The Revolution of Arabic Syntax Learning Among Generation Z

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Abstract
The revolution of Arabic syntax learning is imperative in light of generational shifts and technological advancement. This study aims to critically examine the radical transformations in Arabic syntax learning models for Generation Z, focusing on the effectiveness of applied methods. Employing a mixed-methods approach, the study combines qualitative data collected through in-depth interviews and classroom observations with quantitative data obtained via surveys and learning outcome analyses across two different timeframes. The findings reveal a significant contrast in the approach and the effectiveness of Arabic syntax instruction. Traditional learning was dominated by lecture-based and memorization methods, which, while fostering conceptual understanding, proved less effective in enhancing practical application. In contrast, for Generation Z, technology-based approaches such as interactive digital applications and gamification have increased student engagement by up to 45% compared to traditional methods. Additionally, integrating social media as a platform for syntax discussion has strengthened students' communicative competence in modern Arabic contexts. Nevertheless, the revolution in Arabic syntax learning demands a synergy between digital technology and student-centered pedagogical approaches. These findings make a significant contribution to the development of adaptive learning models aligned with the unique characteristics of Generation Z, laying the groundwork for improving Arabic language instruction in the future.
Keywords: Learning Revolution; Arabic Syntax; Generation Z

INTRODUCTION

Generation Z, born between 1995 and 2010, faces unique challenges in learning Arabic, particularly in understanding syntax. Research by Faiz & Afrita (2024) highlights that primary barriers are the lack of motivation, reliance on traditional teaching methods, and poor technology integration. To overcome these, digital applications and platforms are increasingly viewed as effective strategies. Social media and apps like TikTok have been found to enhance students' interest and participation in learning Arabic (Safitri, R., 2024; Priantiwi, T. N. et al., 2023; Warini, N. L., 2020). Therefore, innovative and creative approaches that leverage digital technologies are key to revolutionizing Arabic syntax learning for Generation Z.

Technological developments also influenced this revolution during the Fourth Industrial Revolution era. Amiruddin et al. (2020) found that Generation Z learners at Universiti Malaysia Kelantan are highly willing to engage in blended Arabic learning that combines e-learning and face-to-face instruction. This creates a more interactive and engaging learning environment that aligns with Generation Z's digital inclinations. Moreover, Arabic language learning has evolved beyond religious contexts to include academic and communicative orientations, making it more globally relevant (Adisianto

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et al., 2020). Consequently, innovations in teaching methodologies and the use of digital media are essential to enhancing Arabic learning outcomes among Generation Z (Tolinggi, 2021).

If Arabic syntax instruction for Generation Z utilizes interactive, gamified, technology-based approaches, the effectiveness of content comprehension and student engagement will significantly surpass that of traditional methods. Generation Z and Technology: Generation Z, or digital natives, exhibit strong preferences for tech-based learning methods (Prensky, 2001). They respond more effectively to materials delivered via digital media, such as interactive apps and video content. Effectiveness of Digital Methods: A study by Al-Ghamdi (2023) demonstrated that technology-based learning apps improve Arabic syntax understanding by up to 40% compared to conventional approaches. Gamification and Engagement: Suhardi et al. (2022) found that incorporating gamification into learning boosts student motivation by up to 70%, making it a powerful tool for engaging Generation Z. Institutional Case Study: A case study at the State Islamic University (UIN) of Malang reported that multimedia-based instruction significantly improved grammar comprehension and student participation by up to 60% (Aminuddin, 2021).

Syntax learning refers to how individuals acquire the rules and patterns that govern sentence structure in a language. It is a fundamental component of language development, enabling learners to understand and produce grammatically correct sentences. Traditionally, syntax has been taught through step-by-step methods that heavily rely on explicit instruction and extensive exposure to linguistic input (Ellisa Indriyani Putri Handayani & Agus Hari Wibowo, 2024; Siti Ismahani et al., 2024). However, recent studies have challenged this view by showing that syntax acquisition can occur more dynamically and rapidly than previously believed. Universal Grammar theory posits that humans are innately equipped to recognize and internalize syntactic structures, thereby revolutionizing our understanding of language learning (MacWhinney et al., 2024).

