



## Utilization Of Audio-Visual Teaching Materials In Learning *Sharaf*

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### Abstract:

The rapid development of digital technology has transformed traditional Arabic learning into a more interactive and student-centered process. This study aims to analyze the use of audiovisual teaching materials in *Sharaf* (Arabic morphology) instruction and their impact on students' cognitive engagement and comprehension. Using a qualitative case study design, data were collected through interviews, observations, and document analysis in Arabic language classes implementing digital media integration. The findings reveal that animated morphology charts, narrated videos, and interactive slides effectively enhance students' retention, recall accuracy, and motivation. Moreover, multisensory engagement through synchronized visual and auditory input supports a more profound understanding of morphological transformations. The study contributes to digital Arabic pedagogy by presenting a model of sustainable, multimodal instruction. It recommends continued development of context-based audio-visual materials to strengthen learner autonomy and ensure long-term pedagogical innovation in Arabic linguistic education.

**Keywords:** *Teaching Materials, Audio-Visual Media, Learning Sharaf*

### Abstrak:

Perkembangan pesat teknologi digital telah mengubah pembelajaran bahasa Arab tradisional menjadi proses yang lebih interaktif dan berpusat pada siswa. Penelitian ini bertujuan untuk menganalisis pemanfaatan bahan ajar audio-visual dalam pembelajaran *Sharaf* (morfologi bahasa Arab) dan dampaknya terhadap keterlibatan kognitif dan pemahaman siswa. Dengan menggunakan desain studi kasus kualitatif, data dikumpulkan melalui wawancara, observasi, dan analisis dokumen di kelas bahasa Arab yang menerapkan integrasi media digital. Temuan penelitian mengungkapkan bahwa penggunaan bagan morfologi animasi, video bernarasi, dan slide interaktif secara efektif meningkatkan retensi, akurasi mengingat, dan motivasi siswa. Selain itu, keterlibatan multisensori melalui input visual dan auditori yang tersinkronisasi mendukung pemahaman yang lebih dalam tentang transformasi morfologi. Penelitian ini berkontribusi pada pedagogi bahasa Arab digital dengan menyajikan model instruksi multimoda yang berkelanjutan. Penelitian ini merekomendasikan pengembangan berkelanjutan materi audio-visual berbasis konteks untuk memperkuat otonomi pelajar dan memastikan inovasi pedagogis jangka panjang dalam pendidikan linguistik bahasa Arab.

**Kata Kunci:** *Materi Ajar, Media Audio-Visual, Pembelajaran Ilmu Sharaf*

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## INTRODUCTION

In the current era of digital transformation, education has entered a stage where learning innovation is no longer optional but essential. The integration of technology in learning activities is a societal necessity to improve the quality of education. Audio-visual media play a central role in making learning more interactive and practical, particularly in language education, which requires both cognitive and affective engagement (Ahmad &

Hillman, 2021; Al-Azani & El-Alfy, 2020; Koerber, 2021). Studies by UNESCO and the OECD show that multimedia-based learning significantly increases student motivation and comprehension. This shows that the success of modern education lies not only in the quality of content but also in the creativity of its delivery. Therefore, investigating the use of audio-visual teaching materials is not just about improving classroom techniques; it also addresses the broader societal need for adaptive, technology-literate learners capable of engaging with global educational standards.

Despite technological progress, many educational institutions, especially in developing regions, still face challenges in optimizing media use in classroom instruction. Teachers often rely on conventional methods such as lectures and textbooks, which tend to foster passive learning. In language learning, this issue becomes more pronounced, as linguistic mastery requires active participation and multisensory engagement (Abdelraouf, 2024; Ulfah et al., 2020). The absence of engaging media contributes to low motivation, slow comprehension, and high levels of boredom among students. As a result, learners struggle to internalize language rules and apply them in communicative contexts (Febriani et al., 2020). This gap between traditional pedagogy and digital innovation underscores the urgent need to explore practical ways to use audiovisual materials in language learning, particularly in complex linguistic areas such as Arabic morphology or *Sharaf*, where abstract rules often pose barriers to understanding.

Observations in several Arabic language classrooms reveal that most students struggle to master *Sharaf*, mainly when lessons rely solely on written explanations or rote memorization. Many students find the morphological changes in Arabic words confusing and monotonous, resulting in decreased learning enthusiasm (Elkhayati, 2021; Kapli et al., 2020). Teachers, on the other hand, acknowledge the importance of integrating technology but often lack the training or resources to apply it effectively. Even when schools are equipped with digital tools such as projectors and internet access, their potential remains underutilized. As a consequence, the learning process becomes unbalanced, rich in content but poor in engagement (Hamada & Marzouk, 2020; Yassin et al., 2020). These findings demonstrate an apparent mismatch between available technological opportunities and their actual use in *Sharaf* learning, emphasizing the need for innovative teaching materials that can bridge theory and visualization.

