Guidelines for Implementing Generative AI in Educational Settings

1. Objective of the Guidelines

The use of generative AI such as ChatGPT, which produce texts and other types of outputs in response to simple prompts, has significantly expanded in recent years. While generative AI has potential applications for enriching education and increasing administrative efficiency, as an emergent technology, it is subject to various ongoing debates over academic integrity as well as other legal and ethical issues.

Sophia University (hereafter referred to as Sophia) has set these Guidelines for Implementing generative AI in Educational Settings (hereafter referred to as the Guidelines). The Guidelines suggest matters to be noted when incorporating generative AI in teaching and learning activities at Sophia. The university policies on grading and evaluation remain the same as indicated in the document "Regarding ChatGPT and other AI chatbots (Generative AI)" issued as of March 27, 2023. However, the Guidelines cover broader issues, such as permitting its use in classrooms. The document is in essence the same as the one shared with Sophia Instructors in June 2023 but now made available on the university website.

2. Basic Principles

Sophia's educational activities are grounded in the educational philosophy, "For Others, With Others." As part of our commitment to Christian Humanism, this philosophy emphasizes that "using one's talents and learning for the benefit of others leads to personal growth". In the contemporary higher education landscape, it is vital to facilitate meaningful learning of students and uphold academic integrity in creating and disseminating knowledge.

With these missions in mind, the following principles should be applied when using generative AI in education.

- A) Both staff members and students at Sophia need to learn the functioning and limitations of this emerging technology.
- B) It is necessary to continuously explore how the technology may be used appropriately, based on further collective understanding of ethical, legal, and societal aspects.
- C) The use of the technology needs to serve not only one's academic excellence and daily needs, but Sophia's educational philosophy, "For Others, With Others", and the purpose of building a better world.

As technical advancements and societal changes associated with generative AI rapidly evolve, the Guidelines and the university's policy shall be revised as necessary.

3. Generative AI Tools Included in the Guidelines

The generative AI tools covered by the Guidelines are text-generating AIs using Large Language Models, such as ChatGPT, Bing, and Bard. Software applications that are enhanced by these AIs are also included.

Policies about non-text generating AI will be considered in accordance with future technical and societal trends.

4. Use in Courses

- Please explicitly communicate to students whether or not the use of generative AI is permitted in coursework. If possible, also explain the intent behind your policy and the extent to which these tools may be used.
- If using generative AI is beneficial toward learning objectives and policies of your course, we encourage instructors to actively explore the possibility to implement.
- If instructors permit students to use the AI, please instruct them on the nature and risks of the technology and how students may appropriately use it (e.g., how to cite when used).

(1) Example of Instruction on Permissible Use in a Course

(e.g.) The learning objectives of this course are to understand about [] and to become able to formulate discussions on [] based on the content of the course and relevant prior research. The use of generative AI for assignments is prohibited. However, it can be useful and assist you with mapping out basic discussions on course topics, so its use for the purpose of self-learning is acceptable. You should be reminded that information generated by the AI may contain errors and biases. You must use it while cross-checking with designated textbooks and other literature.

(2) Example of Instruction on Appropriate Use and Risks in a Course

(e.g.) In the []th class of this course, we will be brainstorming about [] using ChatGPT. Everyone should register for ChatGPT on their own. You do not need to subscribe to the paid account (ChatGPT Plus). Note that the content you input into ChatGPT is used as learning data, so do not share any personal or confidential information.

5. Use in Assignments and Prevention of Misconduct

· Texts, program source codes, and calculation results generated by AI are not recognized as

- the student's own work for assignments (reaction papers, reports, essays, theses, etc.).
- However, this policy does not prevent instructors from permitting the use of generative AI, should that be appropriate considering the learning objectives and nature of the course.
- In any case, please explicitly communicate to students whether or not they can use generative AI in assignments. If possible, also explain the intent behind this policy and the extent to which these tools can be used.
- · Also, please ensure that the format and grading of the assignment are such that students are unlikely to use generative AI inappropriately.

