

INTERNATIONAL JOURNAL OF MODERN EDUCATION (IJMOE)



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THE USABILITY OF THE I-SYAIR APPLICATION IN LEARNING ARABIC POETRY AMONG UNIVERSITY STUDENTS

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Article Info:

Article history:

Received date: 20.10.2025 Revised date: 10.11.2025 Accepted date: 18.12.2015 Published date: 24.12.2015

Abstract:

This study aims to evaluate the usability of the i-Syair application in learning Arabic poetry among university students. The i-Syair integrates Augmented Reality (AR) and interactive multimedia to create an engaging and immersive learning experience, bridging classical Arabic literature with modern technology. Guided by the Tawhidic paradigm of balanced human development encompassing intellect ('aql), spirit (rūh), and body (jasad), the study assesses three key aspects of usability: usefulness, satisfaction, and ease

To cite this document:

Che Amran, A. A., Osman, R. A. H., Alosman, A., Ahmad Johor, M. A. M., Yushasnul, M. N., Idris, I. R., Kasim, R., & Khairallah, C. (2025). The Usability of the i-Syair Application in Learning Arabic Poetry Among University Students. *International Journal of Modern Education*, 7 (28), 1062-1074.

DOI: 10.35631/IJMOE.728073

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of use. Employing a quantitative descriptive design, data were collected from 33 respondents enrolled in the Bachelor of Arabic Language and Literature program through a structured questionnaire using a five-point Likert scale. The results, analyzed using IBM SPSS version 26, revealed that i-Syair achieved a high mean score across all dimensions, indicating strong user acceptance and positive learning impact. Students reported that the AR features significantly enhanced their comprehension and enjoyment of Arabic poetry, transforming learning into an interactive experience rather than mere memorization. The findings affirm that i-Syair is a user-friendly and pedagogically effective tool that supports modern Arabic learning while embodying technological innovation and Islamic educational values.

Keywords:

Arabic Poetry, Augmented Reality (AR), Educational App, i-Syair, Learning Poetry

Introduction

The rapid advancement of educational technology in the 21st century has transformed the landscape of language learning worldwide. The integration of digital media, mobile devices, and interactive applications has opened new possibilities for creating more engaging and personalized learning experiences. In higher education, technology is no longer seen as a supplementary tool but as a central component in supporting meaningful and lifelong learning. In this digital era, students are not passive recipients of knowledge; they expect learning to be interactive, visual, and multimodal, reflecting the technological environments they live in. This shift has prompted educators to adopt innovative, technology-enhanced pedagogies that respond to the needs of today's learners, commonly known as digital natives.

In language education, technological tools have proven to be especially valuable in addressing the challenges of comprehension, motivation, and cultural context. Multimedia applications that combine text, audio, images, and video have been shown to enhance memory retention and foster deeper understanding through dual-channel cognitive processing (Mayer, 2001). Studies in multimedia learning reveal that the human brain learns more effectively when information is presented through both verbal and visual modalities, as learners can integrate these two sources of information to construct meaning more effectively. Consequently, multimedia-based learning environments have become increasingly relevant in foreign language education, where visual and auditory reinforcement supports comprehension of complex linguistic and cultural elements.

Within the field of Arabic language learning, the adoption of technology has steadily grown over the past decade. Researchers such as Osman et al. (2022) and Hashim et al. (2023) have highlighted how technology-assisted tools improve learner engagement and comprehension, particularly among non-native speakers. Arabic, being a linguistically rich and context-dependent language, presents unique challenges for learners who must navigate classical grammar structures, nuanced vocabulary, and cultural symbolism embedded in literary texts. Digital learning platforms, when effectively designed, can bridge these gaps by providing multimodal representations and interactive feedback that facilitate comprehension and interpretation.

While the integration of technology in Arabic language instruction has been promising, its application to Arabic literature, particularly poetry remains limited. Arabic poetry occupies a central place in the Arab intellectual tradition. It serves not only as a linguistic art form but also as a reflection of moral values, aesthetic expression, and historical consciousness. However, many students perceive Arabic poetry as abstract and difficult, often due to its figurative language, rhythm, and cultural allusions. Traditional teaching methods tend to rely on rote memorization and teacher-centered explanations, which fail to engage learners' imagination or critical appreciation. As a result, students struggle to connect emotionally or intellectually with the texts, leading to diminished interest and limited understanding.

