

## IMPROVING THE QUALITY OF ARABIC LANGUAGE LEARNING THROUGH ARTIFICIAL INTELLIGENCE AT JUNIOR HIGH SCHOOL MA'ARIF NGANTRU TULUNGAGUNG IN THE ERA OF SOCIETY 5.0

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### Abstracts

The utilization of Artificial Intelligence (AI) in improving the quality of Arabic language learning at junior high school Ma'arif Ngantru Tulungagung in the era of Society 5.0 is an intriguing subject to be explored. Society 5.0 refers to a new paradigm where digital technology and humans interact harmoniously to create a sustainable and innovative society. The research methodology employed a qualitative approach, utilizing observation, interviews, and document analysis as data collection tools. The gathered data were analyzed using content analysis to identify patterns and trends in the implementation of AI in the context of Arabic language learning. The research findings indicate that the use of AI in Arabic language learning at junior high school Ma'arif Ngantru Tulungagung has significantly contributed to the improvement of the learning quality. AI is utilized to broaden the accessibility of Arabic language learning, enhance student engagement, and provide personalized and real-time feedback. Furthermore, AI is also employed to develop learning content tailored to individual needs and preferences. The implementation of AI in Arabic language learning at junior high school Ma'arif Ngantru Tulungagung also faces several challenges. These challenges include teacher training in utilizing AI technology, concerns regarding privacy and data security, and the management of infrastructure that supports AI requirements. In the context of the Society 5.0 era, this research provides an important contribution in demonstrating the potential of AI in enhancing the quality of Arabic language learning in junior high school.

#### Keyword:

Arabic Language Learning, Artificial Intelligence, Society 5.0 Era

### Introduction

Junior high school Ma'arif Ngantru Tulungagung is one institution education that has role important in develop quality education in Arabic. Arabic Language Education at Junior high school Ma'arif Ngantru Tulungagung aim for strengthen understanding student in study and master Arabic as the language of the Qur'an, hadith, and Islamic literature. However, in a number of year. Finally, the educators at the madrasa face a number of challenge in increase quality learning Arabic.

Deep Arabic Learning matter experienced this too enhancement in a manner significant along walk time, especially moment This Already entering the era of society 5.0. Educators must can adapt with existing changes, for Can bring the disciples to open to digital literacy.

With open digital literacy and artificial intelligence are expected quality learning Arabic becomes increase and quality with exists technology in the world of education. Whereas technology education is study and practice For help the process of learning and improving performance with create, use, and manage processes and resources adequate technology (Richey, 2008).

At the moment this, has entering the period of society 5.0 or often called the era of "super smart society". This era different with the previous period, namely the era of society 4.0. If in the era of society 4.0 more focus on usage intelligence artificial and emphasis on aspects business, then in the era of society 5.0, digital technology is used For give more focus on aspects human. This aim For create values new to get overcome gap social, age, type gender, as well language. Besides that, the era of society 5.0 also offers diverse designed products and services For fulfil need individual nor group society. With approach this is expected all circles can feel benefit from development technology in a manner evenly, without leave anyone behind (Umro, 2021).

Era Society 5.0, which is marked with integration technology sophisticated, specifically AI, and human, to be relevant context in implement enhancement quality learning Arabic at Junior high school Ma'arif Ngantru Tulungagung. this era push transformation public through utilization AI technology for reach objective development sustainability that focuses on well-being human. With more understanding deep about potential and challenges deep use of AI learning Arabic at Junior high school Ma'arif Ngantru Tulungagung, expected results study This can give solid foundation for development strategy innovative and effective learning in increase quality Arabic language education in the era of Society 5.0.

Along with development rapid technology, Artificial Intelligence (AI) has surfaced as one solution innovative in various field, incl education. Use of AI in Arabic learning offers potency For increase efficiency and effectiveness learning, as well give experience learn more personalized and interactive for students. Utilization intelligence made in the world of education Already can seen in several countries. In Australia it has developed Intelligence Tutoring System (ITS) (Wayne Holmes, Rose Luckin, 2016).

