

## THE ROLE OF DIGITAL TECHNOLOGY IN THE PEDAGOGICAL TRANSFORMATION OF ARABIC LANGUAGE LEARNING

Khizanatul Hikmah<sup>1</sup>, Ahmad Hafidz Abdullah<sup>2</sup>, Misbahul Munir<sup>3</sup>

Universitas Negeri Malang, Indonesia

[khizanatul.hikmah.2502319@students.um.ac.id](mailto:khizanatul.hikmah.2502319@students.um.ac.id); [khizanatul.hikmah@umsida.ac.id](mailto:khizanatul.hikmah@umsida.ac.id)<sup>1</sup>,

[ahmad.hafidz.2502319@students.um.ac.id](mailto:ahmad.hafidz.2502319@students.um.ac.id)<sup>2</sup>,

[muhamad.misbahul.2502319@students.um.ac.id](mailto:muhamad.misbahul.2502319@students.um.ac.id)<sup>3</sup>

**Abstrac:** The Arabic language has strategic value in religious, scientific and cultural aspects. However, Arabic language learning in Indonesia still faces a few challenges, including limited human resources, monotonous methods, limited learning media, and an unsupportive learning environment. This study aims to examine the role and innovation of technology in improving the quality of Arabic language learning in the digital age. The research method used is qualitative with a literature review approach, where data is obtained from scientific articles, journals, and relevant previous studies. The results of the study show that technology acts as an interactive medium, a digital learning resource, and a means of communication that can encourage pedagogical transformation in Arabic language learning. Developing technological innovations include learning applications, e-learning platforms, Augmented Reality (AR), Virtual Reality (VR), and Artificial Intelligence (AI), which provide a more contextual, flexible, and effective learning experience. In conclusion, technology is not merely a complement but a primary driving force in improving the quality of Arabic language learning, with its success largely determined by the digital literacy readiness of educators, infrastructure, and adaptive curriculum strategies.

**Keyword:** *Technology; Learning; Arabic; Digital.*

### INTRODUCTION

Arabic is a language that has strategic and historical value for Muslims around the world (Aziz Arifin, Sukandar, 2021). Arabic is not only the language of the Qur'an and hadith, but also the language of science and culture (Aman, 2021) that has produced many monumental works. In addition, in the current era, the increasing demand for foreign languages has also led to an increase in the orientation towards learning Arabic. This is because this orientation has begun to penetrate the professional and economic spheres. Therefore, learning Arabic has become an important agenda in the world of education. Currently, Arabic language learning in Indonesia still faces various obstacles and challenges, such as a lack of

qualified human resources, methods that are not varied and interesting, learning media that are still limited, and an environment that is not conducive to language development (Agung, Amran, Jamil, 2021). As a result, the results of Arabic language learning are still far from expectations and objectives.

Arabic language learning is an important part of Islamic education (Aufa, 2018), especially in improving Arabic language skills among the community. In recent years, the use of learning media has become an effective strategy in improving the quality of Arabic language learning. Thus, innovation in Arabic language learning media based on the use of technology has become a highly relevant and interesting topic in Arabic language education research.

The use of technology-based Arabic language learning media can improve the quality of learning in a more effective and efficient manner (Euis, Adi, Irpan, 2022). In several previous studies, it has been seen that the use of technology-based learning media can improve students' Arabic language skills (Azhar, et al., 2023) (Ade Nurul, et al., 2025), increase learning motivation, and increase student engagement in the learning process (Sarnoto, et al., 2023).

The use of technology-based Arabic language learning media also has several challenges. One of the main challenges is how to integrate technology with learning materials that are appropriate to the needs of students (Loso, Rengga, Ali, 2025). Therefore, further research is needed to find effective solutions for integrating technology with Arabic language learning materials. In this regard, the researcher focuses on how technology can build the existence of Arabic language learning and identify effective Arabic language learning technology innovations that can be used in the Digital Age.

## **RESEARCH METHOD**

This study uses a qualitative approach with a library research method. A qualitative approach was chosen because this study aims to explore in depth the role of technology in Arabic language learning in the digital age. With this research method, it is hoped that a comprehensive picture can be obtained of how technology-based learning media innovations can improve the quality of Arabic language learning. The researcher collected data from scientific articles, national and international journals, and research reports relevant to technology-based Arabic language learning. The data analysis technique was carried out by the researcher through the stages of reduction, data display, and interpretation of various findings related to the role and innovation of technology in Arabic language learning.

## RESULTS OF THE DISCUSSION

### 1. The Role of Technology in Arabic Language Learning

Technology plays an important and essential role in learning today, especially in the revolution of Arabic language learning in various educational institutions. This role can be explained through three main aspects, namely as an interactive medium, a digital learning resource, and a means of communication.

