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# A Study On Impact Of Artificial Intelligence On Teaching And Learning- Post Covid-19

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## INTRODUCTION

Education field is undergoing tremendous changes in the system through the implication of Artificial intelligence in education. Teaching and learning are being seeing the transformation through latest technologies. AI impact on education is increasing with the visualisation of customized learning. With the assessment and to have an interaction over online platforms to have blended learning exposure.

From past two decades there is no standard education model to be followed which paved way for development of AI into education sector. Since AIED (AI in education) is still in the incubation phase only few education institutions have tied up with there project. It has created a gap between how AIED technologies could work but how exactly it is implemented in educational institutions.

Machine learning concept was started in the year 1956 algorithms played a major role in assigning a task or completion of task. AI is some form of computer code that displays good amount of intelligence, problem solving and learning by which it can be analysed as super intelligent. With normal human intelligence operations can be made by computers to complete the assigned task. However, AI gradually learns things on its own and improves based on past operations.

Education institutions are more dependent on machine learning technologies to collect student data and implement action-oriented ideology to better the performance of students and also to take sound informed decisions. With the usage of AI, teachers can focus more on the problematic area and give students the customised learning solution. This way it is creating a huge demand for various vendors in the market to provide advanced level AI software for teachers to have a good customised learning content. These elements are the growing indicators of AI market in education sector.

Some areas where AI applications is been used in daily activities, some very frequently used AI are

**E-commerce:** All business operations happening online, to count on one such category would be flipkart when a customer places as order it displays the suggestions relating to it and any offers you have in the interested category will be alerted through the notifications. These activities are made by AI.

**Social networking platforms:** Platforms like Instagram, Facebook, tweeter all work with adoption of artificial intelligence, when a user shares the photos, AI can detect the similar faces. It also suggests you to follow the contacts who are on the same platform.

**Educational institutions:** During Covid-19 education sector was no a exception from not operating. with the AI online classes were managed, monitoring of the students, Assigning the task completion of work, calculations information generations instantly all these were base to conduct the classes and the whole system will be monitored by AI.

Artificial intelligence can change the classrooms, Technological implications are vast on learning system, these days students are finding learning through the computers without making it to classroom. Apart from students admirative operations can be made easier, time can be saved and organization can avail the benefit of it and focus more on individual student development.

According to recent market research report conducted by Technavio, AI market in the education field will see the growth of \$557.03mn during the year 2021-2025.

### **Basic activities in education can be automated by Artificial Intelligence**

Grading students' performance usually consumes long time, same time can rather be used for preparation for classes, interacting with students to solve the problems or more of professional development can be made.

AI cannot completely replace humans. Teachers can automate the grading system including multiple choice or any blank testing as well. Which in turn helps teachers to concentrate more on academics' development.

### **Software can be developed for education purpose according to student requirement**

Any type of personalized learning training will provide customized solutions to students to have combined learning along with other class group. The technological development and customized learning is key assistance to AI to have a positive impact on education sector. Focus can be made for selective learning, and for concepts which they have not learnt. This methodology support students for their learning.

### **Students can benefit by AI tutors**

AI tutors can help students by teaching basics, but there is no scope for creative learning and score good ranking. Technology being progressive, should take every opportunity to enlighten the student with knowledge.

There are many limitations for human tutors, this can be replaced by AI by teaching mathematics or any other subjects with good writings.

### **AI has changed the way of using information**

Latest development in technology plays a major role in both professional and personal communications. From past few years exchange of information has completely changed. AI systems have different working levels where it becomes easier for students to do research. Due to AI system, we can see the similar information according to our recent search history. Google gives information based on the location. Flipkart gives data based on previously purchased Products.

### **AI can change traditional teacher role**

Trained teacher can use AI to help students who are struggling to understand the concept. AI will transform traditional mode of working with essential technological learning, by this teacher can save time and focus more on academic development. AI can take up task of educating students, solve the issues, give expert solutions to the problems and even teach basic concepts with more details.

