Intergenerational Arabic Learning: Rethinking Grammar Instruction Through Adaptive Design

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Abstract: The study of Arabic grammar within mixed-age classrooms has become an increasingly observable phenomenon in contemporary language learning settings. This intergenerational composition creates a distinctive instructional environment that presents both unique challenges and meaningful opportunities for Arabic language educators. This study explores how learning unfolds and how teachers manage and respond to the diverse classroom composition. Using a qualitative case study design, data were collected through classroom observations, and in-depth interviews with teachers, learners, and administrators, complemented by document analysis. The data were analyzed thematically using Instructional Design Theory (IDT) as the analytical framework. Findings reveal that the age-diverse learning environment brings variations in individual needs and motivations, which are actively accommodated through an adaptive learning cycle. In this cycle, strategies are continuously adjusted in response to students' needs and interactions, ensuring dynamic and effective classroom engagement. This study represents one of the earliest efforts in Indonesia to explore the dynamics of mixed-age Arabic language learning, providing valuable insights for designing and managing instruction in age-diverse classrooms. The findings not only offer practical pedagogical guidance for educators but also establish a foundational framework for future scholarship on intergenerational learning within Arabic language education.

INTRODUCTION

What happens when teenagers from Gen Z learn Arabic side by side with Millennials balancing work and study, and Gen X learners returning to education after years away from the classroom? This seemingly unusual classroom composition is, in fact, part of a broader global trend. Research shows that mixed-age learning has become increasingly common across various educational settings, from community programs to after-school activities, reflecting a natural and growing shift toward learning environments that bring together individuals

of different ages and backgrounds[1]. Foreign language learning has long been regarded as one of the main pathways to developing intercultural communication competence and enhancing individual competitiveness in the global era. A foreign language serves not only as a means of transferring knowledge but also as a medium for building academic, professional, and social networks[2].

In the educational context, mastery of a foreign language is often considered an indicator of an institution's success in preparing its students to face the challenges of globalization. Accordingly, many countries strive to develop foreign language learning systems that are not only linguistically oriented but also incorporate social, cultural, and 21st-century skill dimensions. Among foreign languages, Arabic holds a strategic position within Indonesia's educational landscape. It carries a dual status, on one hand, as the language of religion, closely tied to Islam -the faith of most Indonesians-, and on the other hand, as a language of science and international communication across the Middle East[3].

Over the past two decades, the teaching and learning of Arabic in Indonesia have shown remarkable growth. Arabic is now taught not only in formal institutions such as schools and universities but is also increasingly popular in non-formal settings, particularly language courses. This development is driven by diverse needs religious, academic, and professional, such as pursuing higher education in the Middle East, deepening Islamic studies, or supporting careers in diplomacy, economics, and education[4]. At the formal level, Arabic is generally positioned as a compulsory subject in madrasahs and Islamic higher education programs. The teaching focus typically centers on grammar, reading classical texts, and translation skills. However, recent studies indicate that formal models of instruction often face several challenges, including limited student communicative competence, teacher-centered traditional methods, and a lack of material relevance to practical needs[5].

Similar challenges are also revealed in the context of Islamic senior secondary schools (*madrasah 'aliyah*), where Arabic language teachers face a gap

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[1] Zoe Cronin, "To Mix or Not to Mix: A Critical Review of Literature on Mixed-Age Groups in Primary Schools," *Cambridge Open-Review Educational Research e-Journal* 6, (October 2019): 165, https://doi.org/10.17863/CAM.46563

[2] Ahmed Aljarelah, "Language and International Communication: The Impact of Language on International Understanding and Diplomatic Relations," *The American Journal of Social Science and Education Innovations* 6, no. 6 (June 2024): 145, https://doi.org/10.37547/tajssei/Volume06Issue06-23

[3] Fauzie Muhammad Shidiq et al., "Exploring the Position and Role of Arabic in Indonesian Society: A Descriptive Analysis," *Al-Ta'rib: Jurnal Ilmiah Program Studi Pendidikan Bahasa Arab IAIN Palangka Raya* 11, no. 2 (2023): 275–292, https://doi.org/10.23971/altarib.v11i2.6899

[4] Maswani and Kisno Umbar, "Arabic for Specific Purposes (ASP) in Indonesian Context: A Review of the Indonesian Qualifications Framework (IQF)," *EUDL: Proceedings of the 4th International Conference on Islamic and Muhammadiyah Studies (ICIS and APCoMS 2024),* Banjarmasin, Indonesia, June 17–18, 2024, http://dx.doi.org/10.4108/eai.17-6-2024.2349073

[5] Zainul Arifin et al., "Analyzing the Problems of Arabic Language Learning in Higher Education," *INSIGHT: Journal of Education and Islamic Studies* 3, no. 3 (2024): https://doi.org/10.24036/insight.v3i3.193

between the demands for professional pedagogical competence and the realities encountered in the field[6]. The policy on Arabic language learning in Indonesia has also undergone various adjustments in line with the development of the national curriculum. In the context of *madrasah*, Arabic holds an important position as part of Islamic religious education. However, its implementation still faces several challenges, such as the limited number of competent educators and inadequate facilities. Therefore, there is a need to improve training for Arabic language teachers, as well as to develop teaching materials that are more relevant to students' needs[7]. This condition has encouraged some members of the community to seek alternative Arabic language learning outside formal education pathways.

