# Using GenAl Tools Practical Guide for Students



IN DUBAI



# **Using GenAl Tools** Practical Guide for Students

#### **Purpose of the guideline**

This guideline has been developed in consultation with international experts in the field of Artificial Intelligence (AI) and Academic Integrity students. The guide is meant to be a quick, easy reference point to help the reader develop understanding and increase awareness of AI content generator tools, their opportunities and threats, discover how best to avoid risks and recognise how to use GenAI if it is authorised and acknowledged.

#### **Document authorship**

ENAI WG Centre for Academic Integrity in the UAE in partnership with University of Wollongong in Dubai and European Network for Academic Integrity, has produced this guideline based on the Centre's collaborations and projects rolled out since 2022 on GenAI. The document has been authored by Dr Zeenath Reza Khan, Founding President of ENAI WG Centre for Academic Integrity in the UAE, Associate Professor at University of Wollongong in Dubai, Ing Veronika Krasnican, Executive Director at European Network for Academic Integrity, and Neha Hemnani, Final Year Student and Student Board Member at ECAIU; and copyrighted to E-CAIU. Readers are welcome to refer to the document and information provided with due attribution.

#### © E-CAIU 2024

#### **Review edits**

The guideline has been peer-reviewed by Professor Salim Razı, Founding Director of COMU Centre for Academic Integrity; Vice Dean, Faculty of Education, Canakkale Onsekiz Mart University, Türkiye.

Date of approval by E-CAIU Board

May 2024

Version

Version 2-MAY-24

To cite this document:

Khan, Z.R, Krasnican, V and Hemnani, N (2024). Using GenAI Tools – Practical Guide for Students. European Network for Academic Integrity Working Group Centre for Academic Integrity in the UAE. University of Wollongong in Dubai. Version 2-MAY-24. Available Online. URL: <u>https://www.academicintegrity-uae.com/resources</u>



### Table of Contents

1. In	itroduction	4
2. O	pportunities Using Generative AI in Education for Students	4
2.1.	Personalised Learning Experiences	4
2.2.	Enhanced Research and Writing Skills	4
2.3.	Cognitive Offloading	5
2.4.	Creative Exploration and Innovation	5
2.5.	Collaboration and Communication	5
2.6.	Accessibility and Inclusivity	5
2.7.	Lifelong Learning and Adaptability	6
3. C	hallenges and Risks of Using Generative AI for Students	6
3.1.	Dependence and Diminished Critical Thinking	6
3.2.	Academic Integrity Concerns	6
3.3.	Data Privacy and Security	6
3.4.	Quality and Accuracy of Information	7
3.5.	Equity and Access	7
3.6.	Overwhelm and Technology Fatigue	7
3.7.	Ethical Considerations and Societal Impact	7
4. S	teps to consider when deciding to use GenAI Tool in your school/university work	7
5. S'	TOP and THINK!	9
6. D	ISCLAIMER	9
P	eferences	

Figure 1: Opportunities using GenAl	. 5
Figure 2: Challenges and Risks using GenAI	. 6
Figure 3: Steps to consider when deciding to use GenAI tools	. 8



#### 1. Introduction

In the rapidly evolving landscape of education, artificial intelligence (AI) tools like ChatGPT have emerged as powerful allies for students and educators alike. These technologies offer unprecedented opportunities to enhance learning, streamline the research process, and foster creativity in ways previously unimaginable (Atlas, 2023; Baidoo-Anu & Ansah, 2023; Karandish, 2021). This guide aims to introduce you to the effective use of ChatGPT and other AI tools in your assignments, providing a roadmap to harness their potential responsibly and efficiently.

