

Optimizing Multilingual Learners' Potential: An Arabic Pedagogy Model at the Indonesian School of Jeddah in the Era of Industry 4.0

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Abstract

This study examines the learning of Arabic Fusha (MSA) at Indonesian School of Jeddah within a multilingual context, where students use Indonesian, Arabic 'Amiyah, and English in their daily lives. Despite high exposure to Arabic, students face challenges in vocabulary acquisition and listening skills, raising questions about the effectiveness of conventional teaching methods and the potential of digital media integration. This research employs a qualitative approach through library research, utilizing content analysis of literature related to Arabic Fusha learning, multilingualism, and digital learning tools. Findings indicate that the integration of digital media, supported by family and social environments, can enhance motivation, comprehension, and overall learning effectiveness. The study contributes theoretically to Arabic language pedagogy in a multilingual context within the Industry 4.0 era and offers practical recommendations for developing technology-based learning models tailored to the needs of diaspora students.

Keywords: Optimizing, Multilingual, Arabic pedagogy, Era of Industry 4.0

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Introduction:

In the era of Industry 4.0, language learning has undergone a significant transformation along with the growing dominance of digital technology in modern teaching methods. This shift requires pedagogical innovation that not only adapts to the needs of the digital generation but also emphasizes optimizing the potential of multilingual learners. Modern Standard Arabic (MSA/Fuṣḥā) holds a strategic position globally as a language of

international communication, scholarship, and diplomacy, and is one of the official languages of the United Nations (UN). Developing an adaptive Arabic pedagogy is therefore essential to help learners in multilingual contexts maximize their linguistic repertoire while facing the rapid changes of the digital age.

Several previous studies have highlighted the potential of digital media in supporting Arabic language learning. For instance, (Penelitian & Pendidikan, 2025) in this study “Dampak Media Digital Terhadap Motivasi Belajar Bahasa Arab Siswa Madrasah Aliyah” found that the integration of digital media positively influences students’ motivation to learn Arabic, making the learning process more engaging and effective. Similar findings were reported at Darul Ikhlas Islamic Boarding School, Panyabungan, where digital methods proved more effective than conventional approaches in improving comprehension and motivation (Hasanuddin, 2024). Research at Muhammadiyah University of Riau emphasized the implementation of simple digital media as well as the practical challenges faced by teachers (Muhammad Fadhly et al., 2024). Moreover, digital media was integrated into Arabic language instruction during the Covid-19 emergency, enabling students to develop creativity, innovation, and enhanced motivation, although it presented distinctive challenges compared to conventional methods (Febriani, 2020)

International studies also reinforce these findings. (Muzaki, n.d.) demonstrated that mobile applications and online platforms are effective in enhancing listening, speaking, reading, and writing skills in Arabic as a second language. (Scholar, n.d.) emphasized the use of Artificial Intelligence (AI) in teaching Arabic to non-native speakers, which can improve the personalization of learning. Al-Kindi (2021) highlighted modern learning strategies such as project-based learning and collaborative learning supported by interactive technology. (K. M. A. Ahamed Zubair, 2024) stressed the importance of integrating the four language skills simultaneously, while (Almelhes, 2021) Evaluation of Students’ Remote Learning Experience of Learning Arabic as a Second Language During the Covid-19 Pandemic. This global literature underscores that the use of technology is not merely a trend but an urgent necessity in Arabic pedagogy for the optimization of multilingual learners’ potential in Industry 4.0. On February 1, 2025, Dr. Muhammad Muchlas Rowi, Special Staff for Digital Transformation and Artificial Intelligence at the Ministry of Primary and Secondary Education, visited the Indonesian School of Jeddah (SIJ) to

explore the implementation of technology in education and to discuss potential collaborations in the field of educational technology (Sekolah Indonesia Jeddah, 2025).

