

Bridging Gaps in Online Arabic Language Instruction: Addressing Key Challenges in Higher Education Institutions

Jamil, N. J.

Centre for Fundamental and Continuing Education, Universiti Malaysia Terengganu,
21300 Kuala Nerus, Terengganu, Malaysia
Tel: +6019-7497905 E-mail: jannahjamil@umt.edu.my

Rashid, R. A.

Centre for Fundamental and Continuing Education, Universiti Malaysia Terengganu,
21300 Kuala Nerus, Terengganu, Malaysia
Tel: +6017-9073564 E-mail: roswati@umt.edu.my

Sahib, F. H. (Corresponding Author)

Centre for Fundamental and Continuing Education, Universiti Malaysia Terengganu,
21300 Kuala Nerus, Terengganu, Malaysia
Tel: +6011-13124482 E-mail: farah_hussan@umt.edu.my

Ahmad, M.

Centre for Fundamental and Continuing Education, Universiti Malaysia Terengganu,
21300 Kuala Nerus, Terengganu, Malaysia
Tel: +6011-2100 9396 E-mail: mazlina.ahmad@umt.edu.my

Abd. Kadir, K.

Centre of Fundamental and Continuing Education, Universiti Malaysia Terengganu,
21300 Kuala Nerus, Terengganu, Malaysia
Tel: +6014-216 2750 E-mail: kasyfullah.kadir@umt.edu.my

Ibrahim, S. H.

Centre of Fundamental and Continuing Education, Universiti Malaysia Terengganu,
21300 Kuala Nerus, Terengganu, Malaysia
Tel: +6012-954 4489 E-mail: suria.hani@umt.edu.my

Yusof, C. M. Y.

Centre of Fundamental and Continuing Education, Universiti Malaysia Terengganu,
21300 Kuala Nerus, Terengganu, Malaysia
Tel: +6013-433 2886 E-mail: cmzaid@umt.edu.my

Mamat, R.

Faculty of Modern Languages and Communication, Universiti Putra Malaysia, 43400,
Serdang, Selangor Darul Ehsan, Malaysia
Tel: +6019-351 7525 E-mail: linamm@upm.edu.my

Pae, R.

Faculty of Education, Language and Communication, Universiti Malaysia Sarawak,
Jalan Datuk Mohammad Musa, 94300, Kota Samarahan, Sarawak, Malaysia
Tel: +6019-821 9720 E-mail: prokiah@unimas.my

Cho, M. S.

Cyber Hankuk University of Foreign Studies of Foreign Studies Rm#711
107 Imun-ro, Dongdaemun-gu, Seoul, 02450 Republic of Korea
Tel: +82221738712 E-mail: minsung625@cufs.ac.kr

Abstract

The rapid shift to online education, accelerated by the global pandemic, has highlighted significant challenges in Arabic language instruction, particularly in Malaysia's public higher education sector. This study investigates the key challenges, strategies, and skills required for effective online foreign language instruction in higher education institutions in Malaysia. Four main themes emerged through interviews with five Arabic language instructors: online teaching and learning facilities, delivery platforms, student attitudes and behaviours, and learning outcomes. Significant challenges include unreliable internet connectivity, student disengagement, and difficulty assessing language proficiency. Instructors have responded by adopting strategies such as recorded lectures, interactive activities, and tailored instruction, aligning with modern pedagogical practices. The findings underscore the need for comprehensive online Arabic language education skills, including pedagogical, managerial, and content-specific skills. This complexity is further highlighted by the practical implications of the study, which include a focus on student-centred approaches, technological investment, and continuous professional development. While the study's reliance on self-reported data limits generalizability, it offers valuable insights into addressing the complex challenges of online Arabic language instruction as a foreign language. Future research should explore the effectiveness of specific interventions and the contextual factors influencing online Arabic language education.

Keywords: Online learning; Online Arabic language instruction; Language teaching challenges; Foreign language instructions; Higher education

Introduction

The global educational landscape, including Malaysia, has experienced a profound transformation towards online learning, a shift primarily catalysed by the COVID-19 pandemic (Hodges et al., 2020; Kamaludin & Sundarasan, 2023). Initially implemented as a temporary solution to curb the virus's spread, online learning has become a permanent fixture in educational practices, significantly influencing how institutions deliver instruction, even as the pandemic recedes. This paradigm shift to online education represents not merely a response to a crisis but a broader evolution in educational delivery that leverages technological advancements to extend learning beyond the traditional classroom.

As a concept, online learning encompasses a range of educational modalities facilitated by electronic platforms and technologies, each tailored to meet diverse learning needs (Albrahim, 2020). Albrahim (2020) proposes a framework comprising six categories of online teaching skills: pedagogical, content, design, technological, management and institutional, and social and communication skills, as displayed in Table 1. It signifies a departure from conventional brick-and-mortar classrooms, enabling learners to access educational content beyond the constraints of physical spaces (Ananga & Biney, 2021). This education modality leverages various technological resources and tools, providing a multimedia-rich environment that includes textual information, visual graphics, written language, animated features, video footage, and auditory components (Saifudin & Hamzah, 2021).

