

A LITERATURE REVIEW ON MULTIMEDIA-BASED QUR'ANIC LEARNING FOR GENERATION Z

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Abstract

The rapid advancement of digital technology has significantly influenced educational practices, including Qur'anic learning for Generation Z. This literature review examines the characteristics and learning preferences of Generation Z, the forms and effectiveness of multimedia used in Qur'anic education, as well as the pedagogical impacts and challenges associated with multimedia-based learning. The reviewed studies indicate that Generation Z learners demonstrate a strong preference for visual, interactive, and technology-supported learning environments that promote engagement, autonomy, and immediate feedback. Various multimedia forms, such as instructional videos, mobile applications, digital Qur'an platforms, and interactive learning media, have been shown to enhance motivation, comprehension, and memorization of Qur'anic content when appropriately designed. Pedagogically, multimedia integration supports active learning, learner-centered instruction, and differentiated teaching approaches in Qur'anic education. However, challenges remain, including unequal access to technology, limited digital competence among educators, and the risk of reduced spiritual depth if pedagogical guidance is insufficient. The review concludes that multimedia-based Qur'anic learning holds considerable potential for Generation Z, provided that technological integration is aligned with sound pedagogical principles and the spiritual objectives of Qur'anic education.

Keywords: Qur'anic learning; multimedia-based learning; Generation Z; Islamic education; literature review

INTRODUCTION

The rapid development of digital technology has significantly transformed educational practices across various disciplines, including religious education. Learning activities

are no longer confined to conventional classroom settings, as digital media increasingly mediate knowledge transmission. Educational institutions are encouraged to integrate technology to respond to contemporary learners'

characteristics and expectations (Ratnawati, Abidin, & Zulfikar, 2020). Multimedia-based learning has emerged as a strategic approach to enhance instructional effectiveness and learner engagement. This transformation also influences the teaching and learning of the Qur'an, which traditionally relies on face-to-face instruction. The adaptation of Qur'anic education to digital environments requires careful pedagogical consideration to preserve authenticity and learning outcomes (Asfiani & Rapi, 2024).

Qur'anic learning plays a central role in shaping spiritual, moral, and intellectual development among Muslim learners. Mastery of Qur'anic reading, recitation, and understanding forms the foundation of Islamic education. Traditional methods emphasize direct interaction between teachers and learners to ensure accuracy in pronunciation and comprehension. Such approaches have proven effective for generations but face challenges in contemporary educational contexts. Changes in learners' lifestyles and learning preferences necessitate methodological innovation. Multimedia-based learning offers potential solutions to address these emerging challenges without diminishing the sacred nature of the Qur'an (Siregar, Sitorus, & Mahrani, 2024).

Multimedia learning integrates text, audio, visuals, animation, and

interactivity to support knowledge acquisition. Cognitive theory suggests that multimedia elements can enhance understanding by engaging multiple sensory channels. Well-designed multimedia materials reduce cognitive overload and improve retention of information. In language-related learning, audio-visual integration is particularly beneficial for pronunciation and listening skills. Qur'anic learning shares similarities with language learning due to its emphasis on phonetics and rhythm. The application of multimedia principles can therefore strengthen Qur'anic literacy when implemented appropriately (Murdiono, 2024).

The emergence of Generation Z has introduced new dynamics into the educational landscape. This generation is characterized by digital nativity, rapid information processing, and preference for visual and interactive content. Learning experiences that lack technological integration often fail to sustain their attention. Generation Z learners tend to value autonomy, flexibility, and instant feedback in learning environments. Educational strategies that align with these traits are more likely to achieve meaningful engagement. Multimedia-based Qur'anic learning aligns with these preferences and supports adaptive learning experiences (Mukhlas, Murhayati, & Zaitun, 2024).

