

## Students and ChatGPT: Insights from the University of Zurich

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### Abstract

The widespread adoption of generative Artificial Intelligence (AI) tools like ChatGPT in higher education has sparked global debate about their impact on student learning. While ChatGPT's potential to enhance academic performance is recognized, concerns remain about overreliance and ethical risks. This report presents insights into how students at the University of Zurich (UZH) use and experience ChatGPT in academic contexts. Drawing on data from a global survey initiative, I analyzed responses from 446 UZH students across disciplines. The report outlines patterns of use, perceived cognitive and educational capabilities, emotional responses, and concerns about ethical implications. Quantitative analyses reveal that ChatGPT is widely used for tasks like summarizing, proofreading, and coding, with notable differences by study field and learning setting. Most students perceive ChatGPT as helpful and report positive emotional experiences, yet remain cautious about its reliability and motivational benefits. Frequent users tend to evaluate the tool more positively and express fewer concerns. Our findings highlight a complex balance between opportunity and risk. While generative AI holds promise for enhancing learning and skill development, institutions must provide clear guidelines, foster AI literacy, and ensure ethical integration. These efforts are essential for preparing students to navigate AI-enhanced academic and professional environments responsibly.

### Keywords

ChatGPT, Generative Artificial Intelligence, AI in Higher Education, Student Use of AI, University of Zurich

## 1 Introduction

Generative artificial intelligence (GenAI) is increasingly transforming knowledge work and education, prompting debates about its potential and challenges. Since its release in late 2022, ChatGPT (OpenAI, 2025) has rapidly become a prominent example of how GenAI is reshaping higher education. Students across the globe have integrated ChatGPT into their academic routines, using it for tasks such as writing, summarizing, brainstorming, and translating (Aristovnik et al., 2025; Garrel & Mayer, 2025). With its capacity to generate coherent and context-sensitive, personalized responses, ChatGPT offers substantial support for academic work (Bai et al., 2023). However, its increasing use also raises important questions concerning educational quality, academic integrity, student skill development, and the future role of human instruction (Bahroun et al., 2023; Chan, 2023). With the use of LLMs for learning also come privacy

and security issues, as well as plagiarism concerns (Melina et al., 2014).

The present report provides an overview of how students at the University of Zurich (UZH) engage with ChatGPT – as GenAI's most prominent and widely used tool in the Western world (Fletcher & Nielsen, 2024) – in their everyday academic life. UZH, Switzerland's largest comprehensive university, is internationally recognized for its research excellence and digital innovation.

Building on a global survey initiative (Aristovnik et al., 2025), this report outlines UZH students' usage patterns, perceptions, and experiences with ChatGPT. It examines how students employ the tool for academic purposes, how they assess its capabilities, and what concerns or ethical considerations they associate with its use. In addition, the report highlights students' emotional responses as well as perceived academic and professional benefits. It contributes to a nuanced understanding of the effects of GenAI on learning



and skill development in contemporary higher education.

## 2 ChatGPT usage among university students

There is a growing body of quantitative research examining the use of artificial intelligence (AI) – particularly GenAI tools such as ChatGPT – by university students. A systematic review by von Garrel and Mayer (2025) identified approximately 50 studies that measured the extent to which students are using AI technologies. These studies provide a comprehensive picture of the widespread diffusion of AI-based tools among student populations across different countries. AI is primarily used for literature searches and reading comprehension, clarification of subject-related questions, explanation of disciplinary concepts, text analysis, text processing, text generation, translation tasks, and exam preparation. These varied applications illustrate the perceived usefulness of GenAI for academic support across disciplines.

However, the consequences of ChatGPT use are still subject to considerable scholarly debate. Yilmaz and Yilmaz (2023a, 2023b) presented contradictory evidence on whether the tool is beneficial or detrimental for students. Shahzad et al. (2025) confirm that GenAI can have a positive impact on students' learning performance in higher education. It offers personalized learning experiences, immediate feedback, and explanations of complex concepts. Students use GenAI to enhance their academic performance. Employing AI in higher education, for example, strengthens students' self-efficacy and creativity – factors that contribute significantly to improved academic achievement. LLMs can also be used to realize effective learning techniques such as repetition and spaced learning (Bai et al., 2023). In contrast, Abbas et al. (2024) found that excessive use of ChatGPT can negatively affect students' personal and academic development. Their findings suggest that students experiencing higher academic workload and time pressure are more likely to rely on ChatGPT. Conversely, students with a strong sensitivity to rewards were less inclined to use it. Notably, frequent use was associated with

increased tendencies toward procrastination, memory decline, and overall reduced academic performance. Similarly, Wecks et al. (2024) reported that the use of GenAI tools had a detrimental effect specifically on students' exam outcomes, suggesting that reliance on such technologies may hinder the acquisition and retention of knowledge required for formal assessments. The most recent meta-analysis by Wang and Fan (2025), which synthesizes findings from 51 studies, concludes that ChatGPT has a strong positive effect on student learning outcomes. Specifically, the analysis shows a large effect on learning performance ( $g=0.867$ ), based on data from 44 experimental and quasi-experimental studies. In addition, it reveals a moderately positive impact on students' learning perception ( $g=0.456$ ), as demonstrated in 19 studies, and a similarly moderate effect on the development of higher-order thinking skills ( $g=0.457$ ), based on nine studies. These results underscore ChatGPT's potential to support both cognitive and affective dimensions of learning.