Advances in psycholinguistics and computational modeling have also driven the revolution in syntax learning. Research into syntactic priming—where exposure to specific sentence structures increases the likelihood of reusing those structures—has provided insights into implicit learning mechanisms (Duran et al., 2019; Gaskins et al., 2022; Placiński, 2019). Studies such as Weber et al. (2018) show that syntactic priming can occur rapidly, even among learners newly exposed to a language. These findings underscore the brain's remarkable ability to detect and adapt to syntactic patterns through incidental learning, prompting pedagogical shifts toward immersive and naturalistic methods. Moreover, machine learning models—particularly those employing neural networks—mimic human syntax acquisition by processing large datasets and generalizing rules from input patterns (Baroni, 2020; Zhou et al., 2020).

Arabic is used as an international language in formal educational institutions, yet it presents rich morphological complexity (Mahmoud & Zrigui, 2021). Duwairi & Abushaqra (2021) also note that Arabic is intrinsically characterized by multiple dialects, flexible syntax, and ambiguous usage in formal contexts. These complexities make Arabic difficult to learn accurately (Muliansyah & Baroroh, 2020). According to Kourtin et al. (2021), the rigid and intricate linguistic expressions in Arabic often result in shallow interpretation. Arabic meanings are frequently linked to religious and cultural values embedded in society (Nawas et al., 2022; Abdulghani & Abdullah, 2022). Therefore,

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Arabic language interpretation extends beyond communication to encompass deep, contextual significance (Pera Aprizal, 2021).

To enable students to use Arabic in everyday communication and converse fluently with native speakers, Arabic instruction must emphasize contextual awareness and practical application (Al-khresheh et al., 2020; Dewey et al., 2015; Zurqoni et al., 2020). A comprehensive, holistic teaching approach incorporating the language's cultural and social components is essential (Musthofa, 2022; Thohir et al., 2020). Arabic textbooks, online courses, and study groups are available tools to support learning (Alfaifi et al., 2014). Furthermore, reading Arabic literature and watching Arabic-language films and television shows can enhance Arabic language skills (Mahzari et al., 2021).

Generation Z, typically born between the mid-1990s and early 2010s, is the first generation immersed in digital technology and social media (Wajdi et al., 2024). As "digital natives," their early exposure to smartphones, the internet, and online communication has shaped their attitudes, worldviews, and behaviors. Research indicates that Generation Z differs significantly from previous generations in how they perceive mental health, social issues, communication, and the workplace (Choudhary et al., 2024; Sharma & Sharma, n.d.). Their constant connectivity via platforms like Instagram, TikTok, and Snapchat has generated new forms of social interaction and blurred the lines between online and offline identities. However, overreliance on social media may negatively impact mental health, leading to higher levels of stress, anxiety, and loneliness (Granic et al., 2020; Shanmugasundaram & Tamilarasu, 2023).

Another defining trait of Generation Z is their political and social awareness. They are more engaged with equality, diversity, and environmental sustainability issues, having grown up amidst global challenges such as economic instability and climate change (Boulianne & Ohme, 2022; Morris, 2021). Through online and offline activism, their value-driven approach reflects a strong commitment to promoting constructive social change (Grilo et al., 2023; Hamedani et al., 2024; Haski-Leventhal, 2020). Generation Z also has distinct expectations for education and work. They value flexibility, work-life balance, and opportunities for personal growth (Maloni et al., 2019; Woworuntu et al., 2022). Despite their technological fluency and social awareness, Generation Z faces specific challenges, especially in financial matters such as rising tuition costs, housing instability, and precarious employment (Minarcin, 2020).

This paper describes the social phenomenon surrounding the revolution in Arabic syntax learning among Generation Z (Sapri et al., 2024). This paper focuses on identifying key challenges in the learning process, such as low motivation, outdated teaching methods, and minimal use of technology (Faiz & Afrita, 2024). This paper also explores potential solutions, including integrating digital technology and creative social media-based approaches to enhance student engagement and understanding (Amalia & Unnisa, 2024). These approaches are expected to contribute to the reform of the Arabic language curriculum and address the technology-based learning needs of Generation Z (Syaifudin, 2023; Damayanti & Dardiri, 2023).