The mismatch between traditional instructional methods and

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Generation Z learning styles has become a growing concern. Conventional Qur'anic learning models may appear monotonous to learners accustomed to dynamic digital media. Reduced motivation and inconsistent learning participation have been reported in some learning contexts. Educational innovation is therefore essential to maintain relevance and effectiveness. Multimedia integration allows Qur'anic instruction to be presented in formats familiar to contemporary learners. Such alignment increases the likelihood of sustained engagement and learning continuity (Mu'minatin & Zarkasi, 2023).

Previous studies highlight the effectiveness of multimedia learning in improving motivation and academic achievement. Audio-visual content enhances learners' ability to understand abstract or complex material. Interactive features promote active learning rather than passive reception of information. Research in religious education indicates that technology-assisted learning can support spiritual instruction when pedagogically grounded. Qur'anic learning benefits from audio components that model correct recitation and intonation. Visual aids further support learners' understanding of tajwid rules and verse structures (Daryanto, Purnomo, & Erlina, 2023).

Despite its potential benefits, multimedia-based Qur'anic learning also presents challenges. Inappropriate

design may distract learners or oversimplify complex religious concepts. Excessive reliance on technology risks reducing direct teacher-learner interaction. Pedagogical frameworks are therefore required to guide effective implementation. Teachers must possess adequate digital literacy to utilize multimedia tools responsibly. Institutional support is also necessary to ensure sustainability and quality assurance. These considerations underscore the need for critical evaluation through scholarly literature.

A literature review provides a systematic foundation for understanding multimedia-based Qur'anic learning. Scholarly works offer insights into theoretical frameworks, instructional models, and empirical findings. Examination of previous studies reveals trends, strengths, and research gaps in the field. Literature analysis supports evidence-based decision-making in educational practice. This approach ensures that innovation is grounded in academic rigor rather than technological novelty. A comprehensive review is essential to contextualize multimedia learning within Qur'anic education (Anastia, Permana, Susanty, & Syarif, 2022).

Existing research on Qur'anic learning increasingly addresses digital and multimedia approaches. Studies explore mobile applications, interactive software, and online learning platforms. Findings generally report positive learner responses and

improved learning outcomes. Variations in instructional design, learner demographics, and educational settings influence effectiveness. Comparative analysis across studies helps identify best practices and limitations. Such synthesis contributes to the development of contextually appropriate learning models (Ussolikhah & Nafi'a, 2024).

The role of educators remains central in multimedia-based Qur'anic learning. Teachers act as facilitators who guide learners through digital content while maintaining pedagogical and spiritual integrity. Professional competence includes mastery of subject matter and instructional technology. Teacher attitudes toward technology influence implementation success. Training and professional development enhance teachers' confidence and effectiveness. Literature emphasizes the importance of balancing technological tools with human guidance.

Institutional context also shapes the implementation of multimedia Qur'anic learning. Infrastructure availability determines access to digital resources. Policy support influences curriculum integration and instructional innovation. Educational institutions must establish standards to regulate content quality and ethical considerations. Collaborative efforts among stakeholders strengthen implementation strategies. Literature highlights the importance of alignment

between institutional vision and instructional practice.

Cultural and religious sensitivity remains a crucial consideration in multimedia Qur'anic instruction. Digital content must respect the sanctity of the Qur'an and Islamic values. Visual and audio representations require careful selection to avoid misinterpretation. Learners' cultural backgrounds influence their reception of digital religious materials. Literature emphasizes ethical responsibility in religious education technology. Sensitivity enhances acceptance and effectiveness among diverse learner populations (Miranda, Rahmawati, & Adiyono, 2024).

This literature review aims to examine scholarly perspectives on multimedia-based Qur'anic learning for Generation Z. The discussion synthesizes theoretical foundations, empirical findings, and practical implications. Attention is given to learner characteristics, instructional design, and educational challenges. The review contributes to understanding how multimedia can support Qur'anic education in contemporary contexts. Insights derived from literature support informed pedagogical innovation. The study ultimately seeks to strengthen Qur'anic learning relevance and quality for future generations.

