Use of AI artificial intelligence chatGPT for arabic language learning media

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ABSTRACT

The existence of AI (artificial intelligence) has helped and solved many problems faced by humans, including in the world of learning Arabic. Currently, AI is mostly produced and developed by Western countries, but Islamic countries have become consumers and markets for AI products. If AI is not utilized in various areas of life, including the world of Arabic language learning, then the development of human resources, especially Arabic language experts, will certainly be hampered in the future. Therefore, in the world of Arabic language learning, use of Artificial Intelligence is very necessary for the teaching and learning process to be effective and efficient and to achieve the learning objectives. This is what underlies the discussion of this research. This research uses qualitative methods and the type is library research. In the context of ChatGPT which is part of information technology, it is necessary to briefly discuss IT which provides advantages such as speed, consistency, accuracy and reliability so that the learning process runs well and results are obtained. Fundamentals of AI also provides insight into the basic principles of AI development itself, starting from a problem and working to develop a solution. In general, the presence of ChatGPT as an AI product has recently become very important in the world of learning because it helps teachers and makes their work easier, especially in implementing learning strategies in schools. Even if we can utilize the sophistication of AI, of course it should be operated by humans who have a strong understanding of the basics of learning science in detail and in depth. Technology that is part of a scientific application is independent of the values of its users. This means that the benefits of technology depend on the producers and users of each technology. Islam itself strongly recommends its followers to utilize technology in managing the natural resources that Allah has given to their people. Utilization of artificial technology in the form of chatGPT is an inseparable part of the world of learning to facilitate the teaching and learning process and motivate students to study hard and achieve quality results in the future.

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Introduction

The development of information technology recently is increasingly unstoppable, surpassing the limits of previous human thinking. The impact of this development is of course human behavior itself: on the one hand it makes things easier, but on the other hand it replaces the work done by humans. For those who are not ready and adapted to this change, they will
only be pushed to the edge of the vortex and arena of human life. Therefore, to anticipate and prevent this from happening, it is clear that careful preparation and serious and heavy efforts are needed, especially from the world of education where education still plays the most important role in human life.

Humans, as the most noble creatures on the face of this earth, are given the ability to change raw materials of low economic value into finished materials of higher economic value, all of which must go through a long process, namely learning from childhood until the end of life. For successful education, a person must strive seriously so that the best way for us Muslims is to build a scientific civilization for the advancement of Muslims in the arena of science. Islam has long produced experts in the fields of science, technology, even medicine, and even astronomy (space). As Islam teaches humans to compete with each other in the search for knowledge. An illustration says that if you want to go to the Moon, study science. In this case, humans must always study and gain knowledge to achieve their goals which are based on the guidelines of the Al-Quran and the Sunnah of the Prophet.

The development of information (Information Technology) is a continuation or development of industrial (modern) society. This shows that the flow of globalization has had a major influence on the trend towards a shift in the world of education from conventional face-to-face education towards education that is more open, rational, future-oriented, open, respectful of time, creative, independent and innovative. For this reason, people are required to master information technology to fulfill their life needs more quickly, effectively and efficiently so that they are able to explain, turn challenges into opportunities and solve any problems they face.

The role of electronic media plays an important role and even determines the pattern of life. The use of information technology such as computers or laptops, tablets, email, applications, Android, iOS and so on, has changed the face of the world from a local environment to an international, global and global environment. In this era of information via satellite communications, it means we have entered the world information environment. Because, today's media networks are not only able to store information in various parts of the world, but are also able to manage it including everything that contains information between a source and the recipient such as television, video, diagrams, printed materials, applications, the internet, and so on. the like.

Media can be called 'learning media' (instructional media) when it contains messages with learning objectives. The Association of Education and Communication Technology (AECT), says that media is all forms and channels used to convey messages and information. Moreover, in this era, the latest technology has emerged, namely Artificial Intelligence (IA) ChatGPT which is used for various needs, especially in the world of learning, which is very helpful in searching for data on the internet.

