ABOUT ARTIFICIAL INTELLIGENCE

Joldasbaeva Ramuza Kuatbaevna

Djankhodjaev Nursultan

Karakalpak State University

Abstract

The components of AI include intellectual education, innovative virtual learning, analyzing data and identifying the learning-style, providing feedback for teachers and students is also made by AI.

Keywords: Artificial intelligence, innovations, education, computer, the quality of education.

Introduction

Before the modern technology was invented, teachers and students would teach and learn mechanically by using natural human power. Development of personal computers allowed individuals and other businesses to use them in different fields of life [1]. These steps led to the broad use of computers in various areas of economy and society.

Recent achievements of modern technology like remaking, counting and broadening other opportunities, including, Internet, World Wide Web and applications which are designed to do exact activities increased the number different computers in educating.

According to a research done in the middle of the last century, evolving computers and special counting technologies in various fields of education, especially, teaching and developing education with the help of a computer (CAI/L) made the use of computers in a classroom more accessible [2].

Wider and wider use of counting and communication technologies over time led to the invention of artificial intelligence. According to Coppin, artificial intelligence is a machine that can adapt to new environments, solve problems, answer questions, plan how a tool works and has the ability to do things that require a certain level of human intelligence [3].

 Based on these explanations, artificial intelligence is the peak of inventions and innovations in information and communication technologies that can provide computers, computer technologies and machines with human capabilities. Artificial intelligence not only creates new technologies for education but also is used widely in teaching and learning.

AI is leveling up and new ways of using it in education are being explored.

The usage of AI in education has vivid effects, particularly, increased productivity, global education, personal education, even better composition as well as managing education in an effective and clever way [4].

It is possible to create artificial intelligence, computers set in robots and additional tools to boos learning of students from the very beginning of education-kindergartens. So, according to Timms, robots are used to teach children, teachers are to correct spelling and pronunciation mistakes to adapt in student's demands [5]. This way, online education is transforming from just downloading materials from websites, learning and doing tasks to using smart and adaptive

web technologies. According to Chassignol, artificial intelligence in education is connected with managing, teaching and learning [6].

AI was officially connected with computers. Even though a computer itself can be the basis for the enhancement of AI, there is a tendency to use computers and software as AI. Computers, sensors and other new pieces of technology set make it easier to locate AI into other objects like machines, buildings and robots.

By the way, Chassignol identifies and explains the AI in an interactive way. They consider AI as a field and a point of view. They point out AI in education as a field of information that is specialized in replying to questions related to human intelligence in a traditional way ,especially, learning, solving problems as well as adapting.

Chassignol points out AI as a tool for programming computers with human capabilities and using them, particularly, ability to solve problems based on human intelligence as well as to identify visual patterns and pronunciation, to make decisions, to translate from one language into another. Other scientists and researches also pointed out comparable elements and abilities of AI using the above mentioned methods. Sharma explains AI as a machine that can copy/follow human behavior [7].

Learning with AI includes intelligent learning, innovative virtual learning, data analysis and prediction. As educational demands increase, intelligent educational systems play an increasingly important role [8]. Intelligent learning systems provide personalized learning and feedback for both teachers and students.

AI systems include machine learning-based analysis, recommendation, understanding, and knowledge acquisition techniques [9]. Machine learning, learning analytics, and data mining are technologies closely related to education. Currently, there are two emerging communities in education based on learning analytics and intelligent data analysis. The two teams have similar goals and methods and use different disciplines such as machine learning, data mining, statistical psychometrics, and data modeling

The field of learning analytics focuses on the study of content management systems and large-scale test scores. Intelligent data analytics emerged from the community of intelligent learning systems that require little or no knowledge.

At the heart of machine learning is knowledge discovery, the process of analyzing and creating meaningful patterns and structured knowledge from a set of data called "training data." For example, machine learning can help create recommendations for students when choosing subjects and universities. It uses data on students' grades, aspirations and preferences to compare them with the best schools. Technology also helps teachers understand how concepts are learned [10].

It uses technologies related to machine learning, data visualization, science learning, and semantics. For example, AI-powered competency-based learning that generates critical student data can effectively discover student data and predict key competencies that students are likely to develop, enabling institutions to be proactive. In addition to skill-based learning, learning analytics also takes advantage of the versatile capabilities of AI.

The difficulty with learning analytics tasks is that it must be applicable to specific educational settings, but also general enough to be used across courses and institutions. Learning analytics

is being increasingly used to support student, faculty, administrator, and institutional learning and to integrate best practices.

References

1. K. Flamm, Creating the Computer: Government, Industry, and High Tech-nology. Washington, DC, USA: Brookings Institution Press, 1988.
2. M. Campbell-Kelly, Computer, Student Economy Edition: A History of theInformation Machine. Evanston, IL, USA: Routledge, 2018.
3. M. M. L. Cairns «Computers in education: The impact on schools and classrooms,» in Life Schools Classrooms. Singapore: Springer, 2017, pp. 603_617
4. B. Coppin, Arti_cial Intelligence Illuminated. Boston, MA, USA:Jones and Bartlett, 2004
5. B. Whitby, Arti_cial Intelligence: A Beginner's Guide. Oxford, U.K.:Oneworld, 2008.
6. M. J. Timms, «Letting arti_cial intelligence in education out of the box: Educational cobots and smart classrooms,» Int. J. Artif. Intell. Edu., vol. 26, no. 2, pp. 701_712, Jan. 2016.
7. Y. Fang, P. Chen, G. Cai, F. C. M. Lau, S. C. Liew, and G. Han, «Outage-limit-approaching channel coding for future wireless communications: Root-protograph low-density parity-check codes,» IEEE Veh. Technol.Mag., vol. 14, no. 2, pp. 85_93, Jun. 2019.
8. M. Chassignol, A. Khoroshavin, A. Klimova, and A. Bilyatdinova, «Arti-_cial intelligence trends in education: A narrative overview,» Procedia Comput. Sci., vol. 136, pp. 16_24, Jan. 2018.
9. R. C. Sharma, P. Kawachi, and A Bozkurt, «The landscape of arti_cial intelligence in open, online and distance education: Promises and con-cerns,» Asian J. Distance Educ., vol. 14, no. 2, pp. 1_2, 2019
10. S. A. Wartman and C. D. Combs, «Medical education must move from the information age to the age of arti_cial intelligence,» Acad. Med., vol. 93, no. 8, pp. 1107_1109, Aug. 2018