Artificial Intelligence for Arabic Lessons Will it Helps Teachers?

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Abstract— **This study aims to determine whether artificial intelligence for learning Arabic can help teachers. The method used by the researcher is a survey method from previous research, which also discusses artificial intelligence. Artificial intelligence can help teachers, especially in Arabic subjects. However, although it can help teachers learn Arabic, it still cannot replace the role of a teacher who teaches directly or face to face. Because Arabic is one of the subjects that teach all or everything related to language, experts are needed to teach it. So with the existence of artificial intelligence, teachers can be helped but not even though they are not optimal. No matter how well the program is designed, it cannot replace the teacher's position as an expert in science. The nature of the computer program is only as a tool, not as a transmitter of knowledge as a whole like a teacher. Technological advances are beneficial or can warn the teacher's work in certain areas. It is hoped that future researchers can use this research as reference material with this research.**

Keywords— *Artificial Intelligence; Arabic Lessons; Teachers*

I. INTRODUCTION

Education is one of the most important needs and needs to be carried out by everyone in a particular country [1]. Education mainly aims to increase and increase one's insight [2]. In addition, education is very closely related to character building; it is related to character formation in the world of education, but it is also given the term character education [3]. Character education is familiar in education because this topic is not a new thing. After all, it can be said that character education grows and develops along with education itself [4].

Character education is a familiar topic because it has become a topic of conversation in the Western world, namely in the 1990s. The person who became the bearer of the discussion was Thomas Lickona through a work he produced that has taken over the center of public attention, namely The Return of Character Education [1]. His work has succeeded in awakening the world of education from slumber to the concept of character education as something that must be used in everyday life. From here, character education became the center of attention of everyone in the world, so it developed until now [6]. Topics in character education are related explicitly to attitudes, behavior, and everything related to other character issues [2].

Based on Law number 20 of 2003, which discusses the national education system, namely in chapter 1 article 1, which states that 'education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious-

spiritual strength. Self-control, personality, intelligence, noble character, and skills needed by himself, society, nation, and state. Meanwhile, national education is based on Pancasila and the 1945 Constitution of the Republic of Indonesia, which contains religious values, and Indonesian national culture and is responsive to the times.

Of course, achieving a goal in education takes a lot of effort. The school must make many efforts, one of which is to educate students in various ways. One of them is trying to bring out the intelligence possessed by students. Before technology development, all teachers only relied on books and manual provision of supplies to all students. However, at this time, the manual method is considered less functional because most students complain about learning how only to listen, read, write, and then make assignments. Such a view makes students feel lazy to develop so that in the end, the knowledge they get is only limited to releasing their obligations.

Many kinds of technology have emerged in this modern era that can also be used for educational purposes [8]. Technology is a device created to facilitate human work [9]. With the existence of technology, humans feel helped in carrying out various forms of activity [4]. The creation of technology is essentially a solution or solution to problems faced by humans, such as educational problems and many other problems [5]. The technology created consists of various branches, including educational technology, information technology, and many others.

He talked about technology. Many opinions say about this term, such as [12] in his research which states that technology is the result obtained from the development of science within the scope of education. Based on this opinion, the stronger the argument that supports the existence of technology in education is very appropriate because technology is the result of the development of science by the previous statement. The expression reinforces this statement that technology is knowledge, so it can be concluded that technology is a small part of science [7]. In addition, the use of digital-based technology has now begun to be used in every educational institution to serve as a means to support learning programs, both as a means of information and also as a means to support all learning activities, both in the form of learning activities themselves and assignments [14]. In addition, technology can also

help improve the competence of a teacher and students with the sophistication of the technology used [8]. The science taught in schools should be adapted to technological developments so that the world of education will continue to follow the flow of the times [9].

Since the emergence of technology, many scientists have taken the initiative to create artificial intelligence through virtual rooms or classrooms to carry out the educational process. Artificial intelligence, which is in the spotlight now, actually started to be launched or became the center of discussion in the last decade [10]. What is meant by artificial intelligence here is a form of development or elaboration of technology, both information technology, and communication technology which began to emerge in the last ten years. Judging from several countries, artificial intelligence has already started to be applied, even reaching 56 percent. The top-level is in the industrial sector. However, the Indonesian state has not been able to use artificial intelligence to its full potential because it still gets a low score; this is because the ability or skill of the workers is still not sufficient for this. Their ability to operate or run technology-based programs is still meager [11]. However, one day Indonesia may be able to overcome this shortcoming and compete with countries whose workforce is highly skilled in technology.

The benefits of technology are felt when face-to-face learning cannot be carried out in all schools in Indonesia in particular. Internet-based technology is used as a means of distance learning [12]. The implementation of online learning becomes more accessible with the presence of technology. At that time, technology was a tool that had a significant role in education. Technology does not hinder the teaching and learning process even though they are separated by distance. Even technology is considered a digital tool that strongly supports educational success during a pandemic [13]. Some of the technologies used in education include Google meet, Zoom, Visco Week, and others [14]. Even today, the technology or media is still being used, even though most schools or colleges have learned face-to-face as usual, although not ultimately.