The role of Islamic institutions in learning Arabic in Indonesia, such as Islamic boarding schools and madrasas as well as Islamic universities cannot be underestimated. Because, having good Arabic language skills is a great necessity in studying sources of Islamic teachings which are useful for cultivating morals that are in accordance with the beauty of Islamic teachings. As time goes by, quite a few people are going out of their nature, which is a challenge in itself for us educators. It is unavoidable that the onslaught of information technology has recently changed a lot of behavior from what was previously considered taboo, to now becoming a normal thing so that it seems like something negative, sometimes without realizing it, becomes something that is just normal without any anxiety or concern in life. damn. As we all know that technology is an invention that can be utilized by anyone, whether used for good or for bad, as educators we should play a role in utilizing digital technology so that educational goals can be achieved optimally, such as efforts to strengthen morals and maintain values. - Divine values through Islamic Education.

One of the characteristics of preserving the Arabic language attached to Islamic education, such as madrasas and Islamic boarding schools, is a competitive advantage that is worth fighting for as a fortress or defense in perpetuating the language of the Koran. Therefore, it is necessary to maintain 'Arabic language culture' in the midst of the world of education by
utilizing technology to improve the quality of learning as a support for quality education.

In connection with the implementation of Islamic learning, which is sometimes held conventionally and far from the touch of information technology, it produces output that is of poor quality and does not achieve learning targets, due to lack of technology. This certainly needs to get the attention of all parties, especially educators, to be able to present a learning process based on information technology, especially in the use of Artificial Intelligence. With this research, it is hoped that all parties involved in Arabic language learning will receive information about the use of AI in their learning, both in madrasas and in Islamic boarding schools or special institutions that teach Arabic.

Methodology

This researcher uses qualitative research methods, namely research that focuses on in-depth understanding of a phenomenon or context through analysis of non-numerical data, such as interviews, observations, or text analysis. In the qualitative research process, studying individual views, assessing the process over a relatively long period of time, generating theories based on the participant's perspective (subjective) and providing detailed information about the views of the person or place of research. Meanwhile, this research is a type of library research, where the data collection comes from literature related to the research theme, then the theories are understood and studied and analyzed.

What is meant by text analysis here is reference-based research or library research, which is more focused on the study of learning sciences related to education and information technology in the form of the use of artificial intelligence (AI) in learning at Islamic educational institutions so that the learning process more effective, efficient, saves time, energy and thoughts so as to produce output that is ready to navigate the global world by spreading Islamic values.

Results and Discussion

1.1 Information Technology

a. Understanding Information Technology

Before we discuss AI at length, we will first explain information technology because AI in a learning context is part of information technology. Judging from the constituent words, it is technology and information. If combined, it can easily become information technology, which is the result of human engineering in the process of conveying information from the sender to the recipient so that the delivery of the information will be faster, spread more widely, and stored for longer (Imam Saufik, 2021). Meanwhile, according to the Law on Information and Electronic Transactions, Number 11 of 2008, what is meant by Information Technology is a technique for collecting, preparing, storing, processing, announcing, analyzing and/or disseminating information (Imam Saufik, 2021). Furthermore, Imam quoted the 2nd edition of the Oxford English Dictionary (OED) which defines information technology as hardware and software, and can include networks and telecommunications which are usually in the context of business or enterprise (Imam Saufik, 2021). Judging from the working system, Haag and Keen define information technology as a set of tools that help you work with information and carry out tasks related to information processing. Another definition states that information technology is everything related to the process of manipulating and processing information (Bayu, 2020).

From the description above, the author can conclude that information technology is the delivery of information using its own technology with a wider reach and faster delivery from the sender of the information to the recipient. The world of education is certainly the leading institution in accommodating information technology because this institution produces people who are experts in IT and also introduces it to students so that they will be ready to face IT-
based life in all areas of life. So, the world of Islamic education must be adaptive to IT developments that are currently occurring as an effort to spread the true values of Islam to humanity throughout the world.

b. The Role of IT in Learning

By applying IT in various ways you will get benefits, as follows:

1) **Speed**

   Computers can do complex calculations in seconds, very quickly, much faster than humans can do them.

