The Utilization of Virtual Learning Environment in Malaysian Non-Arabic Speaking Learners' Classroom

Noorafini Kassim[1] https://orcid.org/0000-0002-3873-5446, **Muhammad Sabri Sahrir**[2]
[1]University Malaysia Sabah, Malaysia, [2]International Islamic University Malaysia, Malaysia
*e-mail: [1]*noorafini@eums.edu.my, [2]muhdsabri@iium.edu.my

ABSTRACT
This study aimed to understand the utilization of VLE in Non-Arabic Speaking Learners' classrooms from the perspective of Arabic teachers in higher education institutions. Purposive sampling was utilized to pick the research sample for this study. Then, the sample used for this study consisted of 3 Arabic language teachers. One-to-one in-depth interviews were conducted with the three informants. Semi-structured interviews were used to gather the data to allow the informants to express their experiences in an accessible manner. A case study was used in this study to create a qualitative design. The researcher used a method called thematic analysis (TA) and followed a few steps, including (i) word-by-word transcription, (ii) interview transcription, (iii) coding, and (iv) labeling. The findings illustrated the Arabic teachers' perspectives on using VLE, the approaches when implementing VLE, and how VLE can effectively teach the Arabic language. The responses of the three informants would illustrate the main themes found using the thematic analysis (TA) method. The analysis of this study helps provide such information to universities on the perspectives of Arabic teachers on the use of VLE, their approaches when implementing VLE, and how VLE can be effective in their language teaching in a virtual learning context. This study allows us to understand better how Malaysian Arabic teachers adapt to virtual language learning environments by utilizing VLE at the university level.

INTRODUCTION

In Malaysian universities, Arabic has become one of the most popular emerging foreign languages, either as a course or as a study program among non-Arabic speaking learners, regardless of their religion and cultural background (Shukri et al., 2019). It is offered as either a compulsory subject or an optional subject in most public universities in Malaysia (Aladdin, 2017). As a multi-ethnic and multi-religious country, Arabic is no longer taught only to Malay Muslims; It is also an option for non-Muslim Malaysian students. Because of its familiarity with the Islamic faith and its potential to enhance their sense of righteousness, this language is preferred by many Malay Muslim students to deepen their understanding of Islam (Adnan & Khalid, 2021). Non-Muslim students typically learn Arabic for communication purposes and find it an engaging and fun course with unique pronunciation. As a result, the number of higher institutions across Malaysia offering the Arabic language for specific or general purposes is constantly increasing (Ghani et al., 2019; Mohd et al., 2019).

Unfortunately, within Malaysia's higher education, there are still problems and challenges with teaching and learning Arabic to Arabic speakers. The problem of poor language skills among non-Arabic speaking learners in Malaysia has existed for several years. Numerous studies have shown that students' proficiency and proficiency in the Arabic language still need to be improved (Baharum & Samah, 2015). Researchers have found that students who struggle to learn Arabic need more confidence in using Arabic and more basic vocabulary knowledge and skills (Ghani et al., 2018). Many reasons, such as poor learner understanding, poor perception, and lower motivation, cause the problem of low language proficiency among non-Arabic speaking learners. Learning Arabic among non-Arabic learners is challenging as they have to work hard to acquire the required language skills. Since the Arabic language is not their mother tongue, it requires perseverance and awareness from non-Arabic speaking learners. Factors such as emotions, learning environment, learning strategies, and skills can influence language acquisition. In addition, learners need help with learning and acquiring the Arabic language. Learners perceive Arabic as the most challenging subject when taught as a second or foreign language. Hamidin et al. (2019) state that most non-Arabic-speaking learners have destructive perceptions and attitudes toward the Arabic language. In addition, they reflect that Arabic is a complex language to learn and master, especially in terms of pronunciation, accompanied by grammar, the writing and spelling system, diacritics, memorizing vocabulary, literacy, and ultimately recognition of the alphabet accordingly (Aladdin, 2013). This complexity can be perceived as a demotivating learning element and represents a significant challenge.