METHOD

This study employed a qualitative research design using a systematic literature review approach to examine multimedia-based Qur'anic learning for Generation Z. The review focused on scholarly articles, books, and conference proceedings published within the last ten years to ensure relevance to contemporary educational and technological contexts. Data sources included reputable academic databases such as Scopus, Google Scholar, ERIC, and national indexed journals. The selection criteria emphasized studies discussing multimedia learning, digital pedagogy, Qur'anic education, and the learning characteristics of Generation Z. Irrelevant, duplicated, or non-peer-reviewed publications were excluded to maintain the quality and credibility of the analysis. This approach enabled a comprehensive synthesis of theoretical and empirical perspectives related to the research topic.

Data analysis was conducted through thematic content analysis to identify recurring concepts, patterns, and pedagogical implications across the selected literature. Each source was examined to extract information related to instructional design, types of multimedia used, learner engagement, and learning outcomes in Qur'anic education contexts.

The findings were then categorized into major themes reflecting instructional strategies, technological integration, and learner-

centered approaches suitable for Generation Z. Cross-comparison among studies was performed to highlight similarities, differences, and research gaps. The analysis process ensured coherence and analytical depth rather than descriptive repetition. This methodological procedure provided a structured foundation for understanding current trends and informing future research directions in multimedia-based Qur'anic learning.

RESULT AND DISCUSSION

Characteristics and Learning Preferences of Generation Z in Qur'anic

Generation Z learners demonstrate distinct characteristics that significantly influence their engagement in Qur'anic education. They are digital natives who have grown up with constant access to the internet, mobile devices, and multimedia platforms. This generation tends to process information quickly and prefers visual and interactive content over lengthy textual explanations. Traditional Qur'anic learning methods that rely heavily on rote memorization and one-way instruction often fail to sustain their attention. Learners from this generation show a strong inclination toward learning environments that integrate technology seamlessly. Their familiarity with digital tools shapes expectations for flexibility, accessibility, and immediacy in the learning process.

Cognitive styles of Generation Z learners also differ from previous generations in meaningful ways. They are accustomed to multitasking and navigating multiple sources of information simultaneously. This condition affects their concentration span, making concise and well-structured learning materials more effective. Qur'anic education that incorporates segmented content, animations, and guided visual cues aligns better with these cognitive tendencies. Learners respond positively when complex Qur'anic concepts are presented in simplified and visually supported formats. Such approaches help bridge the gap between classical Qur'anic knowledge and contemporary learning habits (Miranda et al., 2024).

Learning motivation among Generation Z in Qur'anic education is closely linked to relevance and contextualization. Learners are more engaged when Qur'anic teachings are connected to real-life situations and contemporary issues. Abstract explanations without practical relevance often reduce interest and participation. Multimedia-based learning allows educators to contextualize Qur'anic values through videos, simulations, and real-world scenarios. This method strengthens learners' emotional and intellectual connection to the Qur'an. Meaningful engagement emerges when learners

perceive Qur'anic education as applicable to their daily lives.

Interaction plays a central role in shaping Generation Z's learning preferences. Passive learning environments are generally perceived as less effective by this generation. Learners prefer opportunities for two-way communication, feedback, and collaboration. Multimedia platforms enable interactive features such as quizzes, discussion forums, and instant feedback mechanisms. These features foster active participation and enhance comprehension of Qur'anic materials. Interactive learning environments also encourage learners to take greater responsibility for their learning outcomes (Amin, 2023).

Autonomy and self-directed learning are prominent characteristics of Generation Z learners. They value the ability to control the pace, time, and sequence of learning activities. Multimedia-based Qur'anic learning platforms support this preference by offering flexible access to materials. Learners can revisit recitation tutorials, tafsir explanations, and tajwid exercises as needed. This flexibility accommodates individual learning differences and promotes deeper understanding. Self-directed learning environments also help learners develop independence and lifelong learning habits.

Social learning remains important for Generation Z, despite their preference for digital interaction.

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Learners benefit from collaborative activities that allow peer discussion and shared reflection on Qur'anic content. Online learning communities and multimedia platforms facilitate collaboration beyond physical classrooms. Peer interaction helps clarify misunderstandings and reinforces learning through shared experiences. Social engagement in digital spaces also enhances learners' motivation and sense of belonging. Qur'anic education that integrates collaborative multimedia tools aligns well with these social learning preferences (Pradhana, Musthafa, & Putra, 2023).

