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A New Stage in the Field of Education

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Abstract

This piece explains how artificial intelligence can be used—and already is—in the field of education.It's yet unknown how AI will be used for the How educators can use it to their educational advantage on a larger scale and how AI could affect education's teaching and learning processes. The positives and cons of AI's impact on education presented in this. It also outlines a certain approach to create a platform with AI for education and The effects of AI on education, in conclusion.

Keywords: Artificial Intelligence, AIED, pedagogical.

Introduction

According to the 2018 Horizon research, experts predict that between 2018 and 2022, the usage of AI in education would increase by 43%. Over the past 30 years, there has been study on the use of AI in education. According to a survey by Research and Markets, the global market for AI education reached $1.1 billion in 2019 and is expected to surpass $25.7 billion by 2030.An multidisciplinary group at the cutting edge of computer science, education, and psychology is the International Artificial Intelligence in Education Society (AIED). On January 1st, 1997, the International AIED society was established. By hosting the International Journal of AI in Education (IJAIED) and AIED conference series, it brings researchers together.There are four main areas of AIED in institutional and administrative services, academic support services, and services that promote learning, including profiling and prediction, assessment and evaluation, adaptive systems, personalization, and intelligent tutoring systems. The application of AI is both inventive

and derived.An new technology called artificial intelligence has begun to alter educational resources and organisations. The ideal educational practise in the sphere of education requires the presence of teachers. Future AI will have a significant impact on almost every aspect of our lives, but the education sector will be particularly affected because teaching and learning are important aspects of life and the existing educational system leaves a lot to be desired. Older schooling was less adaptable than what the future of AI in education will offer. The teachers who are most crucial to the educational system are both pricey and not scaleable. Teachers are underappreciated and given a lot of paperwork in some nations. By providing each person with a customised curriculum based on their interest and skill assessments, AI can assist them individually. Nowadays, young people frequently use their cellphones or tablets. This gives students the chance to use AI applications to study for 10 to fifteen minutes in their free time. Using gesture recognition technology, AI aids in understanding the students' attitudes or comfort levels during lectures. As AI develops, it can now read a student's facial expressions or hand movements to determine whether they are finding the lecture difficult to understand. If so, the machine can adjust the course so that the student can easily follow along.Machines driven by AI are capable of customising the academic curriculum. With the use of AI tools, worldwide classrooms can accommodate students who have hearing or vision impairments. Students who are ill and unable to attend class can also benefit from this.The teacher marks the pupils in the traditional educational system based on their assignments and tests, which takes a lot of time. When AI intervenes in this situation, it would quickly complete these jobs. Additionally, it aids in providing advice on how to close learning gaps.People who speak different languages or have hearing or vision issues can access a variety of resources thanks to AI. The AI-based system application Presentation Translator delivers subtitles in real-time mode. Students can read and hear in their native language, for instance, with the aid of Google Translate. Modern technologies like VR and gamification are useful for more participatory meetings.There were previously some systems in place where multiple-choice tests were scored by computers, and now advancements are being made such that written solutions like paragraphs and assertions can also be graded by computers. As a result, a teacher's job is made simpler, there is no time wasted, and the time saved can be used to focus more on the growth and assessment of each individual student.In the future, AI may also be used to handle admissions and enrolment procedures, while its full potential is still untapped. AI can aid students in their home study habits and exam planning. Future AI will be able to respond to various learning styles. The development of more sophisticated tutoring and study programmes is entirely due to artificial intelligence. Applications for AI in education are currently being explored, such as AI mentors for students. students can be divided into groups by AI that are most suited for specific assignments. Adaptive Group is the term for this.AI application software that can forminstantaneous essay grading for students. The essays below arethe future essays can be added to a central databasebe contrasted using the earlier pieces included in thedatabase. In education, artificial intelligence is atechnology based on computers that offersinstruction that is individualised, flexible, and perceptive. TheDomain Knowledge is a major component of the AIED system.model that demonstrates the system's capacity tofinish the assignments that allow the students to judge youassist in finding a solution. the pupil modelIt presents a picture of the student in terms oftheir expanding knowledge and competencies.Finally, the Interface component offers the channel via which the learner and the system communicate. The Model of Pedagogy component depicts the teaching capability of the system.Voice Assistant is the second aspect of AI that is very beneficial in teaching. This is a ground-breaking use of AI. This includes the Google Assistant, Microsoft's Cortana, Apple's Siri, and Amazon's Alexa. Without the assistance of their teacher, these voice assistants allow students to communicate directly with the instructional materials that are available on the internet and in the installed devices.Many educational institutions, including certain colleges, are slowly abandoning the traditional methods of