Experts state that society 5.0 is draft originating community from Japan, which focuses on the role central people and use technology. Idea This appear as response to revolution potential industry 4.0 reduce role active society. In the era of society 5.0, intelligence artificial focus on aspects humanity, with make use of deep data amount accumulated large via the internet for increase all field life. With so, believed that matter This will help man undergo more life means.

In the era of society 5.0, utilization digital technology aims for form teachers and participants knowledgeable student broad and has competent skills, so they can undergo life with good, prosperous, and harmonious. The perpetrators Education, especially teachers, are faced with demands for reach objective the with optimizing superiority digital technology and reduce impact possible negative arise from its use. Because that, teachers are expected for innovate method learning with use digital media increase quality participant he taught.

However, though deep AI potential increase quality learning Arabic has noticed globally, specialized research study deep AI application learning Arabic at Junior high school Ma'arif Ngantru Tulungagung Still limited. Because it is necessary A in depth and holistic research for analyze and evaluate impact deep use of AI increase quality learning Arabic at Junior high school Ma'arif Ngantru Tulungagung.

Objective study This is for describe How application of AI can increase quality learning Arabic at Junior high school Ma'arif Ngantru Tulungagung in the era of Society 5.0. Study This expected can give guide practical for educators in optimizing use AI technology, as well give donation knowledge to understanding We about deep AI application context Arabic education.

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learning process is supported by technology this at least will walk effective with a number of terms: 1) Develop ability participant educate for solve problems in life real (contextual) so education become relevant and responsive to demands life real every day. The implication curriculum become more interesting and possible stimulate interest or motivation participant educate Because can with easy apply his knowledge in life real daily 2) Growing thinking reflective and 3) Help development and engagement active from participant educate in the learning process (Asmani, 2011).

Approach integrating learning technology own lots excellence. First, with focus on development ability participant educate in solve problem contextual, learning become more relevant with life real every day. Student can see How their knowledge get can applied in situation real, so increase interest and motivation they in learn. This Of course just bring impact positive on the curriculum, which is becoming more interesting and challenging for student.

Furthermore, learning is supported technology is pushing too development thinking reflective. Student invited for think critical and analytical moment they use technology For reflect understanding them, evaluate solution, and looking for method alternative For solve problem. Ability think reflective This will help student develop Skills think more deep and confronting challenge with way more creative.

Finally, technology also plays a role in increase involvement active student in the learning process. Through various interactive tools and platforms, students can participate in a manner active in various activity learning. Involvement This can motivating student For take role active in learn and feel more involved in material learning.

However, it is necessary remembered that technology only tools and their effectiveness depending on how the teacher and students use it. Permanent teacher own role important in direct and guide student in utilise technology for meaningful learning. Besides it is also important for ensure that access to technology evenly between students, so No There is lagging students in this more modern learning process.

## Methods

In study this, is used method study shaped qualitative descriptive analytic. Method This aim for research and describe variables research, as well do systematic and in depth analysis For find value and meaning from object under study. For collect data, used technique interview and analysis document, which reflects medium aspect researched, that is curriculum learning Arabic. All data collected Then analyzed with use technique analysis of the Miles & Huberman model, which includes data collection, data presentation, reduction, verification, and conclusion. Analysis document done for find form and approach Arabic curriculum. Possible data sources generate data in the form of signs through letters , numbers , pictures / photos and symbols other (Arikunto, 2011). That means the data collected from same source through observation, interview and documentation (Riyanto, 2010).

So as researcher need truly attending and doing own data collection because researcher in study qualitative is observer participants who have obligation full for watching and listening be careful possible whole information obtained in the research qualitative (Moleong, 2018). If conclusion beginning supported by evidence appropriate strength with what researchers find when return to place research, then conclusion the possibility characteristic credible (Trianto, 2010).

