Students' Perception of ChatGPT

Dear Student,

The Faculty of Public Administration, University of Ljubljana (from Slovenia, Europe), together with over 200 international academic partners, is conducting a global student survey entitled **Students' Perception of ChatGPT**.

The recent exponential growth in the use of artificial intelligence (AI) tools has led us to recognize the importance of understanding how ChatGPT shapes higher education students' experiences and learning outcomes by specifically analysing how students with diverse cultural backgrounds view ChatGPT.

Students attending higher education institutions around the world are kindly invited to complete the questionnaire to help us understand your perception and use of ChatGPT. Participation in the study is completely voluntary. It should take about 15 minutes to complete the questionnaire, divided into 11 sections. All answers are treated as anonymous. The data collected will only be used for research purposes and only be disseminated in aggregate form.

Please complete the questionnaire in full and submit it by clicking "End" on the final page to ensure a valid response. Do not submit the questionnaire more than once.

For any more questions, do not hesitate to contact Prof. Aleksander Aristovnik, PhD, from the University of Ljubljana at <u>aleksander.aristovnik@fu.uni-lj.si</u>.

By clicking on the **Next page**, you hereby declare that:

- You have been informed of the voluntary and anonymous participation in this study.
- You are at least 18 years old and have the legal capacity to provide free and voluntary consent.
- You are currently enrolled in a Higher Education Institution on any level of study.

By answering the complete questionnaire, you give us your consent to be able to process your answers, and this consent is extensive and a precondition to participate in this research project.

Thank you in advance for participating in this survey!

SECTION 1: SOCIODEMOGRAPHIC CHARACTERISTICS

Q1 - What is your citizenship?

(Select from the drop-down list of 197 countries)

Q2 - What is your gender?

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

Q3 - How old are you (in years)?

(Min 18, max 100)

Q4 - In which country are you studying during this semester?

(Select from the drop-down list of 197 countries)

Q5 - Please write the name of the institution where you are studying this semester.

(e.g., University of Ljubljana, Faculty of Public Administration)

Q6 - Is your institution publicly/government funded?

- o Yes
- o No

Q7 - What is your student status?

- Full-time
- o Part-time

Q8 - What level of study are you enrolled in?

- o Undergraduate Certificate/Diploma/Bachelor's degree (1st level)
- Postgraduate Certificate/Diploma/Master's degree (2nd level)
- o Doctoral degree (3rd level)

Q9 - Are you a first-year student in a Bachelor's degree?

- o Yes
- o No

Q10 - What is your main field of study?

- o Arts and Humanities (History and Archaeology, Languages and Literature, Philosophy, Ethics and Religion...)
- o Social Sciences (Public Administration, Economics, Business, Law, Educational Science, Sociology, Psychology...)
- Applied Sciences (Computer Science, Information Technology, Civil Engineering and Geodesy, Mechanical Engineering, Sport, Medicine, Healthcare...)
- o Natural and Life Sciences (Electrical Engineering, Biotechnical, Pharmacy, Chemistry, Mathematics and Physics...)

Q11 - What learning method best describes your current mode of study?

- Traditional learning (in a classroom)
- Online learning (using digital technologies)
- Blended (hybrid) learning (a mix of traditional and online learning)

Q12 - Do you feel confident about getting a job after you complete your studies?

- Not at all confident
- Slightly confident
- Moderately confident
- Very confident
- o Extremely confident

SECTION 2: USAGE

Q13 - Have you ever used ChatGPT?

- Yes
- o No

[1 = the questionnaire will continue; 2 = only section 10: Study and personal information will be offered]

Q14 - Which version of ChatGPT do you use?

- ChatGPT-3.5 (free version)
- o ChatGPT-4 (with a subscription)
- o Both

Q15 - To what extent do you use ChatGPT in general?

- o Rarely
- o Occasionally
- Moderately
- o Considerably
- Extensively

Q16 - What is your experience with ChatGPT?

- Very bad
- o Bad
- o Neutral
- o Good
- Very good

Q17 - Where did you first learn about ChatGPT?

- o From mainstream media news (TV, internet, newspaper, radio...)
- o On social media
- o In class and/or at work
- o From friends and/or family

Q18 - How often do you use ChatGPT for the following tasks?