As we delve into this topic, we will explore how these tools can aid in understanding the purpose of your assessments, assist in preparation and research, enhance the quality of your language, and even contribute to the creation of images and videos (Adiguzel et al., 2023; Baidoo-Anu & Ansah, 2023; Chan et al., 2023). We will navigate through combining text and images for more compelling presentations, review, and revision processes, and underscore the importance of ethical considerations, documentation, and transparency in your work. Furthermore, we will touch on incorporating screenshots, facilitating review and evaluation, ensuring compliance with guidelines, and ultimately, achieving final approval for your assignments.

Whether you're a seasoned pro at digital tools or just beginning to explore the possibilities AI can offer, this introduction will lay the groundwork for effectively integrating AI into your academic endeavours, opening doors to new forms of expression, and understanding in your assignments with integrity, acknowledgement, and approvals.

### 2. Opportunities Using Generative AI in Education for Students

The integration of Generative AI (GenAI) in education opens a plethora of opportunities for students, transforming traditional learning environments into dynamic, interactive, and personalized experiences. These advancements are not just about leveraging technology for the sake of innovation but about redefining the educational landscape to better suit the needs and capabilities of today's digital natives.

#### 2.1. Personalised Learning Experiences

GenAI tools can tailor educational content to meet the individual needs of each student (Chiu, et al., 2023). By analysing data on students' learning habits, strengths, and areas for improvement, these tools can offer customized recommendations, exercises, and resources. This personalisation helps in addressing learning gaps more effectively and accelerates the learning process by focusing on areas that require the most attention.

#### 2.2. Enhanced Research and Writing Skills

GenAI technologies like ChatGPT can serve as invaluable research assistants, helping students gather, summarize, and cite information from a vast array of sources (Chan & Hu, 2023; Malik et al., 2023). They can also guide students in refining their writing skills,



offering suggestions for improvement, and assisting with grammar, structure, and style. This support not only enhances the quality of assignments but also instils confidence in students as they develop their academic writing skills.



### 2.3. Cognitive Offloading

Provides students a unique opportunity to streamline complex tasks, allowing for deeper focus on critical thinking and creativity. By automating routine processes, students can enhance their learning efficiency and retention (Khan, 2023). This integration fosters a more engaging and effective educational experience, preparing students for future technological landscapes.

# 2.4. Creative Exploration and Innovation

With the ability to generate text, images, and even music, GenAI tools encourage creative exploration and innovation among students. They can experiment with different forms of content creation, explore complex concepts through visualization, and present their ideas in unique and compelling ways. This fosters a sense of creativity and innovation, preparing students for a future where these skills are increasingly valued (Dwivedi et al., 2023; Kasneci et al., 2023).

#### 2.5. Collaboration and Communication

GenAI can facilitate collaboration among students

by providing platforms for shared projects, peer feedback, and group discussions (Karandish, 2021, Bailey et al., 2021). These tools can help bridge geographical and language barriers, allowing students from different parts of the world to collaborate seamlessly. Moreover, GenAI can enhance communication skills by offering simulations and scenarios for students to practice and improve their interpersonal and presentation skills.

#### 2.6. Accessibility and Inclusivity

One of the most significant opportunities presented by GenAI in education is the enhancement of accessibility and inclusivity (UNESCO, 2023; Welker, 2023). AI tools can provide support for students with disabilities through voice recognition, text-to-speech, and personalized learning accommodations. This ensures that education is more accessible to all students, regardless of their physical or learning challenges.



#### 2.7. Lifelong Learning and Adaptability

GenAI tools can support the development of lifelong learning skills and adaptability (UNESCO, 2023). By exposing students to the latest technologies and teaching them how to leverage AI in their learning, they become more adaptable and prepared for the evolving demands of the workforce. This continuous learning mindset is crucial in a world where technological advancements are constant.

### 3. Challenges and Risks of Using Generative AI for Students

While GenAI offers numerous opportunities for enhancing education, it also presents several challenges and risks that students must navigate. Understanding these concerns is crucial for leveraging GenAI tools responsibly and effectively in an academic setting.



