## **TUNG WAH COLLEGE**

# **Generative AI and ChatGPT Using Guidelines**

#### Introduction

This document outlines guidelines for using ChatGPT in teaching, learning, and research at Tung Wah College while upholding academic regulations. It provides conceptual structures for ChatGPT use in higher education. The guidelines will be continuously revised to stay current with advancements in the field, and academic integrity and regulations will be revisited to ensure alignment with academic values. This document serves as a starting point for incorporating generative AI into teaching, learning, and research at Tung Wah College while promoting best practices and academic integrity. The guidelines and principles discussed in this document may also apply to other emergent generative AI tools, such as DeepSeek.

## Generative AI and ChatGPT for Teaching and Learning

## Teaching: Preparing teaching material

- Generate summary of a concept or a topic: ChatGPT is good at constructing comprehensive summaries of a concept, topic, or issue. Teaching colleagues can utilize ChatGPT to provide a summary to aid students in gaining an overview or to brainstorm ideas for discussion.
- Adopt ChatGPT generated content with caution: ChatGPT generates content using AI algorithms and a vast amount of data, but it cannot distinguish between the cases it learns. It creates events and examples that cannot be traced or verified, making them unsuitable as instructional material. Real-world cases should come from credible sources such as traditional media.
- Construct illustrative visuals for teaching purposes: ChatGPT can create photos or images in response to prompts, which can be useful when generic images are needed but difficult to locate. For instance, a health care lesson may prompt ChatGPT to generate an image of a 60-70-year-old man with a broken leg. However, these images should not be mistaken for false news or facts, and teaching staff should not create fabricated visuals.

## Learning: As a tool to enhance learning

## • Clarifying Concepts

Students can ask ChatGPT to explain difficult concepts or topics they encounter in their coursework. It can provide explanations in simpler terms, offer examples, and break down complex ideas into more digestible parts.

## Simulating Discussions and Debates

Students can use ChatGPT to simulate discussions or debates on various topics related to their field of study. This can help them explore different perspectives, develop critical thinking skills, and prepare for class discussions or presentations by practicing articulating their arguments and responses.

### • Practice Questions

ChatGPT can generate practice questions and quizzes on various subjects. Students can use these to test their knowledge and get instant feedback, helping to reinforce learning and identify areas that need more focus.

### • Resource Recommendations

Students can seek recommendations for textbooks, articles, research papers, and other educational resources. ChatGPT can suggest materials based on the specific topics or courses the student is studying.

## • Time Management and Study Tips

ChatGPT can offer advice on effective study techniques, time management strategies, and how to prepare for exams. It can provide tips on creating study schedules, staying motivated, and optimizing study sessions for better retention and understanding.

## Learning: Preparing a written assignment

- Take ownership and accountability: ChatGPT can generate content for written assignments or term essays, but students should not use the entire generated content or a significant portion of it. Teaching staff should use AI-content detection tools to evaluate submissions, e.g., Turnitin, which has embedded an AI writing detection indicator to the Similarity Report.
- **Brainstorm ideas**: ChatGPT can generate comprehensive summaries on any topic, which can serve as a useful starting point for gaining an overview or brainstorming ideas for further investigation and discussion.
- As a reflect and review tool: Students can form groups and request an analysis of a topic or issue from ChatGPT to evaluate their work and determine if further investigation is needed. Similarly, a student can compare and contrast their own assignment draft with the generated analysis to enrich their work.
- As an editing tool: Students can use ChatGPT for language editing purpose in order to help fix most spelling and grammatical errors on condition that students are not preparing an assignment for language courses, and/or the assessment criteria is not focused on language competence.
- Cite properly: If students quote ChatGPT chat session into their written assignment, it should be properly cited to credit the author of the algorithm with a reference list entry and the corresponding in-text citation. AI tool is not treated as an author but as a source. See references on how to cite, e.g., in APA<sup>1</sup>, or in MLA<sup>2</sup> style.