		Never	Rarely	Sometimes	Often	Always
Q18a	Academic writing (writing assignments, research papers)	0	0	0	0	0
Q18b	Professional writing (writing e-mails)	0	0	0	0	
Q18c	Creative writing (generating stories, poems)			0	0	
Q18d	Proofreading (receiving feedback on writing)			0	0	
Q18e	Brainstorming (generating new ideas)	0	0	0	0	
Q18f	Translating (converting text from one language to another)	0	0	0	0	0
Q18g	Summarizing (generating concise summaries of lengthy texts)	0	0	0	0	0
Q18h	Calculating help (solving mathematical problems)	0	0	0	0	0
Q18i	Study assistance (practising for exams)	0	0	0	0	0
Q18j	Personal assistance (seeking advice on various personal topics)	0	0	0	0	0
Q18k	Research assistance (finding information for research papers)	0	0	0	0	0
Q18l	Coding assistance (getting assistance with programming)	0	0	0	0	0

SECTION 3: CAPABILITIES

Q19 - How much do you agree with the following statements related to the capabilities of ChatGPT?

	ChatGPT can	Strongly disagree		Neutral	Agree	Strongly agree
Q19a	understand indications given in human language.	0		0	0	0
Q19b	respond in human language.			0	0	0
Q19c	hold a pleasant conversation.			0	0	0
Q19d	provide information efficiently.			0	0	0
Q19e	provide reliable information.		0	0	0	0
Q19f	summarize extensive information.			\circ	0	\bigcirc
Q19g	simplify complex information.	0	0	0	0	0
Q19h	facilitate traditional learning (in a classroom).	0	0	0	0	0
Q19i	facilitate online learning (using digital technologies).	0	0	0	0	\circ
Q19j	facilitate blended (hybrid) learning (a mix of traditional and online learning).	0	0	0	0	0

SECTION 4: REGULATION AND ETHICAL CONCERNS

Q20 - Does your institution (university/faculty) have policies or a code of ethics regarding the use of ChatGPT for students?

- o Yes
- o No
- o I don't know

Q21 - How much do you agree with the following statements related to the regulations in the usage of ChatGPT?

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		Strongly disagree		Neutral	Agree	Strongly agree
Q21a	International regulation is necessary for ChatGPT.		\circ	0	0	
Q21b	Government regulation is necessary for ChatGPT.		0	0	0	
Q21c	ChatGPT should be subject to university/faculty ethical guidelines.	0	0	0	0	0
Q21d	ChatGPT should be subject to employer ethical guidelines.	0	\circ	0	0	0

Q22 - How much do you agree with ethical and other concerns related to ChatGPT in the following situations?

	ChatGPT might	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Q22a	encourage unethical behaviour.	0		0	0	
Q22b	encourage students to cheat.	0		0	0	
Q22c	encourage students to plagiarize.	0		0	0	
Q22d	threaten the ethics of the study.	0		0	0	
Q22e	mislead with inaccurate information.	0		0	0	
Q22f	invade privacy.	0		0	0	
Q22g	reduce human interaction.	0	\circ	\circ	0	\circ
Q22h	replace formal education.			\circ	\circ	\circ
Q22i	increase social isolation.			0		
Q22j	hinder learning by doing the work for students.			0		

Q23 - How much do you agree with the following statements related to the ethical considerations on the use of ChatGPT?

	Students should	Strongly disagree		Neutral	Agree	Strongly agree
Q23a	consult with the professors about using ChatGPT.	0	0	0	0	0
Q23b	disclose their use of ChatGPT to their professors.	0	0	0	0	0
Q23c	report any unethical use of ChatGPT by colleagues to their professors.	0	0	0	0	0
Q23d	take appropriate measures to protect their own personal information.	0	0	0	0	0

SECTION 5: SATISFACTION AND ATTITUDE

Q24 - How much do you agree with the following statements related to your satisfaction with ChatGPT?

_		Strongly disagree		Neutral	Agree	Strongly agree
Q24a	I find ChatGPT more useful than Google or other web search engines.	0	0	0	0	0
Q24b	It is easier for me to interact with ChatGPT than with my professors.	0	0	0	0	0
Q24c	It is easier for me to interact with ChatGPT than with my colleagues.	0	0	0	0	0
Q24d	The information I get from ChatGPT is clearer than the one provided by my professors.	0	0	0	0	0
Q24e	I am satisfied with the level of assistance provided by ChatGPT.	0	0	0	0	0
Q24f	I am satisfied with the quality of information provided by ChatGPT.	0	0	0	0	0
Q24g	I am satisfied with the accuracy of the information provided by ChatGPT.	0	0	0	0	0

Q25 - How much do you agree with each of the following items while thinking about ChatGPT?

•		Strongly disagree		Neutral	Agree	Strongly agree
Q25a	I have the impression that using ChatGPT is under my control.		\circ	0	0	
Q25b	Using ChatGPT is interesting to me.	0	0	0	0	
Q25c	Being able to use ChatGPT is important to me.	0	0	0		0
Q25d	ChatGPT can help with things in everyday life.	\circ	\bigcirc	\odot	\bigcirc	

SECTION 6: STUDY ISSUES AND OUTCOMES

Q26 - How much do you agree with the following statements related to learning and academic enhancement addressed with ChatGPT?