2) **Consistency**

   The processing results are more consistent and do not change because the format (shape) is standard, even though it is done repeatedly, whereas it is difficult for humans to produce exactly the same thing.

3) **Precision**

   Computers are not only fast, but also more accurate and precise (precision). Computers can detect very small differences, which cannot be seen with human capabilities, and can also perform difficult calculations.

4) **Reliability**

   What is produced is more trustworthy, compared to what is done by humans. Errors are less likely to occur when using a computer.

   In this technological era, the role of IT in learning is very important in order to support the effectiveness of learning and achieve learning goals as well as introducing IT to students so that in the future they will have the competence to operate IT in their lives or work. Not wanting to be left behind, Islamic education requires serious efforts from all parties involved in it, from teachers, teaching staff, laboratory staff to library staff.

c. Understanding Artificial Intelligence (AI)

   Previously, people looking for information would definitely rely on Google as a sophisticated machine from the early 2000s until now, but now artificial intelligence (AI) has emerged which is even more phenomenal, namely ChatGPT. Its emergence certainly did not happen suddenly, but through a long process of research and experimentation. Therefore, it is necessary to explain the definition of artificial intelligence in order to have an overview and purpose of its use.

   Artificial intelligence, which in the foreign language Artificial intelligent, means: "intelligence" is the Latin word "intelligo" which means "I understand". So the meaning of intelligence is reliability in understanding and carrying out actions (Jamaluddin et.al, 2021). According to the Language Dictionary, intelligence has the meaning: An ability to understand (The Faculty of Understanding). This behavior is characterized by:

   1) Understanding from experience
   2) Solving something that is contradictory
   3) Speed of response to new situations (flexible)
   4) Use of reasons in the process of solving problems effectively
   5) Relating in a confusing situation
   6) Understanding using ordinary methods/rational methods
   7) Applying a science that is used to condition the environment (Jamaluddin et.al, 2021).

   According to experts, artificial intelligence has the following definition:

   1) According to H. A Simon

      Artificial intelligence or AI is a lesson in getting computers to do things better than humans do.

   2) Knight and Rich's opinion Artificial intelligence or AI is a part of computer science that understands efforts to create computers that are like what humans can do or even better than that.
3) Norvig and Russell’s opinion.  
Artificial intelligence / AI is categorized into two main dimensions, namely thinking and acting (Jamaluddin et.al, 2021).

d. Presence and Definition of ChatGPT

Based on searching references on the internet, there are several journals which state that before ChatGPT appeared we were quite amazed by chatbots like Apple’s Siri which we could talk to, or the Simsimi chatbot which was quite entertaining to answer our silly questions which was popular around 2012, so now it has arrived. It’s time for a more serious chatbot to confront us, namely ChatGPT (Afgiansyah et.al, 2023). Where, this platform is produced by OpenAI (openai.com, 2022), owned by Elon Musk’s company, one of the richest entrepreneurs in the world who is involved in the artificial intelligence and electric car sectors. This machine is a natural language processing (NLP) technology that is capable of responding to human questions in the form of text (known as prompts) that are typed into the application (Adi Setiawan et.al, 2023).

ChatGPT itself is an abbreviation of Generative Pre-Trained Transformer, a chatbot that can answer user questions with the same steps as humans but in the form of automatic text. The jobs that ChatGPT can do include:

1) Coding  
A user can ask AI Chat GPT to create a programming code example. Even though you can’t build a complete program/application with Chat GPT, in the hands of a skilled programmer, these pieces of code can be made into a program or application directly.

2) Explain the contents of the book  
AI ChatGPT can briefly explain the essence of a book. If we dig and ask further, we can get important points from a book, the author’s point of view, and the conclusion of the book that we want to know.

3) Become a personal assistant  
You can also ask anything and ask for something text-based to be created for you to process further.