Technology as an Interactive Medium. Technology enables the transformation of Arabic language teaching methods through interactive media that are often used in the Digital Age (Arifah, Umam, Fatkhurrohmah, 2025), such as learning applications, e-learning, and multimedia that facilitate active student engagement. Based on previous research, it is known that the use of multimedia-based applications, videos, and interactive simulations can increase motivation and understanding of Arabic language concepts more effectively than traditional methods.

Technology as a Source of Digital Learning. Broad access to digital content such as e-books, video tutorials, podcasts, and online platforms offers greater flexibility in learning. Technology opens more freedom for independent learning, allowing students to learn at their own pace and according to their personal needs. Literature reveals that e-learning and mobile applications have increased engagement and learning outcomes in the context of Arabic language learning (Natsir, et al., 2023).

Technology as a Means of Communication. The integration of technology facilitates communication between educators and students outside the classroom (Daud, Aulia, 2019) through social media, discussion forums, and online communication applications. Research shows that social media such as WhatsApp, Instagram, TikTok, and YouTube can facilitate access to learning, expand reach, and strengthen collaborative interactions between students.

Thus, overall, researchers conclude that technology is not merely a complement, but rather the main driving force behind pedagogical transformation in Arabic language learning. The successful integration of technology into learning is closely related to educators' digital literacy readiness, adequate infrastructure, and adaptive curriculum strategies.

### 2. Technological Innovation in Arabic Language Learning

The development of digital technology has brought significant transformations to the world of education, including Arabic language learning. Technological innovation trends in Arabic language learning continue to evolve in line with the increasing needs of the digital generation, who prefer interactive, flexible, and contextual approaches. Trends and innovations in

Arabic language learning using current technology are not only through content and applications, but there are many ways to develop them, namely as follows:

**Learning Applications:** There are many mobile applications designed specifically for learning Arabic, such as Duolingo, Memrise, Mondly, and Alif Bee, which provide interactive Arabic language learning at various levels of difficulty. Users can easily download these applications from the Google Play Store on their gadgets. Through these applications, learning Arabic will be more enjoyable and motivate users to learn it.

**E-learning Platform,** This platform has been widely used in educational institutions. E-learning or electronic learning is a modern learning system that uses computer technology to deliver learning materials (Khomsah and Muassomah, 2021). The main characteristics inherent in e-learning include a) utilising Electronic Technology (E-learning uses electronic technology to deliver learning materials. This includes the use of computers, digital devices, and computer networks to support the learning process), b) Utilising Computers (Digital Media and Computer Networks): Learning materials in e-learning are stored in digital form (digital media) and can be accessed through computer networks (computer networks). This allows flexible and easy access to learning materials from various locations. c) Using Self-Learning Materials, namely learning materials arranged in such a way that students can learn independently in a digital format that can be accessed anywhere. d) Utilising Education Information Systems: E-learning is not only about delivering learning materials, but also utilising information systems to manage learning, curricula, learning outcomes, and education administration efficiently. E-learning provides flexibility, accessibility, and efficiency in both formal and informal contexts. This supports learning that is more adaptive and responsive to the needs of learners and facilitates innovative teaching.

**Augmented Reality (AR) and Virtual Reality (VR) technologies,** The development of AR and VR in the world of education has brought about new breakthroughs, including in Arabic language learning (Azizah, 2024). Both are technologies that allow users to interact with a three-dimensional simulated environment in an immersive way. In the context of Arabic language learning, AR and VR can create a more contextual, realistic, and interactive learning experience, thereby enhance language skills and understanding of Arab culture.

**Artificial Intelligence (AI)** plays an important role in Arabic language learning as an interactive support tool that facilitates the learning process. The use of generative AI such as ChatGPT can function as an intelligent tutor that can help users practise writing Arabic texts (Hadi, Hendri, 2025) (Fitri, 2025), providing corrections in grammar, vocabulary, and sentence structure. Additionally, AI can be used in speaking exercises through voice recognition systems, which assess the pronunciation of Arabic letters and words in real-

time (Satrio, 2025), thereby approaching the standards of native speakers. Thus, AI not only accelerates the learning process but also boosts students' confidence in using Arabic actively and communicatively.

These innovations not only improve the accessibility and flexibility of Arabic language learning, but also provide a more enjoyable and effective learning experience for learners around the world.

## CONCLUSION

Based on the above description, it can be concluded that Arabic language learning in the digital age faces both challenges and great opportunities. Technology has a strategic role as an interactive medium, digital learning resource, and means of communication that can enrich the learning experience and increase student engagement. The frequent emergence of innovative trends, ranging from mobile applications, e-learning platforms, AR/VR, to AI, shows that technology can support more effective, efficient, and enjoyable Arabic language learning. However, optimising the use of technology requires the readiness of educators' digital literacy, the availability of infrastructure, and a curriculum that is responsive to the times. Thus, the integration of technology in Arabic language learning is not only a necessity but also a key strategy in realising a more adaptive and competitive quality of Arabic language education in the digital age.

