A Policy on the Use of Artificial Intelligence in Publication

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Recently, journal editors (and academics generally) have become aware of a breakout headache, or perhaps a breakout boon they need to confront: Artificial intelligence, AI—specifically Chat GPT. This technology first appeared on November 30, 2022—about a year ago—and is already a major concern and attractant for academics and higher ed students. University faculty (and I suspect high school as well) are alarmed particularly by this new tool's implications for student plagiarism, but there is even more than that to be concerned about, as we will discuss. Academics and publishers have similar concerns about publications. I and the other editors of *Culture, Education, and Future* (*CEF*) are troubled by the potential unintended consequences that Chat GPT will have on the quality and depth of research in our field.

Chat GPT is a generative AI algorithm or a program that can create something new, such as art, music, or written documents. Chat GPT generates the latter, of course. Thus far, most of the literature about Chat GPT is aimed at student cheating. Fortunately, the problems of using AI with students are similar to those related to faculty who may use it; thus, the student material is helpful.

Chat GPT is easy to use—one merely submits a carefully conceived request, and it produces a well-structured and academically sounding paper, one that can appear publication-ready. And herein lies the first of the issues. The product of this AI tool reads like a scholar has written it, making it difficult to detect. Careful scrutiny may detect the fake—there are errors and writing that are atypical of an author--for example. "May" is the keyword, however. False positives and negatives are common, even with software detectors (McMurtrie & Supiano, 2023).

AI will not likely be helpful for writing the design, findings, or conclusions section for papers, but scholars will quickly realize its potential for structuring and writing an introduction and literature review and for finding references. Such applications could reduce the drudgery of extensive literature reviews and reviewing related references. But our immediate reaction is that using generative GPT used for such purposes is like having someone else produce papers for the author. It's plagiarism, and as Hicks (2023) said in the title of her article on this subject, "Chat GPT cannot be your research assistant."

AI-generated scripts are not produced by humans; more particularly, they are not written by the claimant to authorship. Plagiarism is an explicit claim of authorship for something one did not write. The person who summons text from generative AI only conjures that script rather than writes it. So. is using material from Chat GPT plagiarism? Of course, it is.

It is plagiarism in yet another way. AI programs scan potentially millions of information sources for material related to the prompts given it. It compiles this information into ordered, human-sounding text (Hicks, 2023). In the process, it may use direct quotes without attribution (Covington, 2023). And it frequently makes mistakes. Again, this is plagiarism; rather, it is plagiarism of a text that is itself plagiarized or misrepresented.

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Typically, one avoids plagiarism by recognizing work done by others. Two possible ways of accomplishing this for AI input have been proposed in the literature (Martínez-Ezquerro, 2023). The first is to include the AI program as a co-author to the paper. Critics argue, however, that co-authors are scholars who make substantial contributions to four writing processes: conception, design, execution, or interpretation of the study (Martínez-Ezquerro, 2023). The *Publication Manual of the American Psychological Association* (APA) similarly states that co-authors make "Substantial professional contributions [that] may include formulating the problem or hypothesis, structuring the experimental study design, organizing and conducting the analysis, or interpreting the results and findings" (p. 24). Obviously, generative AI does none of these. Its contribution might be significantly useful, but computers and computer programs are not able to conceptualize and understand (Shen et al., 2023). It is, at its root, a mechanical processor of information and cannot qualify as a co-author.

Secondly, some have proposed that generative AI programs, when used, be recognized in a disclaimer section along with their specific contributions (e.g., developing the literature review (Martínez-Ezquerro, 2023). This addresses plagiarism and authorship dilemmas but fails to address another issue, that of endemic and collateral human error.

We turn to this now. As stated earlier, the operational strategy of generative AI programs functions by compiling and collating information, and this is problematic in ways other than breeding plagiarism. These programs fill gaps in information with "educated" guesses, which often leads to factual errors (Covington, 2023; Hicks, 2023; Shen et al., 2023). In fact, Chat GPT warns about such errors on its introductory page. Similarly, Chat GPT sometimes creates bibliographical entries by fabricating them from existent material (Hicks, 2023).

Such errors are problematic at their face value, but they are also problematic in more subtle ways. As a reviewer myself, I have noticed that scholars aren't always careful to check the pertinence or even the factuality of their references. Dependence on AI may further exacerbate this academic laziness. In particular, we are concerned that dependence on generative AI can foster failure to develop the in-depth expertise needed to write creatively and with insight about a topic, depending instead on the "expertise" of AI (Hicks, 2023). When authors do not demonstrate deep knowledge of their subject matter and are not familiar with the content of references, they will fail to see flaws in the logic of their arguments, will be unlikely to see possible creative directions their topics could take, and certainly would fail to identify errors or non-existent references in AI produced manuscripts.

Weak knowledge of a subject matter is generally evident in a manuscript and easily picked up by informed reviewers, but AI-generated manuscripts are written authoritatively and may deceive reviewers into thinking the citations are conclusive. If journal editors and reviewers, then they will be burdened with more carefully scrutinizing references and conclusions. If they fail to catch or neutralize such problems, then well-written but inferior scholarship could seep into mainstream thinking.

Were these issues not problem enough, Chat GPT currently does not access academic material more recent than 2021 (Hicks, 2023). Without independent expertise from the author, important references would be overlooked.

Due to these issues, it is the policy of the editors of *Culture, Education, and the Future* to reject any paper substantively aided by generative AI software. Further, if any manuscript gets past us and we discover the mistake later, it may be rescinded. We are using detection software that tags manuscripts suspected of using AI in substantive ways, but since such software is prone to error, we will consult with authors prior to rejecting or rescinding any paper.

We hope that authors interested in publishing in *CEF* will share our concerns, which we feel are threatening to the credibility and substantiveness of academic research. AI technology is likely the future of writing and scholarship; however, we will seek ways that generative AI can be integrated into academic research. New versions of generative AI programs are under development (Chat 4.0, for example, was recently

released). Further, there is considerable thought being devoted to how the technology might be applied in the education of students and in publications, and these ideas could very well inform researchers in their quest to produce excellent, informed research. We will track these developments, and we welcome papers from academics that inform our efforts.

We will also modify our policy on generative AI as more is learned about the issues associated with generative AI and as technology advances. We will not, however, compromise our commitment to rejecting plagiarism, to research quality, and to human control of the content of scholarly work.

Declarations

Publisher's Note: This paper was reviewed and approved by the other editors, Mehmet Akif Erdener, Sümer Aktan, and Ünal Deniz, as it addressed the publication policies of the CEF journal.

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