(1) Example of Instruction on Permissible Use for Assignments

(e.g.) The learning objectives of this course are to understand about [] and to be able to formulate discussions on [] based on the content of the course and relevant prior research. It is important to note that the objectives of the assignments cannot be fulfilled if you employ generative AI. Therefore, its use is strictly forbidden for reaction papers, group presentations, and final reports.

(e.g.) In this assignment, you will employ generative AI to produce an essay on the topic of [] and provide your own critique based on what you learned in this course. In your report, describe the output text created by the generative AI and your own critique of the text. Also, include the following information at the end: "Type of generative AI used," "Date of text generation," and "Exact words of the prompt you provided to the AI)" Note that the content you input into ChatGPT and other AI can be used as training data, so do not share any personal or confidential information.

(2) Reconsideration of Assignments and Grading Methods

While there are tools available for detecting AI-generated documents, it is important to note that the detection rate is not infallible, and there remains a possibility of false positives. Furthermore, there will likely be more cases where boundaries become more blurred, such as texts co-authored by generative AI and humans. Thus, we intend to continue our discussion and find effective ways to handle such situations.

As an immediate measure to prevent academic misconduct, one possible approach is reducing the proportion of non-face-to-face assignments, such as reports. However, applicability or effectiveness of incorporating alternative grading methods should vary depending on the format and nature of each course. The following are examples but should not be taken as uniform measures.

- Evaluation by face-to-face exams, presentations, oral examinations and alike.
- Evaluation based on the learning process, such as assessing the degree of engagement in class or tasks on Moodle.
- Peer evaluation and/or self-evaluation combined with active learning.

It may also be possible to design assignments that are difficult to apply generative AI (e.g., relating student personal experiences with the course content). Again, whether such assignments are feasible and appropriate should be determined on a case-by-case basis by considering specific characteristics of each course.

(3) Example of Handling Cases Where Academic Misconduct is Suspected

So, what should be done when there is suspicion of academic misconduct using generative AI? As stated in (2), at this point it is challenging to accurately detect the use of generative AI by detection tools (e.g. the AI detection function of Turnitin). Instructors are advised to take the following steps to verify the suspicions:

I. <u>Identify suspected sections</u>

Identify which parts of the assignment are suspected to be generated by AI. Indicators may include writing styles that are different from students' usual wording, unnatural vocabulary, grammar usage, or contents that seem out of character.

II. <u>Interview with the student</u>

Arrange a meeting with the student and request an explanation about the specific sections in question. Ask the student to confirm whether it is their own research or opinion. When conducting the interview, carefully present the grounds for your suspicion and clearly explain as much as possible.

III. Additional verification

Based on the student's explanation, cross-verify the information with other sources, such as related documents or relevant literature, if applicable.

If there is a clear suspicion of academic misconduct after taking these steps, please report and consult with the Center for Academic Affairs as in other cases of suspected academic misconduct.

6 Ethical, Legal, and Social Issues

As stated in the Basic Principles, generative AI is an emerging technology, and the associated ethical, legal, and social issues are changing rapidly. There are several issues we would like instructors to become familiar with at this moment as follows:

- Risks of personal and confidential information used as training data once it is inputted.
- Issues regarding privacy, copyright protection, and the transparency of training data.
- Risks of AI generating and disseminating information that is incorrect or contains bias and stereotypes.
- Possibility of AI generating information that are legally and ethically problematic, such as copyright infringement, violation of trademark rights, breach of personal information protection, and disclosure of specially designated secrets.
- Increased risks of fraud and cyber attacks using generative AI.

- Potential disparities in access to the technology when paid services become more widespread.
- The environmental impact of increase in energy consumption due to widespread adoption of generative AI.

Please gather information and learn about these issues concerning the use of generative AI on your own.

Despite such concerns as mentioned above, there are quite limited frameworks of evaluation, regulation, and user education of the technology. As a university, we need further emphasis on education that equip students with the ability to critically assess information and think on their own, rather than overly relying on the AI tools. It is also imperative to promote literacy in appropriately using generative AI while being aware of associated risks and limitations.