However, the study by Kosmyrna et al. (2025) shows that using large language models (LLMs) like ChatGPT for essay writing leads to significantly reduced brain activity and cognitive engagement compared to using a search engine or relying solely on one's own knowledge. Brain connectivity decreased in line with the level of external assistance: participants in the brain-only group showed the strongest and most widespread neural activity, those using search engines showed moderate engagement, and the LLM group showed the weakest neural activation. Over the course of four months, LLM users not only performed worse in writing quality and memory tests, but also recalled less from their own essays and reported the lowest sense of ownership over their texts. In contrast, the brain-only group exhibited the highest cognitive involvement, better memory recall, and a stronger sense of authorship. These findings raise important concerns about the long-term impact of LLM use on learning, suggesting that while such tools may offer short-term convenience, they can hinder deep processing, memory consolidation, and meaningful engagement with one's own work. By simplifying the process of obtaining answers in academia, LLMs could

also decrease student motivation to perform independent research and generate their own solutions (Pedró et al., 2019).

### 3 Research questions

In March 2024, a survey conducted among students at the University of Zurich (UZH) revealed that ChatGPT is by far the most widely used AI tool among the student population (von Däniken, 2024). Building on these initial findings, the present report draws on new survey data to explore students' perceptions, usage patterns, and experiences with ChatGPT in the academic context. Specifically, it aims to provide a more nuanced understanding of how students interact with ChatGPT across different domains of their academic life, including cognitive support, skill development, and career readiness.

From a higher education research perspective, these questions are situated at the intersection of digital transformation, student agency, and institutional adaptation. They are also highly relevant for informing university-level debates on AI policy, teaching innovation, and the evolving nature of academic skills and literacies.

To address these concerns, the report outlines the following research questions, structured into three thematic areas: (1) usage and perceptions, (2) emotional and motivational dimensions, and (3) academic and professional outcomes.

This first cluster addresses students' actual use of ChatGPT and their perceptions of its academic utility. From a higher education perspective, these questions speak to patterns of digital tool adoption, technology acceptance, and the changing nature of student learning strategies in AI-supported environments.

- › RQ1: To what extent do students use ChatGPT for various academic tasks?
- › RQ2: How do students evaluate the cognitive, communicative, and learning-related capabilities of ChatGPT?

The next group of questions focuses on the affective and motivational aspects of ChatGPT use. It explores students' emotional engage-

ment, satisfaction, and concerns – factors that shape learning persistence, user trust, and broader attitudes toward educational technologies. These dimensions are particularly relevant in the context of student-centered learning and responsible AI integration.

- › RQ3: What concerns do students have regarding the use of ChatGPT?
- › RQ4: How satisfied are students with the use of ChatGPT?
- › RQ5: What emotional responses do students experience while using ChatGPT?

The final cluster addresses the perceived and actual educational effects of ChatGPT. It connects students' academic experiences with broader competencies and career readiness. These questions are central to assessing the pedagogical value of AI, its role in skill development, and its implications for the alignment between higher education and future labor market demands.

- › RQ6: To what extent does the use of ChatGPT influence students' academic outcomes, learning processes, and motivation?
- › RQ7: What role do students attribute to ChatGPT in enhancing their writing, language, communication, analytical, and problem-solving skills?
- › RQ8: How do students perceive the impact of ChatGPT on future labor market demands and potential skills mismatches?

### 4 Method

Aristovnik et al. (2025) implemented a comprehensive, large-scale global survey conducted between October 2024 and February 2025. The questionnaire was available in seven languages – English, Italian, Spanish, Turkish, Japanese, Arabic, and Hebrew – and encompassed a wide range of topics related to the use of ChatGPT. These included sociodemographic characteristics, usage patterns, perceived capabilities, regulation and ethical considerations, satisfaction and attitudes, academic challenges and outcomes, skill development, labor market relevance and skills mismatch, emotional responses, personal

and study-related information, and general reflections. The survey targeted higher education students aged 18 and above who were enrolled at any level of study at a recognized higher education institution. The final dataset comprises responses from 22 963 students across 120 countries and territories. The full dataset is freely available for download (Aristovnik et al., 2025).

For the Swiss subsample, participant recruitment was carried out by the author at the UZH. In 2024, UZH had an enrollment of 14 667 Bachelor's students and 7 782 Master's students (University of Zurich, 2024). The call for participation, including the survey link, was disseminated via the university's official newsletter in December 2024. For the analyses presented in this report, only the UZH subsample is used to address the research questions.

#### 4.1 Sample description

The sample consists of 446 fully completed questionnaires from Bachelor's and Master's students with Swiss nationality enrolled at the UZH. The majority of participants identified as female ( $n=263$ ; 59%), followed by male ( $n=170$ ; 38%). Participants' ages ranged from 19 to 47 years, with a concentration in the early twenties ( $M=24.5$ ). A total of 56.4% of respondents were enrolled in a Bachelor's program ( $n=251$ ), including 3% in their first semester. Meanwhile, 43.6% were pursuing a Master's degree ( $n=194$ ). Additionally, 81% of participants reported studying full-time ( $n=361$ ).

Participants in the survey came from a range of academic disciplines. The largest group studied Social Sciences (Public Administration, Economics, Business, Law, Educational Science, Sociology, Psychology; 43.9%), followed by Natural and Life Sciences (Electrical Engineering, Biotechnical Sciences, Pharmacy, Chemistry, Mathematics and Physics; 20.0%), Arts and Humanities (History and Archaeology, Languages and Literature, Philosophy, Ethics and Religion; 19.3%), and Applied Sciences (Computer Science, Information Technology, Civil Engineering and Geodesy, Mechanical Engineering, Sport, Medicine, Healthcare; 16.8%). This distribution reflects a certain disciplinary diversity, with a clear emphasis on the social sciences.