In the non-formal context, Arabic language course institutions have grown rapidly, offering more communicative, practical, and flexible approaches. These courses are highly in demand because they provide a more fluid learning environment, are tailored to learners' needs, and open opportunities for people of various age groups to learn together. The phenomenon of age diversity in Arabic language classes presents both an interesting and challenging issue. In certain language course institutions, a single class may consist of learners ranging from 17 to over 40 years old. This diversity creates unique instructional dynamics, as each generation brings distinct learning styles, motivations, and needs. Generational literature suggests that Generation X (1965–1980) tends to value stability, structure, and authority; Generation Y or Millennials (1981–1996) are more open to collaboration and experiential learning, while Generation Z (1997–2012) is accustomed to digital technology and interactive learning patterns[8]. When managed appropriately, such diversity can foster meaningful intergenerational interaction and collaboration. However, it may also lead to gaps in material comprehension and learning pace.

One institution that represents this phenomenon is the BAC. According to information from its official website, BAC offers a communicative, systematic, and enjoyable learning method that is open to students from various age groups and professional backgrounds. Participant testimonials indicate that learning at BAC is easy to understand and relevant to daily needs, making it one of the preferred choices for Arabic language learners in the Bandung area. Preliminary findings from the researcher's observation in a grammar class at BAC revealed that the

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[6] Maman Abdurrahman et al., "Tantangan Guru Bahasa Arab Madrasah Aliyah dalam Perspektif Kompetensi Pedagogik dan Profesional" Arabiyat: Jurnal Pendidikan Bahasa Arab dan Kebahasaaraban 2, no. 1 (2015), https://doi.org/10.15408/A.V2I1.1513

[7] Ali Maksum dan Nana Jumaha, "Kebijakan Pembelajaran Bahasa Arab di Indonesia dalam Kurikulum Madrasah," *Jurnal Kajian Penelitian Pendidikan dan Kebudayaan (JKPPK)* 2, no. 4 (Oktober 2024): 147–156, https://doi.org/10.59031/jkppk.v2i4.598

[8] Hala Shaker Hammad, "Teaching the Digital Natives: Examining the Learning Needs and Preferences of Gen Z Learners in Higher Education," *Transcultural Journal of Humanities and Social Sciences* 6, no. 2 (January 2025): 214–242, 10.21608/tjhss.2025.346098.1303

class consisted of high school students, university students, and adult workers aged between 17 and 50 years. Generationally, this composition represents members of Generation X and Generation Z. The presence of these two generations positions Arabic learning at BAC within a mixed-age learning setting, even though it does not cover the entire generational spectrum.

Mixed-age learning is defined as a pedagogical approach that integrates learners from different age groups within a single learning environment[9] From a pedagogical perspective, this model is considered capable of fostering opportunities for interaction, collaboration, and intergenerational knowledge exchange[10]. However, existing studies on mixed-age learning have been largely dominated by research conducted in the context of early childhood and primary education in Western countries[11].

Research focusing on foreign language learning for adults within non-formal educational settings in Indonesia remains scarce. The phenomenon of multi-generational classrooms at the BAC is therefore relevant to investigate, as it directly influences instructional strategies. The main research question of this study focuses on the classroom conditions in the grammar class at BAC, and how the learning process unfolds when participants come from various age groups and even different generations? This also includes the teachers' strategies in addressing such a classroom setting. To analyze this, the study applies Instructional Design Theory (IDT) (Reigeluth, 1999) as its primary theoretical framework.

IDT provides systematic guidance for understanding how instructional conditions, such as learner profiles, learning environments, and materials, influence the selection of teaching strategies to achieve desired outcomes. In addition, the study adopts Generational Theory[12] to examine one of the most critical instructional conditions, which is learner characteristics. This theory helps explain the distinctive motivations, goals, and learning styles of each generation. The combination of these two theories enables a comprehensive analysis. IDT serves as an overarching framework for understanding the instructional process, while Generational Theory provides a detailed perspective on the characteristics of the learners. This theoretical approach simultaneously addresses a gap in the

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[9] Lena O. Magnusson and Kerstin Bäckman, "Teaching and Learning in Age-Homogeneous Groups versus Mixed-Age Groups in the Preschool; The Swedish Example," *Cogent Education* 9, no. 1 (August 10, 2022): 2109802, https://doi.org/10.1080/2331186X.2022.2109802

[10] Robbert Smit and Eva Engeli, "An Empirical Model of Mixed-Age Teaching," *International Journal of Educational Research* (2015), https://doi.org/10.1016/j.ijer.2015.05.004

