



ARTIFICIAL INTELLIGENCE (AI): SOLUTION OR NEW PROBLEMS?

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Human history is characterized by a constant encounter with new inventions and evolving circumstances. Fundamental transformations of the early ages included the shift from cave drawings to the first written tablets, the domestication of animals, and the transition to agricultural and settled societies. Similarly, innovations impacting education and instruction have ranged from the move from oral to written culture, the adoption of blackboards, and the faster production of written materials following the invention of the printing press, to the transformative effects of television and computers. While all these inventions have introduced innovations, they have concurrently presented new problems. Nevertheless, certain technological advancements have streamlined operations within the educational and scientific communities.

For instance, the migration of articles and theses from physical documents to electronic formats, coupled with the development of plagiarism detection software, has made it straightforward to identify instances of academic dishonesty. This development has substantially eased the workload for editors, universities, and researchers. In contrast, detecting any instance of plagiarism was a protracted process during periods when sources were not digitally available. Just as the issue of plagiarism appeared to be managed in this context, the rapid development of Artificial Intelligence (AI) emerged, introducing new complexities.

AI in Academic Research: Efficiency vs. Integrity

AI has undeniably simplified the work of researchers, particularly those publishing articles in non-native languages, by offering significant support in minimizing linguistic and grammatical errors. However, this assistance can inadvertently result in a mechanical language within manuscripts, especially for researchers who lack sufficient command of the required academic jargon in their respective fields.

Alarming, some researchers have progressed beyond using AI solely for language refinement, opting for the path of least resistance by employing these tools to directly generate and publish their work. This practice has generated two distinct challenges for academic journal editors and universities: the urgent need for new AI detection tools to identify AI-generated content and complex ethical issues. The debate over whether or not AI should be recognized as a co-author remains unresolved. A critical side effect of AI-produced articles is the presence of irrelevant references and highly formulaic sentence structures—issues that are often overlooked by researchers who do not possess deep mastery of the subject area and its associated language.

AI in Education: Skills and Reliability Concerns

While academic journals grapple with these issues, 21st-Century education and instruction faces its own set of problems alongside technological convenience. Examples include screen addiction and the reliance of students on AI to complete assignments and projects. Although students using AI may appear to gain an advantage, particularly when instructors lack technological competence and literacy, AI is progressively impacting several of their fundamental skills. It negatively influences essential abilities such as critical

thinking, coherent writing, logical reasoning, and problem-solving. Furthermore, the veracity of information currently generated by AI constitutes a separate and significant concern. For example, when asked about a country that has never had a woman president, AI may still produce an incorrect or nonsensical response, such as “the country’s prime minister answers as the President.”

Reliability constitutes another major challenge. If a student denies the use of AI when questioned about the authorship of an assignment, serious academic integrity issues arise. While a technologically proficient instructor can utilize detection tools to uncover the situation, the outcome is quite different for educators who are less familiar with technology.

It is evident that AI has already begun to significantly influence the lives of educators, journal editors, and publishers, and its future impact is guaranteed to be greater. To prevent the introduction of new problems into the field, there is a clear need for competent editors and educators who can effectively control the accuracy and validity of information. For example, when a study on the pedagogical content knowledge of a science teacher is submitted, the subject editor’s deep familiarity with the relevant literature during the initial review process will enable them to readily identify a potentially AI-generated submission.

Finally, numerous studies on the use of AI in education have been published (Samara, & Kotsis, 2024; Usak, 2024; Yıldızhan Bora, & Şahin Kölemen, 2025; Xiaofan, & Annamalai, 2025; Karampelas, 2025; Nikolopoulou, 2025; Andić, 2025; Uyar, 2025), some are forthcoming, and many more are currently under review. Rather than replicating existing work, it would be more beneficial for researchers to focus on studies that introduce novelty to the field and offer solutions to existing problems. The answer to the question posed in the title will ultimately be provided by researchers, readers, and stakeholders.

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