The majority of participants (60.5%) reported that blended (hybrid) learning best

describes their current mode of study. This is followed by traditional classroom learning (31.4%) and online learning (8.1%).

## 5 Results

### 5.1 Extent of ChatGPT use across academic tasks

Among the respondents, ChatGPT was by far the most widely used GenAI chatbot, with 99.1% of valid responses indicating usage ( $n=421$ ). In contrast, other tools were used far less frequently: Microsoft Copilot (16.2%), Google Gemini (14.1%), Perplexity AI (9.4%), Claude AI (6.1%). Most respondents use the free version of ChatGPT (66%), while 24.2% pay for a subscription. A small group (9.7%) uses both versions. The ChatGPT usage varies, with 32.3% reporting considerable use and 27.3% indicating moderate use. Fewer participants use it rarely (11.6%) or extensively (11.4%). The overall experience with ChatGPT was predominantly positive: 60.8% rated their experience as good and 15.3% as very good, while only 5% had a bad or very bad experience. When asked where they first learned about ChatGPT, most participants (40.5%) cited friends and family. This was followed by mainstream media (25.5%), social media (20.2%), and educational or work-related contexts (13.8%).

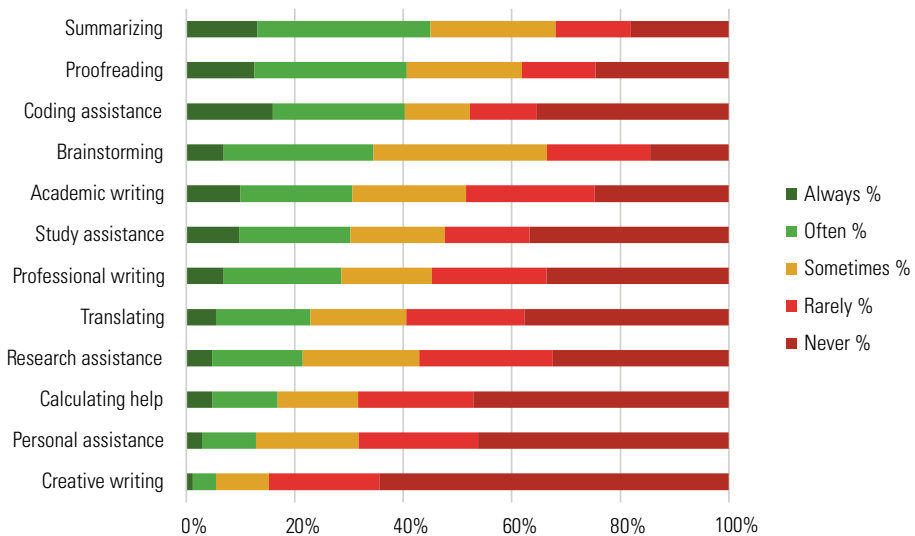
Students use ChatGPT for a wide range of purposes, though with varying frequency across tasks (see Table 1 and Figure 1). Summarizing texts is among the most common use cases: nearly 31.9% of students report using it often, and 13.1% always. Proofreading and brainstorming are also frequent tasks – 28.1% use it often for proofreading and 27.6% for brainstorming. Coding assistance stands out as a key use case for a subset of the respondents: although 35.3% never use it, a combined 40.3% use it often (24.3%) or always (16.0%). Academic writing also sees substantial usage: around 20% use it often, 21% sometimes, and only 24.7% never. Similarly, professional writing tasks, such as composing emails or formal documents, are often (21.7%) or always (6.9%) used by nearly 29% of students, even though one third (33.6%) never use ChatGPT for this purpose. Study assistance (e.g., exam preparation)

**Table 1: ChatGPT usage by use case**

Use case	Never % ( <i>n</i> )	Rarely % ( <i>n</i> )	Sometimes % ( <i>n</i> )	Often % ( <i>n</i> )	Always % ( <i>n</i> )
Summarizing	18.1 (76)	13.8 (58)	23.1 (97)	31.9 (134)	13.1 (55)
Proofreading	24.5 (103)	13.6 (57)	21.2 (89)	28.1 (118)	12.6 (53)
Coding assistance	35.3 (148)	12.4 (52)	11.9 (50)	24.3 (102)	16.0 (67)
Brainstorming	14.5 (61)	19.0 (80)	31.9 (134)	27.6 (116)	6.9 (29)
Academic writing	24.7 (104)	23.8 (100)	20.9 (88)	20.7 (87)	10.0 (42)
Study assistance	36.7 (154)	15.7 (66)	17.4 (73)	20.5 (86)	9.8 (41)
Professional writing	33.6 (141)	21.2 (89)	16.7 (70)	21.7 (91)	6.9 (29)
Translating	37.7 (158)	21.7 (91)	17.7 (74)	17.4 (73)	5.5 (23)
Research assistance	32.5 (136)	24.6 (103)	21.5 (90)	16.7 (70)	4.8 (20)
Calculating help	47.1 (198)	21.2 (89)	14.8 (62)	12.1 (51)	4.8 (20)
Personal assistance	46.2 (193)	22.0 (92)	18.9 (79)	10.0 (42)	2.9 (12)
Creative writing	64.4 (270)	20.3 (85)	9.8 (41)	4.3 (18)	1.2 (5)