Aesthetic design and usability significantly influence Generation Z's engagement with Qur'anic learning materials. Learners are more attracted to platforms with clean interfaces, appealing visuals, and intuitive navigation. Poorly designed digital resources can hinder learning regardless of content quality. Multimedia Qur'anic materials that employ balanced color schemes, readable typography, and structured layouts enhance user experience. Effective design supports focus and reduces cognitive overload. Visual clarity becomes an essential component of successful Qur'anic education for this generation.

Feedback and assessment preferences of Generation Z also reflect their digital orientation. Learners expect immediate and clear feedback on their learning progress. Multimedia

tools provide instant evaluation through automated quizzes, pronunciation analysis, and progress tracking. Immediate feedback helps learners identify mistakes and improve more efficiently. Traditional delayed assessment methods are often perceived as less motivating. Continuous digital assessment supports sustained engagement and self-improvement in Qur'anic learning (Luthfan, 2023).

Overall, the characteristics and learning preferences of Generation Z necessitate a pedagogical shift in Qur'anic education. Multimedia-based approaches respond effectively to their cognitive, motivational, and technological traits. Learning environments that emphasize interaction, flexibility, relevance, and visual support are more likely to achieve educational goals. Qur'anic education must adapt without compromising its spiritual and doctrinal foundations. Strategic integration of multimedia enhances accessibility and understanding of Qur'anic teachings. Aligning instructional practices with Generation Z's learning preferences ensures the sustainability and effectiveness of Qur'anic education in contemporary contexts (Supriadi, 2022).

Forms and Effectiveness of Multimedia in Qur'anic Learning Practices

Multimedia has become an integral component in contemporary Qur'anic learning practices, responding

to the evolving characteristics of modern learners. The integration of text, audio, visuals, and interactive elements enables a more holistic learning experience compared to conventional methods. Qur'anic instruction no longer relies solely on face-to-face recitation and memorization but incorporates digital platforms to enhance accessibility and engagement. This transformation aligns with broader educational trends that emphasize learner-centered and technology-supported instruction. Multimedia tools facilitate exposure to authentic Qur'anic recitation, tafsir, and tajwid through diverse formats. Such developments indicate a shift in pedagogical approaches within Islamic education (Walmarwa & Rizal, 2024).

Audio-based multimedia represents one of the most widely used forms in Qur'anic learning, particularly for improving recitation accuracy. Digital recordings of qualified qāri' enable learners to repeatedly listen to proper pronunciation, rhythm, and intonation. Consistent exposure to high-quality audio has been shown to strengthen phonological awareness and tajwid mastery. Learners benefit from the ability to control playback speed and repetition according to individual needs. Audio applications also support independent learning beyond classroom settings. These features contribute to more flexible and personalized Qur'anic learning experiences.

Visual multimedia, including animated texts and tajwid color-coding, plays a significant role in enhancing comprehension. Visual cues help learners identify pronunciation rules and structural patterns within Qur'anic verses. The use of diagrams and symbolic representations simplifies abstract tajwid concepts that are often difficult to grasp through oral explanation alone. Visual reinforcement supports dual coding processes, strengthening memory retention. Learners demonstrate improved accuracy when visual guidance accompanies auditory input. This combination reinforces cognitive processing in Qur'anic literacy development.

Video-based multimedia integrates audio and visual elements, offering comprehensive instructional support. Instructional videos featuring expert teachers provide demonstrations of correct articulation and recitation techniques. Learners gain contextual understanding through visual representation of mouth movements and articulation points. Video content also supports asynchronous learning, allowing repeated access without time constraints. The use of subtitles and annotations further enhances clarity and understanding. Such features make video an effective medium for structured Qur'anic instruction (Asmarita, 2024).