## DAFTAR PUSTAKA

- Agung, N., Amran, A. R., & Jamil, H. (2021). *Utilization of the Wondershare Filmora Application in Compiling Arabic Teaching Materials Based on Local Culture*. In BIS-HSS 2020: Proceedings of the 2nd Borobudur International Symposium on Humanities and Social Sciences, BIS-HSS 2020, 18 November 2020, Magelang, Central Java, Indonesia (p. 319). European Alliance for Innovation.
- Aman, Moch. (2021). *Bahasa Arab Dan Bahasa Al-Qur'an*. Tadarus Tarbawy. 3(1): 300-308.
- Ahmad Fadillah Khomsah dan Muassomah. (2021). Penerapan E-Learning dalam Pembelajaran Bahasa Arab di Masa Pandemi. *Tarbiyatuna: Jurnal Pendidikan Ilmiah*, 6 (4).
- Ahmad Zain Sarnoto dkk. (2023). *Analisis Penerapan Teknologi dalam Pembelajaran dan Dampaknya terhadap Hasil Belajar*. *Journal of Education*, 6(1): 82–92.
- Arifah, Zetty., Mustolikh Khabibul Umam., Ricy Fatkhurrokhman. (2025). *Transformasi Pembelajaran Bahasa Arab melalui Teknologi Digital dalam Pendidikan Islam*. *Educatia: Jurnal Pendidikan dan Agama Islam*, 15(1): 1-22.

- Arifin, Moch. Aziz, Sukandar. (2021). *Pentingnya Bahasa Arab Bagi Umat Islam Di Pedesaan*. Al-Adalah, 24(1): 11-17.
- Aufa, F. M. (2018). Al-Madkhal Al-Makrify Dan Pembelajaran Bahasa Arab. Lisanan Arabiya: Jurnal Pendidikan Bahasa Arab, 2(2), 173-190.
- Azhar, M., Wahyudi, H., Promadi, P., Masrun, M. (2023). *Penggunaan Teknologi Dalam Pembelajaran Bahasa Arab di Indonesia*. Jurnal Review Pendidikan dan Pengajaran (JRPP), 6(1): 3160-3168.
- Aziza, ilma fahmi. (2024). *Pengembangan Media Pembelajaran Bahasa Arab Berbasis Teknologi Augmented Reality (Ar)*. JIPI: Jurnal Ilmiah Pendidikan Islam. 3(1): 52-62.
- Daud, Afrianto., Aulia, Ando Fahda., Ramayanti, N., (2019). *Integrasi teknologi dalam pembelajaran: Upaya untuk beradaptasi dengan tantangan era digital dan revolusi industri 4.0*. Seminar Nasional Pemberdayaan Masyarakat, 1: 449-455.
- Euis Sholihah, Adi Supardi, dan Irpan Hilmi. (2022). *Teknologi Media Pembelajaran Bahasa Arab*. Al-Urwatul Wutsqo: Jurnal Keislaman dan Pendidikan. 3(1).
- Fitri, Allisa Tazkia. (2025). *Tinjauan Literatur: Integrasi Kecerdasan Buatan (AI) Dalam Pembelajaran Bahasa Arab*. Jurnal JIPS (Jurnal Ilmiah Pendidikan Scholastic). 9 (1): 16-26
- Judijanto, Loso, Rengga Yudha Santoso, Ali Mansur. (2025). *Integrasi Teknologi dan Sektor Pendidikan: Tantangan dan Peluang dalam Perspektif Multisektoral*. Jurnal Ilmiah Edukatif, 11(1): 47-57.
- Hadi, Mardi., Qohar, Hendri Abdul. (2025). *Peran Artificial Intelligence dalam Meningkatkan Pembelajaran Interaktif Bahasa Arab*. Ranah Research, 6(6): 3010-3023
- Natsir, Nurasia., Akhmad Baidun., dkk. (2023). *Belajar di Era Digital*. Kebumen: Mutiara Intelektual Indonesia.
- Sakti, Ade Nurul Laras, Anisa Rifdah, Cici Hifni, Mutiara Nur, Nurmaya Rafika, Hilda Zahra Lubis. (2025). *Penggunaan Teknologi dalam Meningkatkan Kemampuan Bahasa Arab Anak Usia Dini*. Jurnal Pendidikan Tambusai. 9(1): 5150-5153
- Satrio, S., (2025). *Integrasi Artificial Intelligence dalam Pembelajaran Bahasa Arab: Peluang, Tantangan, dan Inovasi Pedagogis di Era Digital*. Journal of Artificial Intelligence and Digital Business (RIGGS). 4(2): 5907-5914.