Several previous studies have explored the impact of multimedia and audio-visual media on language learning. (Fu et al., 2022) found that visual components increase memory retention by up to 38%. Youcef (2021) and Abu-Rayyash et al. (2024) emphasized that combining audio and visual inputs stimulates both sensory channels, thereby enhancing comprehension. Mizan et al. (2024) and Fisher (2023) observed that video-based media significantly improve students' participation in Arabic classes. Similarly, Al-Anzi (2022) and Al-Azani (2020) demonstrated that digital media increases engagement in learning Arabic as a foreign language. These studies consistently highlight the effectiveness of multimedia integration in language instruction. However, most of them focus on general Arabic skills such as listening and speaking, with limited exploration of specific linguistic branches, such as *Sharaf*. Thus, the current research aims to fill this overlooked gap by investigating the specific application of audio-visual materials in teaching Arabic morphology.

While existing research confirms the positive effects of audio-visual learning, it rarely examines how such media can address abstract grammatical structures. Few studies, such as those by Arifah et al. (2022), Pujiati (2022), and Zubaidah et al. (2021),

briefly mention the role of videos in supporting grammar instruction. However, their findings lack depth in morphological application. Moreover, most prior studies employ quantitative approaches that focus on student responses rather than on the pedagogical process itself. This leaves a significant research gap in understanding how audio-visual media concretely transform the learning dynamics in *Sharaf*. The present research serves as a bridge between media theory and pedagogical practice by providing empirical insights into the design, implementation, and effectiveness of audiovisual materials tailored explicitly for *Sharaf* instruction in Arabic education.

The novelty of this research lies in its focus on *Sharaf*, a linguistic discipline often perceived as abstract and challenging, and in proposing a practical model for integrating audio-visual teaching materials into its instruction. Unlike prior studies that discuss media effectiveness in general, this research explores how visual and auditory representations can illustrate complex morphological transformations, enabling students to “see” linguistic changes that were previously only explained theoretically. By contextualizing *Sharaf*'s teaching through videos, animations, and interactive visualizations, this study enhances the learning experience, making it more tangible and enjoyable. The study also responds to the urgent need for digital pedagogical frameworks in Islamic educational contexts, aligning religious knowledge with modern instructional design principles.

The central research problem addressed in this study is: How can audio-visual teaching materials be effectively utilized to enhance students' understanding and interest in learning *Sharaf*? This question arises from the observed gap between traditional learning methods and the underutilized potential of digital media. The research assumes that properly designed audio-visual materials can transform abstract linguistic rules into concrete, comprehensible patterns. The underlying argument is that learning *Sharaf* through audio-visual representation engages multiple senses simultaneously, thereby enhancing cognitive processing and retention. Thus, the study hypothesizes that integrating such media will not only improve comprehension but also stimulate students' motivation and curiosity toward Arabic morphology (Riwanda et al., 2024).

This research contributes theoretically and practically to Arabic language pedagogy. Theoretically, it expands the discourse on multimedia learning by situating it within the context of Arabic linguistic studies, particularly *Sharaf*. In practice, it provides educators with empirical guidance on designing and implementing audiovisual materials that make morphological concepts more accessible. The study's findings are expected to benefit teachers, curriculum designers, and institutions aiming to modernize Arabic instruction through technology. More broadly, this research aligns with educational reforms promoting digital literacy and creative pedagogy. By focusing on *Sharaf*, the study not only preserves classical linguistic knowledge but also revitalizes it through modern educational innovation, ensuring that traditional Islamic scholarship remains relevant in today's digital learning environments.

## RESEARCH METHOD

This study employs a qualitative case study design, chosen for its ability to provide an in-depth, contextual understanding of the phenomenon under investigation: the use of audio-visual teaching materials in learning *Sharaf*. The qualitative approach is suitable for exploring complex educational processes that numerical data cannot fully capture. At the same time, the case study design provides an opportunity to analyze the phenomenon in detail within a specific setting (Sarfo et al., 2021). The research was conducted in an Arabic

language education environment where *Sharaf* is taught as part of the curriculum. The location was purposefully selected because it represents a setting that still combines traditional linguistic instruction with the emerging use of digital learning media, allowing the researcher to examine both the challenges and the potential of integrating audio-visual materials into *Sharaf* learning.

