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Machine Learning Enhance The Future Of Education

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Article History	Education is a basic right of every human being, it helps us to overcome
·	problems in our daily lives. It helps us to understand the workings of the
Received:	world and deal with any problems in our day-to-day lives. Education has
Revised:	undergone many changes due to the occurrence of Covid-19 which led to
Accepted:	numerous technological advancements, which have affected the way
	teachers educate and the way students learn. One of the important events in
	the technology sector has been the occurrence or surfacing of AI and machine learning.
	It improves the prospect of education and improves the learning
	environment for the students. Machine learning has had an enormous
	influence on the education industry. Currently, Machine Learning has
	become one of the most lucrative fields in the IT sector. Machine learning is a revolutionizing technology that will transform the entire educational experience for teachers as well as students. Through machine learning,
	teachers can create a lesson plan based on the needs of individual students. It provides feedback based on individual students understanding of
	concepts and behavior. With the help of the feedback, the teacher will be able to recognize flagging students immediately and take appropriate actions by changing the lesson plan according to the needs of the students.
	Feedback is a vital part of every system. Here, the feedback is provided to
	both the students and teachers.
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CC-BY-NC-SA 4.0	Keywords: - Machine Learning, virtual assistant, Artificial intelligence

Introduction: -

Machine learning is a field of study committed to comprehending and developing a machine that can 'learn', that is, it uses prior data to improve the functioning or operation of a machine.

Machine Learning, with the assistance of Artificial Intelligence (AI), enables devices to learn from past data provided by users. The machine learning framework comprises acquiring and storing a large amount of information that can be used by a variety of users in many industries.

Self-driving automobiles are not far off in the future, thanks to machine learning. Machine learning can be used in a variety of domains, including pattern identification, education, computer vision, bioinformatics, and natural language processing.

Machine learning has emerged as a new educational frontier. It has the potential to change the way education is delivered. Education progresses on a daily basis. There are no longer just students in a classroom, staring at their notebooks while the teacher instructs. The modern classroom makes considerable use of digital resources and places a strong emphasis on machine learning. It promises to provide tailored in-class training based on student behavior and other characteristics. This raises the chances of better learning. Machine learning is also beneficial in assessment and evaluation since it reduces prejudice. Machine learning is a newer technology that is vital to artificial intelligence and human connection.

1. Education Science in Machine learning for educational research:

Before a few years, education research was exclusively limited to pupils studying in an institution. So, that data is limited related with

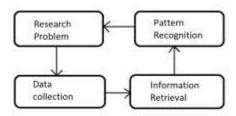


Fig1: Machine learning Data-driven predictive Model.

educational research. a statistical tool without using machine learning is not a sufficient model for predicting or analyzing huge data amounts of data that are created by students through online courses.

Machine learning wants to lot of data to improve prediction and give Accurate information. Machine learning has huge potential in education. it can analyze a huge amount of data which is collected by students through online courses, data can vary on the background of the student and which courses are selected by students, their conceptual level and logical level of students, their geographic location, etc. Several researchers are collected data from this site to enhance machine learning's contribution to education. To make new things to enhance the education system.

Machine learning is based on a data predictive model to support creating and testing the conjecture for the problem associated with these huge collected data, that help us to take action to improve the education system like which courses and curricula work or do not work well courses, which courses are more needed for the industry?

2. Enhance Machine Learning in Educational Area

Machine learning will improve education in many ways Increasing efficiency, Learning analytics, Predictive analytics, Personalized Learning, Assessment, etc.

Another way with the help of machine learning tools we can group students and teachers according to need and availability.



2.1 Automated Assessment in Machine learning:

Many educational assessment learning tools can help a student to enhance learning and education. The assessment should be in line with the aims of the students and the course content. Identifying critical assessment strategies that will assist us in evaluating pupils' progress. Report patterns are useful in creating curricular content and delivery strategies in individual programs. With the help report pattern, we want to add a more suggested element to be considered in assignment design and review problems that can be encountered by implementing machine learning.

