Artificial Intelligence in College Education: Students' Perceptions

Student Researchers

Luis Fernando Rivera Gómez
luisf5377@gmail.com

Andres Yassir Leones Kligman
aleones2@cuc.edu.co

Advisor
Martonia Gaskill Ph.D.

Introduction

- AI stands for Artificial Intelligence, which is a branch of computer science that focuses on developing machines and computer programs that can perform tasks that usually require human intelligence.

- AI systems use a combination of techniques from different fields, such as machine learning, natural language processing, computer vision, and robotics, to mimic human intelligence and behavior.

- AI technology has numerous applications in various fields, including healthcare, finance, transportation, manufacturing, and entertainment, among others.

- Artificial Intelligence (AI) has been making remarkable strides in recent years, but it was its application in education that have garnered significant attention;

Literature Review

- Artificial intelligence is the science and engineering of making intelligent machines, especially intelligent computer programs (McCarthy, 2007).

- AI technologies such as ChatGPT has brought new opportunities to traditional teaching methods, such as the creation of highly personalized contents and services for students (Zhai, 2023).

- AI technologies can be unethically utilized by leading plagiarism and academic misconduct (Sok et al., 2023).

Literature Review

- Haleem (2022) mentions that ChatGPT can be used as a tool to help students with their studies by creating relevant content and sources on a specific subject or using it as a writing assistant by offering suggestions for their writing process.

- Rudolph et at., (2023) suggests the use of physical materials, surveillance software for online exams, critical thinking activities, etc. to avoid the unethical uses of ChatGPT.

- The recent release of ChatGPT, a flexible and accessible form of artificial intelligence, raises a multitude of questions for those of us interested in interactive learning environments (Rospigliosi, 2023).

Purpose of the Study

The purpose of this study is to investigate the perceived benefits and drawbacks of AI, such as ChatGPT, in education, as well as to identify barriers to AI adoption in learning from college students' point of view.

Research Questions

Main Research Question

What are college students' perceptions of Artificial Intelligence and its uses as a learning tool in college?

Additional Questions

1. How familiar are college students with Artificial Intelligence, such as ChatGPT?
2. What are the perceived opportunities of using AI such as ChatGPT as a tool in college level classes?
3. What are the perceived challenges of using AI, such as ChatGPT, as a tool in college level classes?
4. Are college students' concerned about the rapid advancement of AI?

Methodology

Participants

- Participants in this study will be undergraduate students from two Latin American universities located in Mexico (N=800) and Colombia (N=500).

- Participants are from different majors including engineering, philosophy and letters, electronics, etc.

- An online survey will be sent to students by their courses instructors

Methodology

Procedures

- College students will be invited to participate in an online survey by their instructors during class either at the beginning or at the end of class time.

- The survey will take about 15 minutes to complete

- The consent form is the first question in the survey where students will either **agree** or **decline** to participate.

Data Collection

- Data will be collected via an Online Survey
  Link: https://unk.co1.qualtrics.com/jfe/form/SV_aeLbMo3wLtImAaq

- 17 likert scale questions

- 7 open-ended questions

- 15 minutes to complete

- Anonymous and voluntary

Why Is This Important

- The results of this study may inform educational institutions and policy-makers on the general impact of AI technology in education to help the facilitation of evidence-based decision-making.

- Students' voice are vital when trying to understand educational ecosystems. This study will provide knowledge based on students' perspectives, which is important to consider when looking at the impact of AI in college level education.

Conclusion

- The purpose of this research is to investigate the potential implications of using chat GPT and other AI models in teaching and learning. The protocol outlined the methods that would be used to conduct the study, including the recruitment of participants, the development of a survey, and the analysis of the survey data.

- Although the study has not been conducted yet, the protocol provides a clear and concise overview of the research topic. The protocol also discusses the potential implications and student´s views of using chat GPT and other AI models in learning scenarios.

Next Steps

- Secure IRB
- Send out the survey to students
- Analyze survey data
- Write results including summary charts and statistical data
- Present the results at conferences
- Write a manuscript for publication

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Questions?