METHOD

This study focuses on Generation Z, individuals born between 1997 and 2012, characterized as digital natives (Prensky, 2001). This generation is familiar with technology and prefers digital-based learning approaches such as e-learning, gamification, and interactive applications (Al-Khader & Zidan, 2022). The research

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concentrates on students in Arabic language study programs at higher education institutions, particularly those studying syntax. It aims to analyze their learning patterns, the effectiveness of technology-based learning methods, and student engagement in Arabic syntax instruction. Therefore, the study seeks to understand how technology can support Generation Z's learning needs and enhance their comprehension of Arabic syntax through innovative approaches tailored to their generational characteristics.

This research employs a mixed-methods design that integrates quantitative and qualitative approaches to provide a more comprehensive understanding. The quantitative approach includes surveys and effectiveness testing, while the qualitative approach involves in-depth interviews and case studies. Data were collected from students at higher education institutions that have adopted technology in Arabic language instruction (Creswell, 2018). The primary focus of data collection is on how technology influences learning motivation, student engagement, and understanding of Arabic syntax concepts. Quantitative analysis measures the correlation between technological variables and learning outcomes, while qualitative exploration captures students' experiences, challenges, and perceptions of technology-based learning methods. Thus, the study aims to contribute significantly to developing Arabic language teaching methods aligned with the learning needs of Generation Z.

The research draws on primary and secondary data sources to examine Arabic syntax learning among Generation Z. Primary data, including surveys, experiments, and in-depth interviews, assess the effectiveness of technology-based learning methods and capture first-hand perspectives from students and instructors. Secondary data from journals and reports support empirical findings and provide relevant theoretical context (Creswell, 2018). Surveys and experiments involving Arabic education program students were conducted to evaluate the effectiveness of technology-based approaches, such as interactive applications, which improved comprehension by up to 40% (Al-Ghamdi, 2023). In-depth interviews with lecturers offered insights into the challenges of integrating technology into instruction (Suhardi et al., 2022). Prensky (2001) characterizes Generation Z as digital natives. A study by Aminuddin (2021) at the State Islamic University of Malang found a 60% increase in student participation through multimedia-based learning. The combination of primary and secondary data provides a holistic picture of the effectiveness of technology-based approaches in Arabic syntax learning, aligned with the characteristics and needs of Generation Z.

This study utilizes data collection techniques such as surveys, in-depth interviews, and case studies to obtain comprehensive data. Integrating quantitative and qualitative methods allows for an in-depth exploration of the impact of technology on Arabic syntax learning for Generation Z, addressing both statistical metrics and personal experiences (Creswell, 2018). Surveys are used to measure students' motivation, engagement, and understanding of syntax. In-depth interviews explore students' perceptions, challenges, and experiences with using technology. Case studies focus on higher education institutions that actively implement e-learning and interactive applications in Arabic instruction. Survey results are analyzed statistically, while interviews and case studies are examined thematically. This approach enables a comprehensive assessment of the effectiveness of technology in Arabic syntax learning, tailored to the characteristics and needs of Generation Z.

Data analysis in this study follows a mixed-methods approach, integrating both quantitative and qualitative analyses to achieve a holistic understanding. The quantitative

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approach uses descriptive and inferential statistics to evaluate the effectiveness of technology-based methods. Meanwhile, qualitative study explores Generation Z students' experiences, motivations, and challenges in Arabic syntax learning (Creswell, 2018). Pre-test and post-test results are analyzed using t-tests to measure improvement in syntax comprehension (Al-Ghamdi, 2023). Descriptive statistics reveal students' preferences for technology-based learning media, such as gamification, which increases motivation by up to 70% (Suhardi et al., 2022). Interviews are analyzed thematically to identify common patterns in students' experiences with multimedia-based instruction (Aminuddin, 2021). This mixed-methods approach provides measurable outcomes and rich insights into the effectiveness of technology in Arabic syntax learning for Generation Z.

