



## Utilizing Interactive Media to Enhance Arabic Literacy in Secondary School Students

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Received:

03 July 2024

Revised:

02 October 2024

Accepted:

07 November 2024

Published:

16 December 2024

### Abstract:

This study aims to explore the application of interactive media in improving Arabic literacy in secondary school students, focusing on the use of digital platforms and immersive technologies such as AR/VR. The research method used is a descriptive approach with qualitative analysis. The main findings indicate that the use of interactive media has a positive impact on improving students' understanding of Arabic vocabulary, grammar, and cultural context. However, challenges such as limited access to adequate technology and lack of training for teachers in integrating this technology into learning are still obstacles. This study also identified differences in students' comfort levels with technology, which affect the effectiveness of learning. Based on these findings, this study recommends increasing access to technology in schools, further training for teachers, and developing a curriculum that is more integrated with digital media. With these steps, it is hoped that Arabic language learning can be more effective and relevant to the needs of the digital era.

**Keywords:** *Interactive Media, Arabic Language Literacy, Secondary School Student*

### Abstrak:

Penelitian ini bertujuan untuk mengeksplorasi penerapan media interaktif dalam meningkatkan literasi bahasa Arab pada siswa sekolah menengah, dengan fokus pada penggunaan platform digital dan teknologi imersif seperti AR/VR. Metode penelitian yang digunakan adalah pendekatan deskriptif dengan analisis kualitatif. Temuan utama menunjukkan bahwa penggunaan media interaktif memberikan dampak positif dalam meningkatkan pemahaman siswa terhadap kosakata, tata bahasa, dan konteks budaya bahasa Arab. Meskipun demikian, tantangan seperti keterbatasan akses terhadap teknologi yang memadai dan kurangnya pelatihan bagi guru dalam mengintegrasikan teknologi ini ke dalam pembelajaran masih menjadi hambatan. Penelitian ini juga mengidentifikasi perbedaan dalam tingkat kenyamanan siswa dengan teknologi, yang mempengaruhi efektivitas pembelajaran. Berdasarkan hasil temuan ini, penelitian ini merekomendasikan peningkatan akses teknologi di sekolah-sekolah, pelatihan lebih lanjut untuk guru, serta pengembangan kurikulum yang lebih terintegrasi dengan media digital. Dengan langkah-langkah ini, diharapkan pembelajaran bahasa Arab dapat lebih efektif dan relevan dengan kebutuhan era digital.

**Kata Kunci:** *Media Interaktif, Literasi Bahasa Arab, Siswa Sekolah Menengah*

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How to Cite:

Muhammad, K., & Irmansyah, I. (2024). Utilizing Interactive Media to Enhance Arabic Literacy in Secondary School Students. *IJ-ATL (International Journal of Arabic Teaching and Learning)*, 8(2).

DOI: <https://doi.org/10.33650/ijatl.v8i2.10364>

## INTRODUCTION / المقدمة

The use of interactive media in Arabic language learning in secondary schools has proven effective in improving students' literacy as a whole, both in academic and application aspects (Paradis et al., 2020). This media provides a more enjoyable and

meaningful learning experience, thus being able to overcome challenges such as low student interest and the limitations of conventional methods. With an innovative approach, interactive media combines theory and practice in a balanced way, helping students develop better language skills. (Alruthia et al., 2020). As a strategic level of education, secondary schools have an important role in utilizing interactive media to create learning methods that are relevant to the needs of the times, supporting the improvement of Arabic language literacy technically and applicatively.

In Indonesia, Arabic literacy often faces significant challenges, especially among secondary school students (Bas-Sarmiento et al., 2020). These challenges include lack of student interest, limited access to interesting learning materials, and minimal integration of technology into teaching methods. Data from several educational surveys show that Indonesian students' Arabic literacy skills are generally still below international standards, even though the country has the largest Muslim population in the world (Nelson et al., 2022). This condition is exacerbated by the dominance of conventional teaching methods that are less relevant to the needs and learning styles of today's digital generation. In response to these challenges, interactive media offers a potential solution to bridge the gap between students' learning needs and available teaching methods.