### **Programmes which have included AI in their system can give feedback to teachers and students.**

AI allows students to cope with the difficult area of study by their assistance and it also helps teachers to know the requirements of the students. There are various student-based courses which can be opted by the students for their development. AI doesn't only give advices but help in academic development of both teacher and student. AI will also provide the feedback based on the course selected and help in assessing the performance of the student by this AI can alert the teachers if the performance of the students is not up to the mark and help them in betterment of the performance.

### **AI has completely changed the role of teacher**

As assigned teachers with the support of AI will complete the concept and help students who are struggling to understand the concept. During covid-19 pandemic period most of the education institutions thought through online education. Along with updated technological implication there is a new way of learning with intelligent computers. AI can be great substitute for the human tutor and also help students with graduation and with innovative customized learning. It can give the expert solution to students in one way it is replacing teacher's role with machine learning.

### **AI can help student to learn by trial-and-error method**

Not knowing the concept, fear of failure are some elements students hesitate to be associated with, even though trial and error method is normal learning methodology. Certain group of students don't want this to be highlighted in front of their peer group or teachers. As a solution AI helps to learn on trial-and-error methodology by less fear.

### **Student learning process educating with fundamental skills can be modified by AI**

By AI students have access for learning anywhere in the world good software and support system will act as a substitute for teacher in traditional classroom learning. AI usually helps students to learn fundamental skill. Which will help students to build strong foundation. In future there maybe advancement in AI which will again change the learning style.

## **IMPLEMENTATION OF ARTIFICIAL INTELLIGENCE IN EDUCATION SECTOR AND THE CHANGES**

Artificial intelligence has a high impact on education sector. AI has different way of working which shifts from traditional mode of working to blended learning. There will be increase in growth rate across the globe. We can see the necessary changes seen in AI particularly into education sector these are

### **Allocation of work by automation**

It is trending that teacher will not only be involved in classroom teaching rather they should also be involved in administration activities of the institution. A teacher needs to spend more of time in preparation for classes and planning for various activities along with administrative work. By Artificial Intelligence the work load for teachers can be reduced by making things to work in automated way and have a track by monitoring the work and feedback.

### **Online learning**

with the help of AI it is possible to access education by sitting in any part of globe. It will scan entire data of the text book and help them access anytime and anywhere. For students who cannot attend offline classes AI becomes boon for learning. And since the data is shared to large number of students any random student across the globe can seek the benefit of virtual learning. By this information exchanges happens virtually by different age group with broader learning concept.

### **Availability of AI support system for 24/7 for 365 days**

Students in traditional mode of learning should wait for learning in a limited time period. Any doubt clarification from the teacher has to happen in a limited time which is a long wait. But due to accessibility to AI for 24 hours students can discuss their problems in various available platforms and rectify their doubts.

### **Post covid-19 and AI developments**

Covid-19 has given a new perspective of learning, when the entire sectors of glob was affected by the hit of covid 19 education institutions saw the drastic changes and adopted new digitalized way of learning. Many universities offered remote learning courses. Students and teachers were made to choose new way of working in new circumstance.

Even after reduction in cases, things might change into normal traditional way of learning but technological benefits which was gained by AI system is much more effective than offline learning. Added advantage was remote learning with broader perspective of interacting with various other people across the globe.

The impact of AI is enormous especially on education sector, according to NEP (National education policy) it is mandatory for students have online certification courses for additional credits. This way students can also focus on skill development.

## **CONCLUSION**

AI has made a huge impact on education sector. Raising market demand for AI systems are enormous. In further days Universities should rethink in adopting AI software into learning system. AI are not only student friendly rather it even makes teacher free from work so has to concentrate on academical development.

There is a requirement of research to be made for implementation of AI into system, with enormous human knowledge AI shouldn't be a complete replacement but it should act as an assistance to the teacher. AI can solve students doubts quickly from any part of globe. It can be act as supportive system even for parents in tracking students' performance. Overall AI has made a greater impact on the education institutions, especially during covid pandemic and the ripple effect can be seen in post covid pandemic situation.

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