2.2 Customizable learning experience in ML:

The introduction of machine learning in schools and colleges transform traditional learning methods with physical books into online learning platforms, and teachers never have kept all records of each student. with the help of machine learning tools teachers can hold all data of every student. in fact, the machine can deliver the concept of goals and Aim for each student for achieving more in our life. the function help teacher can observe the student. That help to make a clear picture of what Students face which type of problem and how to counter problems. how to improve the performance of students. A teacher can predict overall class performance.

Hence the teacher can see and judge which methods work or which do not work well and what needs to be changed in the program to make the job easier.

2.3 Increasing Efficiency

Machine learning has the capacity for content and management of the curriculum activity of the organization. it helps to work according to the capacity and understanding of everyone. this analyses the work according to the teacher and student.

It makes work for the teacher and student easier and that helps in a happy and comfortable education system. This increases the involvement of the student participation and learning of the student, this increases the efficiency of education.

It helps to increase the efficiency of the educator by completing classroom management tasks.

Automatic Grades calculation without emotional interference: Machine learning helps to check assignments and tests of the students, without any controversy between teacher and students. The grading of the student will not be affected by it, the student will get a score on his/her performance given. This is not simple; Machine learning can provide the paper grades with the ability to automatically assign grades to papers. there are many complexities in it but research is still going on for checking it. Now their many platforms that help in it.

Summary: -

The study's goal is to assess the current state of machine learning applications in the education industry. This study demonstrates that machine learning can be used in a variety of ways in the education sector.

It demonstrates how machine learning can assist in student grading by removing human bias.

Furthermore, it demonstrates how machine learning can aid in student grading by eliminating human bias. It can also assist educational institutes in reaching out to students and providing them with the assistance they require.

It also demonstrates the key advantages of machine learning and how it can be used to predict student achievement. The system may identify students' flaws and offer solutions to enhance their performance by 'learning' about them. It also demonstrates how we can abandon standardized testing. Machine learning-based test assessment gives students, teachers, and parents continuous feedback on how pupils learn, the help they need, and their advancement toward their aim for learning.

We cannot even begin to conceive how far the education sector will develop in the future owing to machine learning alone. It will provide new chances for management while also narrowing the effort and learning gap between students and teachers.

References: -

1. Kucak, D[anijel]; Juricic, V[edran] & Dambic, G[oran] (2018). Machine Learning in Education - a Survey of Current Research Trends, Proceedings of the 29th DAAAM International Symposium, pp.0406-0410, B. Katalinic (Ed.), Published by DAAAM International, ISBN 978-3-902734-20-4, ISSN 1726-9679, Vienna, Austria DOI: 10.2507/29th.daaam.proceedings.059

- 2. https://www.thetechedvocate.org/8-ways-machine-learning-will-improve-education, (2018), Accessed on: 201809-25
- 3. The Impact of Artificial Intelligence on Learning, Teaching, and Education: Policies for the Future. Retrieved from https://www.researchgate.net/publication/329544152.
- 4. Anjali Jagwani (2019). A review of machine learning in education 2019 JETIR May 2019, Volume 6, Issue5 www.jetir.org (ISSN-2349-512).
- 5. Pallavi Asthana, Bramah Hazels. Application of Machine Learning in improving learning environment
- 6. Mahdi Noorian, Ebrahim Bagheri, and Wheichang Du(2011), 'Machine Learning-based Software Testing: Towards a Classification Framework', Proceedings of the 23rd International Conference on Software Engineering & Knowledge Engineering.
- 7. Yu Lou, Ran Ren, Yiyang Zhao, 'A Machine Learning Approach for Future Career Planning.
- 8. Fedor Duzhin, Anders Gustafsson(2018), Machine Learning-Based App for Self-Evaluation of Teacher-Specific Instructional Style and Tools' Education Sciences, MDPI Journal.
- 9. Burges, C.J.' A tutorial on support vector machines for pattern recognition' Datamining and knowledge discovery, vol 2, Issue-2, pp 121-167, 1998.
- 10. Jia, J. W., & Mareboyana, M. (2014). Predictive models for undergraduate student retention using machine learning algorithms. In Transactions on Engineering Technologies (pp. 315-329). Springer, Dordrecht.