Table 1: Online Teaching Skills Framework
(Albrahim, 2020)

Skills	Description
Pedagogical Skills	Understanding learning theories, employing effective instructional strategies, and facilitating student engagement and participation.
Content Skills	Developing comprehensive course syllabi, aligning educational goals with student characteristics, and integrating diverse academic resources.
Design Skills	Organising and presenting learning materials, collaborating with production teams, and selecting appropriate tools and techniques for effective instruction.
Technological Skills	Technological resources and their instructional applications.
Management and Institutional Skills	Navigate institutional policies, quality procedures, legal considerations, and ethical guidelines to ensure effective course management.
Social and Communication Skills	Fosters learner engagement and interaction, necessitating proficient use of diverse communication tools and strategies to facilitate active learning.

The rapid transition to online learning during the pandemic has unveiled a variety of challenges for stakeholders within the education sector. Students were suddenly thrust into unfamiliar online learning environments, often lacking the necessary preparation or prior experience (Kamaludin & Sundarasan, 2023; Yusuf, 2020). At the same time, educators faced the daunting task of swiftly adapting their instructional methods to suit online modalities, frequently with minimal preparation time (Hofer et al., 2021; MacIntyre et al., 2020). This scenario underscores the distinction between emergency remote teaching,

induced by the pandemic, and well-planned online instruction, highlighting the necessity for robust support systems and adequate training in online pedagogical techniques (Hodges et al., 2020; Schleicher, 2020).

The challenges associated with this transition are multifaceted, encompassing technological, pedagogical, and social dimensions. Technological challenges include unstable internet connectivity, particularly in regions with limited infrastructure, and disparities in access to electronic devices, which create barriers for students from marginalised backgrounds (Kamaludin & Sundarasan, 2023; Mohamad, 2021). Pedagogically, educators struggle to adapt traditional teaching methodologies to online environments, resulting in ineffective instructional practices and diminished learning outcomes (Pikhart & Al-Obaydi, 2023). Moreover, the lack of face-to-face interaction in online learning environments contributes to isolation and disconnection among educators and learners, impacting social dynamics and interpersonal relationships (Ferri et al., 2020).

While numerous studies have explored online learning during the pandemic across various disciplines and institutions (Ananga & Biney, 2021; Elzainy et al., 2020; Hung & Bao, 2023; Mahalingam & Jamaludin, 2021; Mushtaha et al., 2022; Ragsdale et al., 2020; Pae, 2020 & 2022; Rashid, 2022; Takker et al., 2021; Yilmaz et al., 2021; Zhang et al., 2020), there remains a significant gap in research specifically focused on the challenges and strategies in teaching Arabic as a second or foreign language, particularly from the perspectives of instructors (Pikhart & Al-Obaydi, 2023). Teaching Arabic online presents unique challenges intensified by the complexities of Arabic pronunciation (Majdan & Shahidi, 2024), script and

syntax (Gomaa, 2024). The language's diglossic nature, which refers to the significant differences between Modern Standard Arabic and various spoken dialects, poses an additional layer of difficulty in learning (Moghazy, 2020) and online instruction (Albirini, 2015). Moreover, the cultural and emotional components of Arabic language learning necessitate approaches that address learners' self-confidence, emotional engagement, and proficiency development, primarily when mediated by technology (Rakhlin et al., 2024; Riwanda et al., 2024). MacIntyre et al. (2020) also claimed that teaching a foreign language online presents unique challenges due to its emotional and intercultural dimensions, necessitating nuanced approaches to address learners' self-doubts, emotional anxieties, and varying proficiency levels. Therefore, in the case of teaching the Arabic language, adapting online pedagogical methods to accommodate the linguistic and cultural nuances of Arabic requires instructors to be innovative in their strategies, leveraging interactive and multimedia resources (Riwanda et al., 2024) to bridge the gap between formal instruction and conversational practice. In light of these complexities, this study investigates the challenges encountered, strategies employed, and teaching skills required to effectively navigate online foreign language instruction.

Methodology

This study employed a qualitative approach, gathering data through semi-structured interviews. The institutions in this study offer Arabic language as an elective or compulsory elective option for foreign language subjects, depending on the students' academic programs. The Arabic language course is structured into three levels, each with a cumulative credit hour of three. The course learning outcomes

focus on sentence construction, essay writing, and basic communication skills, which are assessed through tests, quizzes, assignments, and presentations.

The study's participants comprised five language instructors teaching Arabic. All participants were actively delivering Arabic language education online following the onset of the COVID-19 pandemic. Before data collection, informed consent was obtained from the interviewees, ensuring they understood that their participation was voluntary and that the data collected would be used solely for academic purposes. Any clarifications or additional information were gathered through WhatsApp, phone calls, or face-to-face interactions.

Data analysis was conducted using ATLAS.ti version 9, with the analysis process guided by Albrahim's Online Teaching in Higher Education Skill Framework (2020) to identify the competencies required for effective online teaching. Data verification involved encoding, thematic analysis, and peer review to ensure the validity and reliability of the findings.

Results and Discussion

Online Teaching Challenges

The study identifies several significant challenges for non-native speakers in online Arabic language learning, particularly in Arabic language instruction. These challenges can be grouped into four primary themes: online teaching and learning facilities, delivery platforms, student attitudes and behaviours, and course learning outcomes (Figure 1). Understanding these challenges is crucial for developing effective strategies to improve online teaching experiences and enhance student learning outcomes.