teaching and learning because they are becoming dated. Instead of giving students written study materials or websites with complex information for their campus-related information, they have already begun supplying voice assistants to them. As an illustration, Arizona State University is attempting to give incoming students more regular, succinct, and accurate institutional information regarding their requirements on campus by making Amazon's Alexa available to them.Any learning aid can be accessed with voice assistants at home or in other places other than classrooms. The primary goal of voice assistants in this situation is to answer common questions about campus requirements or a specific student's schedule and courses, which aids the institution in lowering printing costs for handbooks that are only used briefly when a student first enrols and helps to lessen the need for internal support. In the upcoming years, it is anticipated that usage of this technology would increase.No wonder education institutions are scrambling to keep up with the need to foster more talent in order to keep the AI growth engine running as artificial intelligence becomes a fast expanding component of our daily life. However, advancements in education extend beyond STEM (science, technology, engineering, and mathematics). But AI curricula are changing the educational landscape.Through support people in learning effectively and achieving their learning objectives, smart systems are quickly transforming educational institutions from elementary to higher education, as well as adult and advanced learning.One-on-one private tutoring is encouraged using the Intelligent Tutoring System. Using neural networks and algorithms, they may decide against a certain pupil. With the aid of AI, students are already being exposed to the enormous array of options for higher education.AI has the potential to completely revolutionise the sector of education. Robots can write better grammar and produce digital content. Digital learning had already begun in the classrooms.Universities will be impacted in the future by the surge of investments and the rising interest in artificial intelligence. The growth of the worldwide student market, the democratisation of higher education, and the rising financial pressure from more students choosing to pursue a higher education will be the main drivers of the use of AI in higher education.Digital technologies should be used in education while maintaining the quality of education:Submit proposals to the authorized bodies to expand the scope of the use of digital technologies in the organization of the educational process and the development of information resources, learning tools and distance learning technologies, to amend regulatory legal acts regulating the activities of higher educational institutions, involving creative students in university digitalization projects, the creation and development of structures equipped with high-performance digital devices, classrooms, laboratories; creation of centers, including media studios,etc., and application of the accumulated experience in all higher educational institutions of Uzbekistan.Ensuring reliable integration of modern information and communication technologies and educational technologies, creating additional conditions for the continuous development of professional skills of teaching staff.Organizing and conducting advanced training courses for teachers on topics such as the use of interactive presentation systems, the development of interactive and multimedia presentations related to the Internet for lectures and seminars.Implementation of the distance learning process at any time using interactive presentation systems, video conferencing, virtual halls, electronic resources in real time.It is necessary to use cloud technologies, virtual reality, augmented reality, as well as use a 3D printer to develop didactic materials and experimental design, apply digital didactic and digital learning models, develop scientific websites for teachers and students to discuss projects, theses, research, etc. Only then will we be able to access knowledge through digital educational resources without reducing the quality of education using digital technologies.Digital educational resources are a collection of photographs, videos, models, role-playing games, cartographic materials necessary for the organization of the educational process and presented in digital form, selected in accordance with the content of a particular textbook, "tied" to lesson planning and provided with the necessary methodological recommendations. The

introduction of new information technologies into the educational process makes it possible to activate the educational process, increase the pace of the lesson, increase the volume of independent and individual work of students. Today, in order for the learning processto be complete, each teacher needs to prepare and conduct a lesson using various electronic educational resources, since their use can make the lesson more lively, interesting, rich and effective.Digital learning is an educational practice that helps the educational process andgives tangible results. It serves not only to continue the educational process with the help of digital educational tools, but also to further improve the quality and effectiveness of training. The introduction of digital education into the educational process is carried out on the basis of the use of information technologies. Informationand communication technologies are one of the types of innovative activity of subject teachers.Digital educational resources (electronic textbooks, tutors, simulators, interactive kits, dictionaries, reference books) help the teacher to conduct an exciting lesson, successfully assimilate the necessary material to students. Digital technologies can be used at all stages of education:

- when explaining new material;
- when pinning the theme;
- when repeating the passed;
- in the control of knowledge, skills and abilities.

