



Editorial

A New Weave in the Pattern

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Abstract: Editor-in-Chief Andres Marrugo discusses the role of Large Language Models, like ChatGPT, in academic publishing, highlighting some practical applications, potential pitfalls, and the ethical considerations required for their responsible use in academia.

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The wheel of innovation turns, and paradigms come and pass, leaving disruptive technologies that gradually become commonplace. Among these, Large Language Models (LLMs), epitomized by tools like ChatGPT, have rapidly emerged in the academic publishing landscape. Their sudden appearance has evoked a range of responses, from unease to intrigue, but it seems clear they are here to stay [1].

The challenges of writing, proofreading, and reviewing papers are familiar to every academic. Any tool that can ease these burdens, such as ChatGPT, is undoubtedly welcomed. However, their use raises pertinent questions – How much should we rely on these tools? Should journals encourage or ban them? Can they be trusted? [2].

The academic community offers varied responses to these questions. Some praise the benefits of LLMs, while others caution against potential pitfalls, such as data hallucination or false references [3]. The fact remains that many academics are embracing these tools despite their limitations, underlining their utility.

In TESEA, our policies on the use of artificial intelligence and similar tools have been updated [4] in line with guidelines from the Committee on Publication Ethics (COPE) [5]. The key principle? Artificial intelligence tools can assist but cannot claim authorship. The responsibility for the paper's content rests firmly with the authors.

Navigating the use of LLMs relies not on blanket prohibitions but on an understanding of their capabilities and limitations. Whether you choose to employ these tools depends on your readiness to own the final output.

One of the particularly remarkable uses of LLMs is as an intuitive drafting system. Starting a manuscript from scratch can be daunting, but prompting an LLM to provide a scaffold can help streamline the process. For instance, you can input a series of bullet points into ChatGPT, and it can generate a well-structured abstract or even an entire section that you can later edit and modify to suit your needs.

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Another practical application of LLMs in academia lies in their potential for facilitating systematic literature reviews. Given the rapid pace of research publication, staying updated with the latest studies in a specific field can be challenging. With LLMs, academics can generate a summary of the latest papers in a particular research area by simply inputting the abstracts or key findings of these papers. This not only assists in managing the high volume of information but also helps to identify patterns and trends, and foster interdisciplinary connections that may have otherwise gone unnoticed. Through this approach, LLMs can revolutionize the literature review process, saving valuable time and enhancing research understanding.

However, while the benefits of LLMs are significant, it's crucial to emphasize that these tools should be seen as aids to the traditional academic processes, not replacements. The human touch in crafting a research narrative, analyzing data, and drawing nuanced conclusions cannot be fully replicated by AI models. Likewise, in tasks like literature reviews, LLMs can offer summaries and identify trends, but they cannot yet appreciate the subtleties and context in the same way a researcher can. It's therefore essential that these tools are used responsibly, and that we remain cognizant of their limitations as well as their strengths. The power of LLMs lies in their ability to support and augment human intellect, not to supplant it.

As we look towards the future, LLMs promise to continue influencing the academic publishing landscape. Further advancements may yield even more sophisticated tools, but the principles should remain the same. Technology can assist, but the onus is on us, the authors, to deliver accurate, insightful, and ethical research.

Andres G. Marrugo Editor. *TESEA*

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