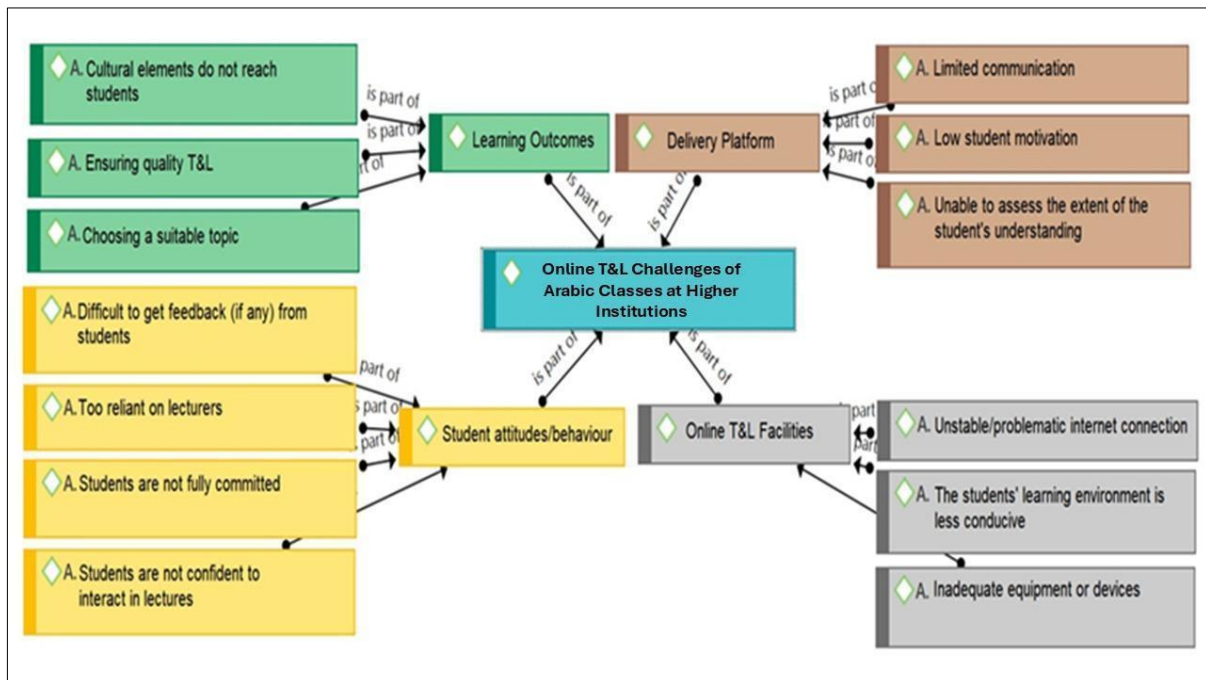


Figure 1: Challenges in online Arabic language instruction

Online Teaching and Learning Facilities

A primary challenge in implementing online education is the availability and adequacy of infrastructure, especially regarding internet accessibility. In many regions, unreliable internet coverage severely limits students' ability to participate effectively in online lectures, access course materials, and complete assessments. This issue is highlighted in the following interview excerpt:

Interview Excerpt: "Lack of student response and focus. Slow broadband, no free network that can support a large number of students (100+) for 1-2 hours of lectures and activities. Students find it difficult to interact, internet problems, limited activities." (Respondents)

This connectivity issue not only disrupts the continuity of learning but also exacerbates existing inequalities, particularly among students from marginalised backgrounds who may lack access to necessary resources. Financial constraints further

compound these challenges, as some students cannot afford the required internet connectivity or electronic devices for online learning. Despite efforts by educational authorities like the Ministry of Education Malaysia (MOE) to enhance internet infrastructure, connectivity problems continue to affect attendance and engagement in online courses (Lambrechts & Sinha, 2019; Thannimalai & Baloh, 2021).

Delivery Platforms

Adopting online teaching platforms introduces numerous challenges for educators, including limitations in communication with students and difficulties in assessing comprehension and engagement. The transition to virtual classrooms constrains traditional avenues for interpersonal interaction, limiting opportunities for meaningful engagement and collaboration. This limitation negatively impacts student motivation and participation and creates challenges in fostering a conducive learning environment

for language acquisition and proficiency development. Additionally, the absence of visual cues and immediate feedback in face-to-face interactions complicates assessing students' understanding and progress. This challenge is reflected in the following interview excerpt:

Interview Excerpt: "Students are unable to understand and master the topic. Time fully is wasted on network switching, and students' learning sessions are disrupted." (Respondents)

Hence, instructors must navigate these complexities while adjusting instructional strategies to optimise learning outcomes in an online setting. The lack of physical presence and non-verbal communication cues further complicates the selection of appropriate topics and effective lecture delivery, highlighting the need for innovative pedagogical approaches and technological solutions to address these multifaceted challenges.

Student Attitudes and Behaviours

A significant challenge to effective online teaching is the attitudes and behaviours of students, which often manifest as disengagement and over-reliance on instructors or translation applications. The virtual nature of online education introduces distractions, technical issues, and competing priorities, leading to decreased student attentiveness and participation (Guillén et al., 2020; Prasetya & Raharjo, 2023). This lack of active engagement compromises learning outcomes and hampers instructors' ability to assess understanding and correct misconceptions. Additionally, the reliance on instructors or Arabic translation tools reflects broader issues in self-directed learning and language acquisition, with varying student autonomy and initiative levels. This dependency on external aids,

coupled with a lack of intrinsic motivation, hinders students' progress and undermines the effectiveness of online language instruction.

