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

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Potential competing interests: No potential competing interests to declare.

The manuscript is timely and detailed one on the use of large language models and chatbots in Geraduate Engineering Education.

A detailed discussion on the disruptions in Education systems has been reported. The basic concepts of machine learning, deep learning, attention / transfer models have been discussed. These are necessary for the educators to know in order to get the best out of the LLMs and Chatbots. The LLM-based chatbot has been used in a graduate Engineering course on Fluid Mechanics. Instructors should not be passive consumers of the technology.

Three principal methods stand out: the Input-Output (I/O) method, the Chain of Thought (CoT), and the Tree of Thoughts (ToT) prompts [181]. - the prompt technology has been well explained with examples from fluid mechanics. In addition to the teaching pedagogy, the course evaluation in the LLM scenario has also been carried out.

The ethical dimensions of deploying LLMs emphasizing equity, transpacrency and data privacy have also been discussed. Challenges and caveats for large language models, like Hallucination, Outdated knowledge, Harmful content, Privacy, Overreliance and their integration into Educaton have been discussed.

The following points needs to be noted:

1. LLM is the abbreviation for Large Language Model. In some places (Secton 7) Language Learning Models have also been abbreviated as LLM.
2. All the paragraphs are to be in justified format.
3. The figure and the table captions are long, sometimes a parapgraph. Such longer descriptions can be included in the text part where the figure or the table has been refered.

2.3 The Stochastic Nature of LLMs: The Concept of Temperature

On the other hand, excessively high temperatures may result in incoherent responses unrelated to the original query. - delete On the other hand,

3.1 History and Evolution of Chatbots and Conversational AIs

Despite many obstacles in the development and implementation procedure, such as sentinent behavior, LaMDA, and PaLM are utilized to develop Bard chatbot [142, 143]. - check the spelling sentinent.

The manuscript is worthy of acceptance after the issued minor suggestions have been taken care of.