Furthermore, the poor proficiency of non-Arabic-speaking learners may be due to the teaching method used by many teachers (Samah et al., 2016; Hamidah et al., 2022). Confident Arabic teachers prefer a teaching approach focusing on the teacher and involving fewer students. Most students sit, listen, and take notes during class, and Arabic language practice and use are restricted to class (Al Muhsin & Mustafa, 2020). This situation has resulted in a lack of interest in Arabic, which most Malay learners consider an undesirable subject (Ghani et al., 2022). However, the pedagogical approach to teaching the Arabic language is a critical issue that remains unresolved. Recent studies have found that many higher education institutions still embody traditional teaching methods. Arabic instruction and acquisition largely depend on the conventional nature of the chalk and language systems, constant vocabulary practice, memorization, and passive and outdated teaching methods. Besides, most Arabic teachers still prefer traditional delivery techniques because they consider them more efficient and timesaving (Adnan et al., 2021)

The conventional teaching method used by most Arabic teachers stems from the difficulties they face in using and adopting technology in the classroom. A previous study by Sahrir et al. (2013) claimed that using computer-based and online-based training or instructional support in Malaysian higher education is rare and at an early stage. In addition, it was found that Arabic teachers prefer to use non-computer teaching materials, mainly because they are unwilling to invest more time and effort into creating them. As a result, Arabic teachers need to be more computer competent, particularly among experienced educators with limited computer literacy, lack adequate computer skills, and use passive teaching (Mohd et al., 2019). Furthermore, Arabic teachers are often perceived as lagging in using ICT applications, need more confidence in creating aspects of multimedia teaching content, and feel more comfortable teaching traditionally (Adnan et al., 2021).

Therefore, teaching and learning Arabic to non-Arabic speaking learners in Malaysia must be improved compared to the emerging current and cutting-edge technologies in 21st-century education (Hashim et al., 2018). Teachers should understand that 21st-century classrooms must provide technology-enhanced teaching materials. Therefore, Arabic teachers need to improve the quality of their teaching with technology-enhanced materials in line with the current challenges of 21st-century education that could help students learn more meaningfully. Books, classrooms, whiteboards, technological equipment, and digital resources can help teachers facilitate learning and improve and use their skills most effectively. Smartphones and computers are everyday technological devices that can enhance knowledge and teaching. Nowadays, most educators and students have smartphones or notebooks, which are becoming increasingly popular for personal or educational reasons, especially in languages. However, it is sad that they do not use them to learn Arabic as a foreign language for academic or special purposes (Sahrir et al., 2017).

Therefore, this study aims to examine using a Virtual Learning Environment (VLE) in non-Arabic speaking learner classrooms from the perspective of Arabic teachers in higher education institutions. The primary research topic for this study is to determine how much Arabic language teachers use virtual learning environments (VLE) in non-Arabic speaking learners' classrooms. The following are the sub-research questions of the study:

1. What are Arabic teachers' perspectives on using VLE in their language teaching?
2. What approaches do Arabic teachers take when implementing VLE?
3. How do Arabic Language Teachers utilize VLE to ensure its effectiveness in language learning?

There are a few ways that this study may be useful. First, the in-depth qualitative study research may portray instructors' points of view by elucidating the underlying feature of their distinctions and perceptions. This research can also support Arabic language teachers in Malaysia, especially those who teach in higher institutions, by providing them with more details about virtual learning environments. Finally, this study also explains how teachers teaching Arabic as a foreign language to primary zero students use the virtual learning environment in terms of their approaches to implementing VLE and how the VLE can be effective in language learning.