Osman et al. (2022) observed that conventional approaches to teaching Arabic literature do not sufficiently motivate students or encourage interpretive skills. Similarly, Hashim et al. (2023) noted that the complexity of literary texts, combined with outdated teaching materials, contributes to students' difficulties in grasping both meaning and cultural significance. This pedagogical gap calls for innovative strategies that reinvigorate the teaching of Arabic literature, making it more accessible, relatable, and intellectually stimulating for modern learners.

One effective response to this challenge lies in the integration of interactive multimedia and Augmented Reality (AR) technologies. AR, defined by Azuma (1997) as the blending of real and virtual environments, allows learners to visualize and manipulate digital content within their physical surroundings. When applied to education, AR creates immersive learning experiences that stimulate curiosity, foster exploration, and make abstract concepts tangible. In the context of Arabic poetry, AR can be used to visualize poetic imagery, such as natural scenes, symbolic objects, or emotional themes, helping learners to interpret verses through direct sensory experience. This multisensory approach not only enhances comprehension but also encourages affective engagement, bridging the gap between textual analysis and lived experience.

Recent studies in AR-based learning environments (Bacca et al., 2014; Chen et al., 2020) demonstrate that such technologies significantly improve student motivation, attention, and conceptual understanding. They enable contextualized and experiential learning, in which students learn by exploring, interacting, and reflecting principles that align closely with constructivist theories of learning (Jonassen, 1999). In constructivist settings, learners actively construct meaning through interaction with both content and environment rather than passively receiving information. Therefore, combining AR with multimedia learning strategies presents a powerful pedagogical framework for literary education, where understanding often depends on visual imagination and emotional interpretation.

In addition, the concept of Ubiquitous Learning (u-Learning) strengthens this framework by allowing education to extend beyond the classroom. U-Learning, as described by Hwang et al. (2008), emphasizes accessibility, mobility, and autonomy, enabling learners to engage with content "anytime and anywhere." Through mobile applications, students can revisit learning materials, review interpretations, and reflect on literary concepts at their own pace. This flexibility is particularly beneficial for literature courses, where deeper appreciation often develops through repeated exposure and contemplation. By integrating u-Learning with AR and multimedia, educators can create learning ecosystems that are continuous, adaptive, and learner-centered.

Building upon these theoretical and technological foundations, the i-Syair project was developed to modernize the learning of Arabic poetry among university students. The term Syair reflects both the poetic form and the cultural essence of Arabic literary tradition, while the prefix i- symbolizes its digital transformation and IIUM style either. i-Syair integrates Augmented Reality and interactive multimedia to create an engaging learning experience that connects students to the cultural, linguistic, and aesthetic dimensions of Arabic poetry. The application enables learners to visualize poetic imagery, listen to recitations, and interact with interpretive layers that reveal meaning, rhythm, and emotion.

The i-Syair initiative responds to two key educational challenges: first, the difficulty students face in understanding classical poetic forms, and second, the need for engaging, technology-enhanced tools that align with students' digital learning preferences. By combining AR-based visualization, audio narration, and interactive content, i-Syair transforms the learning of poetry from a passive reading exercise into an experiential process. It encourages learners to explore meanings independently, appreciate rhythm and metaphor, and internalize the cultural and moral values conveyed in Arabic literature.

The application also reflects a broader educational philosophy rooted in the Islamic concept of holistic learning, which integrates intellect ('aql), spirit (rūh), and ethics (akhlaq). Arabic poetry, when studied through such an integrated approach, becomes not only a linguistic subject but also a medium for moral and spiritual reflection. Through its immersive features, i-Syair enables students to engage both analytically and emotionally with poetic texts, fostering a balance between intellectual understanding and aesthetic appreciation.

Therefore, this study aims to evaluate the usability level of the i-Syair application in learning Arabic poetry among university students. The evaluation focuses on three main aspects of usability:

- 1. Usefulness, to determine how effectively i-Syair supports students' understanding and appreciation of Arabic poetry.
- 2. Satisfaction, to assess learners' overall experience and acceptance of i-Syair as a learning tool.
- 3. Ease of Use, to evaluate the accessibility and user-friendliness of the application during the learning process.