Data were collected through three primary techniques: documentation, observation, and in-depth interviews. Documentation involved reviewing teaching materials, lesson plans, and institutional guidelines for the use of audiovisual media. The observation focused on how teachers and students interact with such media during *Sharaf* instruction. At the same time, interviews were conducted with teachers and learners to gain insights into their perceptions, experiences, and responses to audio-visual resources. The data analysis process followed the interactive model proposed by Jusufi & Jusufi (2023), which includes four main stages: data condensation, data display, and conclusion drawing or verification. Data condensation involved selecting, simplifying, and organizing raw data to highlight relevant aspects of *Sharaf* learning. The reduced data were then displayed in descriptive and thematic formats to reveal emerging patterns and relationships. Finally, conclusions were drawn through iterative verification to ensure analytical consistency and validity.

To ensure the credibility and trustworthiness of findings, several verification techniques were applied, including triangulation, member checking, and prolonged engagement. Triangulation was conducted by comparing data from different sources — documents, observations, and interviews to ensure the consistency of information. Member checking involved confirming key interpretations with participants to validate the researcher's analysis. Additionally, prolonged engagement in the field enabled the researcher to gain a deeper understanding of the learning context and minimize potential biases. Through these steps, the research ensures the reliability, transparency, and authenticity of the qualitative findings on the effective use of audio-visual teaching materials in *Sharaf* instruction.

## FINDINGS AND DISCUSSION

### Finding

The following section presents the research findings from field observations, interviews, and document analysis. Each finding reflects the transformation of Arabic morphology (*Sharaf*) learning through digital pedagogical innovation, cognitive visualization, and contextual implementation. These findings are structured to illustrate how technology integration, multisensory engagement, and sustainable pedagogy collectively enhance students' comprehension, participation, and autonomy in mastering Arabic linguistic structures.

### Use of Technology in Teaching Materials

The field data revealed that digital pedagogical innovation in *Sharaf* learning represents a paradigm shift from traditional, memorization-centered methods to a more multimodal, participatory approach. In operational terms, this innovation refers to the systematic integration of audiovisual media, such as animated morphology charts, video explanations, and interactive PowerPoint slides, into classroom instruction. Teachers no longer act as the sole transmitters of knowledge but instead as facilitators who guide

students in exploring morphological patterns through visual and auditory stimuli. This change transforms the learning environment into an interactive experience in which students construct meaning from what they see and hear, rather than merely memorizing word forms and rules.

During interviews, teachers described how the use of digital media has fundamentally altered their teaching dynamics. One teacher explained, “When I use animated morphology charts and video explanations, students can immediately grasp the changes in word forms; they see how the patterns shift rather than just memorizing the rules.” Another teacher added, “Students are much more enthusiastic when they see the words come alive through animation. They often ask questions or even predict what will happen next in the chart.” The researcher interpreted these responses as evidence that teachers are not simply adopting technology for convenience, but are consciously designing lessons to stimulate cognitive engagement and conceptual understanding. The shift reflects a deeper pedagogical awareness among teachers of the need to align their instructional methods with students’ digital learning habits.

A second teacher reported that students who previously struggled to follow morphological lessons began to show improvement after digital integration was introduced. They noted, “Before using videos and visual patterns, many students found *Sharaf* too abstract. However, when I showed narrated examples, they started saying, ‘Oh, now I get it!’ and their test scores improved.” The researcher interpreted this as an indication that digital pedagogy supports students’ cognitive processes by reducing the abstraction of Arabic morphology, thus bridging the gap between form recognition and functional understanding. The integration of multimodal elements text, sound, and motion encourages students to process information rather than passively receive it. This transformation also promotes student autonomy, as learners can revisit the visual materials independently to reinforce comprehension outside of class time.

Observation in the classroom supported these findings. When digital media was used, students appeared more focused, responsive, and interactive. One student even commented during observation, “It is easier to remember the patterns when we can see them move on the screen.” They frequently engaged in discussion while observing animated charts, predicting possible word forms, and testing their hypotheses collaboratively. This pattern demonstrates that digital pedagogical innovation in *Sharaf* learning has moved beyond simple media use toward a transformative learning environment where cognitive engagement, creativity, and interaction coexist. The data show a consistent pattern: digital pedagogy transforms morphological learning into a participatory, student-centered process that deepens comprehension and fosters sustained motivation to master Arabic language structure.