During my time in Jeddah, KSA, I interviewed several SIJ students who reported that their mixed use of languages at home was influenced not only by geographical context but also familial dynamics—that they often must understand both the language of their father and mother in daily life. This forced bilingual or multilingual adaptation becomes part of their linguistic reality. In the SIJ context, students grow up in a multilingual ecosystem: Indonesian as the home language, Arabic *‘Āmiyah* as the language of daily communication, and English in both academic and global contexts. This linguistic environment presents both challenges and opportunities, particularly in mastering formal vocabulary and listening skills in Arabic *Fuṣḥā*. Despite the high level of Arabic exposure among SIJ students, difficulties persist in specific aspects. Research on the acquisition of Arabic *Fuṣḥā* among multilingual diaspora students remains limited, creating an academic gap. According to (Aminuzal et al., 2024)), Indonesian students in Jeddah are accustomed to using non-formal Arabic (*‘Āmiyah*) in their daily communication, while the teaching process in schools is conducted in formal Arabic (*Fuṣḥā*). This situation creates a gap between formal and non-formal language, affecting the effectiveness of learning. Similarly, it has been emphasized that students usually speak non-formal Arabic (*‘Āmiyah*) in the classroom, while Arabic teachers use formal Arabic (*Fuṣḥā*) in instruction. Therefore, the use of Arabic in the teaching and learning process at SIJ has become a challenge that needs to be addressed seriously.

Research Objectives

This study aims to:

1. Analyze the language use patterns of students at the Indonesian School of Jeddah (SIJ) within a multilingual environment.
2. Identify the main challenges students face in mastering Modern Standard Arabic (*Fuṣḥā*).

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3. Formulate pedagogical strategies—grounded in technology and learner motivation—to optimize the potential of multilingual learners in diaspora settings during the Industry 4.0 era.

Research Questions

This research seeks to answer the following questions:

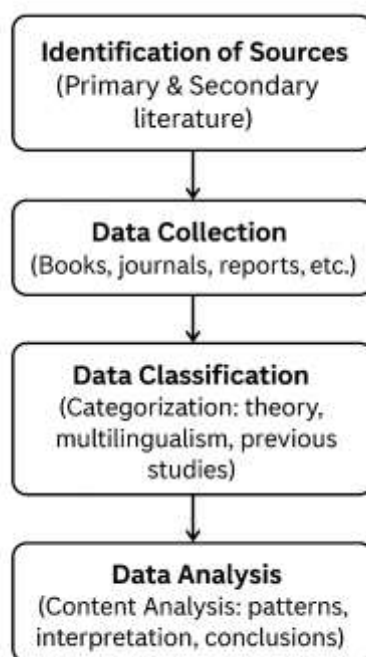
1. How do SIJ students use language in their daily multilingual environment?
2. What are the main challenges they face in mastering Arabic Fuṣḥā, particularly in listening and vocabulary acquisition?
3. What pedagogical strategies can be employed to optimize the potential of multilingual learners in the context of diaspora education and the demands of Industry 4.0?

Research Methodology

This study employs a qualitative approach using library research as its main method. The selection of this method is based on the research objective, which emphasizes conceptual and theoretical analysis, as well as the review of previous studies, rather than field data collection. Library research enables the researcher to gather information from various sources, both primary and secondary, such as books, journal articles, research reports, and relevant academic publications.

The strength of this method lies in its ability to provide a strong theoretical foundation, broaden perspectives through cross-study comparisons, and identify existing gaps in the literature. Thus, library research is highly appropriate for examining the phenomenon of teaching and learning Arabic Fuṣḥā in a multilingual diaspora environment, such as the Indonesian School in Jeddah, which remains relatively underexplored.

Data analysis was carried out using content analysis. This process includes data collection, classification based on themes (e.g., motivation, learning strategies, family roles, digital media), data reduction to filter the main information, and drawing conclusions. This approach allows the researcher to identify patterns, build arguments, and formulate recommendations relevant to the research context.



Literature Review

The literature review is structured around three main themes: challenges in Arabic language learning within multilingual contexts, the role of motivation in language acquisition, and the integration of digital technology in Arabic pedagogy.

1. Arabic Language Learning in Multilingual Contexts

In diaspora settings, learners often face unique challenges due to Arabic diglossia—the coexistence of *Fuṣḥā* (formal Arabic) and *‘Āmiyah* (colloquial Arabic). Ferguson (1959) originally introduced this concept, and recent studies by (Saiegh-Haddad & Schiff, 2025) and (Bergstrand Othman, 2025) confirm that diglossia significantly affects learners’ listening and reading proficiency. (Aminuzal et al., 2024) highlight the gap in Indonesian students in Saudi Arabia between the formal Arabic used in classrooms and the informal Arabic used in daily communication.