[11] Arya Ansari and Kelly M. Purtell, "Continuity and Changes in Classroom Age Composition and Achievement in Head Start," *Journal of Applied Developmental Psychology* 59 (2018): 74–85, https://doi.org/10.1016/j.appdev.2018.07.002

[12] Tatyana Zayko and Victoriya Vinichenko, "Generational Theory: An Overview of the Research Conducted," in *International Scientific Siberian Transport Forum TransSiberia – 2021*, ed. Viktor K. Korneev (Cham: Springer, 2022) 10.1007/978-3-030-96383-5_88

existing literature. According to recent research on trends in Arabic language teaching studies[13], most studies on Arabic language education in Indonesia still focus on general teaching methods and formal educational contexts, such as schools and *pesantren*, without exploring the complexities of intergenerational classrooms in non-formal settings. Previous studies have tended to view learners as a homogeneous group. Therefore, this research contributes to enriching the understanding of adaptive instructional strategies in mixed-age classrooms and provides practical insights for teachers and institutions to adjust their strategies to meet the diverse needs of their learners.

METHOD

This study employs a qualitative method with a case study design. BAC was selected as the research site based on its class placement system, which assigns learners according to proficiency levels. This system produces classes with a wide age range and diverse generational composition, creating a mixed-age learning environment in a non-formal context. These characteristics make BAC a relevant and representative setting for examining the implementation of grammar instruction in a heterogeneous learning environment. The unit of analysis in this study is the grammar learning process within the mixed-age Level 5 class at BAC.

The research data were obtained from teachers, administrators, and selected learners who were directly involved in the grammar learning activities at BAC. Participants were chosen through purposive sampling[14] to ensure representation from three generational groups: Generation Z, Generation Y (Millennials), and Generation X. This strategy allowed the study to capture diverse perspectives from learners at different life stages who shared the same instructional space, as well as to gather rich information on classroom dynamics, instructional strategies, and learning experiences.

Data was collected through classroom observations, in-depth interviews, and document analysis. Observations were conducted across several grammar sessions to examine the learning process and the responses of learners across age groups. In-depth interviews were carried out with teachers, administrators, and learner representatives from each generational group to explore their perceptions and learning experiences. Document analysis complemented the primary data and included institutional archives and documents related to class organization at BAC. Data analysis was conducted using thematic analysis following established

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[13] Zikriah Zikriah and Lailatul Mauludiyah, "Research Trend of Arabic Language Teaching in the World: Systematic Literature Review Based on Scopus Database," *Raden: Research and Development in Education* 4, no. 1 (2024) https://doi.org/10.22219/raden.v4i1.31847

[14] Omid Tajik, Jawad Golzar, and Shagofah Noor, "Purposive Sampling," *International Journal of Education and Language Studies* 2, no. 2 (2024) 10.22034/ijels.2025.490681.1029

procedures[15]. The stages of analysis included repeated reading to gain a comprehensive understanding of the data, identifying and categorizing significant patterns, and developing key themes. These themes were then interpreted using Instructional Design Theory (Reigeluth, 1999) as an analytical lens, enabling the researcher to map how instructional decisions, strategies, and forms of adaptation emerged within the mixed-age Arabic language classroom context.
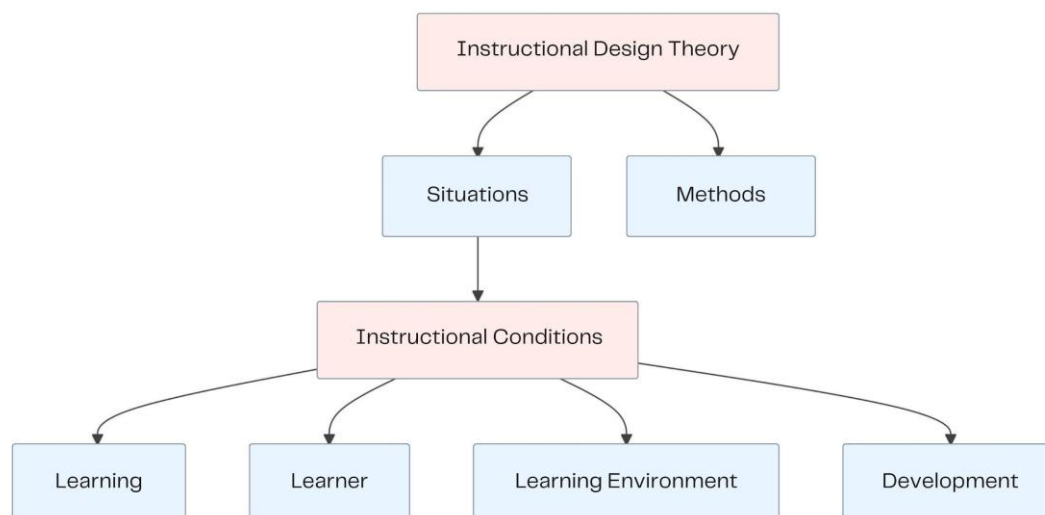

Figure 1. Instructional Design Theory

Within the framework of Instructional Design Theory, the concept of methods is broadly understood as a series of instructional strategies and tactics that can be applied to achieve the desired learning outcomes. In this context, methods are not limited to rigid techniques but also include more fluid and adaptive approaches as identified in this study.