<sup>1</sup> https://apastyle.apa.org/blog/how-to-cite-chatgpt

<sup>&</sup>lt;sup>2</sup> https://style.mla.org/citing-generative-ai/

#### **Generative AI and ChatGPT for Research**

## Research integrity

## Originality & Transparency

ChatGPT can aid in literature reviews and idea development, but researchers must perform the research tasks themselves. If generative AI is significantly used, it should be reported in the methodology or relevant section like other research tools. To ensure the authenticity of research proposals and manuscripts, it is recommended that the similarity index, as reported by writing detection indicators like Turnitin, should not exceed 25% for all research materials. This includes both the original research proposals and manuscripts. It is important to note that while AI tools may be used to edit the materials, most of the content should be created by the researchers themselves.

## Accuracy & Accountability

ChatGPT is only a research tool, the accountability of the researcher is not transferable, including but not limited to accuracy, integrity, and plagiarism. Researchers should countercheck in various ways to ensure academic standards are met.

## • Privacy & Data Management

ChatGPT is mostly cloud-based, so researchers must protect the privacy of research participants and data security with measures such as coding. Data should be removed from the cloud after analysis.

#### Authorship

ChatGPT should not be considered as the author in any research work, as researchers hold non-transferrable professional and ethical accountability.

## Research process

#### • Research topic and problem

ChatGPT can be beneficial in generating research topics, but it cannot access original articles and provide proper references to identify research gaps in the literature for a particular research topic. Researchers should be cautious that the generated problem statement can be purely hypothetical without evidence.

## • Literature review and synthesis

ChatGPT may generate standard in-text citations and references, and researchers must double-check if they are made-up non-existent. Researchers must also be aware that ChatGPT may fail to synthesize prior literature findings to develop a formal literature review. Instead, multiple paragraphs citing a few studies and their findings will be provided.

## • Research design

ChatGPT may be used in producing a research design, but researchers should critically select the right research design (e.g., sample size and ways of collecting data) that can address the research question adequately.

## Finding analysis

ChatGPT is not well-suited for analyzing empirical data using statistical methods. However, it can be useful for qualitative research such as analyzing transcribed text from interviews and focus group discussions. ChatGPT can generate data visualizations, such as graphs or charts, to help researchers visualize patterns or trends in their data. It can also produce a comprehensive review of findings, which can serve as a starting point for interpretation and discussion.

#### Glossary terms

## **Academic Integrity**

Tung Wah College, as a member of the higher education academic community, is dedicated to the core values of academic honesty. The five essential values of academic integrity<sup>3</sup>, which include honesty, trust, fairness, respect, and responsibility, will also serve as guiding principles for the employment of generative AI and ChatGPT.

- **Honesty**: The quality of being honest, free from fraud or deception, legitimate, truthful. There are number of ways to demonstrate honesty, such as, be truthful, give credit to the owner of the work, keep promises, provide factual evidence, aspire to objectivity, consider all sides and one's own potential preconceptions.
- **Trust**: Assured reliance on the character, ability, strength, or truth of someone or something. There are number of ways to demonstrate trust, such as, clearly state expectations and follow through, promote transparency in values, processes, and outcomes, trust others, give credence, encourage mutual understanding, act with genuineness.
- **Fairness**: The quality of state of being fair, free from self-interest, prejudice, or favoritism. There are number of ways to demonstrate fairness, such as, apply rules and policies consistently, engage with others equitably, keep an open-mind, be objective, take responsibility for your own actions.
- **Respect**: High or special regard, esteem, the quality or state of being esteemed. There are number of ways to demonstrate respect, such as, practice active listening, receive feedback willingly, accept that others' thoughts and ideas have validity, show empathy, seek open communication, affirm others and accept differences, recognize the consequences of our words and actions on others.
- Responsibility: the quality or state of being responsible, moral, legal, or mental accountability, reliability, trustworthiness, able to answer for one's conduct and obligations, trustworthy. There are number of ways to demonstrate responsibility, such as, hold yourself accountable for your actions, engage with others in difficult conversations, even when silence might be easier, know and follow institutional rules and conduct codes, create, understand, and respect personal boundaries, follow through with tasks and expectations, model good behavior.

