



THE ROLE OF ARTIFICIAL INTELLIGENCE IN IMPROVING THE EFFECTIVENESS OF LEARNING

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Abstract:

The focus of this article is on the implementation of Artificial Intelligence or artificial intelligence in improving learning efficiency. Artificial Intelligence is the process of designing a machine to behave like a human or other term called cognitive tasks, which is how machines can learn automatically from programmed data and information. Artificial Intelligence as an application that also offers a way to invite users to participate who are not found on outdated documents or in an unchanged environment. Artificial Intelligence will make the data a collection of the learning processes already carried out by the user, and then will provide alternatives and ways of solving them and which are learning solutions that suit the needs of the user. Artificial Intelligence has the ability to encourage and accelerate the discovery of new learning boundaries and the creation of innovative technologies in learning, this is expected to increase effectiveness in the learning process.

Keywords: *Artificial intelligence, effectiveness, learning*

INTRODUCTION

One of the main characteristics of the 5.0 society is the use of artificial intelligence. Artificial intelligence will transform the big data collected through internet applications in all areas of life (the Internet of Things) and become a new experience, dedicated to improving the ability of humans to open up new opportunities. We know that society 5.0 is a human-centered and technology-based society concept developed by Japan. The concept was born as a development from the industrial revolution 4.0 that was judged to have the potential to degrade the human role. Artificial intelligence can also be defined as one part of computer science that enables machines (computers) to perform activities like and as well as those performed by humans. The conscious use of Artificial Intelligence that we have applied in our daily lives. Many applications already implement artificial intelligence as an advantage of such applications. Examples of applications that we often use are based on artificial intelligence such as streaming video/music, search engines, selfie features on smartphones, Global Positioning System (GPS), Video Games, Social Media. Artificial Intelligence or artificial intelligence is also a process of designing a human way of thinking and designing a machine to behave like a human or other term is called cognitive tasks, which is how machines can learn automatically from programmed data and information.

The role of Artificial Intelligence or artificial intelligence is always used in improving the effectiveness of learning processes, organized in educational institutions or for self-learning (self learning). Further learning activities will apply more artificial intelligence so that learning will be more effective and efficient. Artificial Intelligence or artificial intelligence can be used to present learning materials, perform assessments, provide learning feedback so that learning goes more effectively.

RESEARCH METHODS

This research uses a qualitative descriptive method, a type of literature study which aims to describe the results of the researcher's findings on several journal articles found. According to Sugiyono (2013), he explained that the qualitative research method with a descriptive analysis design was carried out intensively, carried out reflective analysis of various documents found, and made a detailed research report. This literature review was carried out with the awareness that knowledge will continue to develop along with changes and progress over time. The purpose of the literature review is for the benefit of the research project itself. In this case, making a literature review is to enrich the writer's insight into the research topic being carried out, help the writer formulate research problems, and help the writer determine the appropriate theories and methods and research results to be used in the research being carried out. As explained by Saputra (2017), research studies literature by looking for theoretical references that are relevant to the cases or problems found. Theoretical references obtained through literature study research are used as the basic foundation and main tool for research practice in the field.

RESULTS AND DISCUSSION

Artificial Intelligence or Artificial Intelligence is intelligence added to a system that can be organized in a scientific context. Andreas Kaplan and Michael Haenlein define artificial intelligence as “the ability of a system to correctly translate external data, to learn from it, and use that learning to achieve specific goals and tasks through flexible adaptation. In these days, Artificial Intelligence or artificial intelligence is increasingly developing and changing a lot of life in the world. We can take an example with the presence of ok Google, SIRI, and some programs created by other international technology companies. Those programs have been created and developed to the best of their ability. Whether for businesses, IT companies, financial services or education, Artificial Intelligence (AI) is being integrated into a variety of industries.

Although it is not a standard in organizations and educational institutions, Artificial Intelligence is in learning. Artificial Intelligence was first tried with programmable computers) .5 Main Role of Artificial Intelligence In Education. This is how Artificial Intelligence tools can be applied to improve the learning process: (1) Personalization of Artificial Intelligence Education helps to find out what students do and do not know, building a personalized learning schedule for each student taking into account the knowledge space. (2) Generating Smart Content Digital lessons Digital learning interfaces with customization options, digital textbooks, study guides, small-sized lessons, and more can be generated with the help of Artificial Intelligence. (3) Information visualization New ways to understand information, such as visualization, simulation, web-based learning environments, can be powered by Artificial Intelligence (4) Learning content updates In addition, Artificial Intelligence helps generate and update lesson content, keeping information up-to-date, and adapting it for different learning curves. (5) Contributing To Task Automation Simplifying administrative tasks: assessing, assessing and answering students is a time-consuming activity that teachers can optimize using Artificial Intelligence. Entrusting a series of tasks to Artificial Intelligence or artificial intelligence helps the teacher to make room for something that concentrates on the assessment of tasks that are impossible to transmit to Artificial Intelligence, improving the quality of lessons. (6) Conduct Guidance The ever-growing programme of personal study takes into account learner gaps to fill during individual lessons. Artificial Intelligence or artificial intelligence tutors are great time-savers for teachers, as they don't have to spend extra time explaining challenging topics to learners. (7) Ensuring Access to Education for Students with Special Needs The adoption of innovative Artificial Intelligence or artificial intelligence technology opens up new ways to interact for learners with learning disabilities. Artificial Intelligence or artificial intelligence provides access to education for learners with special needs such as deafness, hearing loss, visually impaired, and others.

There are 4 ways Artificial Intelligence is transforming the learning industry: (1) Smart Learning Content One way to use this within an enterprise is when Artificial

Intelligence can condense content in overloading problem-solving guides into more digestible learning guides with summaries of problem-solving steps and intelligent simulations. Smart learning content can also be used to design curricula and digital content across a variety of devices, including video, audio, and online assistants. (2) Intelligent Tutoring System Although this Artificial Intelligence or artificial intelligence application is still in its early stages, it will soon be able to serve as a complete digital platform that helps students with their educational needs in almost all areas of need. In addition, the platform will soon be able to adapt to a variety of learning styles to help every educator and learner. (3) Virtual Facilitators And Learning Environments With Artificial Intelligence or artificial intelligence, real lecturers will soon be replaced by robots. But there are already virtual human mentors and facilitators who can think and act like humans smart environments and learning platforms use AI, 3-D games, and computer animation to create virtual characters and realistic social interactions. The initiative includes more than just virtual facilitators as Augmented Reality will soon be part of the training. (4) Content Analysis Content analysis refers to Artificial Intelligence or artificial intelligence platforms that optimize learning modules. Through Artificial Intelligence or artificial intelligence, the content taught to students can be analyzed for maximum effect and optimized to meet the needs of the learners. Content analytics enables educators and content providers to not only create and manage their e-learning content, but also gain critical insights into student progress and understanding through a suite of powerful analytics.

CONCLUSION

The assimilation of Artificial Intelligence or artificial intelligence is slower to develop the necessary human-like attributes of acceptance, versatility, and understanding. However, there are many areas where the inherent power of Artificial Intelligence helps fill in much needed in learning and teaching in educational institutions. The ability of Artificial Intelligence or artificial intelligence to transform data and information large amounts of data in real-time and automatically provide new content or specific learning parameters helps meet learners' needs for continuous and purposeful practice and feedback. This allows the enforcement personnel to create effective and efficient learning processes so that students can better understand the material in the learning process that will affect the student's learning outcomes.

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