VLE and Language Learning

The implementation of Virtual Learning Environment (VLE) in Malaysian higher education institutions creates an excellent opportunity for quality education as they expand the space of the physical learning environment, provide opportunities to expand the imagination of faculty and learners alike, and can transform the current Learning needs of the new generation. However, regarding the acquisition of languages, virtual teaching is only just beginning to gain the same popularity it has recently enjoyed in other disciplines (Zou et al., 2021). The term virtual learning environment can refer to several learning arrangements, e.g., a web-based course, a blended or hybrid course, or an entirely virtual or online course. Nevertheless, virtual learning remains one of the most important tools that has long been at the forefront of revolutionizing educational practices due to its advantage in terms of space, time, and resources (Nwagwu, 2020). Additionally, it enables students to learn autonomously and creates new skills to pave the way for lifelong learning (Dhawan, 2020). As language learners worldwide increasingly embrace the usage of Virtual Learning Environments (VLE) outside the classroom, language teachers are also utilizing these digital technologies. According to the available research, VLEs can boost learner achievement when utilized ethically. Advances in ICT are undoubtedly changing work culture rapidly. Teachers must recognize that 21st-century classrooms have to include technology-enhanced instructional materials and be ready to employ and adapt technology as it improves student learning (Padmavathi, 2016). According to Hamidin (2015), teachers need to initiate a paradigm shift in their teaching, not just rely on chalk and speech. The method is tedious and reduces students' motivation to learn. Teachers need to enhance their standing in teaching and know in line with current education challenges with facilities that could enhance their understanding and help them learn more meaningfully (Hamdan & Mohd Yasin, 2010). In Malaysia, public universities employ e-learning or a VLE as a platform to give their students a wide range of programs. In addition to incorporating virtual learning environments (VLE), numerous public universities have indeed implemented so. Presently, all 18 public institutions in Malaysia provide VLE to improve lectures and classes (Md Ajis et al., 2017). The investigation of students' preparedness for the virtual learning environment served as the foundation for Lee, Hong, and Ling's study of online learning or virtual learning environments in Malaysia, which began in 2002. In general, most studies focused on examining the effects of VLE on students rather than teachers. Few studies involved teachers implementing VLE, but it was more about reading their perception and acceptance of technology.

VLE has greatly benefited language learning and can help learners improve their language skills (Adas & Bakir, 2013; Ghazizadeh & Fatemipour, 2017; Ghani et al., 2016; Jalaluddin, 2016; Mohd, 2019; Hamouda, 2020; Mohammed, 2022). Due to its advantage in terms of distance, time, and resources, VLE remains one of the most powerful tools that have been at the forefront of altering educational methods for a long time (Nwagwu, 2020). VLE, the modern language learning method, can offer new perspectives to students and enable new pedagogies that increase learner-managed learning that could result in genuine advances, not just floundering in the current state. With new pedagogies that support learner-managed learning, VLLE, the modern language learning method, can provide students with fresh

perspectives and help them advance rather than flounder in anticipation of learning. Learning a language online is different from learning a subject online. Unlike other courses, language may be learned virtually and taught that way. Learners are expected to speak, listen, read, and write in the language they are studying. As a result, the effectiveness of the language course depends on how well the online learning environment can give students opportunities to practice the language (Zou et al. 2021).

METHODS

The qualitative research design was chosen to result from the researchers' interest in exploring the perspectives and experiences of Arabic foreign language teachers in using a Virtual Learning Environment (VLE) in their language teaching. The qualitative research approach was established in the social sciences to examine social and cultural occurrences and note the general public's sentiments, ideas, actions, and beliefs. Furthermore, according to Denzin and Lincoln's study in 2005, qualitative research focuses on understanding phenomena or events in terms of the meanings they will discover. Again, it is also highlighted by Merriam and Tisdell (2016) as an awareness of the meaning that people have created. A descriptive case study was therefore employed in this investigation. An exploratory case study looks at any occurrence in the data that piques the researcher's interest. The interview method was used for this study. The interview examines Arabic teachers' perspectives on using Virtual Language Learning (VLE). A major technique frequently employed by qualitative researchers is conducting interviews with chosen participants. Utilizing interview techniques enables the researcher to learn about the subjects' thoughts, feelings, and current concerns. It is highly advised to employ qualitative methodologies because the research concerns human interaction and perspectives. Respondents will give more truthful responses and opinions when speaking with the interviewer face-to-face. Hence the outcome will be more accurate.

Population and Sample

Purposive sampling, which identifies the crucial factors for selecting the research sample, was utilized to pick the research sample for this study, allowing the researchers to choose participants with the strongest comprehension of the problem. According to Patton (2002), purposive sampling is frequently used in qualitative research to find and choose information-rich examples to make the most of little resources. Therefore, the sample used for this study consisted of 3 Arabic language teachers who served at least two years of experience. They were selected to provide enough valuable data. Furthermore, they were chosen from the same institution that offered a foreign language course in Arabic, the Centre for the Promotion of Knowledge and Language Learning (CPKLL), University Malaysia Sabah in the Kota Kinabalu branch (main campus). Therefore, they would be able to provide more detailed and in-depth information related to the research objectives (Creswell, 2014; Patton, 2002). Each informant will be introduced as #I1 (informant 1), #I2 (informant 2), and #I3 (informant 3) to maintain the informant" personal confidentiality.

