

Balancing: The Effects of AI Tools in Educational Context

Yihe Liang

Department of English Language and Literature, Hong Kong Shue Yan University, Hong Kong, 999077, China

*Corresponding Author: 222004@hkysu.edu.hk

Abstract

The use of AI tools in educational contexts, and particularly in higher education, has been associated with both positive and negative effects. While AI tools can help students with their writing, they can also lead to the loss of creativity and moral issues. To balance the effects of AI tools, this paper presents two solutions. One, universities should adjust their assessment methods to focus on developing students' creativity and critical thinking. Next, the universities should offer AI literacy programs to teach students how to use AI tools properly. By balancing the strengths and weaknesses of AI tools, the humanities can maintain their value in the face of evolving technology.

Keywords

AI Tools; Educational Context; Higher Education; Humanities; Creativity; AI Literacy.

1. Introduction

There has been a wavering attitude in academia and universities towards the question of whether AI tools should be banned in educational contexts. To address the issue, it is important to understand AI or, more directly, AI tools. "Artificial intelligence is the simulation of human intelligence processes by machines, especially computer systems. Specific applications of AI include expert systems, natural language processing, speech recognition, and machine vision" [1]. In the education context, especially in higher education, AI tools are often used to refer to AI programs such as QuillBot, Grammarly, DeepL, ChatGPT, and others that can be used as tools for writing. QuillBot and Grammarly are two kinds of AI programs that can help people modify grammar and sentence structure and even replace words to make texts more academic and perfect while also avoiding plagiarism. They help people who speak English as a second language better express their true meaning. DeepL is a neural machine translation tool that is closer to the meaning of the source text than Google Translate, helping people to better translate their texts. ChatGPT is a kind of chatbot that can produce human-like texts based on some large language models and can also compose texts based on the users' commands. It is clear that the benefits that AI tools provide are important, especially for some students who struggle with their essays. AI tools are highly valued by the educational industry because of their revolutionary effect on academic writing, particularly in the field of the humanities. In higher education institutions, the way in which students are examined in the teaching of the humanities is generally through essays. Due to the reasons mentioned above, it is believed that the impact of AI tools on scholars, and in this case, students, is two-sided, both positive and negative. Marche argues that essays have always been central to humanities pedagogy and that essays written through AI tools read like filler [2]. Thus, the use of AI tools in educational contexts means that "The College Essay Is Dead" [2]. The lack of conceptual understanding, literacy, empowerment, and ethical awareness of AI is also a significant problem [3]. With technology constantly evolving, the use of AI tools in educational contexts is unavoidable, and there is no possibility of banning AI tools for use in educational contexts. Consequently, it is important to find a way to enhance the positive effect of AI tools if the universities cannot ban

them. This essay will provide some potential solutions by analysing the benefits of AI tools in writing to help students modify their essays and provide creative ideas, as well as the problem of possible abuse or academic dishonesty by students.

2. The Concerns of Using AI Tools for Academic Writing

The effects of AI tools on higher education can be enhanced by changing the way in which students' abilities are examined by assessment tasks. Some scholars believe that using AI tools for essay writing is a form of academic plagiarism, as they believe that students who use AI tools, especially ChatGPT, to provide creative ideas are not inspired by their own thinking. Furthermore, the use of AI tools to help students with their essays can lead to a loss of creativity and an overreliance on AI tools. If students rely on the use of AI tools to complete their essays rather than independent thinking, they will certainly lose their creativity and become ineffective students.

2.1. Shifting the Focus of Assessment in the Humanities

By far, the subjects most affected by AI tools are the humanities, as AI tools are generally used by students in their essays. The traditional assessment tasks for these subjects are usually in paper form. While these concerns are valid, they are dependent on individual student choice. If students cannot use AI tools appropriately, then they will become the slaves of AI tools. How these worries are addressed depends on the true purpose of teaching in the humanities. The humanities are about creativity and the ability to think, so teaching should focus on developing students' creativity and teaching them how to think rather than judging their abilities through their essays alone. Rim emphasises that the humanities are not simply an education in what to think but in how to think [4]. Faced with the development of AI tools and the concerns about them, teachers of the humanities should change the way they evaluate students, rather than only associating the assessment task with the essays.

2.2. The Limitations of AI Tools in the Humanities

At the same time, AI tools are not as powerful as they could be in terms of their unique writing style and their ability to think deeply, and thus AI tools do not meet the demands of the Humanities Departments for their students. The most important thing is that in the field of the humanities, each student's creativity, and the way they think are influenced by their own life experiences in addition to those taught by their teachers. When both are combined, each student thinks in a different way, and the results will be different. As a kind of AI tool that is still developing and does not have the ability to think in depth and can only imitate human behaviours, they cannot provide people with a truly excellent essay. In areas of the humanities, some of which are considered to be on the eve of extinction due to the development of AI, the way teachers assess students' skills requires some changes to better help students keep their creativity alive and learn how to think more effectively. By making suitable adaptations, the humanities can be better prepared to maintain their energy.