The use of digital technologies in the classroom is necessary, and they:

- allows you to effectively organize group and independent work in theclassroom;
- allow individualization of the educational process;
- increasing interest in classes;
- activation of cognitive activity of students;
- development of students' creative potential;
- used when upgrading a lesson.

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In the future, AI may also be used to handle admissions and enrolment procedures, while its full potential is still untapped. AI can aid students in their home study habits and exam planning. Future AI will be able to respond to various learning styles. The development of more sophisticated tutoring and study programmes is entirely due to artificial intelligence. Applications for AI in education are currently being explored, such as AI mentors for students. students can be divided into groups by AI that are most suited for specific assignments. Adaptive Group is the term for this.AI application software that can forminstantaneous essay grading for students. The essays below arethe future essays can be added to a central databasebe contrasted using the earlier pieces included in thedatabase. In education, artificial intelligence is atechnology based on computers that offersinstruction that is individualised, flexible, and perceptive. TheDomain Knowledge is a major component of the AIED system.model that demonstrates the system's capacity tofinish the assignments that allow the students to judge youassist in finding a solution. the pupil modelIt presents a picture of the student in terms oftheir expanding knowledge and competencies.Finally, the Interface component offers the channel via which the learner and the system communicate. The Model of Pedagogy component depicts the teaching capability of the system.Voice Assistant is the second aspect of AI that is very beneficial in teaching. This is a ground- breaking use of AI. This includes the Google Assistant, Microsoft's Cortana, Apple's Siri, and Amazon's Alexa. Without the assistance of their teacher, these voice assistants allow students to communicate directly with the instructional materials that are available on the internet and in the installed devices.Many educational institutions, including certain colleges, are slowly abandoning the traditional methods of teaching and learning because they are becoming dated. Instead of giving students written study materials or websites with complex information for their campus-related information, they have already begun supplying voice assistants to them. As an illustration, Arizona State University is attempting to give incoming students more regular, succinct, and accurate institutional information regarding their requirements on campus by making Amazon's Alexa available to them.Any learning aid can be accessed with voice assistants at home or in other places other than classrooms. The primary goal of voice assistants in this situation is to answer common questions about campus requirements or a specific student's schedule and courses, which aids the institution in lowering printing costs for handbooks that are only used briefly when a student first enrols and helps to lessen the need for internal support. In the upcoming years, it is anticipated that usage of this technology would increase.No wonder education institutions are scrambling to keep up with the need to foster more talent in order to keep the AI growth engine running as artificial intelligence becomes a fast expanding component of our daily life. However, advancements in education extend beyond STEM (science, technology, engineering, and mathematics). But AI curricula are changing the educational landscape.Through support people in learning effectively and achieving their learning objectives, smart systems are quickly transforming educational institutions from elementary to higher education, as well as adult and advanced learning.One-on-one private tutoring is encouraged using the Intelligent Tutoring System. Using neural networks and algorithms, they may decide against a certain pupil. With the aid of AI, students are already being exposed to the enormous array of options for higher education.AI has the potential to completely revolutionise the sector of education. Robots can write better grammar and produce digital content. Digital learning had already begun in the classrooms.Universities will be impacted in the

future by the surge of investments and the rising interest in artificial intelligence. The growth of the worldwide student market, the democratisation of higher education, and the rising financial pressure from more students choosing to pursue a higher education will be the main drivers of the use of AI in higher education.Despite the enormous opportunities AI presents, there may also be some possible hazards. AI has the potential to be either the greatest or greatest evil for humanity. The development of AI applications in higher education has new ethical concerns and risks that could help teaching and learning. One such instance is when administrators may consider replacing teaching with profitable automated AI solutions due to the continuing corona virus outbreak and budget cuts. As the use of AI in education grows, there is a possibility that students will become more dependent on technology and that personal relationships would decline. Sometimes, this will be detrimental to students' learning rather than beneficial.The teachers, student counsellors, teaching assistants, and administrative personnel may worry that they will be replaced by the Intelligent Tutor System, an AI application. A lot of data, including sensitive information about students and staff, is needed for AI systems, which raises severe privacy concerns. AI is very expensive when compared to the price of installation, maintenance, and repair. Only institutions of higher learning with substantial funding can allow themselves to use such advanced technologies. When this technology is overused, it might lead to a lack of interpersonal relationships, which could be detrimental to the users. We are unable to determine the exact amount of data lost when an AI requires repair due to an accident or other unforeseen event. Future AI will have a significant impact on almost every aspect of our lives, but the education sector will be particularly affected because teaching and learning are important aspects of life and the existing educational system leaves a lot to be desired. Older schooling was less adaptable than what the future of AI in education will offer. The teachers who are most crucial to the educational system are both pricey and not scaleable. Teachers are underappreciated and given a lot of paperwork in some nations. By providing each person with a customised curriculum based on their interest and skill assessments, AI can assist them individually