2. Motivation in Arabic Language Learning

Motivation is a critical factor in successful language acquisition. According to Maslow's hierarchy of needs (Zebua et al., 2022), student engagement depends on the fulfillment of both physiological and psychological needs. Dewantara's educational philosophy (Zufar et al., 2023) emphasizes the teacher's role as a motivator and role model. (Albantani et al., 2022) found that using interactive and communicative teaching strategies significantly enhances student motivation in Arabic learning.

3. Technology Integration in Arabic Pedagogy

Findings & Discussion

The assessment of the learning outcomes of Muhammadiyah Boarding School *Alabio* students is carried out at the end of the semester every year. The research data used are the results of the Arabic language assessment of grade VIII students which are categorized into two classes (A and B) where class A is a non-boarding school student and class B is a boarding school student. The following is the table of Arabic assessment results for class A and class B:

1. Arabic Learning Challenges in Multilingual Contexts

The findings of the questionnaire conducted with 35 ninth-grade students at the Indonesian School of Jeddah (SIJ) indicate that the majority of students use **Indonesian** at home (37.1%) or a **combination of Indonesian and Arabic** 'Āmiyah (31.4%), while only 8.6% rely solely on Arabic 'Āmiyah and 22.9% reported other variations. This demonstrates that students' primary linguistic exposure is still far from Arabic Fuṣḥā (MSA). In terms of comprehension, 46% of students reported experiencing frequent difficulties in understanding Fuṣḥā, 38% reported occasional challenges, and only 15% did not experience significant difficulties. Among language skills, **listening was perceived as the most difficult (54%)**, followed by **vocabulary mastery (31%)**, and **writing and speaking (15%)**. These results confirm that receptive skills remain the major obstacle for multilingual diaspora learners.

In addition to the students' responses, interviews with Arabic teachers at SIJ revealed that living in an Arabic-speaking country does not

automatically guarantee proficiency in Arabic Fuṣḥā. Teachers explained that most students tend to acquire Arabic 'Āmiyah as their dominant social language, while their mastery of formal Arabic remains limited. As a result, teachers must make extra efforts to explain lessons, provide additional vocabulary support, and bridge the gap between students' everyday language and the formal register required in the classroom.

These findings align with (Aminuzal et al., 2024) who observed that Indonesian students in Jeddah predominantly use non-formal Arabic ('Āmiyah) in daily communication, while classroom instruction relies on formal Arabic (Fuṣḥā). (Almelhes et al., 2025) further highlighted that a substantial portion of learning challenges originates from psychological and socio-cultural dimensions, such as limited motivation, low engagement, and lack of supportive learning environments.

To provide a clearer picture of these findings, the results of the questionnaire are presented in the following pie charts, which illustrate students' home language use, their level of comprehension difficulties, and the specific skills they find most challenging.

Languages Used at Home

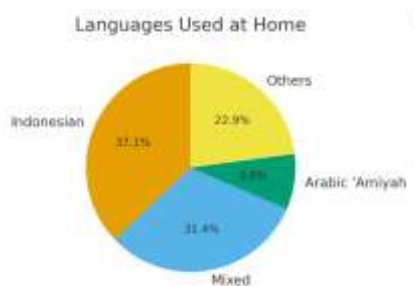


Figure 1. Home Language Distribution among SIJ Students

The first pie chart demonstrates the distribution of languages spoken at home among students. Indonesian emerges as the most dominant (37.1%), followed by mixed-language use (31.4%), while only a small proportion use Arabic 'Āmiyah (8.6%). Meanwhile, 22.9% reported using other languages. These findings suggest that the home environment plays a limited role in reinforcing Arabic language exposure, as Indonesian or mixed codes continue to dominate.

Difficulties in Understanding Arabic Fuṣḥā

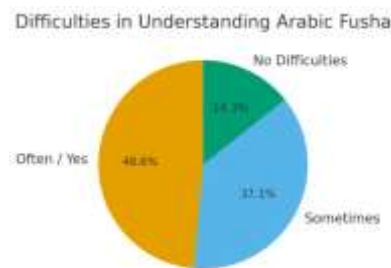


Figure 2. Levels of Difficulty in Understanding Arabic Fuṣḥā

The second pie chart illustrates the degree of difficulty students face in understanding Arabic Fuṣḥā. Almost half of the respondents (48.6%) frequently encounter difficulties, and 37.1% report occasional challenges, whereas only 14.3% experience no difficulties at all. This shows that comprehension of Fuṣḥā remains a substantial obstacle, even within an Arabic-speaking environment.

