3%.
 - KSR 36% vs. 34%
 - Law 33.3% vs. 16.7%
 - Native Studies 20% vs. 40%
 - ALES, Education, Medicine & Dentistry, Nursing, and Pharmacy and Pharmaceutical Sciences all had high 'agree' scores (>50%).
- Noteworthy variation by gender: 48.5% of non-binary and gender identity agreed and 17.5% disagreed. This was followed by men at 46.7% agreement and 21.3% disagreement, and women at 43.7% agreement and 19.2% disagreement. More transgender individuals disagreed (25.8%) than any other group.
- Noteworthy variation by disability:
 - A Deaf person: 30.8% agree and 30.8% disagree.
 - A person with a disability: 41.7% agree and 20.5% disagree.
 - An able-bodied or non-disabled person: 46.8% agree and 19.4% disagree.
 - Another identity that should be protected on similar grounds as disability: 36.1% agree and 27.9% disagree.

"GenAl is impacting and changing many jobs' responsibilities. Agree or disagree? 'My faculty is doing enough to help me prepare for a workplace that includes Al."

- Strongly agree: 6.7%
- Somewhat agree: 22.9%

- Neither agree nor disagree: 39.6%
- Somewhat disagree: 21.3%
- Strongly disagree: 9.6%
- Noteworthy variation by year of study: Again, disagreement rose by year of study, and was much higher than disagreement related to preparing for the workplace in general terms.
 - 1st year: 34.7% agree vs. 25.3% disagree.
 - 2nd year: 27.7% agree vs. 30.2% disagree.
 - 3rd year: 27.3% agree vs. 34.9% disagree.
 - 4th year: 26.8% agree vs. 37.7% disagree.
 - 5+ year: 19.6% agree vs. 37.4% disagree.
- Faculties of concern: ALES (26% agree), Augustana (none agree), CSJ (10% agree), Native Studies (none agree).
- Noteworthy variation by gender: 27.9% of men disagreed while 30.9% agreed.
 39.8% of non-binary and other gender identities disagreed while 27.2% agreed.
 31.6% of women disagreed while 30.5% agreed. 43.5% of transgender respondents disagreed, compared to only 31% of cisgender respondents.
- Noteworthy variation by disability:
 - A Deaf person: 15.4% agree while 46.2% disagree.
 - A person with a disability: 29.5% agree while 34.8% disagree.
 - An able-bodied or non-disabled person: 30.4% agree while 32.6% disagree.
 - Another identity that should be protected on similar grounds as disability: 24.6% agree while 32.8% disagree.

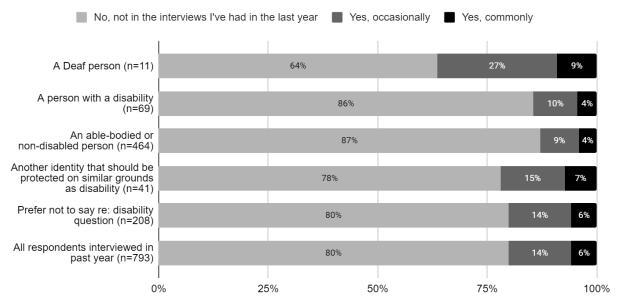
"In job interviews in the last year, have you been asked about genAl? (Your opinions of it, when you feel it's appropriate to use, whether and how you've used it, etc.)"

- No, but I haven't been interviewing for jobs in the last year: 49.3%
- No, not in the interviews I've had in the last year: 42.7%, 84% of interviewed students (i.e. with 'I haven't been interviewing for jobs in the last year' excluded).
- Yes, occasionally: 2.4%, 5% of interviewed.
- Yes, commonly: 5.6%, 11% of interviewed.
- Noteworthy variation by year of study: Most respondents indicated that they
 were not asked about genAl during their interviews, but a significant fraction of
 students at every level have encountered these questions, rising to one-fifth of
 fourth-year students who have been interviewing. Respondents that were asked
 are as follows:
 - 1st year: 6.0% of respondents, 15% of interviewed.
 - 2nd year: 8.3%, 15% of interviewed.

- 3rd year: 5.1%, 10% of interviewed.
- 4th year: 11.4%, 20% of interviewed.
- 5+ year: 7.5%, 12% of interviewed.
- Faculty variation: The faculties where students were most likely to encounter these interview questions, if they had been interviewing, were:
 - Business (18%)
 - KSR (23%)
 - Science (18%)
- Noteworthy variation by gender: Although the majority of respondents were not asked about genAl during their interviews, of those that were, 11% are men, 9.7% are non-binary and other gender identities, and 6.4% are women.
- Noteworthy variation by disability:
 - A Deaf person: 30.8% were asked (rising to 36% of interviewed) while 69.2% were not.
 - A person with a disability: 7.6% were asked while 92.4% were not.
 - An able-bodied or non-disabled person: 6.1% were asked while 93.9% were not.
 - Another identity that should be protected on similar grounds as disability: 14.8% were asked (rising to 22% of interviewed) while 85.2% were not.

This last finding suggests that Deaf or neurodivergent students are much more likely to be asked about their genAl opinions/usage in job interviews, which leads to potential human rights questions. Note that the differences here, though drastic, were not statistically significant. "In job interviews in the last year, have you been asked about genAl? (Your opinions of it, when you feel it's appropriate to use, whether and how you've used it, etc.)"





"Agree or disagree? 'Students who use genAI for writing will develop weaker writing skills.'

