Learning Culture of Generation Z in Arabic and English Language Education in the Era of Digital Disruption

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Abstract This study aims to describe the learning culture of Generation Z in Arabic and English language education in the era of digital disruption. This qualitative literature study employs a descriptive-analytical approach by examining relevant books and scientific publications from the last decade to identify the characteristics, learning behaviours, and technological influences shaping this generation. The research objects are studies discussing Generation Z and their learning culture in language education, while data were collected through documentation techniques and analysed using content analysis. The findings show that Generation Z demonstrates a fast, visual, interactive, and technology-based learning orientation, supported by digital platforms, multimedia resources, and gamified learning environments. Their learning culture reflects autonomy, collaboration, and global connectivity, yet it is also challenged by digital distraction, low critical digital literacy, and unequal digital resource availability—particularly in Arabic language learning. English learning benefits from abundant digital materials, while Arabic learning remains limited in academic digital content. The study concludes that effective language education for Generation Z requires blended learning, gamification, critical digital literacy reinforcement, and the active role of lecturers as facilitators who guide students to use technology productively. These results imply the need for curriculum redesign, pedagogical innovation, and improved digital infrastructure to support adaptive and future-oriented language learning.

Keywords: Digital Literacy; Generation Z; Learning Culture; Language Education; Technology-Based Learning

INTRODUCTION

The development of information and communication technology in the 21st century has brought significant changes to various aspects of life, including the world of education. The era of digital disruption is characterized by the presence of internet-based technology, artificial intelligence, big data, and social media, which are increasingly embedded in the lives of the younger generation. This phenomenon directly impacts the learning methods, communication styles, and ways of thinking of today's student generation.

Generation Z, those born starting in the 1997s, are the group most affected by these changes. According to McCrindle & Fell (2021), Generation Z is the most technologically immersed generation, meaning they have been familiar with gadgets, computers, and the internet since birth. This results in learning patterns that are significantly different from previous generations. In an educational context, they tend to prefer fast, visual, collaborative, and multimedia-based learning (Prensky, 2001).

In Indonesia, the number of Generation Z entering schools and universities is increasing. Based on data from the Central Statistics Agency (BPS,

2023), around 28% of the student population in Indonesia currently belongs to the 15–24 age group, which represents the early part of Generation Z. This condition confirms that the education system must prepare relevant strategies to address the learning characteristics of this new generation.

Language learning, particularly Arabic and English, holds a strategic position in this context. Arabic is studied not only as the language of religion and Islamic culture but also as a medium for understanding classical and modern literature in the Islamic world. Meanwhile, English serves as a global lingua franca that provides access to information, international communication, and career opportunities. Thus, Arabic and English language education is not only oriented toward linguistic aspects but also toward mastering 21st-century skills, including digital literacy, collaboration, creativity, and problem-solving (Partnership for 21st Century Learning, 2019).

However, the reality on the ground shows a gap. Students in Arabic Language Education and English Language Education programs are still largely tied to conventional methods, while digital technology demands more innovative approaches. Another challenge is the low level of digital literacy among students. A UNESCO (2022) survey noted that more than 40% of students in Southeast Asia struggle to filter valid information from the flood of information on the internet. This condition puts Generation Z at risk of information overload and digital distraction.

This phenomenon raises an important question: how is the learning culture of Generation Z, particularly students of Arabic and English language education in Indonesia, shaped in the context of the digital disruption era? This study is important because a comprehensive understanding of their learning culture will help educators, educational institutions, and policymakers develop relevant learning strategies.

Literature Review

Generation Z in the Context of Education

In education, Generation Z tends to learn quickly, visually, and interactively. They are accustomed to using gadgets, applications, and digital platforms to seek information and interact. Research by Putri (2021) shows that Generation Z students prefer multimedia-based learning, such as videos, infographics, and gamification, over traditional lecture methods. Susanti & Rahman (2022) add that they tend to utilize microlearning through social media or language learning applications, as it better suits their relatively short attention spans.

Furthermore, Huda et al. (2023) reveal that adaptive learning strategies need to be developed to align with the characteristics of this generation. Generation Z tends to multitask but is also susceptible to digital distractions. Therefore, lecturers need to guide them not only to master technology but also to use it productively in learning.

Learning Culture and Its Transformation

Learning culture is a set of values, habits, and strategies used by individuals or groups to acquire knowledge. Tilaar (2002) states that learning culture is formed through the interaction between the education system, social environment, and individual characteristics. In the current context, the development of digital technology has brought significant transformation to learning culture.