Note: *n* = 418–421

**Figure 1: ChatGPT usage by use case**



Note: Sorted by "Always" and "Often".

shows a mixed pattern: 20.5% use it often, 9.8% always, and 36.7% never. Translating is a moderately used feature – 17.4% use it often, 5.5% always, while 37.7% never use ChatGPT for this purpose. Similarly, research assistance shows moderate adoption: 16.7% often and 4.8% always use ChatGPT for this task, with 32.5% never using it. In contrast, calculating help is less frequent: almost half of the respondents (47.1%) never use ChatGPT for mathematical support, and only 12.1% use it often, 4.8% always. Personal assistance (e.g., advice on personal topics) is even less common – nearly half of the participants (46.2%) reported never using ChatGPT, while only 10% use it often and 2.9% always. The least common use case is creative writing (e.g., stories or poems): 64.4% never use ChatGPT for this purpose, and only 4.3% use it often, 1.2% always.

Several significant correlations were found between gender and ChatGPT usage. Specifically, men reported significantly more frequent use of ChatGPT in general ( $\rho = -.150$ ,  $p < .01$ ) and also in several specific domains: creative writing ( $\rho = -.153$ ,  $p < .01$ ), summarizing ( $\rho = -.106$ ,  $p < .05$ ), calculating help ( $\rho = -.166$ ,  $p < .01$ ), study assistance ( $\rho = -.115$ ,  $p < .05$ ), personal assistance ( $\rho = -.151$ ,  $p < .01$ ), research assistance ( $\rho = -.125$ ,  $p < .05$ ), and coding assistance ( $\rho = -.199$ ,  $p < .01$ ). These results suggest that male students tend to use ChatGPT more frequently and across a broader range of academic and personal tasks.

Students' use of ChatGPT differs significantly by field of study, as confirmed by several ANOVAs (all  $p < .05$ ). Social Sciences students reported the most frequent use for a broad range of academic tasks, including academic writing ( $M = 2.94$ ,  $p < .001$ ), professional writing ( $M = 2.64$ ,  $p = .010$ ), proofreading ( $M = 3.12$ ,  $p = .025$ ), brainstorming ( $M = 3.09$ ,  $p = .037$ ), translating ( $M = 2.43$ ,  $p = .017$ ), summarizing ( $M = 3.35$ ,  $p = .002$ ), and research assistance ( $M = 2.57$ ,  $p = .006$ ). In contrast, students in Natural and Life Sciences and Applied Sciences reported significantly higher use for more technical applications. This includes calculating help (Natural Sciences:  $M = 2.31$ ,  $p = .001$ ), study assistance (Natural Sciences:  $M = 2.99$ ,  $p < .001$ ), and especially coding assistance (Natural Sciences:  $M = 3.36$ ; Applied Sciences:  $M = 2.91$ ;  $p < .001$ ).

Students' use of ChatGPT varies significantly depending on their learning environment. Those engaged in online or blended learning report notably higher usage across a range of academic tasks compared to students in traditional classroom settings. Significant differences were found for academic writing ( $p < .001$ ), brainstorming ( $p = .002$ ), summarizing ( $p < .001$ ), study assistance ( $p < .001$ ), and research assistance ( $p < .001$ ), among others. This suggests that digital learning contexts not only expose students more frequently to AI tools like ChatGPT but may also encourage more active integration into everyday study routines.

As expected, general ChatGPT use was strongly and significantly correlated with positive experience ( $\rho = .543$ ,  $p < .01$ ) and with frequent use across all listed tasks, including academic writing ( $\rho = .601$ ), professional writing ( $\rho = .547$ ), proofreading ( $\rho = .545$ ), brainstorming ( $\rho = .453$ ), summarizing ( $\rho = .557$ ), study assistance ( $\rho = .453$ ), and coding ( $\rho = .398$ ), all at  $p < .01$ . Similarly, positive experience was significantly correlated with nearly every specific use case.

## 5.2 Students evaluations regarding learning-related capabilities

Most participants agreed that ChatGPT can understand indications (60.9%) and respond in human language (55.2%), with a smaller group strongly agreeing (16.2% and 21.9% respectively; see table 2). A majority also found that ChatGPT provides information efficiently (60.3%) and can summarize extensive information (51.1%) and simplify complex content (54.7%). However, fewer participants believed that ChatGPT can hold a pleasant conversation – only 32.8% agreed and 9.8% strongly agreed, while 39.3% remained neutral. When it comes to reliability, responses were more cautious: only 20.6% agreed that ChatGPT provides reliable information, while 28.1% disagreed and 43.3% chose neutral. Regarding ChatGPT's educational support potential, respondents were more optimistic for online (36.7% agree, 12.7% strongly agree) and blended learning settings (33.4% agree, 12.7% strongly agree), but more reserved for traditional classroom learning, where 40.4% were neutral and only 22.9% agreed.