# 3.1.Dependence and Diminished Critical Thinking

One of the primary concerns with the extensive use of GenAI tools is the potential for students to become overly dependent on these technologies for completing assignments and problem-solving (Yusuf et al., 2024). This reliance can lead to a decrease in independent thinking and critical analysis skills, as students may opt for the convenience of AIgenerated answers over developing their own solutions and ideas.

#### 3.2. Academic Integrity Concerns

GenAI can complicate issues of academic integrity and plagiarism (Khan, 2023). The ease of generating essays, reports, and other assignments with AI tools can tempt students to submit AI-generated work as their own, raising ethical questions about authorship and originality. Distinguishing between studentgenerated content and AI-assisted work becomes increasingly difficult, potentially undermining the value of academic achievements.

#### 3.3. Data Privacy and Security

The use of GenAI tools often requires access to personal data and information, raising concerns about data privacy and security (Chan & Hu, 2023). Students may unknowingly expose sensitive information to third-party AI platforms, risking data breaches or misuse of their information. Understanding the data policies of AI tools and ensuring that personal information is protected are crucial considerations for students.



#### 3.4. Quality and Accuracy of Information

Although GenAI technologies can provide vast amounts of information and content, the quality and accuracy of this information can vary (Mizumoto & Eguchi, 2023; Chan & Hu, 2023)). Misinformation or biased content generated by AI can mislead students, affecting their learning outcomes and understanding of subjects. Critical evaluation of AI-generated content is essential to ensure that students are relying on accurate and credible information for their learning.

#### 3.5. Equity and Access

Access to cutting-edge GenAI tools may not be uniformly available to all students, leading to disparities in educational opportunities (Quaintance, 2024). Students from underprivileged backgrounds or institutions with limited resources may face barriers to accessing these technologies, exacerbating existing inequalities in education. Ensuring equitable access to GenAI tools is a significant challenge that needs to be addressed.

#### 3.6. Overwhelm and Technology Fatigue

The constant evolution of GenAI tools and the pressure to stay updated with the latest technologies can overwhelm students, leading to technology fatigue (Klein, 2022). Balancing the use of AI in education with traditional learning methods is crucial to prevent burnout and ensure that students remain engaged and motivated in their studies.

#### 3.7. Ethical Considerations and Societal Impact

The use of GenAI in education raises broader ethical considerations about the societal impact of these technologies. Questions about the role of AI in shaping knowledge, influencing decision-making, and affecting employment opportunities in the future are critical (Khan, 2023). Students must be educated not only on how to use GenAI tools but also on the ethical implications and societal impacts of these technologies.

# 4. Steps to consider when deciding to use GenAI Tool in your school/university work

- 1. **Consult with Instructors:** Before incorporating AI tools into any assessments or assignments, consult with your instructors. Seek clarification on their expectations and guidelines regarding the use of AI in your coursework.
- 2. Understand the Purpose: Before using the AI tool, ensure that you understand the purpose of your report or document. What message are you trying to convey? What information needs to be included? Knowing this will help you use the AI tool more effectively to enhance your language and create relevant images.
- 3. **Prepare**: Before using the AI tool, gather all the necessary information, data, and resources related to your topic. Having a clear understanding of the content will enable you to better guide the AI in generating relevant language and images.
- 4. Enhance Language: Use the AI tool to enhance the language of your text by providing it with specific prompts or sections of your writing that you want to



improve. Ask the AI to suggest alternative phrases, reword sentences for clarity, or expand on certain ideas. Always review the AI-generated content to ensure it aligns with your original intent and maintains accuracy.

5. **Create Images**: Utilize the AI tool's capabilities to generate images that support the content of your report. Provide clear instructions or descriptions of the visuals you need, such as charts, graphs, diagrams, or illustrations. Be specific about the data or concepts you want the images to represent. Review the generated images to ensure



they are accurate and visually appealing.