Learning Outcomes

Achieving learning outcomes in online Arabic language instruction poses a significant challenge, particularly in developing communication proficiency and integrating cultural elements. The complexities of language acquisition, exacerbated by the absence of face-to-face interaction, create substantial barriers to students' mastery of language skills and cultural understanding. Communication, a cornerstone of language proficiency, becomes increasingly challenging to develop and assess in virtual environments, where non-verbal cues and contextual nuances are lacking. This deficiency impairs students' ability to express themselves effectively and limits their understanding and interpretation of linguistic and cultural subtleties. Furthermore, incorporating artistic elements into language instruction without physical presence or experiential learning opportunities presents distinct challenges. The interdependence of language and culture necessitates innovative pedagogical approaches and technological solutions to bridge the gap between theoretical knowledge and practical application, thereby enhancing students' language proficiency and cultural competence in online learning environments. To tackle these complexities, integrating authentic assessment methods and cultural immersion strategies, as suggested by previous studies (O'Dowd, 2021; Vahed & Rodriguez, 2021), can improve students' language proficiency and intercultural competence (*Figure 2*).

Pedagogical Adaptations in Response to Challenges

Various pedagogical adaptations have been employed to tackle the challenges identified. Figure 2 provides a comprehensive overview of 16 sub-themes derived from interviews, offering potential solutions to challenges encountered in

online Arabic language instruction. These adaptations encompass strategies for improving online teaching facilities, optimising delivery platforms, enhancing student engagement, and achieving learning outcomes, as depicted in Figure 2.

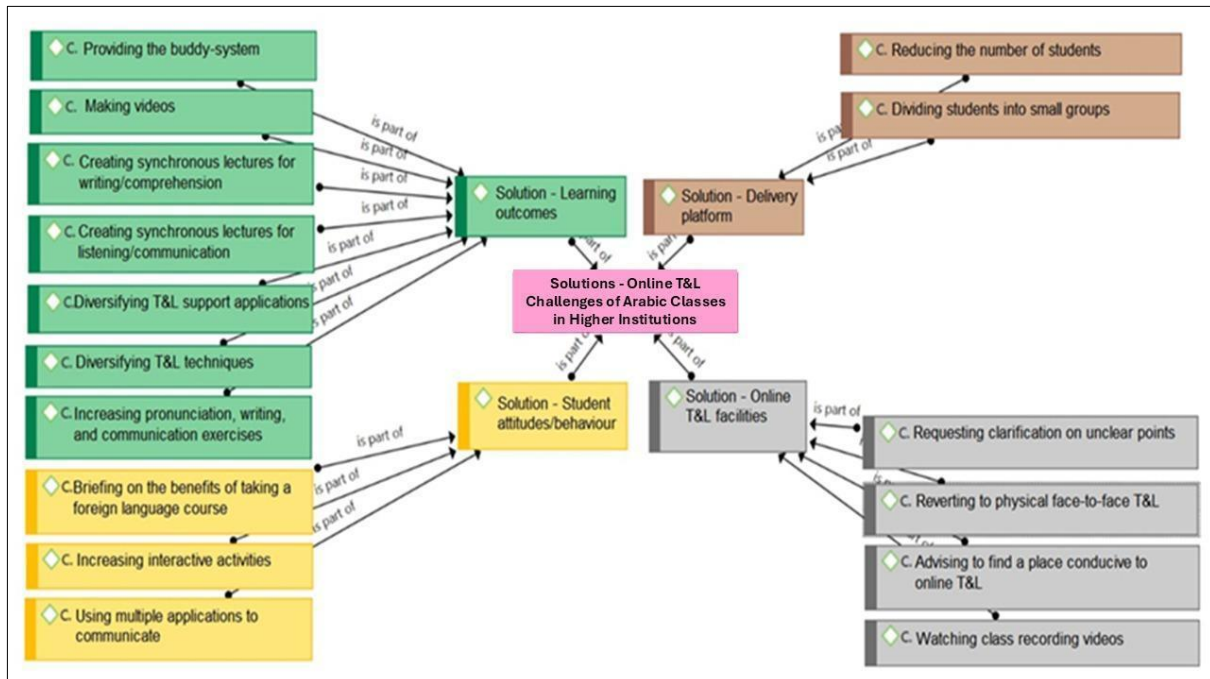


Figure 2: Comprehensive overview of solutions to challenges in online Arabic language instruction

Enhancing Online Teaching and Learning Facilities

To address the challenge of unreliable internet connectivity, Arabic language instructors have adopted several strategies to ensure continuous learning experiences for students. One fundamental approach is providing lecture recordings, which allow students to revisit missed content and engage in discussions with peers or instructors asynchronously. This suggestion is outlined in the following interview excerpt:

Interview Excerpt: "Remote learning can be implemented by providing assignments and recorded videos as well as requiring students to submit video-recorded activity reports." (Respondent)

This strategy mitigates the impact of internet disruptions and fosters active learning and student engagement beyond live sessions (Hodges et al., 2020). Additionally, some instructors have transitioned critical lectures from remote to in-person online instruction, particularly for topics or activities requiring stable internet connectivity. This flexible delivery approach accommodates diverse learning needs and preferences, aligning with research advocating for pedagogical practices that incorporate knowledge of learning styles and student-centred approaches.