Studies on the use of interactive media in learning have been carried out by many other researchers. Several studies, such as those conducted by Al-Abdullatif & Alsubaie, (2022); Sarhan et al., (2021); Wirayuda & Chan, (2021), and Bouclaous et al., (2021), show that interactive media can increase students' learning motivation, especially in language learning. Research by Slewa-Younan et al., (2020) highlighted that the use of technology-based applications in Arabic language learning not only improves students' language skills but also accelerates their understanding of the material. Meanwhile, Bardus et al., (2022) revealed that the integration of interactive visual and audio media can help students understand vocabulary and grammar more effectively than traditional methods. Thus, this study seeks to complement the existing literature by exploring how interactive media can be optimized in improving Arabic literacy at the secondary school level, thereby contributing to the development of more effective technology-based teaching methods.

This discussion is based on the understanding that the approach to learning Arabic has often been trapped in conventional methods that focus solely on memorization and grammar. This approach tends to be less effective in attracting students' interest and does not provide an interactive learning experience (Amin & Badreddine, 2020). This study aims to show that the integration of interactive media in Arabic language learning can be an innovative solution to significantly improve student literacy. Unlike previous studies that generally only highlight the effectiveness of interactive media in technical aspects such as improving academic grades, this study emphasizes how interactive media can create a holistic learning experience, involving students' cognitive, affective, and social aspects. Interactive media is not only considered as a learning aid, but also as a medium to enliven the teaching and learning process that is relevant to the digital era (Hasan et al., 2020). With this approach, this study is expected to offer a new perspective on how interactive media can be optimized to improve Arabic language literacy among high school students, while filling the gap in the existing literature regarding the application of technology in language learning.

## RESEARCH METHOD / المنهجية

This research method uses a descriptive approach with a qualitative approach,

which aims to understand the phenomenon of the use of interactive media to improve Arabic literacy in students (Soesana et al., 2023). This research took place at MAN 1 Prabumulih City, a high school that has an Arabic language teaching program integrated with technology. This location was chosen because MAN 1 Prabumulih City has been known for its innovative efforts in integrating technology, including the use of interactive media and digital platforms in the learning process. This school also has active and diverse students, providing an ideal context to explore how interactive media can improve Arabic language comprehension. By focusing on schools that have implemented technology in Arabic language teaching, this study can provide deeper insights into the application of the latest technology in the context of language education.

A qualitative approach was chosen to explore students' experiences, perceptions, and views regarding the use of AR/VR technology and digital platforms in Arabic language learning, as well as its impact on their language skills. Data collection techniques in this study consisted of in-depth interviews with students, Arabic teachers, and principals. Interviews were conducted to obtain information regarding students' experiences in using interactive media and how it affects their understanding of vocabulary, grammar, and the cultural context of Arabic (Haryono, 2023). In addition to interviews, classroom observations and documentation of the learning process were also conducted to complement the data obtained and provide a more comprehensive picture of the application of technology in learning. The researchers also utilized notes and reports from previous learning activities related to the research topic.

The collected data were analyzed using thematic analysis, where the data were coded based on themes that emerged from interviews and observations (Thalib, 2022). The analysis process was carried out by reading the data in depth, identifying relevant patterns and themes, and linking them to the research objectives to understand how interactive media can improve students' Arabic literacy. This analytical approach helps researchers gain in-depth insights into the effectiveness of interactive media in Arabic language learning and how it contributes to improving students' language skills at MAN 1 Prabumulih City.