6. **Make Videos**: If creating videos, use AI tools responsibly to enhance visual elements and storytelling. Ensure that the content aligns with the purpose and message of your report. The story and information used to generate the video should be your original work and not generated from AI tools.

7. **Combine Text and Images**: Integrate the AI-generated language and images seamlessly into your report. Ensure that the text and visuals complement each other and enhance the overall clarity and effectiveness of your communication.

8. **Review and Revise**: After incorporating AI-generated content into your report, thoroughly review the document to ensure coherence, accuracy, and consistency. Make any necessary revisions to refine the language and improve the visual presentation.

9. Remember Ethical

**Considerations**: Remember to uphold ethical standards when using AI tools. Avoid plagiarism by properly attributing any AI-generated content in your report. Additionally, critically evaluate the accuracy and reliability of AI-generated information before including it in your document.

10. Ensure Documentation of Prompts: When utilizing the AI tool to enhance language or create images, it's important to document the prompts or instructions provided to the tool. Before using the AI, take screenshots



of the specific prompts or input text you've used to guide the generation process. This documentation serves as evidence of the inputs provided and can help clarify the origin of AI-generated content if needed.

- 11. Ensure Transparency and Accountability: Providing screenshots of the prompts ensures transparency and accountability in the use of AI-generated content. In academic or professional settings, it's essential to demonstrate the integrity of your work by documenting the sources and inputs used to generate text or visuals.
- 12. **Incorporate Screenshots**: Include the screenshots of the prompts alongside the AIgenerated content in your report or documentation. This practice not only acknowledges the use of AI but also provides context for readers or evaluators to understand how the content was generated and the extent of human input involved.
- 13. Save Earlier Drafts: Using GenAI tools to improve your writing is a valuable skill, but it is essential to demonstrate your initial efforts to fully appreciate the improvements made. By saving earlier drafts, you can effectively show your teachers how GenAI tools have helped you enhance your writing or the concepts taught, leading to a deeper understanding of your growth and progress.
- 14. **Facilitate Review and Evaluation**: By providing screenshots of the prompts, you enable reviewers or instructors to assess the appropriateness and relevance of the AI-generated content in relation to the original context and intent of the report. This transparency fosters trust in the credibility and authenticity of your work.
- 15. **Remember Compliance with Guidelines**: Adhering to the requirement of providing screenshots of prompts ensures compliance with any academic or institutional guidelines regarding the use of AI tools. It demonstrates a commitment to ethical conduct and responsible use of technology in academic or professional endeavours.
- 16. Get Final Approval: Before submitting your report, seek feedback from peers or instructors to ensure that the AI-generated content effectively enhances the quality of your work. Make any final adjustments based on the feedback received.

## 5. STOP and THINK!

**Check School or University Policies**: Always check your university/school's policy statements regarding the use of AI tools in academic work. Familiarize yourself with any guidelines, restrictions, or recommendations they may have.

**Warning about Data Privacy, Bias, and Hallucination**: Be cautious of data privacy concerns, biases, and hallucinations that may arise from AI-generated content. Exercise critical thinking and verify information from reliable sources.

**CAUTION - Use of AI in English Language or Academic Writing**: Avoid using AI tools for writing tasks in English language or academic writing courses, as these tasks are essential for learning to write effectively. Use AI tools to enhance your own writing rather than relying on them for content generation, which can lead to academic misconduct.

#### 6. DISCLAIMER

These guidelines emphasise the responsible and ethical use of AI tools to enhance language and visual elements in reports, while also highlighting considerations such as data privacy, bias, hallucination, and appropriate use in academic contexts. They are not meant to replace



any student's campus policy or procedures laid out by instructors in classrooms. Students thinking to use GenAI must speak to their academic advisors and course instructors to understand their own campus' rules and regulations, find out about approvals and acknowledgement before using the tools.