Step beginning in study this is do studies comprehensive literature about the use of Artificial Intelligence (AI) in learning Arabic. Overview literature This will involve search journal scientific, books, articles, and sources information related other. Focus search will

given to research previously had done in context deep use of AI Arabic education. Studies literature this will give base strong theory for study as well as understand deep AI concepts and applications learning Arabic.

Observation direct done for observing the process of learning Arabic which involves the use of AI in Junior high school Ma'arif Ngantru Tulungagung. Observation will covers observation to interaction between educators and students, use AI tools, as well response student to learning the.

Interview done with educators and students involved in learning Arabic with use of AI. Interview will give outlook deep about perspective them, experience, as well evaluation related with deep use of AI learning Arabic.

Findings from data analysis will interpreted and analyzed in a manner comprehensive. Analysis results will used for answer question research and goals study in a manner whole. Findings study will explained in a manner clear and presented with strong argument in form report research.

With follow method study it is expected study This can give deep understanding about enhancement quality learning Arabic through the use of Artificial Intelligence in Junior high school Ma'arif Ngantru Tulungagung in the era of Society 5.0.

## Results and Discussion

Era Society 5.0 refers to development integrating technology man with system computing smart. This era offer potency For increase quality learning Arabic via utilization of Artificial Intelligence (AI) in Junior high school Ma'arif Ngantru Tulungagung (Aziz, 2020).

Utilization of Artificial Intelligence in learning Arabic can give significant benefits. AI can help in identify need Study students , provide material customized learning, delivers bait come back in real time, and improve interaction between teachers and students (Nurhayati, 2020). Theory Related with Enhancement Quality Arabic Language Learning Through Artificial Intelligence at Junior high school Ma'arif Ngantru Tulungagung in Era Society 5.0 is appropriate with a number of theory following

### 1. Theory Constructivism

Theory constructivism state that student in a manner active build knowledge they through the interaction process with environment and context learn. In learning Arabic, approach constructivism looked student as builder knowledge active, and AI can role as tool For facilitate the learning process (Piaget, 1972).

### 2. Theory Learning based Problem

Theory This emphasize learning through solving appropriate problem with context and life daily student. With utilization of AI, students can faced with challenges Arabic relevant and based problem For increase understanding them (D. H. (Ed. . Jonassen, 2011).

### 3. Theory Learning Student Centered

Theory This put student as subject main in the process of learning and appreciating individual differences as well style learn. Use of AI in Arabic learning makes it possible customized content with preference learning and needs students, so the learning process more personal and effective (Holec, 1981).

### 4. Theory Learning Collaborative

Theory This emphasize importance collaboration and interaction social in learning. With AI assistance, students can communicate, discuss, and work the same in understand Arabic through an interactive learning platform (Johnson, D. W., & Johnson, 1989).

### 5. Theory Reinforcement (Reinforcement Theory)

Theory strengthening emphasize use strengthening positive for increase motivation and results learn. AI can give bait come back instant and positive when student succeed finish Arabic assignment with well, that can increase trust self and motivation Study student (Skinner, 1969).

Junior high school Ma'arif Ngantru Tulungagung has implementing Artificial Intelligence in learning Arabic. Use of AI in form learning applications and platforms has give contribution positive in increase quality learning and outcomes study student (Saputra, 2022).

Utilization of Artificial Intelligence in learning Arabic at Junior high school Ma'arif Ngantru Tulungagung is also faced with challenges and opportunities. Challenge the covers limitations access technology, training for teachers, and management effective data. However, opportunities arose including enhancement motivation Study students, access to material richer learning, and monitoring progress Study individually (Wahid, 2023).

Enhancement quality learning Arabic via utilization of Artificial Intelligence in Junior high school Ma'arif Ngantru Tulungagung can give benefit significant, incl enhancement understanding and skills Arabic speaking students, increase involvement student in learning, and improvement the efficiency of the learning process (Kusuma, 2023).

