

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

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After reading the paper "Beyond Traditional Teaching: The Potential of Large Language Models and Chatbots in Graduate Engineering Education" by Mahyar Abedi, Ibrahim Alshybani, MRB Shahadat, and Michael Murillo, I could point the following:

- **Introduction:** The introduction provides a good overview of the history of technological disruptions in education and the potential of LLMs and chatbots to be the next wave of disruption. The authors do a good job of citing relevant literature and providing clear explanations of complex concepts.
- **The Building Blocks of Educational Chatbots: An Introduction to Large Language Models:** This section provides a detailed overview of LLMs, including their history, architecture, and training procedures. The authors do a good job of explaining the technical aspects of LLMs in a way that is accessible to a non-technical audience.
- **Applications of Large Language Models in Education:** This section discusses the potential applications of LLMs in education, such as answering questions, providing feedback, and generating content. The authors provide specific examples of how LLMs have been used in these applications, and they discuss the benefits and challenges of using LLMs in education.
- **Ethical Considerations of Using Large Language Models in Education:** This section discusses the ethical implications of using LLMs in education, such as the potential for bias and plagiarism. The authors argue that it is important to be aware of these implications and to take steps to mitigate them.
- **Conclusion:** The conclusion summarizes the main points of the paper and discusses the future of LLMs in education. The authors argue that LLMs have the potential to revolutionize education, but they also acknowledge that there are challenges that need to be addressed before LLMs can be widely adopted.

Overall, this is a well-written and informative paper that provides a good overview of the potential of LLMs and chatbots in education. The authors do a good job of balancing technical details with practical applications, and they raise important ethical considerations. I would recommend this paper to anyone interested in learning more about the future of education.

Here are some specific points that could be improved:

- The introduction could be more concise. The first few paragraphs provide a lot of detail about the history of technological disruptions in education, but this information is not essential to understanding the rest of the paper.

- The section on the applications of LLMs in education could be more specific. The authors provide some general examples of how LLMs have been used, but they could provide more detail about how LLMs could be used in specific courses or disciplines.
- The section on the ethical considerations of using LLMs in education could be expanded. The authors do a good job of raising important ethical issues, but they could provide more detail about how these issues could be addressed.
- There is a need of more clear suggestions on how to use this in a broad environment. A missing key actor is the founder of Khan Academy. It is quite mandatory to review:

Overall, this is a good paper that makes a significant contribution to the field of education. I would recommend it to anyone interested in learning more about the potential of LLMs and chatbots in education.