4) Virtual teacher  
You can learn anything, programming, finance, health, etc. with Chat GPT. Even so, you still have to balance it with directions from experts and experts.

1.2 Arabic Language Learning Media

a. Instructional Media

Several definitions of learning media put forward by education experts, in general, some provide a broad understanding and others provide a narrow understanding. In a broad sense, what is meant by learning media is any person, material, or event that provides opportunities for students to acquire knowledge, skills and attitudes. The narrow definition of learning is a non-personal means (other than humans) used by teachers who play a role in the teaching and learning process to achieve goals (Wahab et.al, 2012). In other words, the definition is that learning media is something in the form of graphics or electronics to capture and reconstruct information, both visual and verbal.

Apart from the opinions above, there are also those who interpret learning media as a combination of hardware and software. In other words, media is hardware that has been filled with software. In this case, what the researcher is discussing is related to chatGPT, including the category of learning media in the form of digital-based software Artificial Intelligence.

b. Arabic language learning

Learning Arabic is a process of interaction between students and teachers in the process of learning Arabic to achieve the goal of making it easier for students to understand Arabic and its scope. Learning a foreign language is a complex process with various complicated phenomena, so it is not surprising that this can have a different meaning for each person. In
learning Arabic, for example, the subject studied is of course Arabic, which is a subject aimed at motivating, guiding, developing and fostering abilities and fostering a positive attitude in Arabic, both receptive in the form of the ability to understand other people’s reading and conversation and productive in the form of abilities use language as a means of communication both verbally and in writing.

The ability to speak Arabic well accompanied by a positive attitude is very helpful in understanding the foundations of the Islamic religion in the form of the Koran and Al Hadith and literature from the books of the ulama. For this reason, Arabic language in Madrasas is prepared to achieve basic language competence, which includes four language skills that are taught integrally, namely listening (maharatu al-istima’), speaking (maharatu al-kalam), reading (maharatu al-qira’ah), and writing (maharatu al-kitabah).

In this case it can be concluded that learning Arabic is a process of interaction between students and teachers to guide, develop and foster the ability to have a positive attitude in Arabic, both reading, writing, pronunciation and listening with the big goal of understanding the basic foundations of the Islamic religion in the form of the Koran, and Al hadith along with Islamic literature.

c. Learning Strategies Using Information And Communication Technology

According to Muhamad Fuad Athman, as quoted by Eni Fariyatul Fahyuni, the term 'strategy' comes from the word stratego (a Greek word) which means the channels that exist for the military. In the Big Indonesian Dictionary the meaning of the word strategy is: "The science and art of using all available resources to implement certain state policies". This is different from Wahyudin Nur Nasution, who quoted Beckman's opinion, defining strategy in general as a tool, plan or method used to complete a task. In the learning context, strategy is related to the approach to delivering material in the learning environment. More than that, learning strategies can also be interpreted as patterns of learning activities that teachers choose and use contextually, according to the characteristics of students, school conditions, the surrounding environment and the learning objectives that have been formulated.

Meanwhile, the definition of strategy itself is a careful plan regarding activities to achieve specific targets. The term strategy according to The International Webster's Student Dictionary of The English Language means "the science of planning and conducting military campaigns on a broad scale; skills in management; an ingenious plan or method" (The science of planning and implementing broad military movements; expertise in management; careful planning or method). So, a learning strategy using ICT is a careful, thorough and planned step in carrying out the teaching and learning process effectively and efficiently in order to achieve the learning objectives that have been set so as to produce quality output in the future.

1.3 Chatgpt As Learning Arabic.

ChatGPT is an Artificial Intelligence (AI) that is suitable for use as a medium for learning Arabic both in class and outside of class because it can make teachers' tasks easier and save time and energy while also motivating students to study harder. As we all know, in the current era, most people in learning really need media that is variable and innovative, with the creativity of learning media it will create a special spirit for teachers and students, in addition, chatGPT technology will help students and teachers to access various kinds of media. In matters relating to the Arabic language, especially teachers themselves have a lot of work to do in the learning process, starting from preparing Learning Implementation Plans (RPP), creating class management, preparing learning materials, even creating learning media which takes a lot of time. That was work in the past that was still done manually. However, this doesn’t need to happen anymore, if a teacher or lecturer uses ChatGPT to do these tasks and can also be used as a learning medium when teaching Arabic.