According to Alenezi (2022), Generation Z students prefer interactive applications such as Duolingo, Quizizz, or Kahoot to enhance their learning motivation. Digital platforms not only facilitate cognitive skills but also foster collaborative cross-cultural learning habits. Ismail et al. (2023) emphasize that digital-based learning encourages the creation of a more collaborative, flexible, and independent learning culture.

This indicates a paradigm shift from traditional teacher-centered learning culture toward a more autonomous and connected learning culture. Thus, the learning culture of Generation Z can be understood as the result of the interaction between individuals and the digital ecosystem they encounter daily.

The Era of Digital Disruption and Its Implications

Digital disruption refers to fundamental changes resulting from technology-based innovations that replace old methods with more efficient new ones. In education, this disruption is evident in the presence of e-learning, massive open online courses (MOOCs), and artificial intelligence (AI)-powered learning systems.

Zhang & Yu (2021) found that the use of AI in language learning can enhance personalization, allowing students to receive materials tailored to their individual needs and learning pace. However, a major challenge is the low level of digital literacy skills. A UNESCO (2022) report revealed that around 40% of students in Southeast Asia still struggle to distinguish credible information on the internet. Putra & Kurniawan (2024) also emphasize the phenomenon of information overload, which potentially reduces student concentration during the learning process.

Thus, although digital disruption offers great opportunities to improve access and quality of learning, educators must still emphasize the importance of critical digital literacy so that Generation Z can become active learners, not just passive users of technology.

Arabic and English Language Education in the Digital Era

In English language learning, research by Li & Wang (2022) shows that gamification approaches can increase student engagement by up to 40%. This learning model aligns with the characteristics of Generation Z, who enjoy challenges, rewards, and interactivity. For Arabic, Al-Khalifa (2020) asserts that digital applications such as mobile learning and classic e-books greatly assist students in understanding linguistic materials. However, the main obstacle remains the limited availability of quality digital content.

In Indonesia, research by Sari & Nurhadi (2023) found that students are more motivated to learn English through international social media and language exchange platforms. Meanwhile, Arabic language learning tends to utilize digital Qur'an applications, online preaching channels, and Islamic forums. This difference shows that cultural context and students' practical needs significantly influence how they utilize technology in language learning.

Thus, Arabic and English language education in the digital era needs to integrate blended learning strategies, gamification, and the strengthening of digital literacy. Lecturers play a crucial role as facilitators, guiding students to use technology to support more critical, collaborative, and relevant learning aligned with 21st-century demands.

METHOD

This study uses a literature review method. According to Creswell (2018), a literature review is a research method conducted by collecting, reading, and analyzing various relevant literature sources to answer the research questions. A literature review was chosen because the goal of this research is to comprehensively understand the learning culture of Generation Z in Arabic and English language education in the era of digital disruption through the analysis of theories, previous research findings, and existing scientific publications.

This research is qualitative with a descriptive-analytical approach. The qualitative approach was chosen because the focus of this research is to explore the meaning, understanding, and characteristics of Generation Z's learning

culture, not to measure with numerical data. Meanwhile, the descriptive-analytical nature is used to present facts obtained from the literature, which are then analyzed to produce conceptual findings.

The criteria for selecting data sources are based on three aspects: 1) relevance to the research topic, 2) quality and credibility of the source (e.g., reputable journals or academic books), and 3) recency, particularly literature from the last ten years (2015–2025) to align with the latest developments. Data analysis was conducted using content analysis.

RESULT AND DISCUSSION

Learning Characteristics of Generation Z

Literature analysis shows that Generation Z has a strong tendency to learn in ways closely tied to the digital world. McCrindle & Fell (2021) describe them as the most technologically "connected" generation. Recent research (Susanti & Rahman, 2022; Huda et al., 2023) confirms that their learning style tends to be short, visual, interactive, and based on microlearning.

The advantage of this learning pattern is that it increases the speed of concept understanding and emotional engagement of students. However, research by Putra & Kurniawan (2024) reveals another side: multitasking and exposure to social media cause distractions and reduce learning concentration. Thus, the learning characteristics of this generation can be seen as a double-edged sword: supporting innovation while simultaneously challenging academic consistency.