**Table 2: Perceptions of ChatGPT's capabilities**

Statement	Strongly Disagree % (n)	Disagree % (n)	Neutral % (n)	Agree % (n)	Strongly Agree % (n)
ChatGPT can...					
... understand indications	1.2 (5)	6.5 (26)	15.2 (61)	60.9 (245)	16.2 (65)
... respond in human language	0.2 (1)	7.2 (29)	15.4 (62)	55.2 (222)	21.9 (88)
... hold a pleasant conversation	5.8 (23)	12.3 (49)	39.3 (157)	32.8 (131)	9.8 (39)
... provide information efficiently	0.7 (3)	6.0 (24)	19.5 (78)	60.3 (242)	13.5 (54)
... provide reliable information	7.2 (29)	28.1 (113)	43.3 (174)	20.6 (83)	0.7 (3)
... summarize extensive information	1.2 (5)	8.2 (33)	18.5 (74)	51.1 (205)	20.9 (84)
... simplify complex information	0.5 (2)	3.7 (15)	18.2 (73)	54.7 (220)	22.9 (92)
... facilitate traditional learning	7.5 (30)	21.2 (85)	40.4 (162)	22.9 (92)	8.0 (32)
... facilitate online learning	3.5 (14)	8.2 (33)	38.9 (156)	36.7 (147)	12.7 (51)
... facilitate blended learning	3.0 (12)	10.0 (40)	40.9 (164)	33.4 (134)	12.7 (51)

Note:  $n = 399\text{--}402$

The frequency of general ChatGPT use and positive experience with ChatGPT were positively correlated with perceptions of its abilities across all measured dimensions ( $p < .001$ ).

### 5.3 Students' concerns regarding ChatGPT use

Only two-thirds of respondents (66.5%) reported that their institution, the UZH, has guidelines or a code of ethics for the use of ChatGPT, while 5% said no, and 28.5% were unsure. In fact, the UZH does provide official guidance on the use of GenAI tools like ChatGPT, including rules for transparency, citation, and academic integrity. 53% agreed that international regulation is necessary, and 45.7% supported government regulation. Even more strongly, 77.1% agreed that ChatGPT should be subject to university or faculty ethical guidelines, and 59.6% supported the same for employer guidelines.

Concerns about ChatGPT's ethical risks were also evident: 40.6% agreed it might encourage students to cheat, 56.4% believed it could lead to plagiarism, 38.9% thought it might threaten academic ethics, and 81% agreed it could mislead with inaccurate information. More moderate concerns were expressed about privacy (39.5% agreement), reduced human interaction (35.3%), and increased social isolation (22.2%). A majority also believed ChatGPT might hinder learning by doing the work for students (49.7%).

Use and positive experience with ChatGPT are significantly negatively correlated with concerns about potential risks. For instance, students who use ChatGPT more extensively are less likely to believe it encourages unethical behavior ( $\rho = -.230, p < .001$ ), cheating ( $\rho = -.212, p < .001$ ), plagiarism ( $\rho = -.192, p < .001$ ), or that it threatens study ethics ( $\rho = -.310, p < .001$ ). Positive experience with

**Table 3: Regulation, concerns, and responsibilities regarding ChatGPT**

Statement	Strongly disagree % (n)	Disagree % (n)	Neutral % (n)	Agree % (n)	Strongly agree % (n)
<b>Regulation</b>					
International regulation is necessary for ChatGPT	8.4 (32)	14.2 (54)	24.4 (93)	31.0 (118)	22.0 (84)
Government regulation is necessary for ChatGPT	8.9 (34)	17.8 (68)	27.6 (105)	26.0 (99)	19.7 (75)
ChatGPT should be subject to university/faculty ethical guidelines	2.4 (9)	4.2 (16)	16.3 (62)	43.0 (164)	34.1 (130)
ChatGPT should be subject to employer ethical guidelines	2.6 (10)	8.7 (33)	29.0 (110)	36.9 (140)	22.7 (86)
<b>Concerns</b>					
ChatGPT might encourage unethical behaviour	9.7 (37)	30.0 (115)	24.8 (95)	27.9 (107)	7.6 (29)
ChatGPT might encourage students to cheat	8.1 (31)	25.6 (98)	17.0 (65)	33.2 (127)	16.2 (62)
ChatGPT might encourage students to plagiarize	6.3 (24)	17.5 (67)	19.8 (76)	40.2 (154)	16.2 (62)
ChatGPT might threaten the ethics of the study	8.4 (32)	22.2 (85)	30.5 (117)	26.6 (102)	12.3 (47)
ChatGPT might mislead with inaccurate information	1.3 (5)	5.0 (19)	12.8 (49)	49.9 (191)	31.1 (119)
ChatGPT might invade privacy	6.3 (24)	20.9 (80)	33.4 (128)	23.8 (91)	15.7 (60)
ChatGPT might reduce human interaction	7.3 (28)	34.5 (132)	23.0 (88)	28.5 (109)	6.8 (26)
ChatGPT might replace formal education	26.1 (100)	41.3 (158)	12.5 (48)	17.0 (65)	3.1 (12)
ChatGPT might increase social isolation	14.4 (55)	37.6 (144)	25.8 (99)	18.8 (72)	3.4 (13)
ChatGPT might hinder learning by doing the work for students	7.9 (30)	20.2 (77)	22.3 (85)	33.2 (127)	16.5 (63)
<b>Responsibilities</b>					
Students should consult with professors about using ChatGPT	5.5 (21)	18.3 (70)	23.3 (89)	40.6 (155)	12.3 (47)
Students should disclose their use of ChatGPT to professors	4.2 (16)	13.4 (51)	24.9 (95)	33.6 (128)	23.9 (91)
Students should report unethical use of ChatGPT by peers	21.1 (80)	23.7 (90)	32.4 (123)	16.6 (63)	6.3 (24)
Students should take measures to protect their personal information	0.8 (3)	1.8 (7)	15.8 (60)	50.3 (191)	31.3 (119)

