



ARTIFICIAL INTELLIGENCE BOON OR BANE?



Ameen Jauhar



Mr. Amit Kapoor
Co-founder, Eupheus Learning

All signs point toward a future dependent on artificial intelligence (AI). And, make no mistake, the education sector is at the forefront of this new-age revolution that is bound to eat up some jobs while, at the same time, creating new ones. We are witnessing technological history in the making. Naturally, such a revolutionary change has ruffled some feathers, much like the emergence of the internet in India in the 1990s, when the postmaster thought that he might lose his job to the email. Education Post's **Prabhav Anand** goes deep to understand the actual impact of AI going forward.

Let's face it. This time last year, no one was talking about it. Then suddenly, one fine day, sometime late last October, it exploded like a ripe tomato under a stiletto heel. Artificial Intelligence (AI) had burst onto the scene, and how! Now, as this new toy begins to slowly, but surely, grow on us, experts are predicting a "profound impact" on the future of education and of course, jobs. But the impact isn't necessarily negative.

"The potential applications of AI in education are sure to bring some changes," says Amit Kapoor, who co-founded Delhi-based EdTech firm Eupheus Learning.

"AI can currently manage administrative processes efficiently, and its adoption will only accelerate this trend. For instance, it can customize learning experiences, streamline classroom management, and improve student learning outcomes," he tells Education Post.

"Prioritizing AI literacy is crucial to ensure that both students and teachers have access to necessary training and resources to integrate these technologies into the ecosystem optimally. Additionally, it's essential to evaluate practices that could challenge the social and ethical fabric of the educator-learner relationship and consider banning them," Kapoor adds.

Indian EdTech companies like Byju's and Unacademy have already adopted AI to personalize learning, automate administrative tasks, and develop new teaching and learning methods.

"By using AI, educators can tailor their teaching methods to suit the individual learning style of each student. This is a significant shift from the traditional

one-size-fits-all approach to education that has been prevalent for so long,” Kapoor says.

But one question remains: Is AI hampering the competence of students? The answer is more nuanced than a simple yes or no, according to academicians.

“While AI is helping students to complete assignments more quickly and easily, it is not quite replacing the critical thinking and problem-solving skills that are essential for success at the workplace,” opines Ameen Jauhar, a senior fellow at the Vidhi Centre for Legal Policy.

“AI currently operates without critical thinking abilities and relies solely on the data available within its system,” says Jauhar, who is also a member of the expert panel of AgriStack, a central government initiative to provide a uniform platform for farmers to deliver end-to-end services throughout the agriculture food value chain.

But there’s, obviously, a flip side.

“There is something called legal drafting, which is one of the core responsibilities of any fresh law graduate or any lawyer who is in their first, second or third year of legal practice. While you can say AI tools are helping them do this job better, law firms that typically want better efficiency and better cost productivity for their clients may consider completely removing this whole rank of first to third year associates, and instead, say that we don’t really need humans to do this job,” says Jauhar.

The real concern, he says, is how automation is going to impact human productivity. “It’s a double-edged sword. To put it simply, are you writing the essay or is Chat GPT writing it for you, with a very likely chance of plagiarism?”

“In my personal opinion, it is acceptable to utilize AI tools such as Chat GPT for assistance purposes, but becoming overly reliant on such tools, such as complete dependence could lead to potential problems,” Jauhar says.

AI implementation has been most prominent in highly digitized industries like IT, financial services, telecommunications,



media, and retail. However, the rate and extent of AI adoption can vary by industry. Businesses operating in sectors with lower AI adoption, including healthcare and pharma, energy and natural resources, and manufacturing, can gain a competitive advantage by being early adopters and building economic moats.

The advent of AI has led to many people worrying about the disappearance of jobs. However, according to experts, AI can create many job opportunities and has space for everyone to grow.

“AI is expected to eliminate existing jobs while creating new ones, with the short-term impact likely to result in more job losses than gains in India’s services exports sector. To cope with AI-driven changes, students are advised to acquire blue-collar skills and prioritize trades over low-skilled administrative roles and routine coding,” Dr. Debashis Guha, Director of the Master of Artificial Intelligence in Business program at S.P. Jain School of Global Management, tells Education Post.

“The call center and software services sectors in India are anticipated to be significantly impacted by AI,” he warns.

He envisions a transformed education sector, with AI providing personalized instruction akin to the ancient Indian system of guru-shishya parampara (student-teacher custom).