In conclusion, AI is a significant advancement in schooling.The next level applications of artificial intelligence in education have not yet been developed, according to a research published by the Centre for Integrative Research in Computer and Learning Sciences. Therefore, those developing AI applications should thoroughly inform educators and decision-makers in the field of education. Although there are certain drawbacks to adopting AI in the educational sector, this is the technology of the future, thus educational institutions should start exposing their pupils to it. The effects of AI will be felt initially at the lowest levels of education and progressively progress to higher education. The long-term effects of AI on education won't be known for some time.AI's primary goal is to facilitate educators' work, not to take their position.

List of used literature:

Саидов, Н. В. (2019). Значение гражданской авиации в современной России. Актуальные проблемы авиации и космонавтики, 3, 559-561.

Тухтабаев, А. (2023). ЎзССРда тиббиёт авиацияси тарихи. Общество и инновации, 4(6/S), 117-120.

Тухтабаев, А. Ш. (2023). История Воздушного Сообщения В Центральной Азии. CENTRAL ASIAN JOURNAL OF SOCIAL SCIENCES AND HISTORY, 4(6), 132-135.

Тўхтабаев, А. Ш. (2020). ҲАВО ТРАНСПОРТИ ТАРИХИ. Интернаука, (22-3), 46-47.

Ravshanova, M. (2021). Transformation of the modern national identity of the peoples of Japan and Uzbekistan. Asian Journal of Multidimensional Research (AJMR), 10(3), 491-494.

RAVSHANOVA, M. PROBLEM OF THE CONCEPT OF PERSONALITY AND PERSON IN

JAPANESE CULTURE. UNIVERSITETI XABARLARI, 2019,[1/1] ISSN 2181-7324.

Bekmirzayev, A., & Omonova, M. (2023). ZAMONAVIY INSONIYATNING MADANIY XILMA XILLIGI VA FALSAFANING INTEGRATSION VAZIFASI. Models and methods in modern science, 2(6), 143-146.

Omonova, M. (2023). THE PROBLEM OF EXISTENTIALISM IN JAPANESE PHILOSOPHY. Solution of social problems in management and economy, 2(5), 84-88.

Омонова, М. М. К. (2023). ПАРАДИГМА НАЦИОНАЛЬНОЙ ИДЕНТИЧНОСТИ НАРОДОВ ЯПОНИИ И УЗБЕКИСТАНА (ФИЛОСОФСКО-КОМПАРАТИВНЫЙ АНАЛИЗ). Oriental renaissance: Innovative, educational, natural and social sciences, 3(3), 967-980.

Равшанова, М. М. К. (2022). ФИЛОСОФСКИЙ АНАЛИЗ МЕЖКУЛЬТУРНОЙ КОММУНИКАЦИ: ЯПОНИЯ И УЗБЕКИСТАН. Oriental renaissance: Innovative, educational, natural and social sciences, 2(5), 827-833.

Абсаламова, Г. (2021). Bolalar tarbiyasi haqida. Общество и инновации, 2(5/S), 390-402.

Absalamova, G. (2021). FRANSUZ MUTAFAKKIRI MICHEL DE MONTEN FARZAND TARBIYASI XUSUSIDA: FRANSUZ MUTAFAKKIRI MICHEL DE MONTEN FARZAND TARBIYASI XUSUSIDA. Журнал иностранных языков и лингвистики, 4(9).

Sharifovna, A. G. (2022). Views of french renaissance thinkers on child upbringing. Asian Journal of Research in Social Sciences and Humanities, 12(5), 386-390.