3. The Risk of Using AI Tools

With the wider use of AI tools in educational contexts, it is essential to make students use AI tools correctly. The lack of conceptual understanding, literacy, empowerment, and ethical awareness of AI tools when used by students has been noted. This indicates that AI tools may be used improperly in areas of education, which could lead to some serious consequences.

3.1. The Consequences of Neglecting the risk of AI tools in Higher Education

Until now, programs to develop AI literacy have not been widely used in university education and are still being tested. It is lacking in foresight for higher educational institutions not to

provide timely literacy courses on AI for their users, especially students. In the absence of the power of universities to ban the use of AI tools, it becomes particularly important to regulate how they are used. Although, it is understandable that people do not take AI literacy seriously as it has not been in the public eye for a long time. Based on the speed of AI development, a lack of AI literacy is bound to have serious consequences. These consequences generally refer to the understanding of AI, its ethics, and the related issues of empowerment. Students' personal values, moral and ethical awareness, and so on, will be present in their essays in the humanities.

3.2. The Need for Relevant Education in Universities

When using AI tools, the AI may make suggestions that are contrary to social ethics or even the law, which can be dangerous, especially if students lack AI literacy. Moreover, as AI is constantly learning by imitating humans, it learns both good and bad things, requiring the recipient to learn to critically evaluate the results. In addition to that, some of the advice given by AI can sometimes be sexist and racist. All these mean that students using AI have to take a proper perspective on the answers provided by AI tools. Kong et al. believe that AI literacy programs will help to enhance students' conceptual understanding, literacy, empowerment, and ethical awareness [3]. This means that university courses could teach students how to use AI tools properly, which is a good way of responding to the concerns of scholars about AI, so that students can use it more appropriately and with as little potential impact as possible.

4. AI Literacy in Educational Context

It is particularly important for scholars to consider the question of how to balance the impacts of AI tools. With fears of the future of the education industry, especially the field of humanities, higher education institutions should adjust the methods they use to test students in order to avoid the loss of creativity and the ability to think that can result from students relying on AI tools to test their work. The biggest problem is that students are being judged by their essays in the humanities, and a change should start with essays.

4.1. The Importance of AI Literacy

As a matter of fact, there are already relevant initiatives in place to test whether essays are completed independently by students. For example, students can give an oral presentation on the essay or conduct a class discussion to confirm that the ideas in the essay are their own. Even though AI is developing rapidly, this does not mean that the subjects like the humanities are going to disappear. There are still many weaknesses in AI that make it impossible to replace humans. Ultimately, AI tools will always be tools to assist people, not replace them. In fact, for the humanities, their status in the world cannot be replaced, even as technology develops faster and faster. The reason is that the subject of humanities deals with complex issues such as human ethics and morality, and AI needs scholars in the field to address the relevant issues. The knowledge of the humanities can help people establish a suitable set of AI L literacy and use it as a gateway for students to use AI tools.

4.2. AI Literacy Programs in the Universities

The students will unavoidably face many ethical and moral issues when using AI tools, as well as biases in the models behind AI tools such as sexism and racism. In such situations, students should learn AI literacy through relevant programs so that they can use AI tools with proper judgement. Universities should also be forward-thinking and offer courses on AI literacy to systematically teach students how to use AI tools properly when faced with progress in AI technology. While universities cannot forbid AI tools, they shouldn't allow students to abuse them, empower them in ways they shouldn't and use them to do things that are unethical and

unlawful. This is why universities have an urgent duty to take action, and adding AI literacy programs to the university courses is one of the effective solutions.

5. Conclusion

It is impossible to stop the potential academic risks of AI tools with a simple ban on the widespread use of AI tools by students to assist them with their essays. Universities should take AI tools seriously but do not need to ban them directly in the face of their evolutions. The concern for the humanities is understandable, as the imbalance between the potential value and potential risks of AI tools is likely to lead to serious consequences. This essay explores, therefore, two main measures to balance the advantages and disadvantages of AI tools in the field of the humanities without banning their use. On the one hand, it is necessary to change the current methods of testing students' academic results, which are becoming out of date, by restating the hearts of the subjects' teaching. This essay focuses on the core of the humanities, thus showing that the way in which students are examined on the basis of essays alone needs to be modified. On the other hand, universities should develop courses on AI literacy so that students can use AI tools in a more correct and sensible way. It is a duty of higher education institutions to offer relevant courses to reduce the effects from the AI tools, if they cannot ban the AI tools. The development of the humanities and technology cannot be separated from each other, and therefore the future of the humanities will not lose its value with the evolving future of AI. As AI continues to make progress in the future, the humanities and other subjects should also take some relevant actions to enhance the benefits and reduce harms brought by AI.

References

- [1] Information on: <https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence>.
- [2] S. Marche: The college essay is dead: Nobody is prepared for how AI will transform academia. *The Atlantic* (2022).
- [3] S.-C. Kong, W. M.-Y. Cheung and G. Zhang: Evaluating an Artificial Intelligence Literacy Programme for Developing University Students' Conceptual Understanding, Literacy, Empowerment and Ethical Awareness. *Educational Technology & Society*, Vol. 26 (2023) No.1, p16-30.
- [4] Information on: <https://www.forbes.com/sites/christopherrim/2022/12/08/the-college-essay-is-still-very-much-alive>.