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	ChatGPT can	Strongly disagree		Neutral	Agree	Strongly agree
Q26a	enhance my access to the sources of knowledge.		\circ	0	0	
Q26b	improve my general knowledge.	0	0	0	0	0
Q26c	improve my specific knowledge.	0	0	0	0	
Q26d	provide me with personalized education.	0	0	0	0	
Q26e	increase my study efficiency.	0	0	0	0	
Q26f	increase my motivation to study.	0	0	0	0	
Q26g	facilitate completing my studies.	0	0	0	0	
Q26h	improve my engagement in class discussions.	0	0	0	0	
Q26i	enhance my ability to meet assignment deadlines.		0	0	0	
Q26j	improve the quality of my assignments.		\bigcirc	\bigcirc		

Q27 - How much do you agree with the following statements related to personal and professional development addressed with ChatGPT?

	ChatGPT can	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Q27a	improve my readiness for exams.	0	0	0	0	0
Q27b	improve my grades.			0		0
Q27c	facilitate completing my activities outside of the classroom.			0		0
Q27d	facilitate completing my internships.	0		0	0	
Q27e	enhance my learning experience.	0		0	0	
Q27f	improve my skills.	0		0	0	
Q27g	facilitate my personal development.	0		0	0	
Q27h	facilitate my academic development.			0	0	0
Q27i	increase my satisfaction with the study.			0		
Q27j	improve my employability.		0	0	O	0

SECTION 7: SKILLS DEVELOPMENT

Q28 - How much do you agree with the following statements related to the ability of ChatGPT to facilitate proficiency and communication skills development?

and con	initialication skins development.					
	ChatGPT can improve my	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Q28a	academic writing proficiency.				0	
Q28b	professional writing proficiency.	0		0	0	0
Q28c	typing proficiency.		0	0	O	
Q28d	native language proficiency.	0		0	0	0
Q28e	foreign language proficiency.	0		0	0	0
Q28f	interpersonal communication skills.	0		0	0	0
Q28g	digital communication skills.	0		0	0	0
Q28h	information literacy skills.	Ö	Ó	0	Ö	Ó
Q28i	digital content creation skills.	Ô	Ó	0	Ô	Ó

Q29 - How much do you agree with the following statements related to the ability of ChatGPT to facilitate analytical and problem-solving skills development?

	ChatGPT can improve my	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Q29a	numeracy proficiency.	0	0	0	0	0
Q29b	decision-making skills.	0.	0	0		
Q29c	problem-solving skills.	0	\circ	\circ		\circ
Q29d	analytical skills.	0	\circ	\circ		\circ
Q29e	critical thinking skills.	0	\circ	\circ		\circ
Q29f	creativity skills.	0	\circ	0	0	\circ
Q29g	data analysis skills.	0	\circ	0	0	\circ
Q29h	programming skills.			0	0	
Q29i	artificial intelligence literacy skills.		0	0	0	

SECTION 8: LABOUR MARKET AND SKILLS MISMATCH

Q30 - How much do you agree with the following statements related to the general challenges in the labour market with ChatGPT?

	ChatGPT will	Strongly disagree		Neutral	Agree	Strongly agree
Q30a	reduce the number of jobs.		0	0		
Q30b	require employees to acquire new skills.	0	\circ	0	0	
Q30c	enhance the connection between higher education and the labour market.	0	0	0	0	0
Q3od	require employees to possess knowledge about artificial intelligence.	0	0	0	0	0
Q30e	increase the demand for employees with skills related to artificial intelligence.	0	0	0	0	0
Q3of	increase inequality between younger and older employees.		0	0	0	0
Q30g	create new jobs.		0	0		
Q30h	change the nature of jobs.		0	0		
Q30i	facilitate remote work.	0	0	0	0	0
Q30j	reduce employee workload.	0	0	0	0	0
Q30k	improve employee productivity.	Ö	Ö	0	Ö	Ö
Q3ol	improve employee innovation.	Ö	0	0	Ö	Ö

Q31 How much do you agree with the following statements related to the ability of ChatGPT to address skills mismatch?

	ChatGPT can	Strongly disagree		Neutral	Agree	Strongly agree
0242	reduce skills shortages (when employers cannot find enough					
Q31a	students/workers with the right qualifications and skills).	0	\cup	0)	
Q31b	reduce under-skilling (when students/workers have skills below those required for the job).	0	0	0	0	0
Q31c	resolve skills obsolescence (when students/workers lose their skills over time due to lack of use or when skills become irrelevant due to changes in the world of work).	0	0	0	0	0
Q31d	resolve skills gaps (when students/workers lack the skills necessary to do their jobs effectively).	0	0	0	0	0

SECTION 9: EMOTIONS

Q32 - How often do you feel the following emotions while using ChatGPT?