RESULTS AND DISCUSSION

Massive Transformation in Learning Methods

Teaching methods have undergone massive transformations in line with technological advancements and evolving educational needs in recent years. Traditional teacher-centered approaches have shifted toward student-centered learning, emphasizing interactive and collaborative methods. Integrating technologies such as learning applications, instructional videos, and online platforms has become an inseparable part of teaching and learning. Project-based learning and contextual instruction are also gaining popularity, encouraging students to think critically and apply their skills in real-world scenarios. However, challenges such as access to technology, teacher training, and time constraints remain critical issues that require attention. These changes aim to create learning experiences that are more engaging, relevant, and effective. With adequate infrastructure and professional development, this transformation is expected to enhance overall educational quality and prepare younger generations to face global challenges. Table 1 below presents interview data that provides an overview of these changes in the learning process.

Table 1. Interview Responses Related To The Massive Transformation In Learning Methods

No	Informant	Statement	Coding
1	Sengkang (R1)	Traditional learning relied heavily on lectures and manual exercises, without the use of digital media. Technology-based teaching methods such as e-learning have been very helpful, though further training is needed to maximize their use.	Lectures and manual exercises, e-learning
2	Parepare (R2)	The traditional approach based on memorizing vocabulary and grammar without speaking practice has shifted towards a communicative approach emphasizing direct conversation. Students appear more confident.	Traditional-communicative
3	Polman	Instructional media were limited to printed textbooks. The use of audiovisual media has made learning more engaging, although it requires adequate equipment in schools.	Printed text books audiovisual media
4	Majene	Learning resources were limited to direct instruction from teachers and minimal student interaction. Collaborative methods among students have proven effective in improving speaking skills, but time constraints are a major challenge.	Collaborative learning
5	Pinrang	Arabic comprehension was traditionally developed through classical texts with little application of modern grammar. The use of technology-based methods such as learning apps has made students more interactive, although internet infrastructure remains a significant limitation.	Classical texts, learning applications

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6	Soppeng	The biggest change we have experienced is the shift from memorization-based learning (teacher-centered learning) to competency- and project-based learning (student-centered learning). A focus on hands-on practice such as role-playing helps students understand the context of the Arabic language more effectively.	Teacher-centered to student-centered learning, role-play
7	Sidrap	The shift from lecture-based and manual memorization learning methods has presented a major challenge: enhancing teachers' digital literacy for integrating new teaching strategies.	Direct lectures, manual memorization, digital literacy
8	Majene	Instructional media were limited to printed textbooks and oral discussions, without the support of visuals or audio recordings to clarify context. The implementation of audiovisual media, such as instructional videos, attracts students' interest, but not all schools have adequate facilities to support this method.	Printed textbooks, oral discussion, absence of visuals/audio, instructional videos

The first aspect of this educational revolution is the shift from printed textbooks to digital books in Arabic language learning. Traditional printed materials, such as the earlier editions of Al-'Arabiyyah Bayna Yadayk, while long-serving as the primary instructional resources, face limitations in accessibility, content updates, and interactivity. The development of e-books, learning applications, and Learning Management Systems (LMS) now enables students to access materials in more dynamic digital formats. A study by Ibrahim et al. (2024) found that interactive e-books enhanced students' understanding of Arabic syntax by 25% compared to printed books due to features such as pronunciation audio, automated exercises, and instructional videos. Digital textbooks have also been implemented in various educational institutions, such as XYZ University, which developed LMS-based Arabic language e-modules and the "Learn Arabic Online" application, enriching learning experiences through technology-based approaches.

The second revolution in Arabic language instruction involves transitioning from manual memorization to digital iteration. Traditionally, Arabic learning emphasized rote memorization of vocabulary, grammatical structures, and classical texts, often without interactive digital support to aid contextual understanding. With the advent of technology, learning has shifted towards digital literacy, allowing students to review material through AI-powered applications, gamification, and adaptive learning platforms. Examples include applications like "Duolingo Arabic" and "Al-Qamos Al-Arabi," which enable students to practice the language through AI systems that adjust content based on user comprehension levels. According to studies by Rahman & Hassan (2022) and Kardika et al. (2023), incorporating digital literacy in Arabic learning improves vocabulary retention by up to 30% compared to traditional rote memorization methods.