By assessing these dimensions, the study seeks to determine the pedagogical effectiveness of i-Syair in promoting interactive, technology-enhanced learning of Arabic poetry. The findings are expected to provide insights into how AR and multimedia can be strategically integrated into Arabic literature instruction, contributing to the development of innovative, culturally grounded, and learner-centered educational models for the digital age.

i-Syair

The i-Syair project was conceptualized as an innovative pedagogical model that operationalizes three interrelated learning theories, Multimedia Learning Theory, Augmented Reality (AR)-Based Learning Theory, and Ubiquitous Learning Theory (u-Learning). Together, these frameworks form the theoretical foundation for the application's instructional design and usability evaluation. Each theory contributes a specific dimension to the learning experience: multimedia ensures cognitive engagement through dual-channel processing; AR enriches

immersion through sensory and spatial interaction; and u-Learning guarantees flexibility and accessibility for continuous learning.

According to Mayer (2001), meaningful learning occurs when learners build connections between verbal and visual representations of information. The i-Syair interface follows this principle by integrating text, imagery, audio narration, and animation into a coherent presentation of Arabic poetry. Each poem is accompanied by synchronized recitation and contextual illustrations, enabling learners to process language and imagery simultaneously. This dual-coding mechanism reduces extraneous cognitive load and promotes deeper understanding of poetic meaning, structure, and rhythm.

For non-native Arabic learners, multimedia presentation is especially valuable. Classical poetry often contains complex syntax, figurative expressions, and cultural symbolism that are difficult to grasp through text alone. By linking auditory recitation with visual cues, such as depictions of metaphors or historical settings, i-Syair translates abstract language into accessible meaning. This design directly applies Mayer's principles of coherence, signaling, and spatial contiguity, ensuring that multimedia elements reinforce rather than distract from learning objectives.

While multimedia enhances comprehension at the cognitive level, AR-based learning extends the experience into the experiential realm. Defined by Azuma (1997) as the blending of virtual content with real-world environments, AR enables students to interact with digital representations that respond to their physical context. In i-Syair, AR components animate selected verses and symbolic imagery within the learner's surrounding space, such as rendering a desert landscape to visualize a metaphor or projecting animated calligraphy that traces poetic rhythm.

This immersive technique transforms poetry from static text into a living experience. Research by Bacca et al. (2014) shows that AR-based environments increase motivation, focus, and knowledge retention by allowing learners to manipulate and explore learning objects. Through experiential engagement, students in i-Syair are not merely readers but participants who reconstruct meaning by observing, listening, and interacting. This constructivist element supports higher-order skills such as interpretation, empathy, aesthetic appreciation, and core outcomes of literature education.

Complementing multimedia and AR is Ubiquitous Learning Theory, which emphasizes learning that is accessible anytime and anywhere through networked or mobile technologies (Hwang et al., 2008). i-Syair is designed as a mobile-based platform compatible with smartphones and tablets, enabling students to continue exploring poetry beyond classroom sessions. The framework encourages self-paced and context-sensitive learning, allowing learners to revisit content, replay recitations, or analyze verses according to personal schedules and learning preferences.

Such flexibility not only enhances accessibility but also supports autonomous and lifelong learning, key attributes of 21st-century education. For Arabic literature, where mastery often depends on reflection and repetition, the ability to study in multiple contexts strengthens both linguistic competence and literary appreciation. The portability of i-Syair ensures that learning becomes integrated into students' daily lives, promoting habitual engagement with the beauty and depth of Arabic poetry.

By synthesizing these three, i-Syair creates a holistic learning ecosystem that unites cognitive, experiential, and contextual dimensions of learning. Multimedia provides cognitive scaffolding for understanding; AR delivers immersive visualization that bridges imagination and perception; and u-Learning ensures continuity and accessibility across time and place. The convergence of these elements results in a platform that not only enhances comprehension but also nurtures emotional connection and sustains curiosity.

In sum, i-Syair represents a pedagogical innovation that aligns technological affordances with literary education goals. It reimagines the study of Arabic poetry as an interactive, student-centered, and culturally grounded experience, demonstrating how digital transformation can coexist harmoniously with classical literary heritage. This theoretical integration also justifies the study's focus on evaluating i-Syair's usability in terms of Usefulness, User Satisfaction, and Ease of Use, as these dimensions reflect how effectively the underlying theories are realized in practice.

Methodology

This section explains the research procedures employed to evaluate the usability of the i-Syair application in the learning of Arabic poetry among university students. It describes the methodological framework used to obtain reliable and valid data on students' perceptions of i-Syair as a technology-enhanced learning tool. Specifically, this section consists of five parts: (i) the research design adopted to guide the overall study, (ii) the research instrument used to collect data, (iii) the data collection procedure involving the targeted respondents, (iv) the data analysis techniques applied to interpret the results, and (v) the reliability of the instrument. Together, these components form the basis for systematically examining the usefulness, user satisfaction, and ease of use of i-Syair in supporting Arabic poetry learning.