### **Cognitive Visualization and Multisensory Engagement through Audio-Visual Media**

Cognitive visualization and multisensory engagement in *Sharaf* learning refer to the process by which students construct mental representations of morphological transformations through synchronized visual and auditory stimuli. In this context, audio-visual teaching materials such as animated word charts, narrated examples, and color-coded transformations serve as tools that stimulate both the auditory and the visual senses. This process helps students to internalize the patterns of Arabic word forms by observing animations while simultaneously listening to verbal explanations. The operational application of this finding in the classroom can be seen when students watch

videos demonstrating *tasrīf* transformations step by step, with accompanying audio that highlights key linguistic elements. Through this multimodal experience, students can process abstract concepts, such as morphological changes, into concrete cognitive structures, enabling more durable retention and recall in their learning of *Sharaf*.

**Table 1. The Observation of Cognitive Visualization and Multisensory Engagement through Audio-Visual Media**

Observation Focus	Indicator of Cognitive Visualization	Observation Percentage (%)
Students follow animated <i>tasrīf</i> transformations attentively.	Visual focus on changing word patterns	87%
Students respond to audio narration during explanation	Auditory responsiveness and verbal repetition	82%
Students can recall morphological forms after a visual presentation	Retention and recall accuracy	78%
Students demonstrate understanding by applying learned forms in exercises	Application of morphological understanding	74%
Students show active participation during video-based learning sessions	Engagement and attentiveness	85%

The observation results reveal that students exhibit a high level of visual concentration during digital *Sharaf* lessons, with 87% showing sustained focus on animated morphological transformations. This indicates that visual elements serve as strong cognitive anchors, helping learners connect abstract rules to tangible forms. Furthermore, 82% of students demonstrated auditory responsiveness by repeating or responding to narrated instructions, indicating effective synchronization between hearing and seeing. Around 78% of learners accurately recalled word forms after visual exposure, suggesting that the visualization process supports long-term memory encoding. However, only 74% successfully applied this knowledge in independent exercises, indicating that while visualization aids recognition and retention, further reinforcement is needed to support deeper conceptual transfer. The 85% engagement rate shows that learners respond positively to the integration of visuals and audio, transforming passive memorization into active participation.

The data indicate a strong correlation between multisensory stimulation and students' cognitive performance in *Sharaf* learning. Students who were exposed to synchronized visual and auditory input demonstrated higher attention, better recall, and greater enthusiasm in engaging with complex morphological concepts. These findings confirm that visual and audio elements work synergistically to facilitate comprehension. Restating the data, the majority of learners (over 80%) maintained focus, responded actively, and retained the presented material effectively, while a slightly lower percentage (74%) had challenges applying these concepts independently. This pattern reflects the transition from perception-based understanding to functional application. From the researcher's observation, this process nurtures a dual-layered engagement, perceptual engagement through visualization and cognitive engagement through contextual application, which together foster meaningful learning outcomes in Arabic morphology.

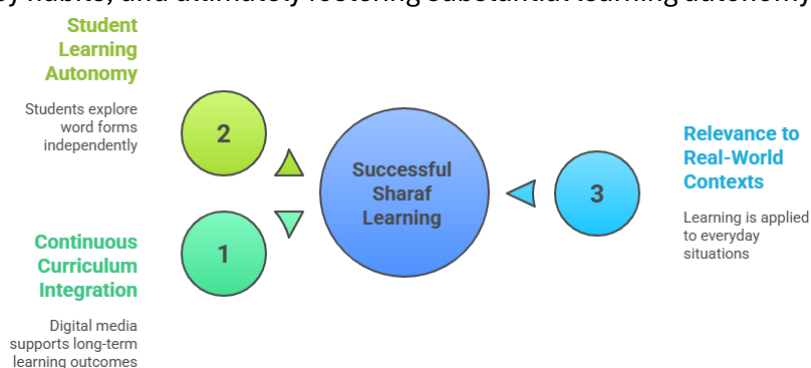
The overall pattern of the observations suggests that audio-visual integration promotes a cognitive learning environment in which students interact with language structures through both sight and sound. The combination of moving visuals and explanatory narration stimulates simultaneous cognitive processing, helping students

internalize linguistic forms more efficiently. Learners display heightened motivation, stronger concentration, and increased accuracy in morphological recognition. However, the data also show that while multisensory media effectively enhance understanding and retention, continuous practice and teacher-guided reflection are still required to convert this understanding into independent analytical skill. Thus, the observed pattern illustrates that cognitive visualization through multisensory engagement not only strengthens students' immediate comprehension but also lays the foundation for deeper morphological competence in *Sharaf* learning.