## Generative AI and ChatGPT

ChatGPT is an app built by Open AI, "We've trained a model called ChatGPT which interacts in a conversational way. The dialogue format makes it possible for ChatGPT to answer follow-up questions, admit its mistakes, challenge incorrect premises, and reject inappropriate requests.<sup>4</sup>" Using the GPT language models, it can, in general, answer users' inquiries, write copy, draft emails, hold a conversation, explain code in multiple programming languages, translate natural language to code, and more, all based on natural language prompts fed to it by the users. The current version is GPT-4 which is more creative and collaborative, "It can generate, edit, and iterate with users on creative and technical writing tasks, such as composing

4 https://openai.com/

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<sup>&</sup>lt;sup>3</sup> International Center for Academic Integrity [ICAI]. (2021). The Fundamental Values of Academic Integrity. (3rd ed.). www.academicintegrity.org/the-fundamental-valuesof-academic-integrity

songs, writing screenplays, or learning a user's writing style.<sup>5</sup>" Specifically, it can employ ChatGPT to construct essays and assignments that may challenge the way higher education assesses students. In addition to its potential impact on teaching and learning, ChatGPT has implications for research as well. Researchers can use ChatGPT to gain a better understanding of complex issues and generate new insights. It can also assist in the creation of research proposals and the analysis of data. However, it is important to use the technology ethically and responsibly, considering the potential biases and limitations of the tool.<sup>6</sup>

#### Responsible AI

Artificial intelligence (AI) presents a great possibility for expanding and sharing human knowledge, but it also comes with an immense responsibility. Concerns regarding AI ethics, data governance, trust, and legality have been raised because of its direct impact on people's lives<sup>7</sup>. When organisations ramp up AI development and use, they must be conscious of new and forthcoming regulations, as well as the steps necessary to ensure compliance. Responsible AI is the practise of building and implementing AI with the goal of empowering users while also equitably impacting the organisation and society, allowing the organisation to build trust and confidently scale AI. When TWC is involved in the creation and use of AI, it adheres to the Responsible AI principles<sup>8</sup>:

- **Minimize unintended bias**: Build responsibility of AI to ensure that the algorithms and underlying data are as unbiased and representative as possible.
- **Ensure AI transparency**: To build trust among users, develop explainable AI that is transparent across processes and functions.
- Create opportunities for users: Empower individuals in the College to raise doubts
  or concerns with AI systems and effectively govern technology, without stifling
  innovation.
- Protect the privacy and security of data: Leverage a privacy and security-first approach to ensure personal and/or sensitive data is never used unethically.
- **Benefit users and society**: By creating an ethical underpinning for AI, the College mitigate risk and establish systems that benefit the stakeholders, staff, students and society at large.

6 https://doi.org/10.1186/s13054-023-04380-2

<sup>&</sup>lt;sup>5</sup> https://openai.com/product/gpt-4

<sup>&</sup>lt;sup>7</sup> Accenture (2023). AI ethics and governance. www.accenture.com/ca-en/services/applied-intelligence/ai-ethics-governance