Transformation of Learning Culture in the Digital Era

The traditional teacher-centered learning culture has now shifted to a flexible, independent, and collaborative learning culture. Alenezi (2022) shows that learning applications such as Duolingo and Kahoot are not only learning media but also tools for building motivation. Meanwhile, Ismail et al. (2023) found that digital connectivity strengthens cross-country collaborative culture, a phenomenon rarely seen in previous generations.

However, this change also brings challenges. Not all students have adequate digital literacy skills. A UNESCO (2022) study warns that nearly half of the students in Southeast Asia struggle to distinguish credible information. This has implications for the formation of a learning culture that is vulnerable to information overload or even misinformation. In other words, the learning culture of Generation Z cannot be separated from the quality of their digital literacy.

Arabic Language Education in the Digital

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Arabic language learning shows a positive trend with the presence of digital Qur'an applications, classic e-books, and Arabic-language YouTube channels. Al-Khalifa (2020) asserts that technology enhances learning motivation and access to resources. However, the limited availability of quality digital content in Arabic remains a major weakness.

In Indonesia, research by Sari & Nurhadi (2023) shows that students more frequently use religion-based applications to learn Arabic, so their learning orientation tends to be religious rather than academic. This indicates an imbalance between academic needs and available digital resources. This gap needs to be addressed by developing richer and more relevant academic digital content in Arabic.

English Language Education in the Digital Era

Unlike Arabic, English language learning benefits from the abundance of digital content. Li & Wang (2022) show that gamification increases student engagement by up to 40%, while Zhang & Yu (2021) emphasize the potential of AI-powered learning to tailor materials to individual needs.

However, this advantage also brings new problems. According to Kurniawan (2022), students often struggle to distinguish between popular content (e.g., films, music, social media) and academic content. As a result, informal communicative skills improve, but the depth of academic linguistic understanding is often neglected. This confirms the need for learning strategies that balance popular content with academic literature.

Implications for Learning Strategies

Critical literature analysis shows that Arabic and English language learning for Generation Z cannot rely solely on technology but must integrate critical digital literacy, motivation, and global collaboration. Blended learning has proven effective as it offers digital flexibility along with face-to-face interaction (Putri, 2021). Gamificationincreases engagement but needs to be combined with in-depth evaluation to avoid being merely entertainment. Social media and digital platforms open spaces for cross-cultural collaboration, but without critical literacy, students are easily trapped in superficial learning. The role of lecturers as facilitators is key. Lecturers must guide students not only to consume digital information but also to critique, compare, and contextualize it in language learning.

From the literature review, several gaps can be identified: 1) Disparity between

English and Arabic language learning. Digital resources for English are abundant, while for Arabic they are still limited. 2) Lack of in-depth studies on the impact of digital distractions. Most research highlights the potential of technology but few empirically examine its negative effects on focus and academic achievement. 3) Limited local research in Indonesia. The majority of studies still focus on global contexts, even though Indonesia's infrastructure and learning culture are unique. 4) Limited integration of AI in Arabic language learning. While AI-powered learning is beginning to be developed for English, similar research for Arabic is still scarce.

The literature review above reveals that the learning culture of Generation Z is closely tied to the development of digital technology. This aligns with the digital natives theory proposed by Prensky (2001), which states that generations born into a digital ecosystem have different learning patterns compared to previous generations.

In the context of Arabic language education, the use of digital technology has two sides. On one hand, technology helps students understand the language more quickly and interactively, for example through mobile learning applications or virtual classrooms. On the other hand, the limited digital resources for Arabic pose challenges to the learning process. Therefore, more digital content supporting Arabic language learning needs to be developed.

Meanwhile, English language education benefits from the abundance of digital learning resources. Generation Z students tend to learn English informally through films, music, podcasts, and international social media. However, this also brings challenges, such as a lack of depth in academic understanding if learning relies solely on popular media. Strengthening academic literacy through a curriculum integrated with digital technology is necessary.

The learning culture of Generation Z essentially reflects the orientation of 21st-century learning, which emphasizes critical thinking, collaboration, communication, creativity, and digital literacy skills. This aligns with the findings of Tilaar (2002) that learning culture is the result of the interaction between the education system, social environment, and individual characteristics. In other words, Generation Z not only shapes a new learning culture but also drives the transformation of the education system itself.

From the literature, it is also evident that blended learning and gamification approaches are the most suitable strategies

for Generation Z. Blended learning allows students to experience the flexibility of technology along with face-to-face interaction. Gamification provides elements of motivation and emotional engagement in learning. Both approaches have been proven to increase participation and interest in learning Arabic and English (Putri, 2021).