		Never	Rarely	Sometimes	Often	Always
Q32a	Bored	0	0		0	
Q32b	Hopeful	0	0		0	
Q32c	Sad	0	0		0	
Q32d	Ashamed	0	0		0	
Q32e	Calm	0	0		0	0
Q32f	Angry	0	0		0	
Q32g	Relieved	0	0		0	
Q32h	Нарру	0	0		0	
Q32i	Proud	0	0		0	
Q32j	Anxious	0	0		0	
Q32k	Surprised	0	0		0	
Q32l	Curious	0	0		0	
Q32m	Excited		0		0	
Q32n	Confused		0		0	
Q320	Frustrated				Ö	

SECTION 10: STUDY AND PERSONAL INFORMATION

Q33 - How would you rate the level of difficulty of your studies?

- o Much too easy
- Somewhat easy
- o Just about right
- o Somewhat challenging
- o Extremely challenging

Q34 - Which learning method do you believe is the most suitable for your studies?

- o Traditional learning (in a classroom)
- o Online learning (using digital technologies)
- o Blended (hybrid) learning (a mix of traditional and online learning)

Q35 - How much do you agree with the following statements related to the study and other information?

		Strongly disagree		Neutral	Agree	Strongly agree
Q35a	I am successful in my studies.	0	0	0	0	0
Q35b	I regularly attend my classes.	0		0	0	
Q35c	I consistently meet assignment deadlines.	0	0	0	0	0
Q35d	My grades accurately reflect my understanding of the study subjects.	0	0	0	0	0
Q35e	I am motivated to study.	0		0	0	0
Q35f	The amount of financial aid (scholarships, student loans) is sufficient for my study needs.	0	0	0	0	0
Q35g	The taxes paid on labour by students and/or young workers in my country is too high.	0	0	0	0	0
Q35h	I have a strong network of social connections that can help me with employment.	0	0	0	0	0
Q35i	I have a strong set of skills that can help me with employment.		0	0	0	0
Q35j	I have sufficient work experience that can help me with employment.	0	0	0	0	0
Q35k	I have sufficient general knowledge that can help me with employment.	0	0	0	0	0
Q35I	I have sufficient specific knowledge that can help me with employment.	0	0	0	0	0
Q35m	My faculty provides me with a sufficient set of skills that enhance my employability.	0	0	0	0	0
Q35n	I would like to be employed in a field I am studying for.	\cap	\cap	\bigcirc	\bigcirc	\cap

Q36 - Which of the characteristics below describes the area you live in?

- o Urban
- o Suburban
- o Rural

Q37 - Are you receiving financial aid for your studies (scholarships, student loans...)?

- Yes
- o No

Q38 - Do you have a job?

- o Yes, a full-time job
- Yes, a part-time job (including student work)
- o No

Q39 - What is your economic status?

- o Significantly below-average
- o Below-average
- Average
- o Above-average
- Significantly above-average

Q40 - Think about your life in general. Here are several characteristics that may apply to you (or not). How much do you agree or disagree with the following statements?

	I am someone who	Strongly disagree		Neutral	Agree	Strongly agree
Q40a	is outgoing, sociable.	0	0	0	0	0
Q40b	is helpful and unselfish with others.	Ö	0	0	0	0
Q40c	keeps things neat and tidy.	Ö	0	0	0	0
Q40d	is relaxed, handles stress well.	Ö	0	0	0	
Q40e	is curious about many different things.		0	0	0	
Q4of	has a determined personality.		0	0	0	
Q40g	is respectful, treats others with respect.		0	0	0	
Q40h	is persistent, works until the task is finished.		0	0	0	
Q40i	feels secure, comfortable with self.	0	0	0	0	0
Q40j	values art and beauty.	0	0	0	0	
Q40k	is full of energy.		\circ	\circ	0	
Q4ol	assumes the best about people.	0	0	0	0	0
Q40m	is dependable, steady.	0	0	0		
Q4on	is emotionally stable, not easily upset.	0	0	0		
Q400	is original, comes up with new ideas.		0	0		

SECTION 11: GENERAL REFLECTIONS

Q41 - Can you share some gener	al views/words about how	you see ChatGPT?
qq. can you share some gener	a. rierrs, rrol as asout lioti	you see charen it

Q42 - email - If you would like to receive the results of the survey, please leave your e-mail address: (e.g., john@gmail.com)

Thank you - Thanks once again for completing this questionnaire!