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Interactive multimedia introduces learner engagement through quizzes, simulations, and immediate feedback mechanisms. Digital platforms often incorporate self-assessment tools that allow learners to evaluate their recitation accuracy. Interactive features promote active participation rather than passive reception of content. Learners experience increased motivation due to gamified elements embedded in learning applications. Immediate corrective feedback supports continuous improvement in reading proficiency. These interactive environments contribute to sustained learner involvement and skill development.

Mobile applications represent a dominant form of multimedia in Qur'anic learning practices. Mobile-based platforms provide portability and ease of access, enabling learning anytime and anywhere. Features such as daily reminders, progress tracking, and personalized learning paths enhance consistency in practice. Learners demonstrate higher engagement when Qur'anic learning aligns with their daily digital habits. Mobile applications also facilitate microlearning through short and focused instructional segments. These characteristics support long-term learning continuity among digitally oriented learners (Lutfi, Sardimi, & Norhidayah, 2024).

The effectiveness of multimedia in Qur'anic learning is reflected in

improved learning outcomes across cognitive and affective domains. Studies indicate that learners using multimedia demonstrate higher recitation accuracy and better retention of tajwid rules. Multimedia environments also foster positive attitudes toward Qur'anic learning by reducing anxiety and monotony. Learners report increased confidence due to repeated practice opportunities and supportive feedback. Engagement levels tend to be higher compared to traditional instructional methods. These outcomes highlight the pedagogical value of multimedia integration.

Teacher facilitation remains essential in maximizing the effectiveness of multimedia-based Qur'anic learning. Educators play a critical role in selecting appropriate multimedia resources aligned with learning objectives. Guidance is necessary to prevent cognitive overload caused by excessive or poorly designed multimedia elements. Teachers also contextualize digital content within Islamic values and learning ethics. Effective integration requires pedagogical competence alongside technological proficiency. This balance ensures that multimedia serves as a supportive tool rather than a replacement for instructional guidance.

The diversity of multimedia formats accommodates varied learning needs and preferences. Effectiveness depends on thoughtful design, appropriate implementation, and pedagogical alignment. Multimedia

supports both independent and guided learning environments within Qur'anic education. Sustainable integration requires continuous evaluation and adaptation to learner contexts. These findings underscore multimedia as a strategic resource in modern Qur'anic pedagogy.

Pedagogical Impacts and Challenges of Multimedia-Based Qur'anic Learning

Multimedia-based Qur'anic learning has demonstrated significant pedagogical impacts on student engagement and learning motivation. The integration of audio, visual, and interactive elements supports diverse learning styles and reduces monotony commonly associated with traditional instructional approaches. Learners tend to show increased attention and sustained focus when multimedia resources are systematically incorporated into Qur'anic instruction. Improved motivation contributes to more consistent participation in both individual and group learning activities. Multimedia tools also facilitate self-paced learning, allowing students to revisit materials according to their individual needs. These conditions create a more learner-centered environment that aligns with contemporary educational paradigms. Pedagogical effectiveness is further strengthened when multimedia use is aligned with clear instructional objectives (Ratnawati et al., 2020).

The use of multimedia enhances cognitive understanding of Qur'anic content, particularly in tajwid, memorization, and comprehension. Audio recordings by qualified reciters provide accurate pronunciation models that support phonological development. Visual aids such as text highlighting and animation assist learners in recognizing patterns of recitation and rules of articulation. Interactive features promote active learning through immediate feedback and guided practice. Cognitive load can be managed effectively when multimedia elements are designed in a balanced and structured manner. Learners demonstrate improved retention when verbal explanations are reinforced with visual representations. These outcomes indicate the instructional value of multimedia in supporting deeper learning processes (Murdiono, 2024).

Multimedia-based instruction also contributes to the development of autonomous learning skills in Qur'anic education. Digital platforms enable learners to set personal learning goals and monitor their own progress. Access to multimedia resources outside formal classroom settings encourages independent practice and lifelong learning habits. Learners become more responsible for managing their study time and learning strategies. Autonomy is reinforced through features such as progress tracking and adaptive content delivery. These experiences support the

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cultivation of self-regulated learning behaviors. Such skills are particularly relevant for Generation Z learners who are accustomed to digital autonomy.