The first step in using ChatGPT is by opening the site, https://openai.com/chatgpt, after that register by entering your name, email and creating a password. Then log in, then just
continue with various kinds of commands that we write according to learning needs, both to create learning tools and as learning media.

For more details, here are concrete examples of using chatGPT both to help teachers create learning administration documents and to use as learning media.

a. Example of using chatGPT chat to create an Arabic language learning tool.

**Example 1:**

Prompt:

"أنا معلمة دين في مدرسة سنوية، أريد أن أضع خطة تنفيذ تعلم اللغة العربية للصف 8."

ChatGPT very quickly in less than five minutes will give the following results:

بالطبع، هنا نشأية على خطة تنفيذ تعليم اللغة العربية (RPP) للصف 8 في مدرسة سنوية. ستتضمن حطة الدروس هذه أهداف التعلم والمواد والأساليب وخطوات التعلم والتقييم.

### حطة تنفيذ التعلم (RPP)

- **الموضوع:** العربيّة
- **الفصل / الفصل الدراسي:** الثامن / 1
- **الموضوع:** اللغة العربية
- **الوقت:** 2 × 45 دقيقة

### أهداف التعلم

بعد المشاركة في هذا التعلم، من المتوقع أن يكون الطلاب قادرين على:

1. ذكر كتابة الأسماء في اللغة العربية.
2. قراءة وفهم النصوص البسيطة عن اللغة العربية.
3. حفظ اسماء باستخدام الأسماء المستفادة.

### المواد التعليمية

- كتاب (كتاب) - كتاب
- طالب (طولة) - طالبة
- كراس (كروس) - كريسي
- سنوية (سورية) - السنوية البيضاء
- معجم (معلم) - مدرس
- طالب (طالب) - تلميذ
- جزء (جزء) - جزء
- قراءة النص (2) - قراءة النص

### طرق التعلم

- التفاعل
- الأساليب: المحتويات والأنشطة والمناقشات والتمارين

### خطوات التعلم

- نشاط تمهيدي (10 دقائق)
Example 2:
In this second example, the researcher will try to ask for a more detailed follow-up, namely relating to Arabic language learning material.

**Prompt:**

ChatGPT:
المادة العربية: تعريف وأمثلة على الأسماء (al-isim) باللغة العربية

أ. تعريف اسم باللغة العربية

اسم (isim) في قواعد الكلمات باللغة العربية يشير إلى اسم كائن أو شخص أو مكان أو مفهوم يمكن التمييز بين الأسماء في كلغة العربية على أساس الجنس (ذكر أو مؤنث) والعدد (مفرد أو مئوج)، والشكل (نهائي أو غير مهده).

ب. أنواع اسم

 segunda (اسم دائر: اسم ذاتي)

أ. اسم حتى (اسم مم)

ج. التسميات حسب نوع الجنس

د. مركزي: مثلاً (مؤنث)

د. التسميات المؤنثة

ه. النصوص حسب الشكل

و. أمثلة على الأسماء باللغة العربية

الاسم الطالب Normally درا

الاسم المجيد (اسم مأ)

س. اسم بح (حبي)

س. اسم في الكتب Salm al-Nabii)

امرأة في الكتب: الكتب أمثلة جنس الناحية

ر. اسماء في الجمل

س. اسماء في الجمل

ح. القيد

ي. أكمل الجملة بأسم الصيغة باللغة العربية

في. أكمل الجملة بأسم الصيغة باللغة العربية

ج. القواعد العامية

د. النصوص

م. المكتبة

تم إعداد جملة بسيطة باستخدام اسم أعلاه باللغة العربية:

م. من خلال هذه تعريف أشياء الأسماء (isim) باللغة العربية. يمكن أن يكون الطالب قادرًا على التعرف على الأسماء وكذلك استخدامها بسهولة. سؤال ذلك إلى إرادة مكانهم وتحضيرهم على التواصل باللغة العربية.
b. Example of using GPT chat as an Arabic language learning medium.