References

- Adiguzel, T., Kaya, M. H., & Cansu, F. K. (2023). Revolutionizing education with AI: Exploring the transformative potential of ChatGPT. Contemporary Educational Technology, 15(3), ep429. https://doi.org/10.30935/cedtech/13152
- Atlas, S. (2023). ChatGPT for higher education and professional development: A guide to conversational AI. https://digitalcommons.uri.edu/cba\_facpubs/548
- Baidoo-Anu, D., & Ansah, L. O. (2023). Education in the era of generative artificial intelligence (AI): Understanding the potential benefits of ChatGPT in promoting teaching and learning. https://doi.org/10.2139/ssrn.4337484
- Chan, C. K. Y., & Hu, W. (2023). Students' voices on generative AI: Perceptions, benefits, and challenges in higher education. International Journal of Educational Technology in Higher Education. https://doi.org/10.1186/s41239-023-00411-8
- Chiu, T. K. F., Xia, Q., Zhou, X.-Y., & Chai, C. S. (2023). Systematic literature review on opportunities, challenges, and future research recommendations of artificial intelligence in education. Computers and Education: Artificial Intelligence, 4.
- Dwivedi, Y. K., Kshetri, N., Hughes, L., Slade, E. L., et al. (2023). Opinion Paper: "So what if ChatGPT wrote it?" Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy. International Journal of Information Management, 71, 102642. https://doi.org/10.1016/j.ijinfomgt.2023.102642
- Karandish, D. (2021). 7 benefits of AI in education. THE Journal. Infrastructure Solutions Group. USA, https://thejournal.com/articles/2021/06/23/7-benefits-of-ai-in-education.aspx
- Kasneci, E., Sessler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., et al. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. Learning and Individual Differences, 103, 102274. https://doi.org/10.1016/j.lindif.2023.102274
- Khan, Z.R. (2023). Ethics of Artificial Intelligence in Academia. In: Eaton, S.E. (eds) Handbook of Academic Integrity. Springer, Singapore. <u>https://doi.org/10.1007/978-981-287-079-7\_188-1</u>
- Klein, A. (2022). Tech fatigue is real for teachers and students. Here's how to ease the burden. Education Week. Classroom technology. March 8 2022. <u>https://www.edweek.org/technology/tech-fatigue-is-real-for-teachers-and-students-heres-how-to-ease-the-burden/2022/03</u>
- Malik, A. R., Pratiwi, Y., Andajani, K., Numertayasa, I. W., Suharti, S., & Darwis, A. (2023). Exploring artificial intelligence in academic essay: Higher education student's perspective. International Journal of Educational Research Open, 5, 100296. https://doi.org/10.1016/j.ijedro.2023.100296
- Mizumoto, A., & Eguchi, M. (2023). Exploring the potential of using an AI language model for automated essay scoring. https://doi.org/10.2139/ssrn.4373111
- Quaintance, Z. (2024). AI is going to cause he next Digital Divide. GT Government Technology. Broadband and Network. February 16 2024. https://www.govtech.com/network/ai-is-going-to-cause-the-next-digitaldivide
- UNESCO. (2023). Guidance for generative AI in education and research. United Nations Educational, Scientific and Cultural Organization, 7, place de Fontenoy, 75352 Paris 07 SP, France
- Welker, Y. (2023) Generative AI holds great potential for those with disabilities but it needs policy to shape it. World Economic Forum. Emerging Technologies. Nov 3, 2023. <u>https://www.weforum.org/agenda/2023/11/generative-ai-holds-potential-disabilities/</u>
- Yusuf, A., Pervin, N. & Román-González, M. (2024) Generative AI and the future of higher education: a threat to academic integrity or reformation? Evidence from multicultural perspectives. Int J Educ Technol High Educ 21, 21 (2024). <u>https://doi.org/10.1186/s41239-024-00453-6</u>

#### Contact office

E-CAIU hosted at University of Wollongong in Dubai Further contact or clarifications: <u>Probity@uowdubai.ac.ae</u>