### Contextual Implementation and Pedagogical Sustainability in *Sharaf* Instruction

This sub-finding illustrates the contextual application of *Sharaf* (Arabic morphology) learning in line with pedagogical sustainability. In the field, "contextual implementation" is defined as a teaching process that adapts media and methods to students' actual needs, the learning environment, and curriculum outcomes. Audio-visual media are used not merely as aids, but as a bridge between theoretical material and students' real-life situations, such as displaying word changes in everyday contexts. Meanwhile, "pedagogical sustainability" refers to teachers' efforts to maintain the effectiveness of digital learning strategies so they remain relevant and usable across semesters and across learning levels.

This contextual learning process begins with the curriculum planning stage, which integrates audio-visual media into *Sharaf* lesson plans. It continues with classroom implementation through interactive videos and digital exercises. Finally, it concludes with a reflection and a project-based assessment. The teacher acts as a facilitator, while students become active subjects interpreting morphological meanings through hands-on practice. Researchers interpret this process as demonstrating a sustainable learning design pattern: from curriculum adaptation to the development of students' cognitive and digital literacy habits, and ultimately fostering substantial learning autonomy.



**Figure 1. Factors contributing to successful *Sharaf* Learning**

Observations indicate that teachers utilize three primary forms of audio-visual media: morphology learning videos, web-based interactive simulations, and digital evaluative exercises. These three media are used interchangeably to accommodate students' diverse learning styles. During class sessions, students appear more enthusiastic when practicing *tasrif* patterns through animated displays adapted to everyday contexts, such as conversations, school activities, and religious practices. Researchers believe this implementation fosters active participation and shifts passive learning patterns to participatory ones. Student-centered learning activities encourage the

continuation of critical thinking processes regarding the meaning and function of words in Arabic sentences.

Observations confirm that contextual *Sharaf* learning goes beyond simply introducing word forms to fostering a deep-rooted linguistic awareness. Teachers not only transfer knowledge but also facilitate understanding by leveraging students' direct experiences through relevant media. Data shows that this approach improves students' ability to connect morphological forms to actual communication contexts. Therefore, the success of this contextual implementation lies in the balance between conceptual clarity and the relevance of the learning experience, making *Sharaf* learning more meaningful and applicable.

## Discussion

The findings of this study demonstrate a significant paradigm shift in the teaching of Arabic morphology (*Sharaf*), aligning closely with the principles of digital pedagogy and multimodal learning proposed in existing literature. The integration of audio-visual media, such as animated morphology charts, narrated explanations, and interactive slides, aligns with the Cognitive Theory of Multimedia Learning, which posits that knowledge is better retained when learners engage both visual and auditory channels simultaneously (Fasinro, 2024; Oudeh, 2019). However, unlike studies that treat technology merely as an instructional aid, this research identifies technology as a pedagogical innovation that transforms the learning experience into a participatory process. This divergence marks a theoretical advancement, as the implementation of *Sharaf* instruction not only enhances retention but also fosters cognitive engagement, thereby reshaping traditional conceptions of language instruction within Islamic education.

The use of digital materials also aligns with constructivist learning principles, in which students actively construct meaning through interaction with multimodal stimuli (Purwani, 2023; Zamroni et al., 2025). The observed student enthusiasm and conceptual understanding mirror what scholars describe as “active cognitive construction,” wherein learners internalize complex linguistic patterns through discovery rather than rote memorization. However, the findings extend beyond prior literature by showing that audio-visual learning in *Sharaf* is not limited to cognitive engagement but also builds learner autonomy. This nuance contributes a new layer to the discourse on digital pedagogy in Arabic education, demonstrating that when digital resources are contextually designed, they can serve as a bridge between theoretical grammar and practical linguistic use, thus reinforcing both comprehension and motivation (Eldjoudi, 2024; Sulaiman & Altakhaineh, 2021).

The results on cognitive visualization and multisensory engagement further substantiate the dual-channel processing framework by showing that synchronized visual and auditory elements enhance learners' focus, retention, and recall accuracy. This supports Paivio's dual coding perspective, in which linguistic and visual inputs are processed by complementary cognitive systems (Aziz, 2025; Hina, 2024). However, the data in this research highlight a distinctive pattern: while over 80% of students demonstrated strong visual and auditory responsiveness, a slightly lower percentage (74%) successfully applied morphological understanding independently. This gap suggests that while multisensory integration is highly effective in perception-based

learning, teachers must still scaffold the transition toward analytical application. Theoretically, this implies that multimodal instruction lays the foundation for understanding, while reflective practice ensures the transfer of that understanding into real communicative contexts (Putri, 2023; Safitri & Zawawi, 2025; Sain, 2025).