Research Design

This study employed a quantitative research approach using a descriptive survey design. The purpose of this design was to obtain systematic data regarding students' perceptions of the usability of the i-Syair application in learning Arabic poetry. A descriptive approach was considered appropriate as the primary objective of the study was to evaluate usability dimensions rather than to test causal relationships or predictive hypotheses. Such an approach is commonly adopted in usability and educational technology research, where user experience, acceptance, and perceived effectiveness constitute the main focus of analysis (Creswell, 2018).

Research Instrument

The main research instrument was a structured questionnaire developed based on the principles of usability evaluation in educational technology. The questionnaire employed a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). It was designed to accommodate student respondents by presenting clear, concise statements related to their learning experience with i-Syair. The instrument aimed to capture students' feedback on three key dimensions of usability: Usefulness, User Satisfaction, and Ease of Use. These dimensions were selected to reflect the functional, experiential, and practical aspects of the application as an Arabic literature learning tool.

Data Collection Procedure

Data were collected using an online Google Form survey distributed to students enrolled in the Bachelor of Arabic Language and Literature programme at the International Islamic University

Malaysia (IIUM). A total of 33 respondents voluntarily participated in the study. The participants were drawn from the Tārīkh al-Adab al-ʿArabī (History of Arabic Literature) course, ensuring that respondents were familiar with Arabic literary texts and therefore well-positioned to evaluate the application's pedagogical relevance. Prior to completing the questionnaire, students were given the opportunity to explore and interact with the i-Syair application, allowing their responses to reflect actual user experience. All data were treated confidentially and used solely for academic purposes.

Data Analysis Technique

Data were analysed using IBM SPSS Statistics version 26. Descriptive statistical analysis was conducted by calculating mean scores for each questionnaire item to determine students' overall perceptions of the usability of i-Syair. The interpretation of mean scores followed the scale proposed by Mohamad Najib (2003), as presented in Table 1. This approach enabled a clear categorisation of usability levels as low, moderate, or high for each dimension.

Table 1: Interpretation of Mean Score Range

Mean Score	Range Interpretation	
1.00 - 2.33	Low	
2.34 - 3.66	Moderate	
3.67 - 5.00	High	

The use of descriptive statistics was deemed appropriate for this study, as the research aimed to evaluate perceived usability rather than to establish statistical significance or infer relationships between variables. While inferential analysis may offer additional insights, it was beyond the scope of the present study, which focuses on usability evaluation within a specific educational context.

The interpretation of mean scores provided a clear indication of students' perceptions regarding the effectiveness and practicality of i-Syair as a digital tool for learning Arabic poetry. Each section of the questionnaire was analyzed separately to evaluate the three usability aspects: i) Section A: Usefulness of i-Syair, ii) Section B: User Satisfaction with i-Syair, iii) Section C: Ease of Use of i-Syair.

Reliability of the Instrument

The questionnaire used in this study was adapted from a validated instrument developed by Subramaniam et al. (2020), which reported a Cronbach's Alpha coefficient of 0.994, indicating a high level of internal consistency. The adapted instrument retained the original usability dimensions with minor contextual modifications to suit the Arabic poetry learning environment. The use of an established and reliable instrument strengthens the methodological rigour of the study and supports the credibility of the findings.

Findings and Discussion

This research presents the findings of the usability evaluation of the i-Syair application in learning Arabic poetry among university students. The analysis focuses on three main dimensions of usability: Usefulness, User Satisfaction, and Ease of Use. Descriptive statistical analysis was conducted using mean scores to determine students' overall perceptions of i-Syair as an educational tool.

Rather than serving merely as confirmatory indicators of user approval, the descriptive findings are interpreted analytically to examine how specific design features of i-Syair operationalise principles from multimedia learning, AR-based learning, and ubiquitous learning theories.

The results are discussed in relation to existing literature on multimedia and AR-based learning, highlighting how i-Syair contributes to enhancing engagement, comprehension, and accessibility in Arabic poetry learning. Emphasis is also given to how students' feedback reflects both the pedagogical affordances and the practical boundaries of i-Syair as a technology-enhanced learning tool.