With the existence of artificial intelligence that is currently being discussed, ideas arise to apply it in education. Artificial intelligence is an elaboration or part of a field of informatics engineering that is

currently experiencing rapid development, including data mining, machine learning, artificial neural networks, pattern recognition, expert systems, natural language processing, speech recognition, evolutionary computing, and so on. There are many similar topics [15]. Based on this explanation, it can be concluded that artificial intelligence that is currently being discussed is a form of computer-based technology program or utilizes computer performance [16].

The application of artificial intelligence in education is expected to facilitate students and teachers in implementing the teaching and learning process. Apart from teachers, the main target of the artificial intelligence program is to make it easier for students [17]. One of the subjects that want to be applied to artificial intelligence is Arabic. Arabic is a subject that is often considered the most difficult by most students [18]. This could be due to the absence of more interesting supporting media to publish Arabic subjects to make students interested. No matter how brilliant the teacher is, students will still feel bored if teaching only relies on printed books. If the teacher can create more exciting teaching materials or other media, it can be a solution to increase students' interest in learning Arabic.

Based on the above background, the researcher is interested in conducting research entitled Artificial Intelligence for Arabic Lessons Will It Help Teachers.

II. METHOD

This study uses a survey research method, namely through research conducted by previous researchers. The survey method is a research method used as an instrument or research tool that is complex and comprehensive [26]. The object of the research study is learning Arabic using or utilizing artificial intelligence, which is currently being hotly discussed.

III. RESULTS AND DISCUSSION

A. Definition of Artificial Intelligence

All Artificial intelligence is a field that seems new to the whole community because there are still many who have not studied it. Even the subject of attention related to artificial intelligence is still relatively unexplored in synthetic systems [27]. In addition, [28], in his research, stated that artificial intelligence, or what is often known as AI, which stands for Artificial Intelligence, is a form of intelligence that utilizes artificial entities. The system used in the design of artificial intelligence is a computer. The way of making artificial intelligence is by entering a system into a computer so that it can carry out activities like ordinary humans. In general, the public considers this way of working with a computer.

The design of artificial intelligence, which is currently developing in several sectors, is to create such a system that can work like humans. The existence of artificial intelligence, which is often abbreviated as Al, on the one hand, provides significant advantages in certain parts. However, with the presence of artificial intelligence, it also replaces human labor such as the reduced workforce needed so that one's economy is also constrained because job opportunities to earn money are reduced because there are more sophisticated systems that can be used to do various jobs that humans usually do in general. It can be concluded that the presence of multiple systems in human life sometimes also brings convenience on the one hand, but on the other hand, it brings catastrophic losses. Artificial intelligence has now spread into several sectors; even Indonesia has begun to use artificial intelligence in various aspects.

B. Development of AI in Indonesia

Artificial intelligence (AI) is a form of intelligence added to a system used to properly manage data that utilizes computer performance as the main ingredient. There have been many discoveries that Al influenced. Al influences are related to learning. In essence, Al is not only talking about robots but also about how to understand the nature of thought and all forms of action by utilizing computer performance as an experimental tool. After conducting several studies related to AI, it was found from these studies that the countries that became the pioneers of AI were European countries and the United States.

Regarding the use of AI, it is not only used in the world of education, but also covers various other fields such as the economy, and even world defense also takes advantage of the performance of AI. Developed countries that are successful in applying AI are China and the

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United States. These two developed countries are often involved in research. Al has been significantly expanded in education from elementary to high school. AI is used as a teaching aid that can help teachers explain learning tutorials; not only that, the advantage of AI is that it can evaluate student systems and student communication systems. One study states that AI was created as a system or tool for human interaction with exceptional and brilliant abilities like humans.

In Indonesia, in particular, AI or artificial intelligence has also begun to be used in several industrial fields such as education, health, manufacturing, services, and many other industries [19]. The industry well-known for taking advantage of AI's performance is the manufacturing industry. In addition to the current manufacturing industry, which applies AI a lot, are also educational institutions. In academic institutions, AI is used to assess student learning outcomes. Not only that, but government institutions also take advantage of AI's performance in carrying out their functions as government regulators.

From the various statements heard about Al, there are indeed many positive impacts that are presented. But behind all that, of course, there are also several things or challenges faced by several countries related to the application of AI. Countries experiencing AI-related challenges are mainly developing countries. one of the challenges after the emergence of AI is the lack of need for a workforce because the performance of AI is almost the same as human performance. Hence, the force is no longer needed.

In Indonesia, those who play the central role of Al are from multinational companies such as Google Alphabet and Facebook. In addition, telecommunication companies such as PT. Telkom Tbk., PT. Telkom Sigma, and PT. Xl Axiata Tbk); besides that, it is also a startup. In Indonesia, the startup is something that plays a role in accessing the AI adsorption process or artificial intelligence. The existence of startups has succeeded in capturing the attention of potential talents both domestically and internationally. With this, the development of startups has become the center of awareness among the government and several other large companies. The government and large companies support the growth and development of startups by providing various kinds of facilities related to startup needs.

