

Review of: "Beyond Traditional Teaching: The Potential of Large Language Models and Chatbots in Graduate Engineering Education"

Todorka Glushkova¹

¹ University of Plovdiv

Potential competing interests: No potential competing interests to declare.

The research aims to explore various aspects of the application of an LLM based chatbot in a fluid mechanics course. The authors also developed a question bank from the course material and evaluated the chatbot's abilities to provide accurate and complete answers.

The study also explores the transformative effect of smart prompting to improve chatbot performance. Addressed issue with effective hinting and third-party enhancements such as the Wolfram plugin.

The authors comment on the risk that chatbots may inadvertently reinforce a transactional approach to learning by prioritizing test-correct answers over critical thinking, creativity and problem-solving skills. The various benefits and potential pitfalls of implementing chatbots in educational environments are also discussed. All this requires dynamic adaptation of training programs for instructors. Given the experience gained, do the authors plan to train teachers and facilitators?