Role of AI in Education
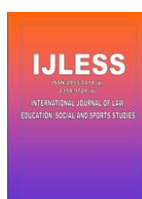
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ABSTRACT

The incorporation of AI powered tools such as ChatGPT, Meta AI and Gemini AI play an important role in transforming educational sector. This article explores the usage, reliance on AI tools and their impact on the students of PUC, graduation and post graduation of Udupi district. Though AI has its impact on almost every sectors such as health care, finance etc, its role is particularly significant in the education field as it enhances the learning experience of students despite of its limitations. The study that I made through sample survey says that 95% of the respondents rely upon AI powered tools to get quick and accurate responses with better vocabulary. This led to the decline of students' interest and patience in searching information in books and journals. Also, usage of AI powered tools hinders the cognitive development of the students. Despite these challenges, AI tools have the potential to create an efficient and inclusive educational system if they are used, balanced and managed in a proper way.

Key Words: AI in education, AI powered tools, creativity, screen time, cognitive development.

Role of AI powered tools in the field of education

Though AI was introduced to the world just to automate tasks and to make data- driven decisions, today it has become the integral part of everyone's life by making every task easier and convenient. Now it has successfully spread out its wings across every fields and made people to rely upon it. This article focuses on usage and importance of AI and its tools such as ChatGPT, Meta AI, Gemini AI in the field of education and the reliance of students of PUC, Under Graduation and Post Graduation from different colleges of Udupi district, upon these AI tools.

It is well known that AI has undoubtedly made its mark across various sectors such as healthcare, finance, manufacturing, E- Commerce, entertainment and media, security and defense etc. It is said that AI is fuelling the growth of the world. PwC's Global artificial Intelligence Study predicts that by 2030, AI will lead to an estimated $15.7 trillion or 26 per cent increase in global GDP. Another report by TeamLease Digital predicts that AI could add around $450-500 billion to India's GDP by 2025, and $967 billion by 2035. Thus it is considered an economic booster. On the other hand, overuse and

overdependence on anything is harmful. "Mark my words, AI is far more dangerous than the nukes" said Elon Musk. Thus the reliance upon AI in every field should be regulated and controlled.

Advancement of technology resulted in the frequent access to the internet, AI, etc, which bring quick and reasonable responses that make students to think that they can rely on technology for instant solutions, potentially reducing the need for critical thinking and independent skills of problem solving. Students can access these via usage of phone without which the modern life is considered difficult. When the survey was conducted, I found that, out of 85 respondents, 5% of them use mobile phones for less than half an hour while 80% of the students use phones for 1-3 hours. They have answered that they spend their time on phone by making calls and messages, watching trending videos on social media, and getting information about the syllabus through AI.

Awareness and access-

Awareness and access to AI tools among students have grown significantly due to the widespread internet availability. More than 95% of the students have the idea about AI and its tools and they use them frequently, i.e. 3-5 times a week. Majority of them take the assistance of ChatGPT to gather various ideas for framing answers for the questions, for writing assignments, and for exploring information related to their syllabus etc as it provides 'reliable and accurate' information with elaborated details when compared to others. A few students use all the three tools of AI such as ChatGPT, Meta AI and Gemini AI, combine the pieces of information that they get from each platform and reframe them to form complete answers.   On the other hand, students from rural areas are mostly aware of and have access to ChatGPT when compared to other AI tools.

Students' engagement and outcomes

Students take the assistance of AI tools for tasks like research, for learning new skills, for managing schedules etc. along with the purpose of study. Students opine that these tools enhance learning outcomes by providing personalized experiences, instant feedbacks and automated assistance. They believe that AI tools can provide broader explanation to each issues that students arise with, and help them by providing information and solving the problem. Regardless of the reasons that they present to convince others, the true motivation of using AI tools is their ability to provide information instantly. They can get more refined answers if they provide more conditions. In addition to that, they save the time of an individual by coming up with quick responses. Also, they save energy which would go waste in visiting libraries or other source houses and peeping into various books, searching journals, websites etc. They provide the limited outcomes or information to the points which avoid hard work of the students. Furthermore, they are easily approachable with free data which merely costs time and effort to collect, clean and process effectively. Thus, AI serves as a time saver by streamlining tasks such as data analysis, writing assistance and exam preparation.

On the other hand, students opine that, AI tools improve their learning experience as they provide extra details about the topics which students want to get. And they feel free to ask anything on the tools of AI, which they may feel hesitant to ask with teachers. Using AI tools in the field of education has made the lives of both students and teachers easier. We know how AI enhances the performance of students. On the other hand, it also helps teachers by providing scalable, intelligent and innovative educational solutions. AI tools automate administrative and content creation tasks, they customize lessons based on students' progress, they analyze data to inform teaching strategies and improve student' outcome. AI powered tools can analyze student data and provide teachers with insights into student performance, helping them create personalized learning plans for each student. They reduce the workloads of individuals with free of cost.

Advent of AI tools significantly increased the screen time. Students depended on hard copies for any information before the access to AI powered tools. Curiosity of an individual is easily satisfied by AI

tools as they provide information effortlessly, leading to unnecessary deep dives on search platforms. Students agree that they rely upon these tools for every mere matters which can be easily handled by their own. According to the survey that I conducted, majority of the students spend at least half an hour a day on their mobile phones engaging themselves exclusively in gathering information related to their syllabus as well as about every random thing which creates curiosity in them.

Opinions of students about AI tools

Although students rely upon the tools of AI for various reasons, they are aware of the limitations of them as well. Students' extreme dependence on AI is problematic in many ways, especially they hinder students' creativity. Quick responses from AI reduce students' need to think independently. AI tools provide readymade answers that discourage students to think about anything critically, and they limit students' exposure for unconventional or out-of- box thinking. Losing the capacity of critical thinking is nothing but losing creativity.

They gather everything from AI tools without a second thought instead of thinking by their own. Their subordination on AI resulted in losing their connection with books/ library. Usage of AI tools multiplies the laziness of students as they get everything within no time. This even leads to loss of moral values like honesty within the students. Additionally, increase in the screen time affects the cognitive development of students.

Students claim that they get used to shortcuts nowadays. As majority of the activities are done quickly, they expect to complete activities related to the academics within no time thus they depend upon AI powered tools to finish them off instantly. Furthermore, they believe that whatever the AI gives is the best because of the lack of exposure to the concepts. Since the habit of searching for information in books and journals has declined, they tend to think that the information they get from AI tools is almost accurate, despite being aware of their limitations. In addition to that, AI has the upper hand in solving the problems of comprehensions and in the usage of proper and better vocabulary that make students to think that the answers given by AI tools are better than the answers they compose. According to the survey, students hardly opine that they can write better answers than the answers given by AI. This prejudiced notion of students led to depend more in AI powered tools.

Overall, using AI powered tools in education sector has both positive and negative impacts. However, the integration of AI tools in education has the potential to transform learning environments by enhancing teaching methods, personalizing students' experiences. These tools improve access to quality education through online platforms. On the other hand, successful implementation requires addressing various ethical and technical challenges. By balancing innovations with ethical consideration, AI can create most efficient educational landscape which meets the needs and demands of students of modern era.

References

[1]. Dhanrajani, R. (2023, May 28). The rise of the Machines. *Business today*, 26-46.

[2]. Chen, L., Chen, P., Lin, Z. (2020, May 5). Artificial intelligence in education: A review. *IEEE Access,* 8, 111135-111145. https://doi.org/10.1109/ACCESS.2020.20988510