C. Artificial Intelligence Can Help Teachers And Students

Arabic is one part of a foreign language that is one of the subjects taught in Indonesia [29]. Learning Arabic does not escape finding various forms of educational problems in the current transitional era; not only that, but Arabic also gets a lot of complex pressure from multiple aspects. The lack of technology to support the learning process is one form of stress in learning Arabic [30]. Of the many learning support applications created, most of these applications do not support Arabic spelling. This is the background of Arabic teachers to work harder than teachers of other subjects. One form of effort made by Arabic language teachers is to combine various applications to create comprehensive learning.

It is still related to the problems or problems of learning Arabic that both teachers and students currently experience. The following are complex forms found in the field: 1) inadequate technology that can support the smooth running of learning activities 2) very few educators can operate technology 3) internet access is disrupted so that it cannot fully support change 4) communication between teachers and students are still very minimal, especially about the obstacles being faced.

One of the problems mentioned above is the lack of teachers who can operate the application. With a special workshop for learning Arabic, these problems can be overcome little by little. The workshop discussed recent learning media and various forms of applications designed by the younger generation who are professionals so that Arabic language teachers feel helped by these materials. One of the new forms of scholarship accepted by the teacher is the application supported by Android for making Arabic learning materials so that the teacher can change the condition of the Arabic class to be more conventional by the times.

In addition, many other applications can also be used for learning Arabic in particular. The problem is only one, namely that most of these applications cannot be used except with the

support of other applications to provide benefits as expected. For example, the use of power points in compiling the material to be taught and utilizing the Filmora application to create interactive learning videos according to the material.

In this study, researchers used some of the latest Arabic learning applications, especially beginner-level ones. The levels of madrasas taken by the researchers were Madrasah Tsanawiyah, Madrasah Ibtidaiyah, SMPT, Madrasah Aliyah, and SMA (learning Arabic). The problems found are 1) students are not used to listening to Arabic conversations directly or through a video they watch, 2) students' interest in learning Arabic is shallow 3) Arabic practice is rarely done.

The following are the results of the research after a test using media or applications:

In this study, the number of educational levels studied differed because the ratio at the Madrasah Tsanawiyah level was much higher. In addition to these reasons, it is at the Madrasah Tsanawiyah level that most students know Arabic. Therefore the role of technology is needed at this level.

The selected application or media used was not chosen arbitrarily but considered from several aspects. Starting with the ease of obtaining it, its users are also considered (can use the Arabic spelling or not) and think about whether the application is known in the community. In selecting the application used, the critical thing that must be considered is that the teacher must be able to understand and operate the application in question. If the teacher understands the application and can use it, that's where the benefits of the application begin to be felt and seen.

Based on the pre-test and post-test results, the results obtained are very much different. The difference in the results can be close to 100 percent. So from these results, it can be concluded that the use of applications in learning Arabic dramatically affects student learning outcomes. Compared to the previous situation, the student's score was much improved. So with the help of the application, the teacher feels very helpful in teaching Arabic.

The applications described in this research are all multimedia-based applications. In terms of preparing material for Arabic learning, in particular, it contains various characteristics such as (1) the material presented is in the form of visual, audio, and also audiovisual, utilizing multiple kinds of communication media, (4) the strength of color language and resolution is also owned by this multimedia.

The use of media is a solution taken so that learning can still be carried out even though it is in a remote state. The preparation of material that uses the media aims to make the limitations and difficulties faced by teachers and students still able to achieve the goal of learning Arabic, namely making students proficient in using Arabic as a communication tool.

A term that is currently known in the community is the era of society 5.0. The era of society 5.0 is a term that comes from the Japanese government, which was formed based on the development of the life of the world community. The era of society does not only focus on the development of manufacturing. Still, it is also closely related to the social aspects of culture, namely through the interaction of physical and virtual spaces. So it can be concluded based on the statement above that the internet is used as a tool to complete various aspects of human life. Not only that, but the era of society 5.0 also carries a concept, namely IoT, which stands for Internet of Things. Internet of Things utilizes the internet's functions in all aspects of life. Also, presenting technology as a means of artificial intelligence, such as the existence of Big Data and the use of Robots in various sectors [20].

From the long description above, it can be concluded that learning media is part of artificial intelligence that has been designed in such a way to make education even more quality and not hindered by space and time. Judging from the research results obtained, as stated in the table above, it is clear that the presence of the media can change students to be better students in learning Arabic, both at the Madrasah Tsanawiyah, Madrasah aliyah, and also high school levels who study Arabic. So, in addition to influencing changes in student learning, the existence of Arabic learning media is beneficial for teachers in presenting Arabic learning materials for the better.

IV. CONCLUSIONS

Based on the results and discussion, it can be concluded that artificial intelligence can help teachers, especially in Arabic subjects. However, although it can help teachers learn Arabic, it still cannot replace the role of a teacher who teaches directly or face to face. Because Arabic is one of the subjects that teach all or everything related to language, experts are needed to teach it. So with the existence of artificial intelligence, teachers can be helped but not even though they are not optimal.

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