This institution has implemented a phased campus reopening in response to less conducive and inadequately equipped learning environments. While on-campus activities have resumed, lectures remain

online, with access limited to dormitories or student housing students. Only those requiring laboratory activities are permitted on campus, reducing physical movement and minimising potential disruptions caused by internet connectivity issues. This situation emphasises the need for more substantial internet coverage and diversified teaching techniques, as highlighted in the following excerpt:

Interview Excerpt: "Internet coverage needs to be strengthened, diversify teaching techniques through the utilization of technology, and increase activities such as video creation, quizzes, and interactive notes." (Respondent)

Although these infrastructure challenges are beyond instructors' direct control, effective communication with university administration and government agencies remains essential for advocating improvements in internet coverage and addressing infrastructure limitations (Bao, 2020).

Optimizing Delivery Platform

The instructors have embraced a multifaceted approach to enhance the effectiveness of online teaching platforms. Recognizing the limitations in communication between instructors and students, they have implemented strategies such as reducing class sizes or dividing students into smaller groups during lectures. This approach allows teachers to focus on each student, resulting in a 20-30% improvement in mastery and making learning more interactive, as noted in the following excerpt:

Interview Excerpt: "Teachers can focus on each student. There is a 20-30% improvement in mastery. Learning becomes more interactive compared to teacher-only lectures." (Respondent)

This approach facilitates more personalized interaction and allows instructors to monitor student comprehension levels more effectively. Furthermore, instructors can efficiently allocate resources and support effective learning outcomes by leveraging their pedagogical, managerial, and institutional competencies, catering to students' diverse needs and contextual factors. These strategies align with best practices in online education, emphasizing the importance of adapting instructional approaches to suit the virtual learning context (Albrahim, 2020).

Fostering Positive Student Attitudes and Behaviours

Proactive measures have been introduced to foster positive student attitudes and behaviours towards online learning. Instructors conduct introductory sessions at the start of each academic term, emphasising Arabic language proficiency's intrinsic and extrinsic benefits. By highlighting the practical applications and career opportunities associated with language skills, instructors aim to instil a sense of value and motivation among students. Additionally, increasing the frequency of interactive activities during lectures promotes enjoyment and engagement, encouraging active participation and ongoing language development (Guillén et al., 2020; Prasetya & Raharjo, 2023). This is further supported by the use of various online tools for language learning, as highlighted in the following excerpt:

Interview Excerpt: "Utilize online activities such as Wordwall, Kahoot, and others. Interactive infographic notes, videos, and other formats are used." (Respondent)

Hinnawi et al. (2023) also claimed that using technology to create interactive educational materials caters to the

preferences of digital-native students, enhancing their overall learning experience and sustaining their interest in Arabic language learning.

Achieving Learning Outcomes

The instructors have implemented various strategies to achieve course learning objectives. Specialised classes focusing on writing, comprehension, listening, and communication skills provide targeted assistance to students struggling with language mastery. These classes are often conducted in smaller groups or through personalised feedback sessions, allowing instructors to address individual learning needs effectively. Additionally, assigning video tasks enables instructors to evaluate students' proficiency in pronunciation, sentence structure, vocabulary, and comprehension interactively and engagingly. Utilising native speakers as cultural ambassadors further enriches exploring cultural elements, overcoming the limitations of online interaction. Moreover, utilizing multimedia tools further supports overcoming the limitations of online interaction, as highlighted in the following excerpt:

Interview Excerpt: "Development of a teaching module using Google Classroom.

An interactive self-learning website, infographic modules in e-book format, videos, and a Telegram bot." (Respondent)

These strategies align with best practices in language education, emphasising authentic assessment and cultural immersion (O'Dowd, 2021; Vahed & Rodriguez, 2021). Through diverse online teaching applications and techniques, instructors deliver high-quality instruction, optimising student learning outcomes. These strategies align with contemporary pedagogical practices and promote comprehensive language acquisition. Moreover, initiatives such as implementing a buddy system, organising synchronous lectures for listening and comprehension, and intensifying focus on pronunciation, writing, and communication skills further enhance the effectiveness of the instructional process.

Online Teaching Skills Employed in Addressing Challenges in Arabic Language Instruction

Table 2 illustrates how the various challenges in online language education at this institution are addressed through specific solutions. Each requires applying different skills as outlined in Albrahim's (2020) framework.

Table 2: Challenges, solutions and skill applied

Challenges	Solutions	Skill
Online Teaching and Learning Facilities	Provision of lecture recordings	Technological skills
	Reverting to physical face-to-face teaching and learning	Management and institutional skills
	Advising to find a place conducive to online teaching and learning	Management and institutional skills
	Requesting clarification on	Social and communication skills

Delivery Platform	unclear points	
	Reducing the number of students	Pedagogical skills
Student Attitudes and Behavior	Dividing students into a small group	Pedagogical skills
	Briefing on the benefit of taking a foreign language course	Pedagogical skills
Learning Outcomes	Increased interactive activities	Content/Design skills
	Using multiple applications to communicate	Pedagogical skills
	Providing the buddy system	Social and communication skills
	Making video	Technological skills
	Creating synchronous lectures for listening and comprehension	Pedagogical skills
	Diversifying teaching and learning support applications	Design skills
	Diversifying teaching and learning techniques	Pedagogical skills
Increasing writing, pronunciation, and communication exercises	Content/Design skills Pedagogical skills	

The study's findings reflect Albrahim's (2020) framework for online teaching skills, which includes pedagogical, technological, management, institutional, design, and content skills. Instructors employ pedagogical skills when designing and delivering lectures, using diverse teaching methods to meet the varied needs of students. Meanwhile, technological skills are crucial for navigating online platforms, providing lecture recordings, and utilising digital tools to create interactive learning experiences. On the other hand, management and institutional

skills are employed to coordinate resources, adapt hybrid teaching models, manage class sizes, and advocate for improvements in internet infrastructure.