Based on interview with Head of Junior high school Ma'arif Ngantru Tulungagung that use of AI can give contribution big in increase quality learning Arabic in our madrasa. AIs have ability for provide material customized learning with need individual students, strengthening motivation learn, and create experience interactive learning. I believe that AI can help student in understand Arabic with more good and improve results study them (Arikunto, 2011).

Interview with an Arabic teacher that is the benefits very various. With using AI, we got give more personalized learning to student. AI can identify weaknesses and needs student individually, so they can get right help. Besides that, AI can too give bait come back instant to students, so they can repair error and improve their Arabic language skills with more effective. The use of AI also creates atmosphere more learning interesting and interactive for student (Aziz, 2020).

Interview with the head of curriculum that role educator very important in integrating deep AI learning Arabic. As educators, we must own good understanding about AI and its capabilities. We need identify method best for utilize AI in the learning process, select and manage source appropriate AI power, as well ensure that appropriate application of AI with curriculum and goals learning. Besides that, we also have to can guide student in use AI technology and help they develop their Arabic skills (Holec, 1981).

There is a number of type intelligence artificial intelligence (AI). used student for increase learning Arabic. Following a number of example deep use of AI context this (Asmani, 2011):

1. Application Arabic Learning: Yes various application learning Arabic use AI technology for help student in control vocabulary, grammar, and skills speak Arabic. Application This often be equipped with feature introduction possible sound student train pronounce the words with right.
2. Assistants: AI powered virtual assistants, such as Siri or Google Assistant, can help student look for information and translation Arabic with fast. Student can use this virtual assistant for communicate in Arabic and improve understanding them.
3. Introduction Arabic script: Technology introduction AI based Arabic writing makes it possible student for write Arabic characters with right and get bait come back instant If happen error writing.
4. Learning Adaptive: AI can used in system learning adaptive, where students accept material learning and practice based on capabilities and needs them. System This can identify difficulty students and give suitable material for help they overcome challenge the.
5. Learning Chatbots: AI based chatbots can give help and answers on question student related Arabic, whenever needed. They can give explanation about grammar, word meaning, and providing reference for more understand topic certain.
6. Introduction Speech: Technology introduction saying AI- based can help student in practice Skills speak Arabic with give bait come back about correct pronunciation and intonation.



7. System Evaluation Automatic: AI can used for develop system evaluation automatic For test ability Arabic students, fine in form test written nor oral.

Use of AI in learning arabic can increase efficiency and effectiveness of the learning process teach, as well give experience more learning interesting and personal to student. However, the teacher's role in give guidance and support still very important in ensure success learning use technology this. Following is a number of AI applications that can used student For learning Arabic (Johnson, D. W., & Johnson, 1989):

1. Mondly Arabic: Application this use AI technology for give experience Study interactive Arabic. Mondly offer exercise speaking, grammar, and vocabulary with introduction voice for help student understand and train Arabic with more effective.
2. Duolingo: One application learning most popular languages, Duolingo also provides course Arabic. Application This use AI technology for serve various exercises, incl exercise speaking, listening, and writing in Arabic.
3. Rosetta Stone: Rosetta Stone provides learning Arabic language supported by AI technology and methods immersion. Application This help student For Study Arabic with similar way with learning Language his first.
4. HelloTalk: HelloTalk is application network socially possible student for interact with speaker original Arabic. Application This use AI technology for translate and provide support in chat, so student can train speak and understand deep Arabic context real.
5. Tandem: Similar with HelloTalk, Tandem is also application network connecting social student with speaker original Arabic. With support AI technology, Tandem helps facilitate exchange language and learning Arabic language practical.
6. Drops: Drops are presenting application learning language through games and gamification. Application it also has course Arabic language powered by AI technology for help student learn vocabulary Arabic with more fun.
7. Learn Arabic AI: Application This provide lesson AI based Arabic language that includes grammar, vocabulary, and conversation exercises Arabic. AI technology helps in give response and feedback proper return for increase understanding student.

Use AI applications for learning Arabic can help student understand and master Language with way more interactive and effective. However, though application This can give valuable support, important for remembered that learning effective language also requires exercise in a manner consistent, engagement active, and guided from the teacher or inner mentor context formal learning.