## **FINDINGS AND DISCUSSION** / نتائج البحث و المناقشة

### **Findings**

This research examines the use of interactive media in Arabic language learning for middle school students in order to increase Arabic language literacy effectively. The research results show that interactive media, such as gamification, the use of visual and audio elements, and AR/VR technology, can increase student engagement, accelerate vocabulary understanding, and provide a more immersive learning experience. This finding is in line with learning theory which emphasizes the importance of technology in creating fun, relevant and applicable learning experiences. The implications of these findings include increasing students' motivation and Arabic language skills, as well as developing learning methods that are more innovative and in line with the demands of the digital era.

### **Increasing Student Engagement Through Gamification**

This study examines the application of gamification in Arabic language learning in secondary schools as an effort to increase student engagement and motivation in learning. The results of the study indicate that the use of game elements in the Arabic language learning process can encourage students to be more active in participating and enjoying learning. One interview with an Arabic teacher at MAN 1 Prabumulih City stated, "With

gamification, students become more interested in following lessons because they feel like they are playing while learning. They are more enthusiastic, and they feel more competitive because there is a point and prize system that motivates them to practice more." This shows that gamification not only increases students' interest in Arabic, but also creates a more enjoyable and less boring learning atmosphere.

In addition, an interview with a grade X student of MAN 1 Prabumulih City revealed, "I used to feel bored learning Arabic, but after there were games like puzzles and language challenges, I became more enthusiastic. I even practiced more at home to get a higher score." This finding confirms that gamification can encourage students to spend more time learning Arabic outside of school hours. Another interview with a multimedia teaching teacher also provided a similar perspective, "*In using gamification, we can see an immediate change in student engagement. They tend to be more enthusiastic and less stressed compared to conventional methods. Students who used to be passive are now more active in participating in class discussions*".

Observations conducted in the classroom during the implementation of gamification showed a significant increase in vocabulary and grammar comprehension. In game-based learning activities, students were shown to be able to remember new words more easily. A student of MAN 1 Prabumulih City said, "I find it easier to remember new vocabulary when playing, because I don't feel pressured like during exams. The game makes me learn while having fun." In these activities, students often compete to get points and rewards, which directly increases their desire to continue practicing and understand Arabic better

In addition, interviews with school principals also revealed views on the challenges in implementing gamification widely. "Gamification provides many benefits, but not all teachers are skilled in utilizing this technology. More in-depth training is needed to ensure that gamification is implemented effectively in the classroom," said the principal. Therefore, to optimize the use of gamification in Arabic language learning, it is important for schools to provide technology training to teachers and improve existing technology infrastructure.

The interpretation of these findings suggests that gamification has great potential in increasing student engagement in Arabic language learning. By combining elements of games, competitions, and rewards, gamification successfully creates a more enjoyable and interactive learning atmosphere. Interviews with teachers and students revealed that gamification reduces boredom and increases students' motivation to actively participate. In addition, learning Arabic through games has been shown to accelerate vocabulary and grammar comprehension because it provides a more natural and less stressful experience. However, challenges related to technological limitations and teacher training need to be addressed so that gamification can be optimally implemented in all schools.

Overall, these findings suggest that gamification can significantly increase student engagement in Arabic language learning, creating a more interactive and enjoyable learning experience. The implication of these findings is that the application of gamification in Arabic language education can increase students' interest in learning, improve their language skills, and introduce new, more enjoyable ways of mastering the language. However, challenges related to technological limitations and teacher training need to be addressed so that the benefits of gamification can be optimally felt by all students.

## Immersive Learning with AR/VR Technology

This study examines the use of Augmented Reality (AR) and Virtual Reality (VR) technology in Arabic language learning in secondary schools to create an immersive and contextual learning experience. The results of the study indicate that the application of AR/VR technology can provide a more in-depth and realistic learning experience, where students can interact directly with Arabic language content in an atmosphere that resembles the real world. One interview with an Arabic teacher at MAN 1 Prabumulih City stated, “With AR and VR, students not only learn theory, but they can experience situations that use Arabic directly, such as interacting in markets or on the streets of Arab cities. This makes them understand the context of language use better.” This shows that AR/VR is able to bridge the gap between theory and practice, providing a more authentic and comprehensive learning experience. An interview with a grade XI student at MAN 1 Prabumulih City added, “The experience of using VR is very enjoyable. I can talk to characters in Arabic as if I were in an Arab country. This makes me more confident when speaking Arabic in the real world.” These findings indicate that AR/VR technology can reduce students’ anxiety in using Arabic, while improving their speaking skills. A similar sentiment was expressed by a technology teaching teacher, who said, “With VR, we can create a more interactive and stimulating learning environment, which is difficult to achieve with conventional methods”.