Collaborative learning practices are positively influenced by the use of multimedia in Qur'anic instruction. Online discussion forums and shared digital tasks promote peer interaction and collective problem-solving. Multimedia-based group activities encourage learners to exchange interpretations and recitation feedback. Social learning is strengthened when digital tools facilitate communication beyond physical classroom boundaries. Learners develop interpersonal skills alongside religious competencies through structured collaborative tasks. These interactions support a sense of learning community and shared responsibility. Pedagogical outcomes improve when collaboration is intentionally designed within multimedia environments.

Despite its benefits, multimedia-based Qur'anic learning presents notable pedagogical challenges. Unequal access to digital devices and stable internet connections limits learning opportunities for some learners. Technical difficulties may disrupt instructional continuity and reduce learning effectiveness. Teachers may face challenges in selecting appropriate multimedia resources that align with pedagogical and religious standards. Overreliance on technology can reduce direct teacher-student interaction if not carefully managed.

These issues highlight the importance of infrastructure readiness and instructional planning. Pedagogical implementation requires contextual sensitivity to learners' socio-economic conditions (Hidayat & Malihah, 2023).

Teacher competence represents a critical factor in the successful integration of multimedia in Qur'anic learning. Limited digital literacy among educators may hinder effective instructional design and classroom management.

Professional development opportunities related to educational technology are not always evenly distributed. Teachers may struggle to balance traditional pedagogical values with modern multimedia approaches. Instructional effectiveness decreases when multimedia is used without pedagogical rationale. Continuous training is necessary to enhance teachers' technological and pedagogical skills. Educator readiness directly influences the quality of multimedia-based learning experiences.

Content authenticity and accuracy pose additional challenges in multimedia-based Qur'anic education. Not all digital resources meet established standards of Qur'anic recitation and interpretation. Inaccurate or unverified content risks misinterpretation and improper learning outcomes. Teachers must exercise critical evaluation when selecting multimedia materials. Quality control becomes essential to maintain the integrity of religious instruction.

Institutional guidelines can support the standardization of digital learning materials. These measures help ensure that technological innovation does not compromise doctrinal accuracy.

Pedagogical alignment between multimedia tools and learning objectives remains a key concern. Multimedia use becomes ineffective when it is applied as an add-on rather than an integral instructional component. Learning outcomes must guide the selection and design of digital resources. Instructional coherence is achieved when multimedia supports, rather than replaces, pedagogical interaction. Clear assessment strategies are required to measure learning progress within multimedia-based instruction. Misalignment can lead to superficial engagement without meaningful learning. Strategic instructional planning is therefore essential.

Positive impacts on engagement, cognition, autonomy, and collaboration are consistently reported across studies. Pedagogical challenges primarily stem from infrastructure, teacher readiness, and content quality. Systematic planning and professional development can mitigate many of these limitations. Balanced integration ensures that technology complements traditional Qur'anic pedagogy. Educational institutions play a vital role in providing policy and structural support. Sustainable implementation requires continuous evaluation and

pedagogical reflection(Pradhana et al., 2023).

CONCLUSION

Multimedia-based Qur'anic learning represents a significant pedagogical shift in responding to the educational characteristics of Generation Z. The integration of audio-visual, interactive, and digital platforms enhances learners' engagement, comprehension, and motivation in studying the Qur'an, particularly in recitation, memorization, and interpretation. Empirical findings from the reviewed literature indicate that multimedia tools support diverse learning preferences while facilitating self-paced and autonomous learning. Despite these advantages, challenges related to teachers' digital competence, unequal access to technology, and the risk of superficial engagement remain critical concerns. Effective implementation therefore requires pedagogical alignment, thoughtful instructional design, and continuous professional development for educators. Overall, multimedia-based Qur'anic learning holds strong potential to enrich religious education when applied within a balanced, ethical, and learner-centered framework.

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