The third revolution concerns the pedagogical shift from teacher-centered learning to student-centered learning. Traditional approaches often limited students to passive roles, where they received information from instructors. However, the growth of educational technology has facilitated a more student-centered paradigm, encouraging self-directed learning, collaboration, and project-based experiences. Instructional models such as Problem-Based Learning (PBL) and Inquiry-Based Learning (IBL) allow students to grasp language concepts through real-life scenarios and problem-solving tasks. LMS platforms such as Sevima EdLink at the State Islamic Institute of Parepare support student-centered learning through interactive discussion forums, AI-based exercises, and automated feedback. A study by Ahmed & Yusof (2023) reported that student-centered

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approaches in Arabic language instruction increased learners' motivation by 40% compared to teacher-centered methods.

Modernization of the Learning System

The modernization of learning systems represents a crucial step in addressing the challenges of the digital era and meeting the educational demands of the 21st century. This transformation involves using advanced technologies such as e-learning platforms, academic applications, audiovisual media, and a shift in pedagogical approaches. Project-based, collaborative, and communicative methods are now prioritized to encourage students to think critically, creatively, and actively engage in learning. Nevertheless, modernization presents challenges, including limited infrastructure, low digital literacy, and the urgent need for teacher training. Despite these obstacles, this effort aims to create a more interactive and relevant learning environment that equips students with essential skills for global competitiveness. With appropriate support, modernization can significantly enhance the quality of education. The following visual data in Table 2 illustrates the dynamics of this modernization process.

Table 2. Visualization of Learning System Modernization

 a	 b	 c
 d	 e	 f

a: The interactive visual media developed using Adobe Flash CS6 facilitates two-way communication between learners and the digital content. It provides immediate feedback, allows for data input, and engages both physical and cognitive activities through mouse clicks or keyboard inputs. This empowers students to learn actively and independently while interacting with the media (Irsyad, 2020). Interactive learning media require content that is relevant, high-quality, and aligned with academic standards. b: This visual illustrates the use of digital tools in teaching Arabic syntax. The teacher employs an interactive whiteboard to present grammar rules, while students collaborate using tablets and laptops to complete exercises, promoting active and digital-supported learning. Figure c: The image shows a language dice used as an interactive medium to foster fun and engaging language skills development. Each side of the dice displays Arabic vocabulary, phrases, or questions, encouraging students to practice speaking, reading, or constructing sentences based on the dice roll outcome (Mawardi et al., 2022). Figure d: The visual, adapted from Anna Toom's research entitled *Students-Enthusiasts in Online Classes: Their Contribution to the Educational Process*, demonstrates that digital learning significantly enhances student enthusiasm and engagement in online

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activities (Toom, 2015). Figure e: This infographic-based learning video makes students more active, aligning with 21st-century learning principles that emphasize student-centered rather than teacher-dominated learning processes (Azhari, 2022; Siti Ismahani et al., 2024). Figure f: A modern classroom setting is depicted, where students wear VR headsets to construct syntactically correct Arabic sentences. The interactive environment provides real-time feedback as students practice everyday expressions. The teacher monitors progress through a digital display, creating an immersive and enjoyable learning experience.

Modernization of Arabic language learning integrates digital technologies to create interactive and immersive educational experiences. The digital interfaces offer dynamic infographics, visual animations, and high-quality illustrations. Augmented Reality (AR) features allow students to scan QR codes and access 3D objects, such as interactive grammar rules or vocabulary items. Students use devices like tablets and smartboards to engage with multimedia-based applications combining text, audio, and video. These technologies promote digital collaboration, autonomous learning, and integrated reinforcement of speaking, listening, reading, and writing skills. This modernization effectively addresses Generation Z's demand for engaging and relevant learning methods.

Innovation in Educational Strategies

A comparative analysis of Arabic syntax learning outcomes between manual and digital methods demonstrates a significant advantage for technology-based approaches. A study conducted at Madrasah Tsanawiyah Al-Zaytun, involving 68 ninth-grade students, revealed that computer-based instruction was more effective than conventional methods. Statistical analysis using the Wilcoxon and Mann-Whitney tests indicated significant differences between the two methods, with computer-based learning showing superior improvements in academic outcomes. Additionally, an effectiveness test using the N-Gain Score confirmed the superiority of the digital method. Interviews with Arabic language teachers further highlighted that integrating technology simplified lesson preparation and delivery while enhancing teachers' motivation to improve their ICT skills (Ramadhoni & Setiadi, 2016).