Besides that, design and content skills are also crucial for developing engaging course materials and assessing learning outcomes. Instructors use these skills to diversify teaching techniques, conduct synchronous lectures, and integrate multimedia resources that enhance students' language proficiency and cultural competence. Additionally, while social and

communication skills may be less emphasised, their role in fostering interaction and building a sense of community in the virtual classroom is vital (Guillén et al., 2020; Iberahim & Sulaiman, 2023; Navaz, 2021; Jamil & Tasir, 2022). Research shows that frequent online interactions, such as commenting, sharing, and messaging, can significantly increase students' perception of social presence, boosting their participation and engagement in learning (Jamil & Tasir, 2022). Moreover, a study by Amran and Majid (2024) also demonstrated that, nowadays, assistive technologies provide students who are both gifted and have disabilities with improved access to information technology, enhanced learning opportunities, and support for daily

activities. Therefore, instructors must have a comprehensive skill set to address the unique challenges of teaching Arabic as a foreign language online, creating an interactive and engaging learning environment that bridges the gap between formal instruction and real-life conversational practice (Table 2).

Figure 3 illustrates the proportion of skills employed in addressing these challenges, highlighting the predominance of pedagogical, management, institutional, and content skills. The study indicates a need for further research into strategies that enhance social and communication skills, essential components of language learning and online student engagement.

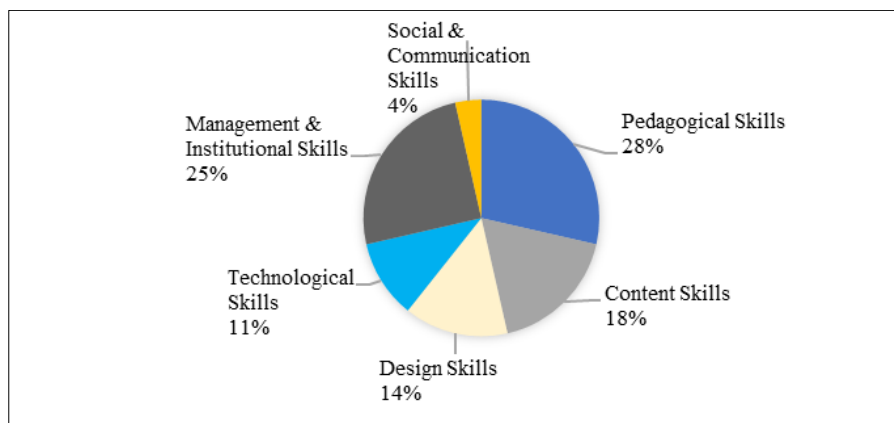


Figure 3: Online teaching skills in higher education institutions

Conclusion

In conclusion, this study investigated the challenges encountered, strategies employed, and the teaching skills required to effectively navigate the complexities of online Arabic language instruction. It identified key challenges, including inadequate online teaching facilities, limited communication in virtual classrooms, student attitudes, and difficulties in achieving learning outcomes, underscoring the need for comprehensive initiatives such as technological infrastructure

improvements, innovative instructional methods, and ongoing professional development for educators. The study's findings have significant implications for practitioners, policymakers, and researchers. Practitioners can adopt the identified strategies, such as lecture recordings and diversified teaching techniques, to enhance student mastery and engagement. At the same time, policymakers are encouraged to formulate supportive policies that promote equitable access to online learning resources. Researchers can build on this work to explore the dynamics of online language

instruction further. Future research should focus on evaluating the effectiveness of these interventions through longitudinal studies, comparative analyses across institutions, and exploration of how to strengthen social presence and community in virtual classrooms. Overall, this study emphasises that addressing the challenges in online language instruction requires a comprehensive, multi-faceted approach involving technological improvements, diversified teaching methods, and continuous professional development.

Acknowledgements

The authors gratefully acknowledge the Talent and Publications Enhancement Research Grant (TAPE-RG) through project number TAPERG/2023/UMT/2603, supported by Universiti Malaysia Terengganu. Additionally, they recognise the support provided by the Research Interest Group of Research Interest Group of Language and Communication Skills (LComS) at the Centre for Fundamental and Continuing Education, Universiti Malaysia Terengganu.