The Most Difficult Language Skills

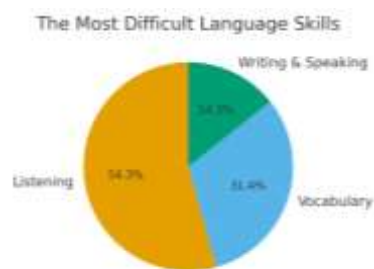


Figure 3. Most Challenging Language Skills for SIJ Students

The third pie chart highlights which Arabic language skills students perceive as the most challenging. Listening is identified as the most difficult

(54.3%), followed by vocabulary acquisition (31.4%), while writing and speaking collectively account for the lowest proportion (14.3%). This pattern underscores that receptive skills, particularly listening, pose greater challenges than productive skills in the acquisition of Arabic.

Several SIJ teachers emphasized that living in an Arabic-speaking country does not necessarily guarantee mastery of Arabic **Fuṣḥā**, as students are more frequently exposed to colloquial **‘Āmiyah** in their daily lives. (Islamic & Sciences, 2025) noted that the residential learning environment has a significant impact on Arabic proficiency. Their study showed that boarding students, who were fully immersed in an Arabic-rich environment, achieved higher learning outcomes than their non-boarding peers. This comparison highlights that, without structured exposure and reinforcement, even students in multilingual or Arabic-speaking contexts may struggle to acquire **Fuṣḥā** effectively.

The phenomenon of diglossia in Arabic, first introduced by Ferguson (1959), distinguishes between “high” varieties (Fuṣḥā/MSA) used in formal and institutional contexts and “low” varieties (‘Āmiyah) used in daily interactions. Research by (Mohammed Harbi, 2022) shows that the functional differences between MSA and ‘Āmiyah can pose challenges for non-native Arabic learners in social communication and the language learning process. This study highlights the importance of understanding the impact of diglossia on Arabic learning among international students. Furthermore, (Bergstrand Othman, 2025) advocates a non-deficit model in understanding Arabic diglossia, emphasizing that phonological and lexical differences between MSA and ‘Āmiyah can affect phonological awareness and reading skills, particularly among young learners. This study highlights the challenges students face in developing Arabic literacy within a diglossic environment.

Another important aspect of the challenges faced by SIJ students is the phenomenon of “language switching fatigue.” This refers to the mental exhaustion that results from having to shift between multiple codes—Indonesian, Arabic ‘Āmiyah, English, and Fuṣḥā—depending on context. While multilingualism generally fosters cognitive flexibility, for young learners it may also produce an additional cognitive load, especially when formal academic tasks demand mastery of Fuṣḥā. The constant need to adjust linguistic registers can lead to slower processing times in comprehension and lower levels of self-confidence when using Fuṣḥā in class.

The presence of diglossia further complicates learning outcomes. Although students are surrounded by Arabic in their external environment, the predominance of colloquial registers means that what they hear and practice daily does not align with the academic and religious Arabic they are expected to master in school. This mismatch between exposure and expectation creates frustration, which is often expressed in students' feedback that Arabic feels "too difficult" or "unnatural" in formal learning. Therefore, the challenge is not merely exposure, but structured and meaningful exposure to the correct variety of Arabic. Without targeted pedagogical strategies, this gap will remain persistent and continue to hinder progress in receptive skills such as listening and vocabulary comprehension.

2. Motivation in Arabic Language Learning

Interviews with selected SIJ students confirmed that motivation is a central factor in their learning process. Many students indicated limited enthusiasm due to perceptions of Arabic being too theoretical, grammar-heavy, and detached from practical communication. This reflects Dawn (Wiza et al., 2024) who highlighted that Arabic's complex grammar and morphology often lower learners' confidence and willingness to engage. (Hashim et al., n.d.) also stressed that the richness of Arabic vocabulary, while academically valuable, adds another layer of difficulty for learners, especially when they are simultaneously navigating multiple languages.