RESULT AND DISCUSSION
Classroom Situations in the Grammar Class at BAC

The interest and demand of Indonesian society for mastering the Arabic language have continued to increase in recent years[16]. Arabic has become a skill needed by various groups from students and university learners to professionals for academic, professional, and personal development purposes. This phenomenon is reflected in the composition of students in the grammar Level 5 class at BAC. As shown in Table 1 below, a single class may consist of participants

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[15] Sirwan Khalid Ahmed, Ribwar Arsalan Mohammed, Abdulqadir J. Nashwan, Radhwan Hussein Ibrahim, Araz Qadir Abdalla, Barzan Mohammed M. Ameen, and Renas Mohammed Khdhir, "Using Thematic Analysis in Qualitative Research," *Global Medicine* (2025), https://doi.org/10.1016/j.glmedi.2025.100198

[16] Maryam Nur Annisa and Randi Safii, "Analisis Kebutuhan Belajar Bahasa Arab sebagai Bahasa Asing dalam Konteks Pendidikan Tinggi," *Eloquence: Journal of Foreign Language* 2, no. 2 (August 31, 2023), 10.58194/eloquence.v2i2.861

ranging from senior high school students to professionals and administrators of *tahfidz* institutions.

Table 1. Composition of Participants in the Grammar Level 5 Class

Generation	Range of Birth Years	Age Range (2025)	Description
Generation Z	2003-2008	17-21 years old	1 Senior High School & 3 University Students
Generation Y/Millennial	1981	44 years old	1 Professional Worker
Generation X	1973	52 years old	1 Founder of GENCAR (Al-Qur'an literacy movement)

This diversity indicates that the need for Arabic proficiency does not end at a certain educational level but instead develops into a continuous process to meet evolving demands. This study focuses on the *Qawāʿid* learning process in a mixed-age class at BAC. The observed class represents an advanced regular course (Level 5), which implies that participants have already passed the basic stages and are considered to be at the C1 (proficient) level in the language learning hierarchy. At this level, learners are expected to master the application of advanced Arabic grammar (*qawāʿid*) comprehensively and analytically across reading (*qirāʾah*), speaking (*takallum*), and syntactic analysis (*iʿrāb*) skills, thus enabling them to understand complex and grammatically accurate Arabic texts or discourses.

Based on Table 1, the Arabic Level 5 class at BAC represents a complex mixed-age class. The participants not only come from three different generations but also vary in their learning purposes. The generational classification in this study refers to the *Generational Theory*, which categorizes individuals based on their birth year range and socio-historical experiences that shape distinctive values, attitudes, and preferences, including in learning contexts[17]. The analysis of participant composition reveals diverse learning goals. Generation Z participants (2003–2008) consist mostly of high school and university students with academic motivations, such as strengthening their understanding of formal Arabic studies at university and preparing for higher education in the Middle East. Meanwhile, the Generation Y (Millennial, born in 1981) participant is a professional worker with intrinsic motivation for understanding the Qur'an and personal

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[17] Bharat Chillakuri, "Understanding Generation Z Expectations for Effective Onboarding," *Journal of Organizational Change Management* 33, no. 7 (2020): 1277–1296, https://doi.org/10.1108/JOCM-02-2020-0058

development. In contrast, the Generation X participant (born in 1973) serves as a *tahfidz* institution administrator, motivated by pragmatic and professional goals related to institutional development and work competency improvement.

The learning characteristics of each generation show patterns consistent with previous research findings, yet with distinctive nuances. Generation X participants exhibit the characteristics of mature adult learners as defined by the andragogical theory[18], with a strong orientation toward results and practical application. Generation Y or Millennial participants demonstrate learning characteristics that emphasize the pursuit of meaning and relevance throughout the learning process. Meanwhile, Generation Z participants display a profound cognitive tendency to question the processes and logic underlying grammatical rules, as reflected in their typical question, "Why is it like that?", indicating a need for comprehensive conceptual understanding. This pattern reflects a fundamental difference in learning orientation: Generation X and Y participants tend to be product-oriented, often asking "So what's the point?", while Generation Z as digital natives, tend to value the depth of argumentation and reasoning behind a conclusion[19]. This divergence in learning orientation, between those focused on the *end product* and those emphasizing the *understanding process*, creates a distinctive learning dynamic within the mixed-age classroom at BAC.