In terms of contextual implementation and pedagogical sustainability, the findings confirm that sustainable digital pedagogy is achieved when instructional design aligns technological tools with students' lived experiences. This aligns with the Contextual Teaching and Learning (CTL) model, which emphasizes learning that connects academic material to real-life situations (Matusov, 2020; Mundzir, 2022; Yaylaci et al., 2021). The study shows that *Sharaf* instruction grounded in contextualized media leads to long-term transformative effects: students develop linguistic awareness, digital literacy, and independent learning skills that persist across instructional cycles (Al-Sharafi et al., 2023; Mohd Rahim et al., 2022). Compared to prior studies that highlight short-term engagement effects of technology, this research expands the discourse by illustrating how contextual integration sustains pedagogical effectiveness across semesters, promoting both continuity and innovation within Arabic linguistic education.

Theoretically, these findings contribute to the growing scholarship on sustainable digital pedagogy in language instruction, providing empirical evidence that multimodal integration can reshape the nature of linguistic cognition in complex grammatical learning. Practically, they imply that educators must go beyond simply adopting digital tools; they should instead design pedagogical ecosystems that combine technological interactivity with contextual relevance. Such ecosystems cultivate cognitive engagement, learner autonomy, and reflective understanding, key pillars of transformative learning. Thus, this study bridges theoretical and practical dimensions of Arabic pedagogy by demonstrating that digital innovation, when contextually sustained, not only modernizes *Sharaf* learning but also redefines it as a dynamic, student-centered, and future-oriented educational practice.

## CONCLUSION

The findings of this study reveal that the utilization of audio-visual teaching materials in *\*Sharaf\** learning brings a transformative impact on both teaching practice and student engagement. The key insight gained is that digital and multimodal approaches move the learning process from rote memorization to meaningful comprehension through visual and auditory interaction. This transformation cultivates learner autonomy, enhances retention of morphological patterns, and fosters active participation. The study underscores the importance of pedagogical creativity and contextual adaptation in developing a more interactive and cognitively engaging Arabic learning environment.

Scientifically, this research contributes to the growing body of knowledge on digital pedagogy in Arabic linguistics by offering a model of sustainable and learner-centered instruction that integrates multimedia principles. However, the study's limitation lies in its qualitative scope, which focuses primarily on descriptive analysis without broad quantitative validation. Future research should expand through experimental or longitudinal designs to measure the long-term cognitive impact of audio-visual media on Arabic morphology learning and to explore cross-cultural adaptability across diverse educational settings.

## REFERENCES

- Abdelraouf, E. (2024). Examining AI Integration by Audio-Visual Media Platforms in Oman: A Qualitative Analysis of Media Professionals' Perspectives. *Arab Media and Society*, 2024(37), 45–68. <https://doi.org/10.70090/ES24EAll>
- Abu-Rayyash, H., Alhawamdeh, S., & Ringomon, Y. (2024). The Eye-Ear Relationship: Investigating Auditory Impacts on Subtitle Reading and Comprehension. *Texto Livre*, 17. <https://doi.org/10.1590/1983-3652.2024.52687>
- Ahmad, R., & Hillman, S. (2021). Laboring to Communicate: Use of Migrant Languages in COVID-19 Awareness Campaign in Qatar. In *Multilingua* (Vol. 40, Issue 3, pp. 303–337). <https://doi.org/10.1515/multi-2020-0119>
- Al-Anzi, F. S. (2022). Improved Noise-Resilient Isolated Words Speech Recognition Using Piecewise Differentiation. *Fractals*, 30(8). <https://doi.org/10.1142/S0218348X22402277>
- Al-Azani, S., & El-Alfy, E. S. M. (2020). Enhanced Video Analytics for Sentiment Analysis Based on Fusing Textual, Auditory, and Visual Information. *IEEE Access*, 8, 136843–136857. <https://doi.org/10.1109/ACCESS.2020.3011977>
- Al-Sharafi, M. A., Al-Emran, M., Iranmanesh, M., Al-Qaysi, N., Iahad, N. A., & Arpaci, I. (2023). Understanding the Impact of Knowledge Management Factors on the Sustainable Use of AI-based Chatbots for Educational Purposes using a Hybrid SEM-ANN Approach. *Interactive Learning Environments*, 31(10), 7491–7510.
- Arifah, F., Barnabas, R. A., & Maryam, S. (2022). Pre-Service Arabic Language Teachers' Readiness in Digital Media Based on European Profiling Grid. *Al-Ittijah : Jurnal Keilmuan Dan Kependidikan Bahasa Arab*, 14(1), 1–15. <https://doi.org/10.32678/al-ittijah.v14i1.5239>
- Aziz, A. L., & Sain, S. H. (2025). Sustainable Legal Education: Aligning Curricula with the 2030 Agenda for Sustainable Development. *GAS Journal of Law and Society (GASJLS)*, Volume-02(Issue-01), 10–19. <https://gaspublishers.com/gasjls/>
- Eldjoudi, O. A. (2024). Translanguaging Pedagogy in the Algerian EFL Classrooms: Teaching Vocabulary and Negotiating Social Justice Issues. In *Multilingual Early Childhood Education: Modern Approaches and Research* (pp. 157–183).
- Elkhayati, M., & Elkettani, Y. (2021). Arabic Handwritten Text Line Segmentation Using a Multi-Agent System and a Directed CNN. In the *5th International Conference on Intelligent Computing in Data Sciences, ICDS 2021*. <https://doi.org/10.1109/ICDS53782.2021.9626747>
- Fasinro, K. (2024). Curriculum Implementation: Challenges and the Prospect of Education Resource Centres to aid Effective Implementation. *African Educational Research Journal*, 12(1), 1–5. <https://doi.org/10.30918/aerj.121.23.102>
- Febriani, S. R., Wargadinata, W., Syuhadak, S., & Ibrahim, F. M. A. (2020). Design of Arabic Learning for Senior High School in the 21st Century. *Jurnal Al-Bayan: Jurnal Jurusan Pendidikan Bahasa Arab*, 12(1), 1–21.