Usefulness of i-Syair

The first dimension measured in this study was the usefulness of the i-Syair application in supporting the learning of Arabic poetry. Table 2 presents the mean scores for eight related items, all of which recorded high levels of agreement, with mean values ranging from 4.38 to 4.48.

Table 2: Usefulness of i-Syair

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No	Item	Mean	Interpretation			
1.	The i-Syair application helps me improve my	4.45	High			
	understanding of Arabic poetry (Syair).		_			
2.	The i-Syair application is useful for me in the process of	4.48	High			
	learning Arabic poetry (Syair).		_			
3.	The i-Syair application helps me diversify my methods of	4.45	High			
	learning Arabic poetry (Syair).					
4.	The i-Syair application allows me to choose my preferred	4.43	High			
	way of learning Arabic poetry (Syair).					
5.	The i-Syair application meets my needs as a student in	4.43	High			
	learning Arabic poetry (Syair).					
6.	The i-Syair application helps me interact more actively	4.43	High			
	with the content of Arabic poetry (Syair).					
7.	The use of multimedia technology in the i-Syair	4.45	High			
	application enhances my understanding of Arabic poetry					
	(Syair).					
8.	The use of Augmented Reality (AR) technology in the i-	4.38	High			
	Syair application enhances my understanding of Arabic					
	poetry (Syair).					

The consistently high mean scores indicate that students perceived i-Syair as useful not only as a functional learning aid but also as a tool that supports cognitive engagement with poetic meaning, imagery, and interpretation. High agreement on items related to learning improvement and content interaction suggests that learners experienced the application as an interpretive scaffold that facilitates understanding of abstract poetic expressions rather than merely as a digital content delivery platform. This finding is particularly relevant in the context of Arabic poetry, where dense figurative language and symbolic meanings often pose comprehension challenges for non-native learners.

The highest mean score was recorded for Item 2 (M = 4.48), which indicates that learners strongly recognise the application's role in facilitating comprehension and active exploration of Arabic poetry. Similarly, high mean scores for items related to learning diversity and learner autonomy suggest that i-Syair allows students to engage with poetic texts through multiple modalities and according to their individual learning preferences. This supports Multimedia Learning Theory (Mayer, 2001), which emphasises that meaningful learning occurs when verbal and visual information are integrated coherently, enabling learners to construct deeper understanding through dual-channel processing.

Furthermore, the high mean scores for items addressing multimedia and Augmented Reality (AR) features indicate that these technological components play a significant role in enhancing students' understanding of Arabic poetry. The visualisation of poetic imagery and the interactive presentation of content appear to assist learners in connecting textual meanings with contextual representations, thereby reducing cognitive load and supporting interpretive comprehension. This finding is consistent with previous studies on AR-based learning, which report that immersive visual environments can improve conceptual understanding and learner engagement (Bacca et al., 2014).

Nevertheless, it is important to acknowledge the pedagogical boundaries of i-Syair. While the application effectively enhances accessibility, engagement, and initial interpretive understanding, it does not replace close textual reading, critical literary analysis, or instructor-guided discussion. Its primary contribution lies in supporting learners' entry into poetic texts and facilitating comprehension, particularly for students who encounter difficulties in interpreting complex imagery and culturally embedded meanings in classical Arabic poetry.

User Satisfaction with i-Syair

The second dimension examined in this study was user satisfaction, which reflects students' overall contentment, enjoyment, and acceptance of the i-Syair application in learning Arabic poetry. As shown in Table 3, all six items recorded high mean scores ranging from 4.35 to 4.45, indicating a consistently positive evaluation of the application from the users' perspective.

Table 3: User Satisfaction with i-Svair

No	Item	Mean	Interpretation
9.	The i-Syair application functions as I expected during my	4.35	High
	learning of Arabic poetry (Syair).		
10.	The i-Syair application satisfies me during my learning of	4.38	High
	Arabic poetry (Syair).		
11.	I enjoy using the i-Syair application while learning Arabic	4.43	High
	poetry (Syair).		
12.	I would recommend the i-Syair application to other students.	4.45	High
13.	I need the i-Syair application as a learning aid to help me	4.43	High
	understand Arabic poetry (Syair).		
14.	I am satisfied with the use of the i-Syair application in	4.43	High
	learning Arabic poetry (Syair).		