Despite the positive impact of AR/VR technology on Arabic language learning, the study also found several challenges. One of them is the limited access and infrastructure of technology in certain schools. A principal said, “Our school is very interested in adopting AR/VR, but our main problem is the limited devices and funds. We have to work hard to find sponsors or external support.” This shows that although AR/VR technology offers great potential in creating more immersive learning, gaps in technological infrastructure remain a significant obstacle. The results of classroom observations showed that students who were involved in learning sessions using AR/VR tended to be more engaged, more motivated, and understood Arabic material faster. Several students said, “I can remember vocabulary more easily because I see visual images of the words directly in the context of everyday life.” This finding confirms that AR/VR provides a more concrete and down-to-earth learning experience, which accelerates students' understanding of Arabic. However, to optimize the implementation of this technology, schools need to improve technological infrastructure and provide adequate training for teachers in using AR/VR effectively.

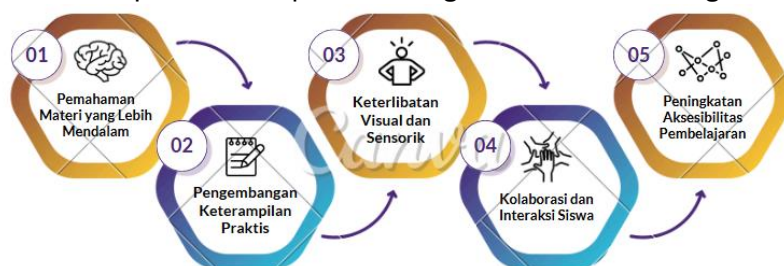


Figure 1. Immersive Learning with AR/VR Technology

Interpretation of these findings suggests that AR/VR technology has tremendous potential in creating a more interactive and contextual Arabic language learning experience. By presenting real-world situations through immersive experiences, this technology helps students not only understand language theory but also apply their knowledge in relevant and real-life situations. The use of AR/VR allows students to feel more confident in speaking Arabic because they can practice in conditions that mimic

everyday life, such as talking to virtual characters in relevant contexts. However, a major challenge faced is the limited access to the devices and infrastructure needed to support the widespread use of this technology. This indicates that while the potential of AR/VR in Arabic language learning is enormous, for it to be optimally implemented, it requires improvements in infrastructure and adequate training for teachers. Effective implementation of AR/VR can open up great opportunities to deliver more holistic learning and improve students' Arabic language skills in a fun and relevant way.

### **Student Collaboration Through Digital Platforms**

Student collaboration through digital platforms in Arabic language learning connects social interaction and mastery of material, creating a more dynamic and participatory learning space. By utilizing digital platforms, students can collaborate in discussions, share resources, and complete assignments together despite being in different locations. This approach not only improves Arabic language comprehension but also encourages the development of collaborative and technological skills among students. Digital platforms allow students to learn more independently, while also strengthening their engagement in learning through more active and continuous interactions. With the integration of technology in learning, the learning process becomes more flexible, increasing the accessibility and quality of education, and preparing students for the challenges of the 21st century.