<https://doi.org/10.24042/albayan.v12i1.5886>

- Fisher, A., & Prucha, N. (2023). ONLINE TERRITORIES OF TERROR: The Multiplatform Communication Paradigm and the Information Ecology of the Web3 Era. In *Routledge Handbook of Transnational Terrorism* (pp. 107–123). <https://doi.org/10.4324/9781003326373-12>
- Fu, J., Wang, Y., Zhou, D., & Cao, S. J. (2022). Impact of Urban Park Design on Microclimate in Cold Regions using a newly developed prediction method. *Sustainable Cities and Society*, 80. <https://doi.org/10.1016/j.scs.2022.103781>
- Hamada, S., & Marzouk, R. M. (2018). Developing a Transfer-Based System for Arabic Dialects Translation. In *Studies in Computational Intelligence* (Vol. 740, pp. 121–138). [https://doi.org/10.1007/978-3-319-67056-0\\_7](https://doi.org/10.1007/978-3-319-67056-0_7)
- Hina, S. (2024). School Zoning Policy Controversy In Elementary Education. *EDUCARE: Jurnal Ilmu Pendidikan*, 3(1), 1–11. <https://doi.org/10.71392/ejip.v3i1.70>
- Jusufi, J., & Jusufi, S. (2023). A Case Study on Teaching English As a Foreign Language Through Movies To Students of Higher Education. *Human Research in Rehabilitation*, 13(2), 287–291. <https://doi.org/10.21554/hrr.092311>
- Kapli, P., Yang, Z., & Telford, M. J. (2020). Phylogenetic Tree Building in the Genomic Age. In *Nature Reviews Genetics* (Vol. 21, Issue 7, pp. 428–444). <https://doi.org/10.1038/s41576-020-0233-0>
- Koerber, B. (2021). “Mock Jewish” in Early Twentieth-Century Tunisia: Linguistic form and Social Meaning. *Arabica*, 68(2–3), 216–280. <https://doi.org/10.1163/15700585-12341598>
- Matusov, E. (2020). A Student’s Right to Freedom of Education and a Teacher’s Fiduciary Obligation to Support It: A Reply to the Commentaries. *Dialogic Pedagogy*, 8, SF97–SF114. <https://doi.org/10.5195/DPJ.2020.357>
- Mizan, A. N., Hijriyah, U., Famela, Z. I., Dinata, R. S., Wahidah, Y. L., & Mardian, H. (2024). Development of Web-Based Audio-Visual Media for Fi’il Amr for Beginners Learning at Ma’had al-Jami’ah UIN Raden Intan Lampung. In *E3S Web of Conferences* (Vol. 482). <https://doi.org/10.1051/e3sconf/202448205006>
- Mohd Rahim, N. I., A. Iahad, N., Yusof, A. F., & A. Al-Sharafi, M. (2022). AI-Based Chatbots Adoption Model for Higher-Education Institutions: A Hybrid PLS-SEM-Neural Network Modelling Approach. *Sustainability (Switzerland)*, 14(19). <https://doi.org/10.3390/su141912726>
- Mundzir, I. (2022). Contextual Learning Innovations in Islamic Education Textbooks at Muhammadiyah Elementary School Grade VI. *Afkaruna: Indonesian Interdisciplinary Journal of Islamic Studies*, 18(1). <https://doi.org/10.18196/afkaruna.v18i1.10375>
- Oudeh, T. Y. (2019). Teaching Arabic Language to Speakers of Other Languages (Between Tradition and Innovation). *Elementary Education Online*, 18(4), 2157–2171.