“While new job opportunities will emerge, ethical concerns must be addressed, particularly in terms of equitable distribution of AI’s benefits. Urgent investments in AI systems, research, and education are crucial to ensure a positive and inclusive impact,” says Guha.

“New technology may create 97 million jobs by 2025,” Radhika Shrivastava, Executive Director of FIIB, says. “With AI integration across multiple industries, AI and automation jobs will grow in demand. These include data detectives or engineers, robotics engineers, machine managers, AI product managers, AI strategy managers, AI consultants & analysts, and programmers.

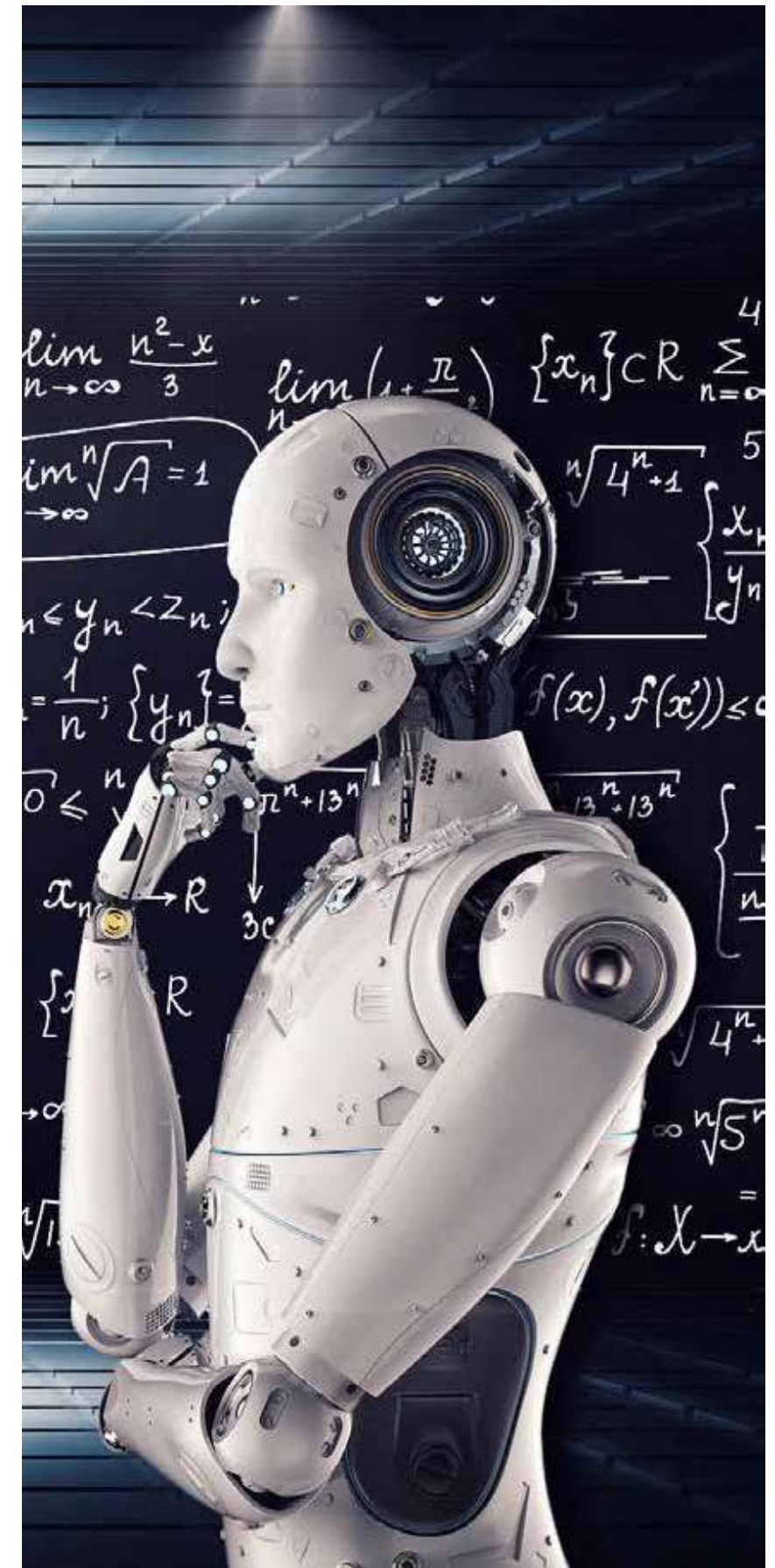
“Those who can code Python, which is crucial for machine learning, will be particularly sought-after. Additionally, AI trainers and those with skills related to modeling, computational intelligence, machine learning, mathematics, psychology, linguistics etc., will be in demand. MBA students should prepare for the AI revolution. The jobs they hold won’t disappear as AI will redefine them.”

