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

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The authors provided a good background of chatbots and introduced LLM or large language models as applications to fluid mechanics. It is impressive that the intended course is fluid mechanics, an engineering course, and LLM is somewhat more of an NLP. The topic is multidisciplinary in nature, infusing natural language and sciences. The initiatives of the researchers to assess, experiment, and test the bot's ability are essential before adoption in education. The study focuses on the Wolfram chatbot plugin, which can help students in graduate study solve complex problems. The bot was tested from 75 question banks, compared chat responses, displayed visual output, created plots, and coded. Output generated by Chatgpt with Wolfram produces a high-level reaction similar to the program's production with another platform. This saves time in programming as it instantly provides the desired output visually.

Moreover, the researchers had differentiated different prompt approach-I/O, COT and TOT and its percentage of correct answers. The study recommended how faculty can prepare test questions based on the bot's limitations and efficiency. This study is an eye-opener to all professors on how bots can be adapted effectively to teaching strategies.