Note:  $n = 379\text{--}381$

**Table 4: Satisfaction regarding ChatGPT**

Item	Strongly disagree % (n)	Disagree % (n)	Neutral % (n)	Agree % (n)	Strongly agree % (n)
I find ChatGPT more useful than Google or other web search engines	8.0 (30)	22.3 (84)	26.6 (100)	30.9 (116)	12.2 (46)
It is easier for me to interact with ChatGPT than with my professors	18.4 (69)	26.6 (100)	16.8 (63)	26.9 (101)	11.4 (43)
It is easier for me to interact with ChatGPT than with my colleagues	34.8 (131)	34.3 (129)	17.6 (66)	10.9 (41)	2.4 (9)
The information I get from ChatGPT is clearer than the one provided by my professors	15.4 (58)	25.3 (95)	32.7 (123)	19.9 (75)	6.6 (25)
I am satisfied with the level of assistance provided by ChatGPT	2.4 (9)	8.8 (33)	23.7 (89)	56.4 (212)	8.8 (33)
I am satisfied with the quality of information provided by ChatGPT	7.7 (29)	23.9 (90)	28.5 (107)	37.2 (140)	2.7 (10)
I am satisfied with the accuracy of the information provided by ChatGPT	12.0 (45)	31.1 (117)	29.8 (112)	25.5 (96)	1.6 (6)
I have the impression that using ChatGPT is under my control	0.5 (2)	7.7 (29)	14.9 (56)	58.1 (219)	18.8 (71)
Using ChatGPT is interesting to me	2.1 (8)	5.6 (21)	12.7 (48)	54.9 (207)	24.7 (93)
Being able to use ChatGPT is important to me	9.0 (34)	15.1 (57)	23.9 (90)	36.6 (138)	15.4 (58)

Note:  $n = 376\text{--}377$

ChatGPT also negatively correlates with believing it misleads ( $\rho = -.324, p < .001$ ), invades privacy ( $\rho = -.182, p < .001$ ), or hinders learning ( $\rho = -.192, p < .001$ ).

In terms of responsibility, the vast majority of students (81.6%) emphasized the importance of protecting their own data when using ChatGPT, highlighting an awareness of personal data security. A smaller but still significant share agreed that they should consult professors about using ChatGPT (52.9%) and disclose its use (57.5%). Only 22.9% believed they should report unethical use by peers.

#### 5.4 Students' overall satisfaction with ChatGPT

Over 43% agreed that it is more useful than Google or other web search engines, while around 30% disagreed and 27% remained neutral. When it comes to communication, students were more divided: about 38% found

it easier to interact with ChatGPT than with professors, whereas 45% disagreed. In comparison to peers, only 13% found ChatGPT easier to interact with, and nearly 70% disagreed. Regarding content clarity, 26% perceived ChatGPT's explanations as clearer than those provided by professors, while 41% disagreed and 33% were undecided. Students expressed relatively high satisfaction with ChatGPT's support: over 65% were satisfied with the level of assistance, and nearly 40% with the quality of information. However, satisfaction with accuracy was more cautious, with just 27% agreeing and 43% expressing dissatisfaction or neutrality. Overall, students reported feeling in control of their use of ChatGPT (77%), and most considered it both interesting (80%) and important (52%) for their academic work.

Both use frequency and positive experience correlate strongly with each satisfaction item ( $p < .001$ ).

### 5.5 Emotional responses associated with ChatGPT use

The emotional responses to using ChatGPT were diverse but leaned predominantly positive. Many participants reported feeling calm (51.1% often, 10.7% always), curious (48.2% often, 13.1% always), or happy (22.0% often, 0.3% always) during use. A significant share also felt hopeful (31.1% often) or relieved (22.3% often). In contrast, negative emotions were reported much less frequently. Only 3.7% often felt sad, 5.5% anxious, 5.5% ashamed, and 8.2% angry. Feelings of boredom were also relatively rare, with just 7.3% reporting they often felt bored. Notably, excitement (22.3% often) and surprise (20.4% often) were fairly common, while feelings like pride were less so (only 6.4% often felt proud). Confusion (25.9% often) and frustration (22.0% often) occurred quite occasionally, suggesting some challenges with comprehension or usability for more than one-fifth of the users. Overall, the data indicate that ChatGPT use is associated with more positive than negative emotional experiences, though occasional moments of confusion and frustration are not uncommon.

### 5.6 Influence of ChatGPT on learning, motivation, and academic outcomes

Nearly half of the students agreed (agreed and strongly agreed) that ChatGPT supports everyday life (49.1%) and improves access to knowledge (48.9%). A majority saw benefits for their general (51.1%) and specific (48.6%) knowledge. Many found it helpful for study efficiency (46.6%) and completing their studies (44.2%), though fewer agreed it boosts motivation (24.7%) or classroom engagement (15.9%). Over one-third felt it helps meet deadlines (36.3%) and improves assignment quality (38.5%).

Students were somewhat divided on whether ChatGPT improves academic outcomes. While 26.4% agreed it could improve their grades, 24.5% disagreed, and 37.1% remained neutral. Similar patterns appeared regarding its usefulness outside the classroom (33.0% agree, 25.5% disagree) and for internships, where skepticism was more pronounced – only 10.7% agreed, while 43.2% disagreed. A majority believed that ChatGPT enhances their learning experience (50.8%) and helps improve skills (35.2%). However, its role in personal development was met with

more disagreement (33.2%) than agreement (17.6%). In contrast, academic development received more support, with 40.4% agreeing. Perceived effects on study satisfaction and employability were more mixed: 27.7% agreed ChatGPT increases satisfaction, while 24.2% disagreed; for employability, only 16.5% agreed, while 33.8% disagreed.