Собирова, Э. А., & Мухсинова, М. Х. (2020). СОВРЕМЕННЫЕ МЕТОДЫ ДИАГНОСТИКИ РЕАКТИВНОГО АРТРИТА У ДЕТЕЙ. In НАУКА И ТЕХНИКА. МИРОВЫЕ ИССЛЕДОВАНИЯ (pp. 219-222).

MUKHSINOVA, M., Ortikov, U. U., Khudjaeva, F. S., Abduvokhidov, J. Z., & Abdurazakova, Z. K. EURASIAN BULLETIN OF PEDIATRICS. EURASIAN BULLETIN OF PEDIATRICS Учредители: Ташкентский педиатрический медицинский институт, Санкт-Петербургский государственный педиатрический медицинский университет, (3), 98-105.

Eshonkulov, U. K. O. G. L., Shukurov, A. Y., Kayumov, O. A. O. G. L., & Umirzoqov, A. A. (2021). STUDY OF THE MATERIAL COMPOSITION OF TITANIUM-MAGNETIC ORE OF THE TEBINBULAK DEPOSIT. Scientific progress, 2(7), 423-428.

Umirzoqov, A. (2020). Justification of rational parameters of transshipment points from automobile conveyor to railway transport. Scienceweb academic papers collection.

Eshonqulov, U. K. O. G. L., Umirzoqov, A. A., Khodjakulov, A. M., & Quziyev, H. J. (2021). DEVELOPMENT OF A TECHNOLOGICAL SCHEME OF SAMPLE ENRICHMENT TITANIUM-MAGNETIC ORE OF THE TEBINBULAK DEPOSIT. Scientific progress, 2(7), 407-413.

Umirzoqov, A. (2020). Using Intermediate Buffer Temporary Warehouses Inside the Working Area of the Gold Mining Quarry. Scienceweb academic papers collection.

Umirzoqov, A. (2020). Justification of the Need for Selective Development of the Phosphorite Reservoir by Horizontal Milling Combines. International Journal of Engineering and Information Systems (IJEAIS).

Nasirov, U., Umirzoqov, A., & Fathiddinov, A. (2021). ANALYSIS OF THE MODERN DEVELOPMENT OF MINING AND PROCESSING COMPLEXES IN UZBEKISTAN. 36ipHrn наукових праць ЛОГОХ.

Umirzoqov, A. A. (2021). SMALL-SCALE QUARRY TRANSPORTATION SYSTEM. Scientific progress, 2(5), 492-497.

Umirzoqov, A. (2020). Development and Implementation of Technical Solutions Aimed at Increasing the Performance of the DTC Complex. Scienceweb academic papers collection.

Umirzoqov, A. (2020). On the Results of Research on the Causes of Abnormally High Reservoir Pressures in the Fields of the South-Eastern Part of the Bukhara-Khiva Region. Scienceweb academic papers collection.

Umirzoqov, A. (2020). Justification of the Need for Selective Development of the Phosphorite Reservoir by Horizontal Milling Combines. International Journal of Engineering and Information Systems (IJEAIS).

Umirzoqov, A. (2020). Calculation of the Optimal Distance Between Parallel-Converged Charges When Exploding High Ledges. Scienceweb academic papers collection.

Umirzoqov, A. (2020). Analysis of the Improving Dynamic Craft and Small-Scale Deposits. Scienceweb academic papers collection.

Umirzoqov, A. (2020). Development and Implementation of Technical Solutions Aimed at Increasing the Performance of the DTC Complex. Scienceweb academic papers collection.

Djurayevich, K. K., Kxudoynazar O'g'li, E. U., Sirozhevich, A. T., & Abdurashidovich, U. A. (2020). Complex Processing Of Lead-Containing Technogenic Waste From Mining And Metallurgical Industries In The Urals. The American Journal of Engineering and Technology, 2(09), 102-108.

Abdurashidovich, U. A. How to Develop Economic and Mathematical Modeling of Rational Progress of Small and Artificial Gold Deposits. 56. Abdurashidovich, UA Special Issue On Environmental Management In The Small-Scale Mining Industry, 57.

Umirzoqov, A. (2020). The Analysis Of Influence Of Productions Of Open Mountain Works On Environment At Formation Of Various Zones On Deep Open-Cast Mines. Scienceweb academic papers collection.

Umirzoqov, A. (2020). As A Road to Sustainability in Small Scale Mining. International Journal of Engineering and Information Systems (IJEAIS).