References

- Albirini, A. (2015). *Modern Arabic sociolinguistics: Diglossia, variation, codeswitching, attitudes and identity* (First edition). Routledge. <https://doi.org/10.4324/9781315683737>
- Albrahim, F. A. (2020). Online teaching skills and competencies. *Turkish Online Journal of Educational Technology - TOJET*, 19(1): 9-20.
- Amran, H. A. and Majid, R. A. (2024). Learning strategies for twice-exceptional students. *Global Journal Al-Thaqafah*, 9(1): 37-54. <https://doi.org/10.7187/GJATSI052019-4>
- Ananga, P., and Biney, I. K. (2021). Comparing face-to-face and online teaching and learning in higher education. *MIER Journal of Educational Studies Trends & Practices*, 7(2): 165-179. <https://doi.org/10.52634/mier/2017/v7/i2/1415>
- Bao W. (2020). COVID-19 and online teaching in higher education: A case study of Peking University. *Human Behavior and Emerging Technologies*, 2(2): 113-115. <https://doi.org/10.1002/hbe2.191>
- Elzainy, A., El Sadik, A., and Al Abdulmonem, W. (2020). Experience of e-learning and online assessment during the COVID-19 pandemic at the College of Medicine, Qassim University. *Journal of Taibah University Medical Sciences*, 15(6): 456-462. <https://doi.org/10.1016/j.jtumed.2020.09.005>
- Ferri, F., Grifoni, P., and Guzzo, T. (2020). Online learning and emergency remote teaching: Opportunities and challenges in emergency situations. *Societies*, 10(4): 1-18. <https://doi.org/10.3390/soc10040086>.
- Gomaa, Y. A. (2024). Deciphering linguistic and cultural hurdles in English-Arabic media translation: Insights from the BBC online news articles. *Cadernos de Tradução*, 44(1): 1-22. <https://doi.org/10.5007/2175-7968.2024.e94510>
- Guillén, G., Sawin, T., and Avineri, N. (2020). Zooming out of the crisis: Language and human collaboration. *Foreign Language Annals*, 53(2): 320-328. <https://doi.org/10.1111/flan.12459>
- Hinnawi, P. D., Abdel-Rahim, A.P., and Azzam, M.S. (2023). Effectiveness of distance e-learning in teaching and learning

Arabic for non-native speakers: An-Najah's Arabic for non-native speakers institute as a model. *Global Journal Al-Thaqafah*, 13(2): 179-211.
<https://doi.org/10.7187/GJAT122023-11>

Hodges, C., Moore, S., Lockee, B., Trust, T., and Bond, A. (2020). The difference between emergency remote teaching and online learning.
<https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>

Hofer, S. I., Nistor, N., and Scheibenzuber, C. (2021). Online teaching and learning in higher education: Lessons learned in crisis situations. *Computers in Human Behavior*. 121: 1-10.
<https://doi.org/10.1016/j.chb.2021.106789>

Hung, L. N. Q., and Bao, T. L. Q. (2023). Comparing the effectiveness of online and onsite learning in English proficiency classes: Learners' perspectives. *Journal of Education and E-Learning Research*, 10(2): 201-208.
<https://doi.org/10.20448/jeelr.v10i2.4541>

Iberahim, N. A., and Sulaiman, N. A. (2023). An Investigation on students-instructors' interaction in online learning environment: A survey among ESL students. *International Journal of Academic Research in Business and Social Sciences*, 13(5): 1395-1403.
<https://doi.org/10.6007/ijarbss/v13-i5/17155>

Jamil, N. J. and Tasir, Z. (2022). Students' perception of social presence in Facebook. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 7(3): 1-13.
<https://doi:10.47405/mjssh.v7i3.1354>

Kamaludin, K., and Sundarasan, S. (2023). COVID-19 and online distance learning in

Malaysia: A blessing or a curse? *Frontiers in Education*, 8: 1-12.

<https://doi.org/10.3389/feduc.2023.1062219>

Lambrechts, W., and Sinha, S. (2019). Limitations of last mile internet access in developing countries. In: *Last mile internet access for emerging economies. Lecture notes in networks and systems*, (77): 41-69. Springer, Cham.
https://doi.org/10.1007/978-3-030-20957-5_2

Mahalingam, N. A. P., and Jamaludin, K. A. (2021). Impak dan cabaran pelaksanaan pengajaran dan pembelajaran atas talian semasa Perintah Kawalan Pergerakan. *Jurnal Dunia Pendidikan*, 3(4): 104-115.

MacIntyre, P. D., Gregersen, T., and Mercer, S. (2020). Language teachers' coping strategies during the Covid-19 conversion to online teaching: Correlations with stress, wellbeing and negative emotions. *System* 94(102352): 1-13.
<https://doi.org/10.1016/j.system.2020.102352>

Majdan, P. R. and Shahidi A. H. (2024). Model pemerian ciri-ciri akustik bunyi plosif dan frikatif arab yang diujarkan oleh penutur natif Melayu. *Global Journal Al-Thaqafah*, 12(2): 104-117.
<https://doi.org/10.7187/GJAT122022-7>

Moghazy, M. A. (2020). Teaching and learning Arabic as a second language online: A case study of Dubai during COVID-19 pandemic. Doctoral dissertation. University of Illinois at Urbana-Champaign.

Mohamad, N. M. (2021). Cabaran pedagogi norma baharu di Kolej Universiti Islam Perlis (KUIPS) ketika pandemik wabak Koronavirus Covid-19. *Jurnal Pengajian Islam*, 14: 243-254.

Mushtaha, E., Abu Dabous, S., Alsayouf, I., Ahmed, A., and Raafat Abdraboh, N. (2022). The challenges and opportunities of online learning and teaching at engineering and theoretical colleges during the pandemic. *Ain Shams Engineering Journal*, 13(6): 1-12.