<sup>8</sup> ibid

#### **Further readings**

- Aho, A. (2022, Jan 28). University writing instructors are no longer grading students' writing. *Leadership Institute*. Retrieved from <a href="https://www.campusreform.org/article?id=18885">https://www.campusreform.org/article?id=18885</a>
- Atchley, P., Pannell, H., Wofford, K., Hopkins, M., & Atchley, R. A. (2024). Human and AI collaboration in the higher education environment: opportunities and concerns. *Cognitive Research: Principles and Implications*, 9(1), 20. <a href="https://doi.org/10.1186/s41235-024-00547-9">https://doi.org/10.1186/s41235-024-00547-9</a>
- arXiv. (2023). arXiv announces new policy on ChatGPT and similar tools. arXiv. Retrieved from <a href="https://blog.arxiv.org/2023/01/31/arxiv-announces-new-policy-on-chatgpt-and-similar-tools/">https://blog.arxiv.org/2023/01/31/arxiv-announces-new-policy-on-chatgpt-and-similar-tools/</a>
- Cambridge University Press & Assessment. (2023). *Cambridge launches AI research ethics policy*. Retrieved from <a href="https://www.cambridge.org/news-and-insights/news/cambridge-launches-ai-research-ethics-policy">https://www.cambridge.org/news-and-insights/news/cambridge-launches-ai-research-ethics-policy</a>
- Chan, C. K. Y., & Colloton, T. (2024). *Generative AI in higher education: The ChatGPT effect*. London: Routledge. https://doi.org/10.4324/9781003459026
- Dilmegani, C. (2023, April, 22). *Generative AI Ethics: Top 6 Concerns*. AI Multiple. Retrieved from https://research.aimultiple.com/generative-ai-ethics/
- European Commission. (2019). Shaping Europe's digital future-Ethics guidelines for trustworthy AI. Retrieved from <a href="https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai">https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai</a>
- Fowler, E. (2022, Dec 29). The college essay is dead: Academics react to ChatGPT. *Leadership Institute*. Retrieved from <a href="https://www.campusreform.org/article?id=20929">https://www.campusreform.org/article?id=20929</a>
- Francis, N. J., Jones, S., & Smith, D. P. (2025). Generative AI in higher education: Balancing innovation and integrity. *British Journal of Biomedical Science*, 81, 14048. https://doi.org/10.3389/bjbs.2024.14048
- Hutson, M. (2021, Mar 3). Robo-writers: The rise and risks of language-generating AI. *Nature News Feature*. Retrieved from <a href="https://www.nature.com/articles/d41586-021-00530-0">https://www.nature.com/articles/d41586-021-00530-0</a>
- Kohnke, L., Zou, D., & Su, F. (2025). Exploring the potential of GenAI for personalised English teaching: Learners' experiences and perceptions. *Computers and Education: Artificial Intelligence*, 8,100371. https://doi.org/10.1016/j.caeai.2025.100371
- Linthicum, D. (2023, April, 5). *Generative AI's Drawbacks: IP to Ethics.* eWeek. Retrieved from https://www.eweek.com/artificial-intelligence/drawbacks-of-generative-ai/
- Lyu, W., Zhang, S., Chung, T., Sun, Y., Zhang, Y. (2025). Understanding the practices, perceptions, and (dis)trust of generative AI among instructors: A mixed-methods study in the U.S. higher education. *Computers and Education: Artificial Intelligence, 8*, 100383. https://doi.org/10.1016/j.caeai.2025.100383
- Marche, S. (2022, Dec 6). The college essay is dead. *The Atlantic*. Retrieved from <a href="https://www.theatlantic.com/technology/archive/2022/12/chatgpt-ai-writing-college-student-essays/672371/">https://www.theatlantic.com/technology/archive/2022/12/chatgpt-ai-writing-college-student-essays/672371/</a>
- McMurtie, B. (2022, Dec 13). AI and the future of undergraduate writing. *Chronicle of Higher Education*. Retrieved from https://www.chronicle.com/article/ai-and-the-future-of-undergraduate-writing
- McMurtie, B. (2023, Jan 5). Will ChatGPT change the way you teach?. *Chronicle of Higher Education*. Retrieved from <a href="https://www.chronicle.com/newsletter/teaching/2023-01-05">https://www.chronicle.com/newsletter/teaching/2023-01-05</a>
- Monzon, N., & Hays, F. A. (2025). Leveraging generative AI to improve motivation and retrieval in higher education learners. *JMIR Medical Education*. https://doi.org/10.2196/59210
- PNSA. (2023). *The PNSA Journals Outline Their Policies for ChatGPT and Generative AI*. PNSA. Retrieved from <a href="https://www.pnas.org/post/update/pnas-policy-for-chatgpt-generative-ai">https://www.pnas.org/post/update/pnas-policy-for-chatgpt-generative-ai</a>
- Rim, C. (2022, Dec 8). The college essay is still very much alive. *Forbes*. Retrieved from <a href="https://www.forbes.com/sites/christopherrim/2022/12/08/the-college-essay-is-still-very-much-alive/?sh=4002f3681c1e">https://www.forbes.com/sites/christopherrim/2022/12/08/the-college-essay-is-still-very-much-alive/?sh=4002f3681c1e</a>
- Stokel-Walker, C. (2022, Dec 9). AI bot ChatGPT writes smart essays Should professors worry?. *Nature News Explainer*. Retrieved from <a href="https://www.nature.com/articles/d41586-022-04397-7">https://www.nature.com/articles/d41586-022-04397-7</a>