Artificial Intelligence in the Classroom

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ABSTRACT

The rapid development of science and technology in modern times has influenced individuals and society with the changes of ages, the quality of our life is changing and Artificial Intelligence (AI) is very much helping our lives in this change. From morning to night this AI has been helping us in many ways and higher education is no exception. AI is also very useful for managing classroom teaching and learning.

Keywords: Classroom; Artificial Intelligence; Technology; Teaching; Learning; Pandemic situation.

INTRODUCTION

In ancient India we have observed that education was only for the elite class of people, where the kings' extended family members, Brahmins and other high class were given access to and they were the one who got to enjoy this fruit of society. The place of a guru (Teacher) was very respected and honoured by all the section of societies. But there is a saying that only the deserving gates what his capable of many prominent figures such as – Balmiki Muni, Vidyasagar, Raja Ram Mohan Roy did come from low deprived background but also didextremely well and proved that high-low class doesn't matter in nation building or society's welfare. Since then after few centuries, India came under British rule and saw new set-up of events such as industrialization, westernization and the rise of technologies such as Artificial Intelligence (AI). With the scope of above mentioned events India started to become more superior and took independence and established herself as Republic. The rise of globalization came into effect and Indian economy got boosted, Hence improving nations GDP (Gross Domestic Product) and foreign relation. But there was still a gap to fulfil in the field of educationas women and men were discriminated. Though after Independence India established as a proper sovereign state with Valid Constitution and adopting Rule of Law as superior, Every Citizens were protected from Social disabilities and numerous reforms were brought for the betterment of the nation. Despite having abundance solutions to every possible problem there were many dysfunctions at the grass root level and one such is in the field of education. As time passes by many new materials and entities came up to show their capabilities and potential problems were identified with improvised technologies such as Learning Management System programme, AI technology etc.

In the present time technology has influenced various levels of education and students are benefiting greatly from it. Along with technology, the new subject that has brought a radical change in the life of students is AI. AI is working today with all types of learners in mind and even a teacher now finds it much easier to convey content using AI than to convey content through speech alone. Because there are many students in the classroom who do not have the mental capacity to understand the subject only from the teacher's speech and therefore the importance of AI is incomparable for them. Alan Turing and John McCarthy are particularly notable among those who have worked on AI. An important definition of AI was given by John McCarthy in 1956 –"The study of AI is to proceed on the basis of conjecture that every aspect oflearning or any other feature of intelligence can in principle be so precisely described that a machine can be made to simulate it." (Russell and Norvig, 2010).

DISCUSSION

The structure and service delivery of any educational institution has now changed under the influence of AI. Teaching and learning has become very challenging nowadays. Inclusive education is a smeared topic these days and refers to the teaching of non-disabled students alongside students' different types of disabilities in such classrooms. AI is helping to increase students understanding in the classroom in inclusive education. AI helps to enhance creativity and critical thinking of students. There were many problems in higher education that once we could not think of solving, now we can easily solve those problems with AI. Students will also develop digital fluency skills, understand the role of emerging technologies, practice digital skills on mobile devices, and explore aesthetic dimensions digital tools. Converse to popular belief, AI is not about intelligent machines capable of thinking like humans. As it exists today; AI is about applying sophisticated algorithms to huge datasets, using strong computing power, which allows for unexpected insights, pattern recognition or computer vision, amongst other applications. It is not a technology of the future. It already shapes our digital world: recognising persons on imaging systems, deciding that you see online, automating content on social media,recommending search engines on video sites or online shops, powering voice recognition technologies on mobile devices, optimizing traffic and routes on maps and ride-sharing, categorization, auto reply, suggested texts and spam filtering on email, financial support.

Significant advances in machine learning and AI open up new possibilities and challenges for higher education. It should be especially remembered that education is a human- centred endeavour and not a technology-centred solution. AI is progressing fast but it is difficult to do it in the best way, the human side of people, the creative side should also be given a chance to develop. Advances in technology have opened up various aspects to the student in learning and have also helped in the presentation and assessment of the subject to the student. At the same time, we can see many administrative staff and teaching assistants losing their jobs in education due to AI. Special attention should be paid to this issue.

Today, we see that classrooms are taught through projectors, different slides are shown with different topics and many advanced school classrooms have robots taking classes.Whenever the students ask any question, the robot answers the question very quickly. If the class is off or in gaming classes, students sit on the computer and play games such as ludo, chess etc.,then AI helps them. Therefore, we cannot imagine a classroom without the full application of AI.The impact of AI in education has been increasingly observed since the time of the Covid-19 pandemic situation. In the pandemic situation, all education has become distance learning. Students become habituated with online classes. Electrical gadgets become their classroom. During this time, as the students took classes online from the teachers of their educational institutions, various online platforms outside their own educational institutions became their medium of education. Students have to take the help of various books of increase the depth of the subject but in the pandemic situation it is not possible for them to bring books to school or to study in a library so their only option is online textbooks. In teaching sometimes the teacher shows a video or sometimes shows a screen share and sometimes teaches throughPowerPoint presentation, these things help the students a lot in gaining mastery of the subject. The combined efforts of machine learning and AI in pandemic situations have greatly helped in educating students.

CONCLUSION

In today's technology world, the importance of AI research, use and investment in this sector is increasing. AI is a unique branch of computer science, so that human thought power andintelligence

is simulated and controlled by computer software. That is, AI is the implementation of human intelligence and thinking power artificially through technology-based machines. This AI is also helping both teachers and students in classroom learning. Nowadays teachers aretaking help of AI in explaining the content rather than just presenting the lecture. AI is helping the physically challenged students as well as the general students in the classroom. In pandemic situations, both teachers and students have become increasingly dependent on AI. Today'sstudents are getting used to self-learning and enhancing their skills using AI. The positive impactof AI is a boon to the learner. We also need to be careful that impact of AI is not harmful to human society.

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