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After CBSE introduces artificial intelligence paper, schools include to curriculum, hire faculty



While several schools in the city have been using AI and technology specifically for students' projects, others have plans of incorporating AI as a new addition to the timetable(Hindustan Times)

An 'intelligent traffic light' system, which promises to reduce commute time, an automated walking stick for the visually impaired, and an 'Alexa' type machine, which acts as a counsellor robot for students, are some of the projects that the bright young minds of the city have created. These are not projects of graduation students but a sample of work that students in city schools have created through scratch programming and machine learning — a branch of artificial intelligence. While some schools in the city are already encouraging students to warm up to newer ways of technology, others will soon be joining the bandwagon by introducing AI as an elective subject.

While several schools in the city have been using AI and technology specifically for students' projects, others have plans of incorporating AI as a new addition to the timetable. This comes after the Central Board of Secondary Education (CBSE) recently decided to introduce artificial intelligence (AI) as a skill subject for students of classes 8, 9, and 10 — a move that is aimed at making students well-versed in newer technology.

Suncity School, Sector 56, will be putting in place a three-tier Al course for students of classes 8, 9, and 10. "We are in the process of incorporating Al in our curriculum for the upcoming academic session. Categorisation of the syllabus, and review of books for the same is currently underway. While students of class 8 will be introduced to the basic level of Al, classes 9 and 10 will be familiarized with subsequently higher levels," said Deepa Gandhi, head, Information and Communication Technology (ICT) department, Suncity School.

Gandhi added that AI was a huge draw among students, and the school was expecting many of them to opt for it. "AI is in demand these days. Most students find it interesting. So far, students had been making projects through coding and other applications. With AI as a new subject in the timetable, they'll be encouraged to explore the field in greater depth," added Gandhi.

While some schools already have ICT teachers who will be teaching AI to students, other schools said that they'd be opening vacancies for specialists once the syllabus is finalised. Schools are currently in the process of the finalising the syllabus with the help of IT experts and teachers.

Students in Heritage Xperiential Learning School, Sector 62, are already using AI as part of the school's Maker-Centered pedagogy. The school has adopted a comprehensive digital literacy curriculum, which is mapped from classes 1 to 12 on data sciences, AI and machine learning. Students from class 6 onwards are allowed to program their own AI machines. "We believe that by giving students a chance to design with AI tools, they will develop a strong understanding of how AI products such as Alexa are programmed and the process of machine learning," said Noora Noushad, design and technology head of the school.

Using the concepts of machine learning, students of the school have developed projects such as an automated walking stick for the blind that works as a proximity detector for the visually impaired.

Shiv Nadar School has also been involving students in Al. The school introduces students to programming and machine learning from class 7 onwards. "We start focusing on technology-based learning and machine learning from class 7, and by the time the student is in a higher class, he/she is given a project to work on that will benefit society. Our students have designed an intelligent traffic light system using Machine learning, which is a branch of artificial intelligence," said Mark Nelson, head, IT department Shiv Nadar School.

Nelson, however, added that mere introduction of AI wasn't enough. "While the CBSE initiative is welcome, it is equally important to have a context in place. CBSE and schools need to offer a context in which AI can be used. AI can be connected to history, social science, and even biology. This understanding needs to be developed," added Nelson.

First Published: Jan 15, 2019 08:34 IST



https://www.analyticsindiamag.com/ai-enters-indian-classrooms-schools-integrating-ai-in-curriculum-after-cbses-approval/

AI Finally Enters Indian Classrooms With Schools Integrating AI In Curriculum After CBSE's Approval



At the beginning of the year, Central Board of Secondary Education (CBSE) announced that they would be implementing Al as a subject for students of classes 8,9, and 10. Now, schools in Gurugram have begun gearing up for a change in syllabus, while experts debate whether the required infrastructure exists for widespread implementation of Al education.

Push for AI in the school curriculum

While some schools in the city have adopted a more open attitude towards technology, many more across the city are mulling how to offer Al as an elective subject. Schools have begun to offer Al and its accompanying technology as project assignments for students. Others have begun to incorporate Al into the students' timetable.

The push for AI education has also created a requirement for teachers that have a grasp on advanced concepts such as robotics, IoT and big data. Students also seem to be exhibiting a positive attitude towards the subject, with many stating that it was a good idea as long as the subject interesting.

This phenomenon has already been experienced in the Heritage Xperiential Learning School, that has been utilizing Al for a while now. As a part of their "Maker-Centered" methods of teaching, students are trained on a variety of digital literacy curriculum, from grades 1 to 12, with primary subjects being Al, ML and data sciences.

The students are then allowed to program their own Al machines from class 6 onwards. Until now, they have created projects like an automated walking stick for the blind, a smart traffic light management system based on ML and even a counseling robot.

Schools gear up for a change in syllabus

Even as CBSE board is reportedly drafting an Al syllabus for classes 8,9, and 10, schools have already begun to implement it in their own curriculum. Many other schools said that vacancies would be opened for specialists once the syllabus is finalised by the board.

Multiple institutions are currently in the process of finalising the syllabus, with the help of teachers and experts in the computer science and Al/ML fields. Deepa Gandhi, Head of Information and Communication department at Suncity School in Gurugram, shared with a leading daily that the school is in the process of incorporating Al in the curriculum for the upcoming academic session. The categorisation of the syllabus and review of books for the same is currently underway. While students of class 8 will be introduced to the basic level of Al, classes 9 and 10 will be familiarised with the subject at a more advanced level. She also revealed that students have started dabbling in coding. The addition of Al to the timetable is also likely to encourage a deeper exploration of the field.

Possible setbacks in integrating AI-related subjects in the syllabus

Infrastructure in Indian schools might not be as advanced as CBSE's move might suggest. Many schools lack the lab facilities for subjects like Physics and Chemistry, while in most schools, students lack a computer science lab. While this might change with the advent of technology into the Indian classroom, it will still take a while.

Another setback is that students might face additional pressure on their part. However, the presence of Al as a skill subject which is optional for study might provide an opportunity for the truly interested to enter the field.

In addition to this, this push for integrating AI in the curriculum can cause the widening of the divide between public and private schools, which are already far apart. Due to private schools being able to charge higher fees, they are able to provide the required infrastructure for the course; a privilege that cannot be afforded by public ones.

Positive Outcomes

This will prove to be a valuable opportunity for students to enter college at higher skill levels. The implementation of Al as an optional subject will increase the interest of students and give students the tools and information they need to survive in an Al-driven future.