The highest mean score was recorded for the item stating that students would recommend the i-Syair application to others (M = 4.45). This finding implies not only individual satisfaction but also a level of confidence in the application's pedagogical value. Such endorsement reflects learners' perception that i-Syair provides meaningful support in understanding Arabic poetry and is worth integrating into broader learning contexts. Similarly, high mean scores for items related to enjoyment and perceived necessity indicate that students regarded the application as a helpful and desirable learning aid rather than an optional supplement.

These findings are consistent with previous studies that highlight the positive impact of technology-based learning tools on student motivation and satisfaction in Arabic language and literature learning (Osman et al., 2022). From the perspective of Ubiquitous Learning Theory (Hwang et al., 2008), the flexibility and accessibility offered by i-Syair through mobile-based usage likely contributed to students' favourable learning experiences, as learners were able to engage with content at their own pace and in various learning environments.

At the same time, it is important to interpret the uniformly high satisfaction scores with caution. As the application represents a relatively novel learning approach, students' positive responses may be influenced by initial exposure to AR-based technology. Therefore, while the findings demonstrate strong immediate acceptance, future studies may consider examining user satisfaction over extended periods to determine whether these positive perceptions are sustained beyond the initial phase of use.

Ease of Use of i-Syair

The third dimension assessed in this study focused on the ease of use of the i-Syair application, which refers to how easily students were able to learn, navigate, and operate the application during the learning process. As presented in Table 4, all six items recorded high mean scores ranging from 4.40 to 4.43, indicating that students generally perceived the application as simple, intuitive, and user-friendly.

Table 4: Ease of Use of i-Syair

No	Item	Mean	Interpretation
15.	The i-Syair application is easy to use.	4.43	High
16.	The i-Syair application is simple to use.	4.43	High
17.	The i-Syair application is user-friendly.	4.43	High
18.	The i-Syair application is flexible to use in various learning	4.40	High
	situations.		
19.	I learn to use the i-Syair application quickly.	4.40	High
20.	I can easily remember how to use the i-Syair application.	4.40	High

The consistently high mean scores suggest that the design and interface of i-Syair enabled learners to interact with the application with minimal difficulty. High agreement on items related to ease, simplicity, and user-friendliness indicates that students were able to focus their attention on understanding Arabic poetry rather than on managing technical or navigational challenges. This finding is particularly important in educational technology contexts, as complex interfaces can increase cognitive load and hinder learning effectiveness.

The results also demonstrate that students were able to learn how to use the application quickly and remember its functions easily. This suggests that the application's design supports self-directed learning, allowing users to engage with the content independently without requiring extensive guidance or technical support. Such usability is essential for ensuring that technology-enhanced learning tools can be effectively adopted by students with varying levels of digital literacy.

From a theoretical perspective, these findings align with Multimedia Learning Theory (Mayer, 2001), which emphasises the importance of reducing extraneous cognitive load in instructional design. By providing a clear and intuitive interface, i-Syair allows learners to allocate cognitive resources toward processing poetic meaning, imagery, and interpretation rather than navigating the technology itself. In addition, the flexibility of the application supports the principles of Ubiquitous Learning (Hwang et al., 2008), as students can use i-Syair in different learning contexts, including classroom-based and independent study settings.

Nevertheless, while ease of use contributes significantly to positive learning experiences, it does not automatically guarantee deep learning outcomes. The effectiveness of i-Syair ultimately depends on how the application is pedagogically integrated into instruction. Therefore, ease of use should be viewed as a foundational condition that enables learning, rather than as an indicator of instructional quality on its own.

Conclusion

The findings of this study demonstrate that the i-Syair application exhibits a high level of usability across all three evaluated dimensions: usefulness, user satisfaction, and ease of use in the context of learning Arabic poetry among university students. Overall, students perceived i-Syair as an effective, engaging, and accessible digital learning tool that supports their understanding and appreciation of Arabic poetic texts.

The usefulness dimension recorded consistently high mean scores, indicating that learners regarded i-Syair as a valuable aid in enhancing comprehension, supporting interpretation, and diversifying learning approaches. The integration of multimedia and Augmented Reality (AR) elements enabled students to visualise poetic imagery and engage with abstract meanings more effectively, thereby facilitating initial interpretive understanding of complex literary texts.

High levels of user satisfaction further suggest that students responded positively to the learning experience offered by i-Syair. Learners reported enjoyment, acceptance, and willingness to recommend the application to others, highlighting its potential as a motivating and learner-friendly tool for Arabic poetry education. These affective responses are particularly significant in literature learning contexts, where motivation and engagement strongly influence learning outcomes.