The use of chatGPT as a learning medium actually has many options, including being able to help bring up appropriate vocabulary for students, quiz methods, puzzles, and so on, if we look at the general achievements of Arabic language proficiency which include listening skills, reading skills, writing skills and speaking skills. So the most relevant thing for using this application in using Arabic language learning media is learning reading and writing skills, this is due to the limitations of chatGPT which only facilitates searching and operating in written form without any audio or video features.

However, that doesn't mean that chatGPT cannot be used for video or audio learning. In this case, chatGPT can really follow the commands we want from various learning methods of any type, for example if we order to provide cartoon videos, then chatGPT will show the various website links there contain complete learning media in the form of audio and video, then we can go to the link that has been shown to be a choice of learning media that we consider suitable. The following are several examples of using chatGPT as an Arabic language learning medium according to existing proficiency achievement needs:

Example 1 (for writing and reading skills)
To learn Arabic writing skills, we can do the following:

So ChatGPT will spontaneously answer by providing various quiz questions as follows:

أمثلة مسابقة تعلم اسم البيئة المدرسية

أكتب باللغة العربية الأسماء التالية:

توكل
جدول
كرسي
بالنوم
حروج

ثم بإفرار اسم إندونيسي ترجمته العربية:

قلم
مساحة
الطاولات المدرسية
مرود
فصل

أمثلة الجملة التالية بالأسم الصحيح باللغة العربية:

وجد في الفصل (السورة).
أفضل ______ (الحقيبة المدرسية) كل يوم.
على مكتبى ______ (الكتب) و ______ (الإطار små)
We can continue to develop the results above in various ways for learning media, either with our creativity or by ordering chatGPT to develop other methods, such as adding games in translating the vocabulary so that the teacher can guess the meaning of the vocabulary in the text. GPT chat display, and let the children think or search in the dictionary manually, once finished the teacher can immediately open the answer by changing the settings by changing the Indonesian language.

Example 2 (for listening and speaking skills)

As mentioned above, the most relevant thing for using this application is reading and writing skills. However, this does not mean that chatGPT cannot be used for video or audio learning, in this case chatGPT can really follow the commands we want from various method requests. Any type of learning because chatGPT will show various website links which contain complete learning media in the form of audio and video according to what we want so it is very supportive for learning media to achieve listening and speaking skills. This is what the author tried in the following request:

So chatGPT will spontaneously show various links containing several forms of learning that we can use. As the results below:
After we get various kinds of references from the links that have been provided, we can go directly to the existing links and can use them as learning media, even with the various kinds of links that exist we are free to choose according to our wishes in using media that suits the material to be we teach.

Conclusion

Based on the description of Artificial Intelligence or artificial intelligence combined with the explanation of Islamic Education, the author can draw the following conclusions:

1. Artificial Intelligence in the form of ChatGPT is an online-based program that can help human work so that it achieves goals easily, effectively and quickly.

2. This technology is value-free depending on the user who has and adheres to certain values, culture and religion.

3. Islamic education does not just produce smart people but makes students have more progressive personalities, the vision and mission of the Islamic religion itself, which is a blessing for the entire universe.

4. Islam strongly encourages its followers to use technology as part of their manifestation, especially Arabic language, in order to study the Koran and hadith, both of which are the main references for Muslims.

5. A job carried out using technology will have advantages including speed, consistency, accuracy and reliability.

6. AI is a part of information technology that plays a very important role in the world of learning, especially as an effective Arabic language learning strategy and media, so it is hoped that it will have a positive impact on human resource development.
ChatGPT really helps teachers in carrying out the teaching process, starting from preparing material, preparing lesson plans, creating class management to creating exam questions and so on.

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