Educational philosophy highlights motivation as essential. Dewantara's triadic principle—*Ing Ngarsa Sung Tulada, Ing Madya Mangun Karsa, Tut Wuri Handayani*—shows the critical role of teachers as motivators and role models (Sugiarta et al., 2019). Teachers are expected not only to deliver linguistic content but also to demonstrate attitudes of patience, consistency, and enthusiasm (Jurriëns, 2023). Albantani and Madkur (2019) emphasized that interactive and communicative approaches can significantly improve student motivation. Similarly, Sa'adah et al. (2022) argued that daily use of Arabic in class conversations and creating teacher forums for Arabic pedagogy strengthen students' exposure and motivation.

Motivation theory also supports these insights. Maslow's hierarchy of needs demonstrates that student engagement depends on fulfilling both physiological and psychological needs before achieving self-actualization

(Zebua, 2021). In SIJ's multilingual context, external support from teachers, peers, and families becomes critical in motivating learners. As Fernando et al. (2024) observed, rewards, recognition, and inclusive learning environments further strengthen motivation, reducing the psychological barriers that often hinder Arabic learning.

The psychological dimension of Arabic learning deserves deeper consideration. Motivation is not a static factor; it is shaped continuously by classroom climate, teacher attitudes, peer dynamics, and family support. Many SIJ students described feeling overwhelmed by the heavy grammatical focus of their lessons, which reduces their willingness to engage. This reflects the role of what is often called the "affective filter"—high anxiety and negative emotions act as a barrier to meaningful input, even when exposure is sufficient. For students to overcome these barriers, teachers must foster a positive and supportive environment where mistakes are seen as part of the learning process rather than as failures.

In this regard, the role of the teacher extends beyond linguistic instruction. Teachers must act as motivators, role models, and sources of inspiration. A patient and encouraging demeanor not only reduces anxiety but also stimulates intrinsic motivation. This aligns with broader educational philosophies that emphasize holistic learning, where the teacher's character and approach are as important as the content being taught. When students feel that teachers genuinely care about their progress, they are more willing to invest effort, even in subjects they perceive as difficult.

Another dimension of motivation is the role of family and peers. Supportive parents who provide access to Fuṣḥā materials—such as children's books, news programs, or Arabic cartoons—reinforce what is learned in school. Peer collaboration, such as practicing dialogues or working on group projects in Arabic, also enhances engagement and lowers the fear of making mistakes. These social aspects of learning highlight that motivation is not purely an internal matter but an ecosystem that must be nurtured by multiple stakeholders.

3. Technology Integration in the Society 4.0 Era

The Society 5.0 era has transformed the role of technology in language pedagogy. Although SIJ students reported limited exposure to interactive applications, digital media remains a promising avenue for Arabic learning. Susiawati (2023) found that platforms such as Zoom (96.4%), Google Classroom, WhatsApp, and YouTube dominate Arabic learning in Indonesian universities. Jamil and Agung (2022) also identified three barriers to Arabic learning: limited listening practice, low enthusiasm, and overly theoretical instruction—all of which can be mitigated through interactive applications and digital pedagogy.

Global studies affirm the pedagogical value of technology. Muzaky and Bustan (2022) showed that mobile apps and online platforms enhance all four skills—listening, speaking, reading, and writing—for second-language learners of Arabic. Mohmiddin and Abu Bakar (2021) emphasized the role of Artificial Intelligence (AI) in personalizing instruction, tailoring lessons to students' strengths and weaknesses. Al-Kindi (2021) highlighted project-based and collaborative learning models supported by interactive technology as effective strategies for comprehensive language development. Zubair et al. (2021) underscored the necessity of integrating all four language skills simultaneously, while Khudier and Salih (2020) confirmed that e-learning remains effective in overcoming post-pandemic challenges in distance education.

At the policy level, efforts to strengthen digital integration are also evident. On February 1, 2025, Dr. Muhammad Muchlas Rowi, Special Staff for Digital Transformation and Artificial Intelligence at the Ministry of Primary and Secondary Education, visited SIJ to explore technological integration in teaching and discuss collaborative opportunities (Sekolah Indonesia Jeddah, 2025). This demonstrates institutional recognition that digital pedagogy is no longer optional but essential for Arabic language education in diaspora contexts.