This situation is reinforced by the institution's policy of placing learners based on ability (placement test) rather than age. This principle represents a key characteristic of mixed-age learning classes namely age heterogeneity combined with learning readiness homogeneity. In this context, the placement test functions as a tool to identify each learner's level of Arabic language comprehension regardless of chronological age differences[20]. According to the teachers, the success of this model rests on three main pillars: learner-friendly instructional materials, teachers' competence in class analysis and management, and learners' enthusiastic and respectful attitude. From the above description, it is evident that the mixed-age class situation at BAC represents a complex and heterogeneous learning landscape shaped by three key elements: (1) highly diverse learner characteristics in terms of goals and learning styles, (2) institutional policy (placement test) that prioritizes readiness over age uniformity, and (3) the

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[18] Banan Abdulrzaq Mukhalalati and Andrea Taylor, "Adult Learning Theories in Context: A Quick Guide for Healthcare Professional Educators," *Journal of Medical Education and Curricular Development* 6 (2019): 1–10, https://doi.org/10.1177/2382120519840332

[19] Jean M. Twenge, "Generations: The Real Differences between Gen Z, Millennials, Gen X, Boomers, and Silents, and What They Mean for America's Future," *Perspectives on Science and Christian Faith* 75, no. 3 (2023): 212–214, 10.56315/PSCF12-23Twenge

[20] Tatiana Peredrienko and Ekaterina Istomina, "Placement Test Validation: Ways of Improvement," in *Proceedings of the International Technology, Education and Development Conference* (2017), 10.21125/inted.2017.1456

analytical nature of advanced *Qawāʿid* materials. Within the framework of Instructional Design Theory (Reigeluth, 1999), this unique composition of instructional conditions encompasses the dimensions of the learner, the learning, and the learning environment, which together establish the foundation for the need for adaptive and flexible instructional strategies.

Adaptive Learning Cycle in Grammar Mixed-Age Classroom

Based on the framework of Instructional Design Theory, the instructional conditions at BAC present a unique complexity that requires a specialized pedagogical approach. These conditions encompass three fundamental aspects: the diverse characteristics of learners across different age groups with varying needs and motivations, a heterogeneous learning environment, and the high level of complexity of the advanced grammar materials that demand analytical understanding. According to Instructional Design Theory, certain instructional conditions require specific approaches to bridge understanding while maintaining the quality of learning. Based on observations of the learning process, it can be identified that the instructional strategies at BAC are developed through three integrated main stages, as illustrated in the following figure.

Figure 2. Adaptive Learning Cycle.

The first stage involves a continuous analysis of learning needs conducted by the teacher. The second stage is the implementation of instructional differentiation based on the generational characteristics of the learners. The third stage consists of adjusting strategies according to learners' responses during the learning process. These three stages form a dynamic and responsive learning cycle that adapts to the real needs within the classroom. The process of learning needs analysis is carried out through several complementary mechanisms. Teachers conduct participatory observations of learners' interactions during classroom activities, monitor comprehension development through exercises and Q&A sessions, and perform informal assessments through individual tasks. The data collected then serve as the basis for determining the most appropriate approach for each age group. This mechanism enables teachers to accurately identify

comprehension gaps and the specific needs of each learner[21].

The implementation of instructional differentiation is clearly reflected in classroom management. Although the core material taught is the same for all learners, the delivery approach is adjusted according to generational characteristics. For Generation X and Y learners, the emphasis is placed on the applicative and practical aspects of Arabic grammar, such as providing examples in the context of the Qur'an, hadith, and common expressions. The teacher consistently connects the material to relevant contexts. Meanwhile, for Generation Z, greater emphasis is given to conceptual understanding and the logic underlying Arabic grammatical rules. The teacher provides in-depth explanations of linguistic analysis processes and the theoretical foundations behind each grammatical principle. This differentiated approach aligns with the findings of Mislikhah[22] concerning the effectiveness of learning approaches adapted to generational characteristics.

These differences in approach are not only limited to the delivery of content but are also reflected in the types of guidance and support provided during practice sessions. Such distinctions serve as a reference framework that guides the subsequent learning process, ensuring that each generation has a clear understanding of the relevance of the material to them. In these practice sessions, Generation X learners tend to receive more direct and concrete assistance, while Generation Z learners are given greater opportunities to explore and construct understanding independently through dictionaries or digital applications. This differentiation strategy is implemented through a series of structured learning activities. The core phase of instruction highlights the complexity of implementing this adaptive strategy. The teacher simultaneously manages two to three different learning pathways within the same classroom space.
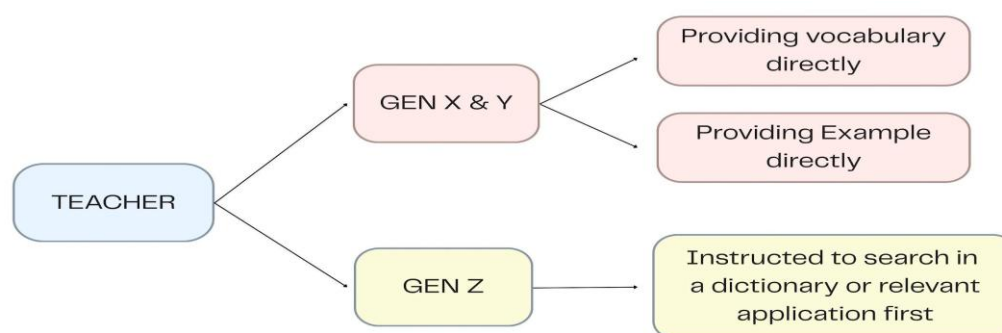

Figure 3. Dynamic Flow of Teacher Interaction within a Session.