Additionally, the role of lecturers as facilitators is crucial in guiding students to manage digital information wisely. Digital literacy skills are a key competency that must be instilled, so that students become not just passive users of technology but also capable of critiquing and processing information to support the learning process.

Generation Z has distinct learning culture characteristics: 1) Digital technology-based : they are accustomed to learning using gadgets, applications, social media, and e-learning platforms from an early age. 2) Visual, interactive, fast : they prefer learning materials in the form of videos, animations, infographics, and gamification over traditional long texts. 3) Multitasking and collaborative : able to handle multiple digital activities simultaneously (e.g., learning while browsing social media) and prefer online group learning. 4) Independent but easily distracted : they can set their own learning pace via the internet but often struggle to maintain concentration due to numerous digital distractions. 5) Global-minded : for English, they are exposed to international content (films, music, global social media); for Arabic, they are aided by digital Qur'an apps, preaching channels, and online Islamic forums.

Several main factors influence their learning culture: 1) Technological factors : availability of language learning apps (Duolingo, Busuu, Qur'an apps), internet access, social media, and video platforms like YouTube. 2) Socio-cultural environmental factors : the role of family, peers, and global trends that make English increasingly dominant, and Islamic identity that drives Arabic learning. 3) Educational and curriculum factors : the learning system in schools/universities, whether still traditional or already adopting blended learning. 4) Digital literacy factors : ability to filter valid information, manage learning resources, and use technology productively. 5) Motivational and psychological factors : intrinsic motivation (e.g., learning Arabic to understand religion, or English for global careers) and extrinsic motivation (academic grades, certification).

The learning culture of Generation Z has important implications: 1) Adaptive Learning Design : Language learning should combine blended learning (a mix of face-to-face and digital) with gamification-based

methods to suit their learning preferences.. 2) Utilization of Social Media and Digital Platforms : Lecturers/teachers can integrate social media, online forums, or mobile applications to provide more contextual language practice. 3) Strengthening Digital Literacy : The curriculum should train students to select credible learning resources, especially since online information is often unfiltered. 4) Global Collaboration and Interaction : Generation Z students can more easily interact with native speakers through language exchange platforms or online communities, so learning strategies should provide space for cross-country collaboration. 5) The Role of Lecturers as Facilitators : Lecturers are no longer just material deliverers but facilitators who guide students in effectively using technology to deepen their Arabic and English skills.

Figure 1. Learning Culture and Influencing Factors

Thus, this discussion shows that the learning culture of Generation Z in Arabic and English language education in the era of digital disruption is adaptive, collaborative, and technology-based, but requires guidance in digital literacy and productive use of technology.

CONCLUSION

This research concludes that the learning culture of Generation Z in Arabic and English language education is strongly shaped by the rapid development of digital technology, resulting in learning behaviours that are fast, visual, interactive, and collaborative. As expected from the issues raised in the introduction, the study reveals that digital disruption has significantly transformed learning preferences, requiring educators to adopt adaptive, technology-integrated, and student-centred approaches. This expectation is supported by the findings, which show that blended learning, gamification, and critical digital literacy are essential for responding to the characteristics and needs of Generation Z. However, this research also has limitations, particularly regarding the reliance on secondary data and the lack of empirical fieldwork that directly observes student behaviour in real learning environments. These limitations offer opportunities for future studies to conduct empirical
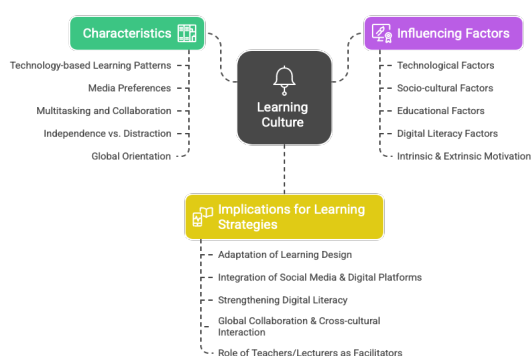
investigations, develop comparative analyses between Arabic and English learning contexts, or examine the impact of artificial intelligence and emerging technologies on language learning for Generation Z. The results of this research have strong prospects for development, especially in guiding curriculum innovation, the creation of digital learning materials, the integration of adaptive technologies, and the formulation of pedagogical models that support productive, sustainable, and future-oriented language learning for Generation Z.

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