

Suggestions for the use of artificial intelligence technology and tools in non-tertiary schools in Macao

1. Purpose

The MSAR government is committed to promoting the development of digital economy and construction of smart cities. High tech (including generative artificial intelligence tools) is developing rapidly, and its application is becoming more popular, especially in education; however, while high tech brings convenience and efficiency to teaching and research, it also brings many hidden concerns, such as the accuracy of artificial intelligence data, the security of personal privacy and confidential information, the fairness of artificially synthesized opinions, etc. As the use of generative artificial intelligence tools has recently attracted attention from all parties, and the users have different backgrounds, in this regard, non-tertiary education schools, as users of high tech, need to better regulate and manage the application of artificial intelligence technology.

To this end, the Education and Youth Development Bureau provides suggestions for non-tertiary schools when applying artificial intelligence technologies and tools in education, so that teachers, school staff and students of non-tertiary schools can correctly and reasonably use artificial intelligence technologies and tools to advance academic development and provide appropriate teaching aids.

2. Scope of application

Non-tertiary education schools in Macao.

3. Formulate school-based usage guidelines

- 3.1. As users of high tech, non-tertiary education schools can independently formulate school-based guidelines that obey the laws and ethics for the use of artificial intelligence technology and tools.
- 3.2. When formulating school-based guidelines, the school must fully consider its teaching and evaluation needs, and formulate appropriate principles, methods and norms for the application of high tech, and to ensure that the use of relevant

technologies by teachers, school staff and students complies with laws and regulations, as well as safety, responsible and ethical standards.

3.3. Non-tertiary education schools should remind teachers, school staff and students to consider ethics, academics, copyright, network security and other issues when using artificial intelligence technology and tools, and should maintain independent thinking and judgment when using high tech, carefully analyze the accuracy and applicability of the content provided by relevant technologies and tools to ensure the professionalism of teachers, school staff and students. In particular:

- ✓ Teachers, school staff and students must pay attention to network security and personal privacy when using “generative artificial intelligence tools”;
- ✓ When the opinions or suggestions generated by conversational artificial intelligence tools involve national security, life safety, criminal behavior, medical information, pornography, violence, etc., non-tertiary education schools should explain to students or rationally analyze and judge the generated opinions;
- ✓ Teachers, school staff and students adhere to academic integrity and avoid infringement or plagiarism. When a finished product involves the use of artificial intelligence tools, it should be carefully determined whether it is an original work or a secondary creation;
- ✓ Teachers, school staff and students must carefully read and refer to the copyright license terms of the artificial intelligence technology and tools;
- ✓ The copyright ownership of a work generated, created and virtualized by an artificial intelligence tool belongs to the artificial intelligence owner or the owner/company/investor of the artificial intelligence tool, and the creator (or the generation source) of the work is the artificial intelligence tool;
- ✓ Teachers, school staff and students should use artificial intelligence tools rationally and should avoid over reliance on such tools;
- ✓ Data generated by artificial intelligence tools can be used as the final results of coursework and research only when students follow the school-based usage guidelines, or with the explicit permission from teachers;
- ✓ Non-tertiary education schools must pay close attention to the physical and

mental health of teachers, school staff and students when they use related technologies and tools; if they encounter emotional or psychological doubts, they should seek help from school counselors and teachers instead of using dialogue artificial intelligence tools as counseling tools or channels for psychological counseling;

- ✓ Non-tertiary education schools must pay attention to the implementation of school-based usage guidelines and update and revise them in due course.