### 5.7 ChatGPT's role in developing skills

The strongest agreement was found for academic (38.4% agree, 13.9% strongly agree) and professional writing (40.8% agree, 14.5% strongly agree), with more than half of respondents perceiving a positive impact of ChatGPT use. Similarly, foreign language proficiency was viewed positively by 58.9% (47.0% agree, 11.9% strongly agree). In contrast, fewer participants believed ChatGPT helps with typing proficiency (only 36.0% agreed or strongly agreed), native language proficiency (25.1%), or interpersonal communication (just 10.1%). Around 41.9% saw benefits for digital communication, 36.8% for digital content creation, and 30.3% for information literacy. Meanwhile, views were notably less favorable for decision-making (only 15.2% agreed / strongly agreed) and critical thinking (20.7%), both of which had high disagreement rates (40.1% and 33.7%, respectively). Support was higher for data analysis (55.1%) and programming skills (62.9%), with the latter receiving the most “strongly agree” responses (22.7%). Finally, AI literacy was seen as positively impacted by 52.1% of respondents.

### 5.8 Perceived impact of ChatGPT on future labor market demands

A majority (64.8%) agreed that ChatGPT will require employees to acquire new skills, and 61.4% believed it will necessitate knowledge about AI. Similarly, 76.5% expected increased demand for AI-related skills, and 62.2% thought the nature of jobs would change. While 47.3% agreed that ChatGPT would improve productivity and 34.3% believed it would facilitate remote work, fewer respondents expected it to improve innovation (only 23.0%) or reduce workload (33.4%). Perceptions were split on job creation and loss: 37.3% thought ChatGPT would reduce jobs, while 46.4% believed it would create new ones. However, 42.2% also expected it to increase inequality between younger and older

employees. Skepticism was strongest regarding ChatGPT's ability to resolve structural issues like skills gaps or shortages. Only around 20% agreed it could reduce under-skilling or skills obsolescence, and about 32% believed it could close skills gaps. Most respondents remained neutral or disagreed with these statements.

## 6 Discussion

Building on a global survey initiative (Aristovnik et al., 2025), this report explores UZH students' usage patterns, perceptions, and experiences with ChatGPT. The findings show that the surveyed UZH students generally perceive ChatGPT as a helpful tool for academic tasks. They appreciated its ability to understand input, respond naturally, and simplify complex content – aligning with research on AI's potential to support learning (Shahzad et al., 2025; Wang & Fan, 2025). The results underscore that students engage with ChatGPT for a wide array of academic and personal tasks (see also Garrel & Mayer, 2025), though usage patterns vary considerably depending on task type, background, and learning context. While certain applications, such as summarizing, proofreading, and brainstorming, were relatively common, others – like creative writing, translation, or personal advice – were used more selectively. Usage patterns also reflect broader contextual differences; e.g., the field of study plays a role: UZH's Social Sciences students were most active in applying ChatGPT to academic writing and research-related tasks, while students in Natural and Applied Sciences leveraged it more for technical tasks like coding. Furthermore, UZH's students in online or blended learning environments consistently reported higher usage, indicating that digital settings may foster a more active and diverse integration of AI tools. The strong correlations between general use and positive experience – as well as between experience and frequency of task-specific use – highlight a reinforcing dynamic: the more UZH's students use ChatGPT and benefit from it, the more they tend to apply it across various academic contexts. Given that the report showed male students use ChatGPT more frequently and across a broader range of tasks, there is

a particular need to support female students in developing AI-related skills and confidence to ensure equitable access to these potential academic benefits.

However, a particularly noteworthy finding is also that a substantial share of UZH's students reported never using ChatGPT for the academic tasks explored. This deserves a nuanced interpretation: non-use of AI should not be seen as a disadvantage by default. Some students may consciously choose to avoid AI – similar to opting out of social media or smartphones – as a form of digital disconnection or critical resistance. It's important to recognize that meaningful academic engagement is still possible without AI, and that alternative approaches remain valid – and at times even more effective and of higher quality. This perspective is supported by the already mentioned findings from Kosmyrna et al. (2025), which show that using LLMs like ChatGPT reduces brain activity, memory, and sense of authorship compared to working without AI. While such tools offer short-term convenience, they may undermine deep learning and intrinsic motivation (see also Pedró et al., 2019).

The survey results showed that UZH's students' emotional responses to ChatGPT were predominantly positive. This suggests that, beyond its cognitive utility, ChatGPT may also provide a psychologically supportive learning environment for some students. At the same time, occasional reports of frustration or confusion indicate that the tool is not always intuitive or satisfactory in practice.

Despite overall positive views, UZH's students were more cautious in their assessments of ChatGPT's reliability, accuracy, and capacity to support motivation, classroom engagement, or interpersonal development. These concerns mirror the broader academic debate: some researchers caution that overreliance on ChatGPT may lead to negative outcomes (Abbas et al., 2024; Weeks et al., 2024). While students recognized ChatGPT's learning support, they remained ambivalent about whether it actually improves their grades or motivation.