- Strongly agree: 26.3%
- Somewhat agree: 48.8%
- Somewhat disagree: 21.3%
- Strongly disagree: 3.8%
- Noteworthy variation by year of study: Total 'agree' was high in first year (80%), stable thereafter (72-73%).
- Faculties of concern: Engineering (7% strongly disagree, 22% strongly agree), Open Studies (10% strongly disagree, 19% strongly agree).
- Noteworthy variation by gender: There was major variation here. While all respondents showed a higher rate of agreement than disagreement, 76.6% of women agree, compared to 23.5% who disagree. 80.6% of non-binary or other gender identities agree, while 19.4% disagree. Only 70.4% of men agree, while 29.6% disagree. This may have to do with varying gender ratios by faculty.
- Noteworthy variation by disability:
 - A Deaf person: 69.2% agree while 30.8% disagree.
 - A person with a disability: 78.8% agree while 21.2% disagree.

- An able-bodied or non-disabled person: 76.7% agree while 23.3% disagree.
- Another identity that should be protected on similar grounds as disability:
 68.9% agree while 31.1% disagree.

"A student mentions they used chatGPT while writing an essay. Agree or disagree? 'I assume this student cheated.'"

- Strongly agree: 21%
- Somewhat agree: 44.7%
- Somewhat disagree: 28.3%
- Strongly disagree: 6.1%
- Noteworthy variation by year of study: Majority of the students agree this is a form of cheating as follows.
 - 1st year: 71.7% versus 28.3%
 - 2nd year: 67.1% versus 32.9%
 - 3rd year: 64.4% versus 35.6%
 - 4th year: 59.5% versus 40.5%
 - 5+ year: 65.4% versus 34.6%
- Faculty variation: ALES, Law, and Science were most likely to agree (>70%).
 Pharmacy and Pharmaceutical Sciences, Open Studies, CSJ, and KSR were most likely to disagree (~40-50%).
- Noteworthy variation by gender: Women were more likely to agree (67.1%) than men (64.1%) or non-binary students (61.2%).
- Noteworthy variation by disability:
 - A Deaf person: 46.2% agree versus 53.8% disagree.
 - A person with a disability: 65.2% agree versus 34.8% disagree.
 - An able-bodied or non-disabled person: 67.9% agree versus 32.1% disagree.
 - Another identity that should be protected on similar grounds as disability: 55.7% agree versus 44.3% disagree.

"Agree or disagree? 'I think genAI will lead to more good jobs in my field.'"

4.1% of respondents strongly believe that genAI will create better jobs in their fields, while 24.8% somewhat agree. In contrast, 23.1% strongly disagree that genAI will improve job opportunities, and 48.0% somewhat disagree.

- Noteworthy variation by year of study: More students somewhat or strongly disagree from each year of study than they agree respectively:
 - 1st year: 73.2% versus 26.8%

- 2nd year: 68.6% versus 31.4%
- 3rd year: 73.5% versus 26.5%
- 4th year: 67.7% versus 32.3%
- 5+ year: 72% versus 28%
- Faculty variation: All faculties had high rates of somewhat or strongly disagreeing: ALES 75.6%, Arts 81.1%, Augustana 83.3%, Business 62.4%, CSJ 100%, Education 78.8%, Engineering 62%, GSR 85.7%, KSR 78%, Law 100%, Medicine & Dentistry 58.1%, Nursing 73.5%, Native Studies 100%, Open Studies 66.7%, Pharmacy 71.4%, and Science 67.7%.
- Noteworthy variation by gender: Majorities of women (74.6%), men (64.4%), and non-binary students or another identity (64.1%) disagreed that genAI would lead to more good jobs in their respective fields.
- Noteworthy variation by disability: Significant.
 - A Deaf person: 69.2% agree versus 30.8% disagree.
 - A person with a disability: 22% agree versus 78% disagree.
 - An able-bodied or non-disabled person: 26.6% agree versus 73.4% disagree.
 - Another identity that should be protected on similar grounds as disability: 42.6% agree versus 57.4% disagree.

"Agree or disagree? 'AI poses a threat to humans in the next 50 years.'"

- 21% of respondents strongly believe that AI presents a threat, while 46.2% somewhat agree with this view. Conversely, 23.7% strongly disagree that AI will pose a threat in the next 50 years, and 9.1% also somewhat disagree.
- Noteworthy variation by year of study: More students agree from each year of study than they disagree respectively:
 - 1st year: 74.7% versus 25.3%
 - 2nd year: 66.8% versus 33.2%
 - 3rd year: 61.1% versus 38.9%
 - 4th year: 66.4% versus 33.6%
 - 5+ year: 69.2% versus 30.8%
- Faculties of concern: All faculties tend to agree, as follows. ALES 74.4%, Arts 71.3%, Augustana 83.3%, Business 65.1%, CSJ 80%, Education 70.2%, Engineering 57.7%, GSR 71.4%, KSR 76%, Law 83.3%, Medicine & Dentistry 61.3%, Nursing 77.6%, Native Studies 80%, Open Studies 57.1%, Pharmacy 71.4%, and Science 67.3%.
- Noteworthy variation by gender: Majorities of women (73.4%), men (56.4%), and non-binary students or another gender identity (59.2%) agree that AI poses a threat to humans in the next 50 years.

- Noteworthy variation by disability:
 - A Deaf person: 38.5% agree versus 61.5% disagree.
 - A person with a disability: 65.2% agree versus 34.8% disagree.
 - An able-bodied or non-disabled person: 68.3% agree versus 31.7% disagree.
 - Another identity that should be protected on similar grounds as disability: 47.5% agree versus 52.5% disagree.