The following research data shows what kind of results will be generated from student collaboration through digital platforms;

**Table 1. Data on Student Collaboration Results Through Digital Platforms**

| Interview Result Data   | Coding                           | Resources               |
|---|----------------------------------|-------------------------|
| "The digital platform allows me to collaborate with classmates outside of class hours, helping me understand the material better"         | Increasing Student Participation | Grade XI Students       |
| "Discussions through digital platforms make me more confident in speaking Arabic, because I can ask questions and give input at any time" | Collaboration Between Students   | Grade XII Students      |
| "With this platform, we can share materials, communicate more efficiently, and explore Arabic language materials in more depth."          | Collaboration Between Students   | Arabic Language Teacher |
| "Even though there are technical constraints, we find it easier to learn because we can access learning materials at any time".           | Flexibility in Learning          | Grade X Students        |

The implications of using digital platforms in Arabic language learning are evident through increased student participation, collaboration between students, flexibility in learning, improved digital skills, and deeper understanding of the material. Digital platforms allow students to actively engage in discussions and share materials more effectively, even outside of school hours, creating a more flexible and dynamic learning experience. The collaboration between students that occurs through this medium encourages them to help each other understand the material, while also improving their technological skills. This also results in a better understanding of Arabic vocabulary, grammar, and cultural context, as students can access various resources and discuss them with classmates more efficiently. As a result, the application of digital platforms in learning not only improves Arabic literacy, but also enriches students' digital skills that are useful in future learning contexts.

## **Improving Vocabulary and Grammar Understanding with Visual and Audio Media**

This study examines the use of visual and audio media in Arabic language learning in secondary schools to improve students' vocabulary and grammar comprehension. The results of the study indicate that the combination of visual media, such as images, videos, and graphics, with audio, such as voice recordings and pronunciation of words, can help students understand new vocabulary more easily. Visual media helps create associations between words and concrete images, while audio media provides guidance on correct pronunciation. One interview with an Arabic teacher at MAN 1 Prabumulih City stated, "Using videos and images in vocabulary learning is very helpful. Students find it easier to remember words because they can see and hear directly how the words are used in real contexts." This shows that the use of visual and audio media can make Arabic language learning more concrete and comprehensive, improving students' memory of vocabulary and grammatical structures.

An interview with a grade XII student of MAN 1 Prabumulih City added, "I find it easier to remember new vocabulary when I see the picture and hear it in the audio recording. It makes me feel more confident when speaking Arabic." These findings suggest that a multimodal approach that combines visual and audio elements can strengthen students' understanding of Arabic, as well as improve their ability to speak and understand sentences as a whole. Another teacher stated, "The use of audio in teaching grammar is very useful because students can hear directly how sentence structures are used correctly, so they understand better and can imitate the correct way of using them."

Although visual and audio media have a positive impact, the study also identified several challenges in their implementation. One of the main challenges found was the limited devices and access to technology in some schools. A principal said, "Not all students have adequate access to devices that can be used to listen to audio or watch videos. This is a barrier to implementing this method across the class." This highlights the importance of ensuring adequate infrastructure so that all students can access visual and audio media in their learning process.

Interpretation of these findings shows that the use of visual and audio media in Arabic language learning is very effective in improving students' vocabulary and grammar comprehension. By combining images, videos, and audio recordings, students can associate words with real visual contexts, as well as hear the correct pronunciation, which helps them remember vocabulary more easily and understand sentence structures better. This media not only speeds up the comprehension process but also increases students' confidence in speaking. Although there are challenges related to technology access, especially in schools with limited devices, the results of the study show that this method is very useful in creating a more interactive and contextual learning experience. To maximize the potential of visual and audio media, adequate infrastructure support is needed in each school so that all students can feel the benefits equally.

Observation data shows that students who use visual and audio media in learning Arabic experience significant improvements in vocabulary and grammar comprehension. The use of video and audio allows students to more quickly understand the meaning of words and master sentence patterns. Visual media such as images and audio media such as pronunciation of words have a positive impact on the learning process, because students can more easily remember new vocabulary and understand how to use it in sentences. These findings confirm that the combination of visual and audio media is effective in accelerating the learning process, making students more active in learning, and

improving their overall language skills.