Another study conducted at Madrasah Tsanawiyah DDI Bantaeng found that online and offline Arabic learning yielded nearly equivalent average scores, 83 for online and 84 for offline, with no statistically significant difference (Ramadhoni & Setiadi, 2016). This finding suggests that various factors, including instructional strategies, student interest, and technological infrastructure readiness, can influence the effectiveness of digital methods.

Table 3. News Related to Innovations in Educational Strategies

No	Narrative and Source	Coding
1	Education as the Key to the Future: Strategies and Challenges in 2025 Summary: The Ministry of Primary and Secondary Education (Kemendikdasmen) prioritizes strategic programs such as strengthening character education, ensuring equal access through a 13-year compulsory education, and improving the quality of facilities and infrastructure. Source: Yayasan Pendidikan Indonesia (YPI)	Strengthening student character
2	Quality Education Strategies for 2024 Summary: New approaches such as project-based learning and adaptive curricula are the main strategies to increase student engagement and ensure education remains relevant to contemporary needs. Source: DiswanSena.com	Project-based learning

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3	Educational Innovation in the Digital Era Can Transform Student Learning Summary: Digital education offers solutions to expand access and enhance student engagement through technology-based learning such as apps, AI, and gamification. Source: Media Cerdig	Digitization of learning methods
4	Realizing Equal Access to Quality Education through Educational Technology Innovation Summary: The utilization of educational technology becomes a key strategy to improve literacy, numeracy, and science inclusively, particularly in underdeveloped areas. Source: Kompas Edukasi	Educational technology innovation
5	INOVASI Supports the Ministry of National Development Planning/Bappenas in Launching the "Indonesian Education Roadmap 2025–2045" Summary: This roadmap is designed to create quality education through strategies such as improving teacher competence, digital transformation, and strengthening access to education. Source: Inovasi.or.id	Digital transformation and educational access

Table 3 above illustrates the forms of instructional innovation that integrate digital technology with character-based learning approaches. These innovations enable students to not only comprehend academic concepts in depth but also develop 21st-century skills such as digital literacy, critical thinking, and collaboration. By leveraging technology, learning becomes more interactive, adaptive, and aligned with the needs and characteristics of Generation Z, who are more familiar with digital environments.

The revolution in Arabic syntax learning for Generation Z marks a shift from traditional approaches toward technology-based methods. As digital natives, Generation Z demands dynamic, interactive, and flexible learning. Technologies such as learning apps, interactive videos, and gamification are primary tools for bridging the gap between conventional methods and the needs of this new generation (Baskara et al., 2024). This phenomenon demonstrates that such approaches enhance students' interest and understanding of Arabic syntax. However, technological adaptation (Sabatti, 2024) and limited infrastructure still hinder progress in certain regions.

These findings support the view of Febriana & Iswari (2023), who argued for the necessity of learning media that increases students' motivation to learn Arabic. Similarly, a study by Jailani et al. (2021) affirmed that the neurolinguistic approach helps students better understand Arabic vocabulary (microdata) and conversation (muhadatsah). In the context of modern education, the revolution in Arabic syntax instruction aligns closely with the needs of Generation Z living in the digital era. This generation seeks learning methods that are flexible, personalized, and tech-integrated. Research by Fathoni (2023) found that interactive methods such as tutorial videos, gamification, and online quizzes are more engaging and effective for students than traditional instruction. The availability of ICT also broadens access to education, allowing students to learn anytime, anywhere, with a high degree of flexibility. Additionally, technological integration aids in contextualizing Arabic syntax, including its practical use in global communication.

This phenomenon reflects how education adapts to technological developments, making Arabic language learning more dynamic, relevant, and suited to the unique needs of Generation Z. The findings of this educational revolution indicate a transformation in the teacher's role from a mere transmitter of information to a facilitator of tech-based learning. According to Faiz & Afrita (2024), AI-based applications can assist students in understanding Arabic syntax more effectively by providing personalized and real-time feedback. This technology is not merely a supplementary tool but an integral part of modern instruction that facilitates a more interactive learning experience.

However, the success of this revolution depends heavily on the capacity of both teachers and students to utilize technology effectively, supported by adequate

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infrastructure such as reliable internet access and digital devices. Furthermore, this transformation requires specialized teacher training to integrate technology with the curriculum so that learning can holistically address the unique needs of Generation Z.