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[21] Tadesse Melesse and Sinatayehu Belay, "Differentiating Instruction in Primary and Middle Schools: Does Variation in Students' Learning Attributes Matter?" *Cogent Education* 9, no. 1 (2022): Article 2105552, https://doi.org/10.1080/2331186X.2022.2105552

[22] St. Mislikhah, "Penerapan Pembelajaran Berdiferensiasi dalam Pembelajaran Bahasa Indonesia," *Prosiding Konferensi Linguistik Tahunan Atma Jaya (KOLITA) 22*, (2024): 371–381, 10.25170/kolita.22.5992

The classroom management strategy implemented by the teacher reaches its peak during the intensive practice session. At this stage, the instructional differentiation becomes particularly evident. The teacher does not apply a uniform approach to all learners but instead divides their attention and type of guidance based on each generation's distinctive learning characteristics. For learners belonging to Generation X, the guidance provided tends to be direct and application oriented. The teacher offers concrete assistance, such as clear step-by-step methods for completing translation and *i'rāb* analysis, as well as examples of grammatical rule application in relevant contexts. This approach effectively accommodates their learning orientation, which prioritizes efficiency and tangible outcomes.

In contrast, for learners from Generation Z, the teacher provides greater autonomy and opportunities for independent exploration. Rather than supplying immediate answers, the teacher often poses guiding questions or encourages students to consult dictionaries and Arabic learning applications first. This strategy aligns with the nature of Generation Z as digital natives, who tend to value discovery-based learning and a deeper conceptual understanding. Meanwhile, learners from Generation Y (Millennials) often serve as a bridge between the two approaches, mediating interaction and supporting knowledge exchange within the classroom dynamics. They receive contextual guidance that connects learning to real-life experiences, both in professional settings and personal development, while simultaneously being encouraged to reflect on the relationship between grammatical theory and its practical application.

The teacher's ability to swiftly switch between different instructional approaches serves as the key to maintaining the smooth flow of practice sessions, a crucial competency in managing mixed-age classrooms. Although the guidance strategies differ, the quality and complexity of the learning tasks remain consistent across all generations. Activities such as text analysis and sentence construction are carefully designed to provide multiple entry points, allowing each learner to access and complete the same task in different ways and at varying levels of depth, in accordance with the principles of Universal Design for Learning[23]. Thus, differentiation primarily occurs in the process of instructional guidance provided by the teacher, rather than in the content or ultimate learning objectives. The adjustment of these strategies is carried out through a feedback mechanism that is seamlessly integrated into the learning process.

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[23] Qais I. Almeqdad, Ali M. Alodat, Mahmoud F. Alquraan, Mohammad A. Mohaidat, and Alaa K. Al-Makhzoomy, "The Effectiveness of Universal Design for Learning: A Systematic Review of the Literature and Meta-Analysis," *Cogent Education* 10, no. 1 (2023): Article 2218191, https://doi.org/10.1080/2331186X.2023.2218191
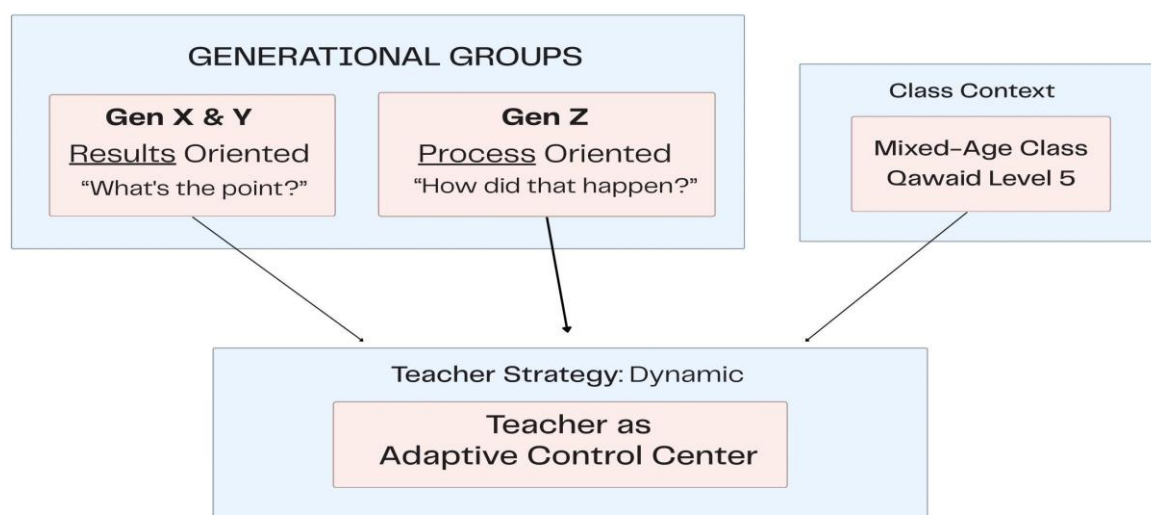
Figure 4. Teacher's Responsive Strategy