A major booster for AI in India has been the incredible government impetus in recent years. From pro-digital infrastructure and the National Strategy for Artificial Intelligence India commission to the emphasis on technology growth in the Union Budgets – India has set up a favorable framework to augment AI.

NITI Aayog, a policy think tank of the Indian government, has set up Rs. 7,500 crore investment towards Centers of Research, funding for startups, and partnerships with hyperscalars including AWS. This has created a conducive ecosystem for AI startups to thrive in India.

Campaigns like ‘AI for India’ and computing platforms like AIRAWAT are also propelling India towards an AI revolution. AIRAWAT, a national AI platform, aims to democratize AI and make it accessible to everyone, including small and medium-sized businesses. This platform has been instrumental in bridging the gap between AI research and industry applications in India.

With the right infrastructure, investment, and policy support, India has the potential to become a global leader in AI. The government’s initiatives towards AI are a step in the right direction, and the country must continue to invest in research and development to stay ahead in the



game. As AI continues to shape the future of technology, India's AI talent pool and innovative ecosystem will play a crucial role in driving this transformation.

However, the pros and cons of AI in education are not so black and white. There are advantages to both sides, but there are disadvantages to each side as well. AI is replacing humans in an increasing number of fields, including education. It's not just teaching but also grading papers, writing essays, and making recommendations to students about what they should study next. The question is: should it be or not?



Artificial Intelligence in education is a very controversial topic right now.

People are torn on whether or not AI should be used to educate students. Many people argue that it will replace teachers and take away the human element of education. However, there are many advantages to AI in education. It can grade papers and essays much faster than a human can. This will give teachers more time to work with students on critical thinking skills and critical analysis skills. This would also allow teachers to focus on individual students who would benefit from their guidance. It can also augment human teachers by providing insights about student learning styles and giving hands-on feedback for students who need more practice with specific topics or skills. AI doesn't get tiring, doesn't have mood swings, and doesn't have a life outside of education.



However, there are some negative aspects to Artificial Intelligence in education as well. A robot might not be as good a teacher as a human can be. The disadvantage of AI in education is that technology may not always be successful in teaching. It does not experience emotions. Students don't feel that they are being cared for by the AI when they are being lectured to or when they have a question, and when they do not get a response from the AI. This is an emerging field, and it's being studied at universities worldwide where professors are working on developing AI technologies that improve our lives. Artificial Intelligence can also be used to provide students with adaptive learning where it adjusts the pace of instruction based on how each student is performing. On the flip side, some people worry about AI's impact where human interaction is receding.

THE NEAR FUTURE

Jobs to watch out for

AI developers and programmers

The demand for artificial intelligence applications and systems is expected to continue to rise, which will result in an increased demand for skilled developers and programmers. These professionals will be in charge of designing, developing, and maintaining applications and systems that are based on AI.

Data scientists and analysts

Artificial intelligence is heavily reliant on data, and the contributions of data scientists and analysts are essential to the success of AI projects. They will be responsible for the collection, analysis, and interpretation of data in order to train AI systems and to assist organizations in making decisions based on the data.

AI trainers

Learning and improvement are both dependent on training for AI systems. Trainers for artificial intelligence will be responsible for teaching AI systems and algorithms how to recognize patterns, process data, and make predictions.

Robotics engineers

As a result of the increasing incorporation of AI into robotics and automation systems, there will be an increased demand for robotics engineers who are proficient in the creation of both hardware and software.

AI ethicists

As artificial intelligence (AI) becomes more pervasive in our culture, there will be an increased demand for professionals who are able to address ethical concerns associated with AI, such as bias, privacy, and accountability.

Customer experience designers

It is possible to use AI to create personalized customer experiences, and customer experience designers will be responsible for designing and implementing the systems used to create these personalized customer experiences.

Cybersecurity analysts

AI systems may be susceptible to cyber-attacks, and it will be the responsibility of cybersecurity analysts to protect these systems from potential dangers and ensure that they are properly secured.



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