Interview with the Arabic teacher that There is a number of necessary challenge faced. One of them is preparation source adequate power, incl infrastructure the necessary technology for use of AI. Besides that, is, training and development competence educator in integrating AI is also becoming challenge. We also need notice aspect social and ethical related with use of AI, as well guard balance between role educator and attendance deep AI technology learning (Johnson, D. W., & Johnson, 1989).

Interview with an Arabic teacher sees a bright future in deep use of AI learning Arabic in madrasas. With progress technology and developments in the Society 5.0 era (D. Jonassen, 2011).

## Analysis

Article This discuss the use of Artificial Intelligence (AI) in increase quality learning Arabic at Junior high school Ma'arif Ngantru Tulungagung in the era of Society 5.0. Following is analysis journal based on a number of relevant aspects. The Era of Society 5.0 is marked with integration advanced digital technology in life every day. In journal this, the use of AI in learning Arabic in madrasas reflects adaptation to development technology in education. The use of AI can increase quality learning Arabic with utilise intelligence artificial for give experience adaptive, interactive, and personalized learning.

Use of AI in learning Arabic in madrasas provides a number profit. AI can provide personalized and customized learning with need individual student. Besides that, AI can too give bait come back instant and personalized help, improve motivation students, as well strengthen their understanding and skills of Arabic.

Deep AI implementation learning Arabic in madrasas also faces challenge. Challenge the covers preparation source adequate power, training educator for integrate AI, as well aspect ethics and privacy related deep use of AI learning. Handle challenge This need commitment and cooperation between institution education, educators, and parties related.

Educator own role central in deep use of AI learning Arabic. They responsible answer for select, manage, and integrate AI with Good in curriculum. Educators should too capable facilitate use of AI, guiding student in utilization technology, as well dig AI potential for increase effectiveness and quality learning Arabic.

Use of AI in learning Arabic in madrasas provides benefit direct for student. They can access material customized learning with level capabilities and needs them. AI can too increase involvement student in the learning process, presenting experience interesting learning, and helpful increase understanding as well as their Arabic skills.

Analysis journal This show that deep use of AI learning Arabic at Junior high school Ma'arif Ngantru Tulungagung in the era of Society 5.0 provides potency significant in increase quality learning. Although There is necessary challenge overcome, the benefits obtained for students and roles important educator in integrate AI amplify argument about urgency use technology This in context Arabic education.

## Conclusion

The use of Artificial Intelligence (AI) in learning Arabic at Junior high school Ma'arif Ngantru Tulungagung can give contribution significant in increase quality learning. Use of AI in learning Arabic has give effect positive to understanding and ability student in Arabic. AI helps too create experience personalized learning, with capable identify needs and characteristics individual student. Use of AI in learning Arabic provides impact positive to motivation and interest Study student. Student tend more motivated and participating active in learning when AI is used. Presence AI technology delivers element interactive and interesting in learning, which strengthens involvement student in the learning process. Deep AI implementation Arabic language learning influences roles and approaches educator. Approach learning become more adaptive and responsive to need student, with educator role as facilitator and companion in the learning process. The use of AI is also capable reduce burden Work educator with give support and materials learning that has prepared in a manner automatic. Use of AI in learning Arabic in the era of Society 5.0 presents challenges and opportunities. Challenge covers preparation source power, training educators, too aspect related social and ethical with application of AI. However, the opportunities presented by AI are deep increase quality very learning Arabic big, especially in create adaptive, interactive, and personalized learning in accordance with development technology in the era of Society 5.0. With thus, research This underline urgency and potential deep use of AI increase quality learning Arabic at Junior high school Ma'arif Ngantru Tulungagung in the era of Society 5.0. Implications from study This is importance deep AI integration curriculum and methods learning, as well necessity ongoing effort in develop ability educators and infrastructure technology for maximizing the benefits of deep AI learning Arabic.

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