<https://doi.org/10.1016/j.asej.2022.101770>

Navaz., A. M. M. (2021). Online language learning and teacher-student interaction: experience of students and instructors. *International Journal of Social Science and Human Research*, 4(6): 1234-1245. <https://doi.org/10.47191/ijsshr/v4-i6-02>

O'Dowd, R. (2021). What do students learn in virtual exchange? A qualitative content analysis of learning outcomes across multiple exchanges. *International Journal of Educational Research*, (109) 101804: 1-13.

<https://doi.org/10.1016/j.ijer.2021.101804>

Pae, R. (2020). Online Japanese language learning: UNIMAS experience. *Proceeding of International Seminar Enrichment of Career by Knowledge of Language and Literature*. 8(1): 5-10.

Pae, R. (2022). Penguatan kemahiran mendengar bahasa Jepun dalam pembelajaran maya. Dalam: Roswati Abdul Rashid, Normalis Amzah and Zoraida Mustafa (Eds.), *Perkembangan Bahasa Jepun di Malaysia*. Kuala Terengganu: Penerbit UMT: 265-278.

Pikhart, M., and Al-Obaydi, L. H. (2023). Potential pitfalls of online foreign language teaching from the perspective of the university teachers. *Heliyon*, 9(2):1-11. <https://doi.org/10.1016/j.heliyon.2023.e13732>

Prasetya, R. E., and Raharjo, D. H. (2023). Exploration of demotivating factors in English language learning Moodle-based:

Comparison online and hybrid learning. *English Education: Jurnal Tadris Bahasa Inggris*. 16(1): 175-196.

Ragsdale, J. W., Berry, A., Gibson, J. W., Herber-Valdez, C. R., Germain, L. J., and Engle, D. L. (2020). Evaluating the effectiveness of undergraduate clinical education programs. *Medical Education Online*, 25(1): 1-7. <https://doi.org/10.1080/10872981.2020.1757883>

Rakhlin, N. V., Li, N., Aljughaiman, A., and Grigorenko, E. L. (2024). "Speech is golden": The importance of colloquial Arabic for reading standard Arabic for beginning readers. *Journal of Speech, Language, and Hearing Research*, 1-27. https://doi.org/10.1044/2024_JSLHR-23-0052

Rashid, R.A. (2022). Penularan wabak Covid-19: Satu tinjauan awal terhadap aktiviti PdP sistem penulisan bahasa Jepun dalam talian. Dalam: Roswati Abdul Rashid, Normalis Amzah and Zoraida Mustafa (Eds.), *Perkembangan Bahasa Jepun di Malaysia*. Kuala Terengganu: Penerbit UMT: 247-264.

Riwanda, A., Ridha, M., and Islamy, M. I. (2024). Empowering asynchronous Arabic language learning through pdf hyperlink media. *International Review of Research in Open and Distributed Learning*, 25(1): 66-88.

Saifudin, N. H. A. and Hamzah, M. I. (2021). Cabaran pengajaran dan pembelajaran di rumah (PdPR) dalam talian dengan murid sekolah rendah (Challenges in implementing home teaching and learning (PdPR) among primary school students). *Jurnal Dunia Pendidikan*, 3(3): 250-264. <http://myjms.mohe.gov.my/index.php/jdpd>

Schleicher, A. (2020, April). Education disrupted - education rebuilt. Spotlight: Quality education for all during Covid-19 crisis.

<https://hundred.org/en/collections/quality-education-for-all-during-covid-19>

Thakker, S. V., Parab, J., and Kaisare, S. (2021). Systematic research of e-learning platforms for solving challenges faced by Indian engineering students. *Asian Association of Open Universities Journal* 16(1): 1-19.

<https://www.emerald.com/insight/2414-6994.htm>

Thannimalai, T., and Baloh, S. (2021). Challenges of Tamil language T&L in rural schools. *Muallim Journal of Social Science and Humanities*, 5(2): 183-190.

<https://doi.org/10.33306/mjssh/>

Vahed, A., and Rodriguez, K. (2021). Enriching students' engaged learning experiences through the collaborative online international learning project. *Innovations in Education and Teaching International*, 58(5): 596-605.

<https://doi.org/10.1080/14703297.2020.1792331>

Yilmaz, Y., Sarikaya, O., Senol, Y., Baykan, Z., Karaca, O., Demiral Yilmaz, N., Altintas, L., Onan, A., and Sayek, İ. (2021). Re-aiming COVID-19 online learning for medical students: A massive open online course evaluation. *BMC Medical Education*, 21(1): 1-14.

<https://doi.org/10.1186/s12909-021-02751-3>

Yusuf, B. N. (2020). Are we prepared enough? A case study of challenges in online learning in a private higher learning institution during the covid-19 outbreaks. *Advances in Social Sciences Research Journal*, 7(5): 205-212.

<https://doi.org/10.14738/assrj.75.8211>

Zhang, Q., He, Y. J., Zhu, Y. H., Dai, M. C., Pan, M. M., Wu, J. Q., Zhang, X., Gu, Y. E., Wang, F. F., Xu, X. R., and Qu, F. (2020). The evaluation of online course of Traditional Chinese Medicine for MBBS international students during the COVID-19 epidemic period. *Integrative Medicine Research*, 9(3): 1-6.

<https://doi.org/10.1016/j.imr.2020.100449>