UZH's students also expressed substantial concern about the ethical and educational implications of ChatGPT. Many feared that the tool could encourage cheating, plagiarism, or dependency, and the majority

supported (stronger) regulation – especially through university or faculty-level ethical guidelines. These concerns were less pronounced among frequent and experienced users, who seemed to view ChatGPT more as a helpful resource than a threat. This finding adds complexity to the current discourse: while critics warn that AI tools may undermine academic integrity (Yilmaz & Yilmaz, 2023a, 2023b), students who engage with ChatGPT regularly may develop a more differentiated perspective on when and how to use it responsibly.

In terms of its perceived role in the labor market, UZH's students expected ChatGPT to reshape future job requirements, particularly by increasing demand for AI-related skills. However, they were more skeptical about whether it would improve innovation, reduce workloads, or solve structural challenges such as skills shortages. These results reflect broader societal uncertainties about AI's impact on work and education – and suggest that while students recognize the importance of acquiring AI competencies, they remain cautious about the broader implications.

Compared to the general population (Latzer & Festic, 2024; Fletcher & Nielsen, 2024), students use ChatGPT more frequently overall – and also more intensively across specific academic tasks. This aligns with findings by Latzer and Festic (2024) for Switzerland, which show that younger and more highly educated Swiss internet users feel more comfortable using AI, perceive these tools as more useful, and are more optimistic about their impact on our lives than older and less educated people.

The fact that less than one-fifth of UZH's respondents first learned about ChatGPT in educational or work-related contexts highlights a gap in formal AI education. While friends, family, and media play an important role in raising awareness, it should not be their responsibility to introduce students to transformative technologies like GenAI. This points to a need for schools and universities to proactively integrate AI literacy into their curricula. Educational institutions should not only inform students about tools like ChatGPT but also foster critical reflection on their use, limitations, and ethical implications. Otherwise, there is a risk that learners will devel-

op superficial or uncritical understandings based on informal or commercial sources.

An in-depth understanding of how students engage with GenAI tools such as ChatGPT is essential for educators, policymakers, and students themselves. Such understanding forms the basis for developing effective strategies that support the meaningful integration of GenAI into higher education while also addressing its potential for misuse (Abbas et al., 2024). As highlighted in recent research (e.g., Wecks et al., 2024), educational institutions bear a central responsibility in this process. They must provide guidance for instructors on how to teach the responsible and reflective use of AI technologies and develop policy frameworks that minimize associated risks while maximizing their pedagogical value. Initial steps in this direction have already been taken at the UZH. For example, concrete recommendations for the use of GenAI in university teaching have been published (University of Zürich, 2025a), and the Extended Executive Board has adopted guiding principles that address the opportunities and risks of these technologies in both teaching and research contexts (University of Zürich, 2025b). In addition, several departments and institutes have begun to draft their own policies to further support responsible implementation. However, the results also indicate a notable gap in awareness regarding whether the UZH has guidelines or a code of ethics for the use of ChatGPT. To ensure responsible and informed use, existing policies need to be communicated more clearly and made easily accessible to students.

However, the fact that only two-thirds of respondents reported that their institution, the UZH, has guidelines or a code of ethics for the use of ChatGPT – while one-third were either unsure or stated that no such guidelines exist – reveals a significant gap in awareness. To promote responsible and informed use, existing policies must be communicated more clearly and made easily accessible to students. For UZH, this finding points to a potential need for improved communication and may also call for further development of AI-related guidelines.

The development of policies must be understood as part of an ongoing process. Institutional policies and recommendations will

need to be continuously reviewed and adapted in light of the rapidly evolving technological landscape. At the same time, greater emphasis must be placed on equipping students to use GenAI tools competently and productively. This involves not only technical proficiency but also critical awareness of the tools' limitations and ethical implications, as well as the ability to integrate them meaningfully into academic work (see also Chan et al., 2023). Preparing students in this way is essential to ensure that GenAI becomes a tool that enhances learning rather than undermining it. Students should develop proficiency in using GenAI for their careers, reflecting the growing need for AI literacy and preparing them for an AI-driven workplace (Chan et al., 2023).

From a higher education research perspective, the findings indicate that ChatGPT is becoming an integral part of students' learning and academic work. Its use extends beyond isolated tasks and increasingly shapes how academic practices are organized and experienced. At the same time, students face considerable uncertainty regarding ethical issues, institutional guidelines, and their own competence in using AI tools. These tensions point to key challenges for universities: to promote the reflective and equitable use of AI while establishing clear and supportive frameworks that provide guidance, foster critical engagement, and generate educational value.

### 6.1 Limitations

There are several limitations to the insights presented in this report. Due to the voluntary nature of participation in the survey, self-selection bias cannot be ruled out – students with a strong interest in GenAI may be over-represented. The cross-sectional design limits causal interpretations. While the sample stems from the UZH, findings may not generalize to other institutions. Additionally, the reliance on self-reported data introduces the risk of social desirability bias. The English-language questionnaire may also have affected comprehension among non-native speakers. Finally, the quantitative design does not capture deeper qualitative insights into students' motivations or contextual factors.

### Author's note on AI use

This manuscript was revised in its entirety using ChatGPT 4.0 (OpenAI) for grammar and language editing. The author critically reviewed all content.

### Conflict of interest

The data used in this report were collected from students at the University of Zurich, where the author is currently employed. This institutional affiliation did not influence the data collection, analysis, or interpretation of results. I declare that there is no conflict of interest related to the content or outcomes of this research.

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