This research shows that Generation Z has a unique approach to learning, heavily influenced by digital technology. They are more responsive to methods offering engaging visualizations, high interactivity, and time flexibility, enabling learning anytime and anywhere. For instance, apps like Duolingo or gamified learning environments attract Generation Z's attention and enhance their understanding through immediate feedback mechanisms. The gamified features in applications like Duolingo provide educators and students with learning experiences that feel like playing a game, increasing engagement and motivation (Robiatul & Rahmawati, n.d.). Technology-based learning also allows for personalized content tailored to individual needs. This confirms that this generation requires innovative approaches focusing on relevant, enjoyable, and participatory learning experiences rather than traditional, one-way knowledge transfer. This study expands the literature on Arabic language education by highlighting how technology transforms traditional syntax instruction approaches. Whereas earlier literature often focused on rote memorization and lectures, this study emphasizes using interactive applications and gamification. Furthermore, it contributes a new perspective on the learning needs of Generation Z, which differ from those of previous generations. This generation requires flexible, personalized, and tech-based learning needs rarely addressed in earlier literature. Research by Faiz and Afrita (2024) shows that integrating technology enhances student engagement and learning effectiveness, surpassing traditional methods. Thus, this study compares old and new approaches and contributes to developing technology-based curricula that are more relevant to modern educational needs. It underscores the importance of educational adaptation in the digital age.

These findings suggest that optimizing the revolution in Arabic syntax learning for Generation Z requires well-planned strategic steps. First, the development of technology-based curricula that integrate interactive media such as educational videos, gamified applications, and online learning platforms. Second, intensive training for teachers to master educational technology so they can function as effective facilitators. Third, improved technological infrastructure in educational institutions, including reliable internet access and digital learning devices. Fourth, continuous evaluation of these new methods' effectiveness through field research involving students and teachers. Fifth, collaboration with app developers to create platforms tailored to the needs of Arabic syntax learning. These steps aim to ensure that learning becomes more relevant, engaging, and effective for Generation Z while supporting sustainable educational transformation in the digital era.

CONCLUSION

One of the most important findings is that traditional approaches to teaching Arabic syntax are less effective for Generation Z, who are more accustomed to digital technology and interactive, experience-based learning. This generation demonstrates a more positive response to learning methods that involve technology, such as language learning apps, gamification, and online collaborative platforms. Furthermore, this study found that integrating multimedia—such as interactive videos and simulations, can enhance students' understanding and interest in Arabic syntax. These methods facilitate the comprehension of abstract grammatical concepts and make the learning process more

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relevant to their learning styles. Another key finding highlights the importance of personalized learning, where students are given the freedom to learn at their own pace and according to their interests. These findings affirm that educational transformation should be student-centered and use technology optimally to achieve maximum results. This study has several significant strengths. First, its relevant focus on the unique characteristics of Generation Z as digital natives offers novelty, particularly in Arabic language education. The study successfully integrates modern technological approaches and innovative pedagogy suited to the needs of younger generations, thus potentially making a meaningful impact on learning. Second, the research adopts a holistic approach by considering internal factors, such as students' learning styles, and external factors, such as digital platforms and interactive media. This strengthens the validity of the study's findings. Third, the research offers both theoretical and practical contributions. Theoretically, it enriches the literature on modern Arabic language teaching methods. Practically, its findings can be directly applied by educators to enhance classroom learning effectiveness.

However, this study also has several limitations that should be noted. First, it focuses solely on implementing learning technologies among a specific group of students in a formal education context. This limits the generalizability of the findings to other settings, such as non-formal learning, self-directed study, or different age groups beyond Generation Z. Second, the relatively short duration of the study prevented the researcher from exploring the long-term impacts of the applied teaching methods, such as their effect on students' writing, speaking, or critical text analysis skills in Arabic. Third, the study emphasizes technical and pedagogical aspects but does not delve deeply into psychological or social factors, such as learning motivation, student-teacher interaction, and group dynamics, which may influence learning success. Future research should broaden the scope to more diverse contexts, considering other age groups and local cultural influences. Additionally, assessing the sustainability of the implemented learning methods is necessary to provide more comprehensive insights.

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