The integration of technology in Arabic pedagogy should not be seen as a supplementary tool but as a core component of language learning in the digital age. Interactive technologies can directly address the two most common challenges faced by SIJ students: limited listening practice and low vocabulary retention. For example, gamified platforms that provide instant feedback can transform repetitive vocabulary drills into engaging

challenges. This not only sustains interest but also strengthens memory retention through repeated exposure in an enjoyable format.

Artificial Intelligence offers even more transformative possibilities. AI-driven platforms can diagnose specific learner weaknesses—for example, consistent errors in listening comprehension of certain sounds—and adapt lessons to address these gaps. Such personalized learning is particularly valuable in multilingual settings where students begin from highly diverse linguistic baselines. Virtual and Augmented Reality simulations can immerse students in real-life Arabic scenarios where they must use Fuṣḥā to navigate airports, markets, or professional interactions. These immersive experiences are especially powerful because they combine language practice with situational relevance, bridging the gap between classroom learning and practical application.

Importantly, the role of technology in the Society 5.0 framework emphasizes human-centered design. This means that technology is not intended to replace teachers but to enhance their ability to connect with students in more personalized ways. Teachers can use analytics from digital platforms to monitor progress and intervene early when students fall behind. By leveraging these tools, Arabic pedagogy at SIJ can move beyond traditional rote learning toward an adaptive and student-centered model that resonates with the digital generation.

4. Optimizing Multilingual Learners' Potential

The linguistic ecology of SIJ—Indonesian as the home language, Arabic 'Āmiyah as the social language, and English as the academic and global language—creates both challenges and opportunities. While multilingual exposure complicates mastery of Fuṣḥā, it simultaneously cultivates cognitive flexibility and adaptive strategies. Interviews further revealed that language mixing among SIJ students is not only shaped by geographic and social environments but also by family dynamics, where students are compelled to navigate the languages of both parents in daily life.

This study affirms that optimizing multilingual learners' potential requires a threefold approach:

01. **Pedagogical Adaptation** – strengthening interactive, technology-driven methods that reduce dependence on conventional rote learning.

02. **Motivational Support** – building both intrinsic and extrinsic motivation through teacher modeling, family engagement, and peer collaboration.
03. **Digital Transformation** – integrating AI, mobile apps, and project-based learning to align pedagogy with the demands of Society 4.0.

Unlike earlier studies that focused on monolingual or bilingual contexts, this research contributes novelty by examining Arabic learning within a multilingual diaspora setting. The findings suggest that media digitalization, teacher innovation, and family support must work synergistically to address barriers in listening and vocabulary, while also leveraging students' multilingual capacity as an asset rather than a liability.

Ultimately, Arabic pedagogy in SIJ illustrates that multilingual learners are not disadvantaged but rather uniquely positioned to thrive when given **adaptive models of instruction. Optimizing their potential in the Industry 4.0 era** requires recognizing their linguistic realities, integrating technological solutions, and sustaining strong motivational frameworks.

The multilingual reality of SIJ students should not be framed as a barrier but as a valuable resource. The ability to operate across three or more languages cultivates advanced cognitive skills such as problem-solving, metalinguistic awareness, and mental flexibility. These abilities can be harnessed to support the acquisition of Fuṣḥā. For example, teachers can highlight cognates and loanwords between Indonesian and Arabic, making explicit connections that ease vocabulary learning. Similarly, drawing parallels between English and Arabic grammatical structures can help students understand abstract concepts that might otherwise seem unfamiliar.

Moreover, multilingualism positions SIJ students as global citizens. Their exposure to Indonesian, Arabic, and English equips them with the linguistic versatility needed to participate in international academic and professional communities. In this sense, learning Fuṣḥā is not simply about meeting school requirements but about enhancing their global competence and cultural identity. By framing Fuṣḥā acquisition as part of a broader narrative of empowerment and opportunity, teachers can shift students' perceptions from resistance to aspiration.

To optimize this potential, pedagogy must adopt a strengths-based approach. Rather than focusing solely on the deficits caused by diglossia,

instruction should leverage the skills and experiences students already possess. Collaborative projects, such as bilingual presentations or multilingual storytelling, allow students to draw from all parts of their linguistic repertoire while gradually increasing the proportion of Fuṣḥā. Such integrative methods transform multilingualism from a challenge into a strategic advantage.

