Correspondence

No worries with ChatGPT: building bridges between artificial intelligence and education with critical thinking soft skills

ABSTRACT

This correspondence discusses the role of artificial intelligence (AI) like ChatGPT in education and research, focusing on developing critical thinking skills and maintaining academic integrity. AI can complement learning and research processes when used ethically and responsibly. Integrating specific teaching methods in education and research can help develop better critical thinking skills and a deeper understanding of the contexts in which AI is used. The article emphasizes the importance of developing critical thinking skills among students and researchers to effectively use AI and distinguish accurate information from hoaxes and misinformation. In conclusion, the collaboration between AI and humans in learning and research will yield significant benefits for individuals and society as long as critical thinking skills and academic integrity remain top priorities.

Keywords academic integrity, artificial intelligence, ChatGPT, collaboration, critical thinking skills, digital literacy, education, ethical use, misinformation, research

Dear editor,
Incredibly, ChatGPT is included in the Scopus Author Identifier. One of the articles detected in Scopus discusses the role of artificial intelligence (AI) in nursing education and its implications for academic integrity.[1] The article highlights the importance of using AI ethically and responsibly to support, not replace, student learning.

In our opinion, ChatGPT's recognition in the Scopus Author Identifier can be considered as a form of respect for Intellectual Property Rights (IPR) and marks a shift in the research paradigm in which AI is increasingly playing a role in the scientific process. However, it is essential to remember that AI, like ChatGPT, is a tool designed to support human researchers, not replace them. AI users must ensure compliance with IPR rules and research ethics, including giving proper credit to sources used by AI and maintaining academic integrity.

The main focus right now is how we can collaborate with AI like ChatGPT to enhance learning and research while developing critical thinking skills. By ethically integrating AI, teaching digital and AI literacy, and promoting collaboration between AI and humans, we can create an environment where AI becomes a complementary partner in learning and research

processes.[2,3] For example, stress the importance of writing assignments in promoting critical thinking, learning and professional identity in public health,[4] which is also relevant to AI education. Developing critical thinking skills will enable individuals to make better decisions based on accurate and reliable information and work effectively with AI in various fields.

Indeed, ChatGPT and similar AI tools can make learning more accessible by providing information, answering questions or assisting in writing and research. However, it is essential for users, especially students and researchers, to maintain critical thinking while using this technology. Critical thinking involves analyzing, evaluating and creating arguments or information with sound logic and evidence. Students with critical thinking skills are better at identifying fake news and unreliable information.[5] Improving critical thinking skills can help individuals to be more skeptical and thorough in examining the claims, sources and evidence provided in the information they receive. Education focusing on developing critical thinking skills and media literacy can help society more effectively recognize and counteract hoaxes and misinformation.[6]

Through this correspondence, we have highlighted the importance of integrating AI, like ChatGPT, in education

and research ethically and responsibly. In addition, we stress the importance of developing critical thinking skills among students and researchers in order for them to use AI effectively and distinguish accurate information from hoaxes and misinformation.[2,6] Integration of methods such as those proposed by August and Trostle[4] in the context of AI and education can facilitate the development of better critical thinking skills and an in-depth understanding of the contexts in which AI is used.

In conclusion, we believe that collaboration between AI and humans in learning and research will significantly benefit individuals and society, providing critical thinking skills and academic integrity remain top priorities.[3] By wisely and ethically leveraging AI technologies such as ChatGPT, we can build bridges between AI and education, enabling students, researchers and educators to meet the challenges of this ever-evolving digital age.

Funding

Conflict of interest

None declared.

References

1. O'Connor S. ChatGPT. Open artificial intelligence platforms in nursing education: tools for academic progress or abuse? *Nurse Educ Pract* 2023;**66**:1–2 https://doi.org/10.1016/j.nepr.2022.103537.

2. Facione PA. Critical thinking: a statement of expert consensus for purposes of educational assessment and instruction. Research findings and recommendations. *Fullerton*. https://eric.ed.gov/?id=ED315423 (1990, 30 March 2023, date last accessed).

3. Kirschner PA, Sweller J, Clark RE. Why minimal guidance during instruction does not work: an analysis of the failure of constructivist, discovery, problem-based, experiential, and inquiry-based teaching. *Educ Psychol* 2010;**41**:75–86. https://doi.org/101207/s15326985ep4102_1.

4. August E, Trostle JA. Using writing assignments to promote critical thinking, learning and professional identity: the epidemiology workplace writing repository. *J Public Health* 2018;**40**:e419–22.

5. McGrew S, Breakstone J, Ortega T *et al.* Can students evaluate online sources? Learning from assessments of civic online reasoning. *Theory Res Soc Edu* 2018;**46**:165–93. https://doi.org/101080/0093310420171416320.

6. Southwell BG, Niederdeppe J, Cappella JN *et al.* Misinformation as a misunderstood challenge to public health. *Am J Prev Med* 2019;**57**:282–5.

M. Arli Rusandi[1], Ahman[2], Ipah Saripah[2], Deasy Yunika Khairun[3], Mutmainnah[4]

[1]Department of Guidance and Counseling, Universitas Riau, Pekanbaru, Indonesia
[2]Faculty of Educational Science, Universitas Pendidikan Indonesia, Bandung, Indonesia
[3]Department of Guidance and Counseling, Universitas Sultan Ageng Tirtayasa, Serang, Indonesia
[4]Department of Guidance and Counseling, Universitas Muhammadiyah Enrekang, Enrekang, Indonesia

Address correspondence to M. A. Rusandi,
E-mail: arli.rusandi@lecturer.unri.ac.id