Recommendations for Teachers on the Use of Generative AI in Teaching at National Yang Ming Chiao Tung University

In response to the advancements in generative AI, National Yang Ming Chiao Tung University (referred to as NYCU) presents the following measures for teachers to utilize generative AI in teaching. These measures aim to enhance teaching effectiveness, encourage students to effectively utilize technology, and foster students' critical thinking abilities.

1. Clearly outline the learning objectives and homework assessment guidelines in the course syllabus

In addition to stating the learning objectives and methods for assessing homework, it is recommended that teachers explicitly address the use of generative AI in the syllabus. This information should clarify whether generative AI can be utilized as a supplementary learning tool or for completing homework assignments, including its impact on the evaluation of students' performance. Teachers may refer to the following examples for relevant statements:

(1) Generative AI tools may be used for homework and exams in this course, but the process of usage must be specified.

(2) Generative AI tools can be utilized for homework and exams in this course, but prior consent from the teacher must be obtained.

(3) Generative AI tools are not permitted for use in coursework and exams.

2. Design Learning Activities that Integrate Generative AI

If the teacher approves the use of generative AI for learning purposes, it is recommended that teachers first gain a thorough understanding of the nature and application of generative AI, as well as its advantages and disadvantages. They should then incorporate it into the course in a flexible manner. The aim is to guide students in utilizing generative AI correctly and develop their skills in logical reasoning, information literacy, and critical thinking. Here are examples of incorporating generative AI as a tool for learning activities:

(1) Encourage students to ask questions and explore topics using professional terminology.

(2) Compare and contrast the search results obtained from generative AI with those from traditional search engines like Google, focusing on specific topics.

(3) When using generative AI to complete assignments or validate student work, urge students to investigate and analyze the sources of AI-generated content, allowing for a critique of its quality and accuracy.

(4) Utilize generative AI for debugging or correcting grammar in completed assignments.

(5) Remind students to refrain from inputting sensitive personal information (e.g., national ID numbers, medical and financial data) into generative AI tools to safeguard their privacy.

3. Design Multiple Assessment Methods

In response to the advancements in generative AI technology, it is recommended that teachers employ a variety of assessment methods for grading homework. The following methods can be utilized (but are not limited to):

(1) Encourage students to demonstrate their learning in non-textual formats, such as through drawings, slide presentations, peer discussions, audio recordings, and more.

(2) Emphasize the mastery of foundational knowledge, enhance the depth of learning content, and propose different levels of homework assignments or in-class test questions. This allows teachers to assess students' learning progress and understanding while also preventing the improper use of generative AI to complete homework assignments at home, thus ensuring fairness in performance evaluation.

4. Establish students' academic ethics in the classroom to ensure that their assignments or theses conform to academic ethics

Teachers should guide students in submitting assignments and theses that meet the requirements of academic writing in terms of style, format, and integrity. It is essential to teach students about academic ethics, helping them understand the responsibility they should take in presenting their academic works. Furthermore, teachers should remind students that generative AI may lack the logical coherence and accuracy expected in scholarly discourse. Given that the technology does not currently provide clear indications of information sources, students should be cautious when using generative AI for academic writing. Relying solely on generative AI for such purposes may not comply with the principles of academic originality and could potentially infringe upon Copyright Act and the academic ethics–related standards.