5. Recommended Pedagogical Strategies

The findings of this study suggest three interconnected strategies for improving Arabic pedagogy:

1. **Digital Integration** – maximizing the use of interactive, multimedia-based platforms to make learning more engaging.
2. **Motivational Support** – building a culture of appreciation and encouragement rather than punishment.
3. **Collaborative Models** – involving schools, families, and the wider community in the learning process.

Practical examples include project-based learning where students create Arabic video blogs, peer teaching sessions where stronger learners support weaker peers, and flipped classrooms where students explore materials at home before engaging in active discussions at school. These strategies emphasize the importance of active participation, collaboration, and creativity in learning Arabic.

6. Multilingualism as an Asset, Not a Barrier

While multilingualism complicates the mastery of Fuṣḥā, it also provides significant advantages. SIJ students develop cognitive flexibility through frequent code-switching, which strengthens executive brain functions. Cross-linguistic transfer also benefits learning, as Indonesian and Arabic share many borrowed terms, especially in religion and culture. Furthermore, the ability to operate in three languages—Indonesian, Arabic, and English—positions SIJ students as potential global citizens. Rather than perceiving multilingualism as a challenge to overcome, pedagogy should recognize and optimize it as a valuable cognitive and cultural asset.

7. Synthesis and Implications

The analysis highlights three key challenges:

- The functional gap between Fuṣḥā and ‘Āmiyah caused by diglossia.
- Limited student motivation due to conventional, grammar-focused teaching.
- A family and community environment that reinforces ‘Āmiyah but not Fuṣḥā.

At the same time, three opportunities emerge:

- The transformative role of digital technologies in language education.
- The integration of motivational frameworks and teacher innovation.
- The cognitive advantages of multilingualism as a foundation for learning.

The interplay between these challenges and opportunities underscores the need for adaptive pedagogy. Teachers must address barriers while leveraging the unique linguistic realities of their students.

Conclusion

This study examined the challenges and opportunities of learning Arabic Fuṣḥā at the Indonesian School of Jeddah (SIJ) within a multilingual context. The findings from questionnaires and interviews revealed that while students are highly exposed to Arabic, they predominantly use Indonesian and Arabic ‘Āmiyah in daily communication, resulting in limited mastery of Fuṣḥā. Listening and vocabulary emerged as the most challenging skills, reflecting the broader difficulties multilingual diaspora learners face. Motivation was found to be a decisive factor, shaped not only by internal attitudes but also by teachers, peers, and family support. In addition, the integration of digital media and technology in the Society 4.0 era provides a vital opportunity to enhance comprehension and engagement. The study highlights the importance of adaptive pedagogy that

combines digital tools, motivational support, and family involvement. Unlike prior studies focusing on monolingual or bilingual learners, this research contributes novelty by addressing the pedagogical needs of multilingual diaspora students. Ultimately, optimizing multilingual learners' potential requires recognizing their unique linguistic realities and leveraging them as assets in the development of effective Arabic pedagogy models.

This study confirms that Arabic Fuṣḥā learning at SIJ cannot be separated from the complexity of its multilingual environment. Although students live in an Arabic-speaking country, their daily use of Indonesian and 'Āmīyah has limited their exposure to formal Arabic. Their main difficulties lie in receptive skills such as listening and vocabulary, and these are compounded by low motivation and the perception of Fuṣḥā as overly difficult. Without effective interventions, these challenges may prevent students from fully developing proficiency in the language.

On the other hand, multilingualism also offers distinct strengths, including enhanced cognitive flexibility and the ability to transfer knowledge across languages. By combining motivational support, family involvement, and technological innovation, educators can turn this complexity into an advantage. Digital platforms in particular can provide interactive, personalized, and engaging experiences that transform students' relationship with Fuṣḥā.

Ultimately, this research suggests that an effective model for Arabic pedagogy in diaspora contexts must rest on three pillars: **adaptation, motivation, and technology**. Such a model ensures that students are not disadvantaged by their multilingual background but are instead empowered to use it as a bridge toward greater linguistic competence. By adopting this adaptive approach, SIJ can prepare its learners not only to master Fuṣḥā but also to thrive as multilingual global citizens in the Industry 4.0 and Society 5.0 era.

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