In terms of ease of use, the findings indicate that i-Syair is intuitive, user-friendly, and flexible across different learning situations. The simplicity of its interface allows learners to focus on content rather than technical operation, supporting autonomous and self-directed learning. This aligns with the principles of multimedia learning and ubiquitous learning, which emphasise reduced cognitive load and learning accessibility beyond the classroom.

Nevertheless, the findings should be interpreted within the study's contextual boundaries. The sample was limited to university students within a single institution, and the focus was confined to Arabic poetry learning. In addition, the study relied on descriptive statistical analysis of self-reported perceptions. Therefore, while the results indicate strong usability and acceptance, they do not provide evidence of causal learning effects or long-term impact.

Despite these limitations, the study contributes to the growing body of research on AR-supported learning in Arabic language and literature education. It highlights the pedagogical potential of integrating immersive and multimedia technologies to enhance accessibility and engagement while complementing, rather than replacing, traditional literary instruction. Future research may extend this work by incorporating inferential analysis, qualitative methods, or broader participant populations to further examine the instructional effectiveness and scalability of i-Syair across different educational contexts.

Acknowledgements

This work was supported by the International Sponsored Research grant SPI25-248-0248, titled "Tawhidic Paradigm in Contemporary Islamic Literature: A Transdisciplinary Approach to Spiritual and Intellectual Revival." The present article constitutes an output of this funded project.

References

- Al-Emran, M., Mezhuyev, V., & Kamaludin, A. (2018). Technology acceptance in mobile learning. Computers & Education, 121, 1–15.
- Azuma, R. T. (1997). A survey of augmented reality. Presence: Teleoperators and Virtual Environments, 6(4), 355–385. https://doi.org/10.1162/pres.1997.6.4.355
- Bacca, J., Baldiris, S., Fabregat, R., Graf, S., & Kinshuk. (2014). Augmented reality trends in education: A systematic review of research and applications. Educational Technology & Society, 17(4), 133–149.
- Chen, P., Liu, X., Cheng, W., & Huang, R. (2020). A review of augmented reality in education: New technologies for teaching and learning. Education and Information Technologies, 25(2), 1–24. https://doi.org/10.1007/s10639-019-09973-6
- Cheng, K. H., & Tsai, C. C. (2016). Affordances of AR in educational contexts. Journal of Science Education and Technology, 25(4), 559–573.
- Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publications.
- Hashim, M. Q., Ahmad Safian, N., & Zubir, B. N. (2023). The difficulties of Al-Adab wa Al-Nusus subject among STAM students of Maahad Amir Indera Petra, Kelantan. In Proceedings of the International Conference on Arabic Language and Culture.
- Hwang, G.-J., Tsai, C.-C., & Yang, S. J. H. (2008). Criteria, strategies and research issues of context-aware ubiquitous learning. Educational Technology & Society, 11(2), 81–91.
- Jonassen, D. H. (1999). Designing constructivist learning environments. In C. M. Reigeluth (Ed.), Instructional-design theories and models: A new paradigm of instructional theory (Vol. II, pp. 215–239). Lawrence Erlbaum Associates.
- Mayer, R. E. (2001). Multimedia learning. Cambridge University Press.
- Mohamad Najib, A. G. (2003). Reka bentuk tinjauan soal selidik pendidikan. Skudai: Universiti Teknologi Malaysia.
- Osman, R. A. H., Jaffer, U., Noor, N. M., Norhamizi, B., Kamaldin, N. F., Mahmoud, A. R., & Amiruddin, A. Z. (2022). Keberkesanan pembelajaran sastera Arab menggunakan

aplikasi teknologi di kalangan penutur bukan Arab. International Journal of Education, Psychology and Counseling, 7(48), 512–526.

- Radu, I. (2014). Augmented reality in education. *Personal and Ubiquitous Computing*, 18(6), 1533–1543.
- Sauro, J., & Lewis, J. R. (2016). Quantifying the user experience. Morgan Kaufmann.
- Subramaniam, S., Maat, S. M., & Mahmud, M. S. (2020). Kesahan dan kebolehpercayaan instrumen penilaian kebolehgunaan terhadap modul pengajaran dalam topik penyelesaian masalah matematik sekolah rendah. Jurnal Dunia Pendidikan, 2(3), 180–190.