## Discussion

The main findings of this study indicate that the use of interactive media, especially AR/VR technology, to improve Arabic literacy in high school students has a significant impact on student engagement and understanding of the material, especially at the location studied, namely MAN 1 Prabumulih City (Heru & Bali, 2024). This finding is in line with the constructivism theory developed by Jean Piaget and Lev Vygotsky, which states that effective learning occurs when students are actively involved in the learning process through direct experience and social interaction (Al-Husseini et al., 2020). Dalam konteks penggunaan media interaktif, teknologi AR/VR memungkinkan siswa In the context of using interactive media, AR/VR technology allows students to interact with Arabic language materials directly, delve into the cultural and linguistic context, and improve their understanding of vocabulary and grammar (Munawwaroh, 2024). In addition, the use of digital platforms for collaboration between students strengthens their communication skills, creates a more inclusive learning environment and supports the achievement of higher Arabic literacy goals (Hasanah, 2024).

The implications of these findings confirm that the application of immersive learning through AR/VR technology in the context of Arabic language learning not only enriches students' learning experiences, but also strengthens their practical skills in the language (Putri, 2024). This is relevant to the contextual learning theory developed by Jerome Bruner, which emphasizes the importance of real-life situation-based teaching to facilitate understanding of abstract concepts (Febrianti, 2023). In this case, interactive media allows students to experience the Arabic context directly, deepen their understanding of vocabulary and grammatical structures, and improve their memory through visual and sensory experiences (Herlina, 2024). Collaborative-based learning through digital platforms also supports the development of students' social and language skills more effectively, providing a positive impact on their language abilities in a broader context (Putri & Java, 2024).

Thus, the application of interactive media to improve Arabic literacy in secondary school students shows the relevance of using technology in 21st century education (Tukimin et al., 2020). The use of AR/VR technology and digital platforms not only supports language comprehension, but also improves students' digital skills which are increasingly important in today's education world (Odeh & Zanchi, 2020). This concept of experiential and collaborative learning strongly supports constructivist and collaborative learning theories, which emphasize the active role of students in constructing their knowledge and skills (Lalileche, 2020). The findings also suggest that interactive and immersive learning can create more meaningful and immersive experiences for students, preparing them to master Arabic more effectively in an increasingly technology-dominated world.

## CONCLUSION / الخلاصة

The conclusion of this study reveals several important findings related to the use of interactive media to improve Arabic literacy in secondary school students. The main findings indicate that interactive media, including the use of digital platforms, AR/VR, and other technology-based tools, can significantly improve students' understanding of Arabic, both in terms of vocabulary, grammar, and cultural context. Although these media have a positive impact, challenges such as limited access to adequate technology and lack of



adequate training for teachers in using these tools remain barriers that need to be addressed. The study also found that although the majority of students showed improvements in Arabic language skills, there was a significant difference in the level of comfort and skills in using technology between students who were more technology-oriented and those who had more difficulty accessing interactive media.

The strength of this study lies in its contribution to a deeper understanding of the application of interactive media in Arabic language learning, as well as its emphasis on the benefits and challenges faced by students and teachers. This study updates the scientific perspective by showing the importance of integrating technology in Arabic language learning in an effective and relevant manner to the needs of the times. However, this study also has limitations, such as its limited scope to one school, and the lack of variation in terms of grade level and learning experience. Therefore, further, more comprehensive research, using a quantitative approach or a broader survey, is needed to obtain a more holistic picture of the use of interactive media in Arabic language learning at the secondary school level.

This additional research will be useful for formulating more targeted educational policies to improve the application of interactive media in Arabic language learning. The government and educational institutions need to collaborate to overcome existing barriers, such as increasing access to technology, better training for teachers, and providing adequate resources. Thus, the use of interactive media can be more optimal in supporting the development of students' Arabic literacy, equipping them with the skills needed to communicate in Arabic effectively in this digital era.

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