As illustrated in Figure 4, the teacher actively monitors the responses of learners from different generations to each learning activity. Data gathered from observations of participation and the patterns of questions raised by Generations X, Y, and Z serve as the basis for adjusting strategies in real time. This mechanism enables the teacher to quickly respond to the specific needs that arise from each generational group during the learning process. Such adjustments may include repeating particular grammatical theories, provide more relevant examples, or re-explain the steps of *i'rab* analysis. This responsive approach prioritizes equal understanding over rigid adherence to lesson plans. The teacher explained, "The principle is to make it easier for everyone. Although the duration is not always in line with the plan, the most important thing is achieving equal understanding"[24]. This statement reinforces that the instructional focus is on mastery learning, where the pace of instruction is adjusted to ensure that no generational group is left behind[25]. In the context of a mixed-age classroom, this commitment to "equal understanding" is crucial, as it must accommodate the differing speeds and information-processing styles of each learner.

This flexibility ensures that the complexity of the advanced *Qawāʿid* material remains accessible to all learners, regardless of their generational backgrounds. Consequently, the real-time adaptations implemented by BAC teachers represent an essential part of an adaptive instructional strategy for mixed-age classrooms. The teacher's ability to "read" the classroom situation quickly and make accurate pedagogical decisions reflects a truly dynamic strategy, as identified in studies on real-time instructional decision-making within

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[24] Teacher's depth Interview, October 2025

[25] Muhammad Javed Aftab, Saira Tasleem, Hina Hadayat, and Ali Assistant, "Effect of Mastery Learning Approaches in Improving Students' Learning Outcomes at Elementary Level," *Pakistan Journal of Social Research* 4, no. 4 (2022): 692–700, 10.52567/pjsr.v4i04.883

heterogeneous settings. The success of this strategy at BAC demonstrates that in intergenerational classrooms, the teacher's flexibility and sensitivity in responding directly to learner feedback are key to creating an inclusive learning experience for all age groups. In addition to instructional strategies, the learning materials are also developed with consideration of generational characteristics. Supplementary worksheets are provided to support learner comprehension, as illustrated in the following figure.

Figure 5. Worksheet for Analyzing Arabic Sentence (*I'rab*).

This supporting worksheet is designed to facilitate learners' comprehension through a systematic visual guide for identifying *i'rab* in Arabic sentences. Based on classroom observations, the worksheet has proven effective in helping learners from various generations analyze sentence structures in an organized manner[26]. Its effectiveness lies primarily in the use of clear flow diagrams and visual markers, aligning with findings[27] that visual representation significantly enhances the understanding of complex grammatical concepts among language learners. In practice, the teacher acts as a flexible and adaptive

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[26] Class Observation, October 2025

[27] Johanna Schoenherr, Anselm R. Strohmaier, and Stanislaw Schukajlow, "Learning with Visualizations Helps: A Meta-Analysis of Visualization Interventions in Mathematics Education," *Education Research Review* (2024): Article 100639, https://doi.org/10.1016/j.edurev.2024.100639

facilitator. This ability is reflected in the teacher's statement: "We need to accommodate comprehension according to each learner's needs"[28], as emphasized in their study on teacher competence in mixed-age classrooms.[29]

Careful time management also becomes a key consideration in implementing this strategy. Field notes indicate that teachers allocate time proportionally: 30% for theoretical explanation, 50% for structured exercises, and 20% for individual feedback and Q&A[30]. This allocation allows teachers to provide sufficient attention to each age group, in line with the principles of time management in differentiated instruction[31]. Institutional support through ongoing professional development serves as another crucial factor in the success of this strategy. The program administrator stated, "Training for Trainers (TFT) programs are conducted regularly to enhance teachers' competence in managing class heterogeneity"[32]. Mastery of differentiated instructional techniques and heterogeneous classroom management remains a core competence that continues to be developed, as recommended in studies on the effectiveness of professional development programs[33].

From the perspective of Instructional Design Theory, the strategies developed at BAC exemplify how instructional methods can be specifically designed to respond to complex instructional conditions. The differentiation approach implemented goes beyond content, encompassing the process, product, and learning environment[34]. This comprehensive scope ensures that the strategies developed genuinely responsive to the diverse characteristics of learners in mixed-age classrooms.