<https://doi.org/10.17051/ilkonline.2019.641214>

- Pujiati. (2022). Innovation Of Learning Arabic Calligraphy Digital Quran In The Cryan World. *Res Militaris*, 12(3), 734–761.
- Purwani, A. (2023). Assistance in Forming a Habituation to Read Students ' Daily Prayer Through Storytelling. *Proceedings of International Conference on Education*, 1(1).
- Putri, D. F., & Baharun, H. (2023). The Implementation of Augmented Reality in Science Education in Secondary Schools. *International Journal of Instructional Technology*, 2(1), 34–45. <https://doi.org/10.33650/ijit.v2i1.9325>
- Riwanda, A., Ridha, M., & Islamy, M. I. (2024). Empowering Asynchronous Arabic Language Learning Through PDF Hyperlink Media. *International Review of Research in Open and Distributed Learning*, 25(1), 66–88. <https://doi.org/10.19173/irrodl.v25i1.7425>
- Safitri, S. D., & Zawawi, A. A. (2025). Balancing Educational Finance through Power Equalizing Models. *Education and Sociedad Journal*, 2(2), 88–97. <https://doi.org/10.61987/edsojou.v2i2.710>
- Sain, Z. H. (2025). From Chalkboards to Chatbots: Revolutionizing Education with AI-Driven Learning Innovations. *Educative: Jurnal Ilmiah Pendidikan*, 3(1), 1–10. <https://doi.org/10.70437/educative.v3i1.823>
- Sarfo, J. O., Debrah, T. P., Gbordzoe, N. I., Afful, W. T., & Obeng, P. (2021). Qualitative Research Designs, Sample Size and Saturation: Is Enough Always Enough? *Journal of Advocacy, Research and Education*, 8(3), 60–65. <https://doi.org/10.13187/jare.2021.3.60>
- Sulaiman, N. A., & Altakhaineh, A. R. M. (2021). Sources of Speaking Anxiety among Arabic-Speaking EFL Students in Arabic Language Classrooms. *International Journal of Pedagogy and Curriculum*, 28(2), 149–160. <https://doi.org/10.18848/2327-7963/CGP/v28i02/149-160>
- Ulfah, S., Ramdania, D. R., Fatoni, U., Mukhtar, K., Tajiri, H., & Sarbini, A. (2020). Augmented Reality Using Natural Feature Tracking (NFT) Method for Learning Media of Makharijul Huruf. In *IOP Conference Series: Materials Science and Engineering* (Vol. 874, Issue 1). <https://doi.org/10.1088/1757-899X/874/1/012019>
- Yassin, R., Share, D. L., & Shalhoub-Awwad, Y. (2020). Learning to Spell in Arabic: The Impact of Script-Specific Visual-Orthographic Features. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.02059>
- Yaylaci, S., Ulman, Y. I., Vatansever, K., Senyurek, G., Turkmen, S., Aldinc, H., & Gun, C. (2021). Integrating Patient Management, Reflective Practice, and Ethical Decision-Making in an Emergency Medicine Intern Boot Camp. *BMC Medical Education*, 21(1). <https://doi.org/10.1186/s12909-021-02970-8>
- Youcef, F. Z., & Barigou, F. (2021). Arabic Language Investigation in the Context of Unimodal and Multimodal Sentiment Analysis. In *2021, the 22nd International Arab Conference on Information Technology, ACIT 2021*.

<https://doi.org/10.1109/ACIT53391.2021.9677274>

Zamroni, F. R., Rasyidi, Baharun, H., W., T., & Putri, D. F. (2025). Artificial Intelligence as a Tool to Improve the Quality of Job-Ready Graduate Skills in Higher Education. *Proceedings of the 2025 IEEE International Conference on Industry 4.0, Artificial Intelligence, and Communications Technology, IAICT 2025*, 129–136. <https://doi.org/10.1109/IAICT65714.2025.11101572>

Zubaidah, K. A., S., S., H., O., Afrida, Y., & Safitri, L. (2021). Web-Based E-Learning Application for Learning the Arabic Language. In *Journal of Physics: Conference Series* (Vol. 1779, Issue 1). <https://doi.org/10.1088/1742-6596/1779/1/012011>