The success of this strategy is evident from the high level of learning engagement across all learner generations. Classroom participation data indicate an average of 85% active involvement from all generations in discussion and practice activities. This achievement demonstrates the alignment between the instructional design and the characteristics of the learners involved. However, it

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[28] Teacher's depth Interview, October 2025

[29] Raúl González-Fernández, Adiela Ruiz-Cabezas, María C. Medina Domínguez, Adela Beatríz Subía-Álava, and Jorge Luis Delgado Salazar, "Teachers' Teaching and Professional Competences Assessment," *Evaluation and Program Planning* 103 (2024): Article 102396, https://doi.org/10.1016/j.evalprogplan.2023.102396

[30] Class Observation, October 2025

[31] Valeria Suryani Kurnila, Dwi Juniati, and Agung Lukito, "Implementation, Principles and Stages of Differentiated Instruction in Mathematics Learning: A Systematic Literature Review," *TEM Journal* 14, no. 1 (February 2025): 727–740, DOI: 10.18421/TEM141-65

[32] Manager Interview, October 2025

[33] Husamah, Jalilah Azizah, Tutut Indria Permana, and Yanur Setyaningrum, "Strengthening Teacher Professional Programs: Insights from Scopus AI," *Jurnal Pendidikan Profesi Guru* 6, no. 1 (2025): 1–10, https://doi.org/10.22219/jppg.v6i1.40646

[34] Marieke van Geel, Trynke Keuning, Jimmy Frèrejean, Diana Dolmans, Jeroen van Merriënboer, and Adrie J. Visscher, "Capturing the Complexity of Differentiated Instruction," *School Effectiveness and School Improvement* 30, no. 1 (2019): 51–67, https://doi.org/10.1080/09243453.2018.1539013

is important to emphasize that the 'alignment' in question refers to an approach that prioritizes the provision of learning strategies and flexibility in the learning process, enabling each learner to identify the approach that is most effective for them.[35].

From a broader perspective, the findings of this study provide an important contribution to the development of both theory and practice in mixed-age classroom learning. The strategies identified are not only relevant to the context of Arabic language learning but can also be adapted to various other learning contexts that encounter diverse learner characteristics. Based on the analysis of the implementation of adaptive and flexible instructional strategies at BAC, it was found that the success of learning in mixed-age settings heavily depends on the teacher's ability to design and implement approaches that are truly responsive to the diversity of learner characteristics.

Previous research on mixed-age grouping[36] often highlights challenges like participation imbalances and higher cognitive load, especially for younger learners who may have fewer opportunities to contribute or struggle to keep pace with older peers. Such outcomes are strongly influenced by pedagogical design and classroom context. The BAC context, however, presents a contrasting scenario. Despite the wide age range of learners, placement tests create relatively uniform academic readiness, which minimizes the participation inequities noted by Cronin. This indicates that issues commonly associated with age differences do not automatically occur in BAC, as the competency-based placement mechanism helps maintain balance and equitable access to learning opportunities. These differences underscore the importance of institutional design in supporting effective mixed-age learning and highlight how BAC's approach offers insights for adaptive instructional practices in heterogeneous classrooms. The strategies identified in this study reveal a comprehensive framework for addressing the complexities of cross-age learning, while also providing an empirical basis for the development of innovative learning models in the future.

CONCLUSION

Mixed-age learning in the *Qawāʿid* Level 5 classroom at the BAC demonstrates that instruction within a heterogeneous environment forms a complex learning ecosystem. The diverse characteristics of learners from Generations X, Y, and Z, each bringing different motivations, experiences, and

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[35] Francesca Sangiuliano Intra et al., "Flexible Learning Environments for a Sustainable Lifelong Learning Process for Teachers in the School Context," *Sustainability* 15, no. 14 (2023): 11237, https://doi.org/10.3390/su151411237

[36] Zoe Cronin, "To Mix or Not to Mix: A Critical Review of Literature on Mixed-Age Groups in Primary Schools," *Cambridge Open-Review Educational Research e-Journal* 6, (October 2019): 165, https://doi.org/10.17863/CAM.46563

learning orientations intersect with the analytical demands of advanced *Qawāʿid* material. Such conditions require the instructor to employ an adaptive and flexible approach, where instructional planning does not operate rigidly but is continuously refined through ongoing needs assessment, instructional differentiation, and real-time strategy adjustment.

These findings highlight that the instructor's competence in managing intergenerational dynamics is a central determinant of instructional effectiveness. This research strengthens the argument that mixed-age classrooms can function optimally when their instructional design is adaptive. Rather than posing an instructional barrier, age diversity enriches the learning process and provides opportunities for deeper and more meaningful engagement among participants. The study's key contribution lies in offering empirical insight into how flexibility and responsiveness can be operationalized in Arabic language instruction within a nonformal educational setting, while also expanding the practical application of Instructional Design Theory in heterogeneous classrooms.

Although this study provides significant insights, it remains limited by its single-site focus and the scope of its exploration of learners' psychological dimensions. Future research may therefore extend the investigation to different institutions and regions, examine the impact of mixed-age learning on measurable learning outcomes, or explore learners' affective and psychosocial experiences in greater depth. Altogether, the findings of this study open up wider opportunities for further inquiry into mixed-age learning within Arabic language education. Altogether, the findings of this study open up wider opportunities for further inquiry into mixed-age learning within Arabic language education.

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