Instrument

The three informants were subjected to one-on-one, in-depth interviews. Semi-structured interviews with 15 questions were used as the qualitative instruments for this study's qualitative data collection. The researchers were able to conduct an organized interview based on their questions while also inviting extra suggestions from the informants to get information that was not covered by the list of questions for using the semi-structured questions. In addition to capturing data from the interviews, the researcher modified an interview methodology from Creswell (2014).

Pilot Interview

Generally, a pilot study is one of the essential components in data collection, which is a small-scale test of all the processes envisioned to be utilized in the primary survey (Demers et al., 2002). Before the questions are finalized, replacement and rephrasing will be made to address any shortcomings discovered during the pilot testing of the interview questions. Before piloting the interview questions, the researcher asked for question checking done by the two expert professors at Kulliyyah of Education, IIUM. The interview questions were amended according to the comments given by the expert. Then, a

pilot interview was conducted before the actual interviews to improve the quality of the interview questions. Minor changes were made to the wording of the question.

Data Collection Procedure

The primary source of data collection was interviewing three Arabic language teachers. Semi-structured interviews were used to obtain the data so that the informants to express their experiences in an accessible manner. People who are interviewed can express themselves using semi-structured interview formats. By doing so, researchers can hear the informants' opinions regarding their difficulties when implementing a virtual learning environment in their classrooms and the novel results they learned from it (Creswell, 2007). The researcher should keep in mind that the purpose of in-depth interviews is not to obtain responses to queries. Understanding other people's lived experiences and the meaning they assign to them is at the core of in-depth interviewing, and an interest in other people's experiences is at the core of interviewing research. It also helps the interviewers to probe for further information, elaboration, and clarification of responses (Creswell, 2014). Open-ended questions created for semi-structured interviews were a foundation to help the interviewer ask specific questions. Merriam and Tisdell (2016), who contend that offering interview protocols may be more readily native to getting feedback from informants, also back this viewpoint. The identified informants were scheduled for the interviews at a time that worked for them. These interviews were also conducted through the length of each phone call for 58:13 minutes, 15:07 minutes, and 56:32 minutes each. The interviews were conducted in Malay; however, informants needed to be more uninhibited to switching Malay and English languages with less restraint to explain their communicative intention or ideas accurately. Additionally, the depth interviews were taped.

Data Analysis Procedure

The process that follows data collection is data analysis. The four components that should be included in data analysis methodologies are data organization, generation of categories, themes, and patterns, study focus, and evolving hypothesis testing. To analyze the data for this study, the researcher has followed a few steps, including (i) word-by-word transcription of the information gleaned from the interview session, (ii) interview transcription, (iii) coding, and (iv) labeling of the same codes and grouping into relevant groups. Analyses of interview data were guided by the research questions outlined. After reading, classifying, and interpreting data, themes were explored and determined. Finally, the researcher used a method called thematic analysis (TA), which focuses on identifying, assessing, and documenting themes that are common patterns found in several data sets that are crucial for describing a phenomenon and are connected to a particular research subject (Braun & Clarke, 2006).

Credibility and trustworthiness

Several portions of the generated themes were transmitted to two inter-raters to guarantee the validity and reliability of the data. This procedure was necessary to confirm that the researcher carefully considered the themes. As stated by Creswell (2014), the method is used to check the consistent pattern of themes development among several investigators or teams in qualitative research. The average inter-rater" agreement was 93.7%, which indicated that the researcher's interpretation was reasonable and representative. The researcher's interpretation was reasonable and representative, as evidenced by the average inter-rater agreement of 93.7%.

RESULTS AND DISCUSSION

This section reports the utilization of virtual learning environment (VLE) in non-Arabic speaking learners' classrooms from the perspectives of Arabic language teachers at higher educational institutions. From the teachers' interview, using this virtual learning environment (VLE) for Arabic language teaching consisted of different extents and dimensions. The findings illustrated according to the mentioned above research questions. The first segment included the Arabic teachers' perspectives on using VLE. The second section will be about Arabic teachers' approaches when implementing VLE. The last part looked at how VLE can effectively teach the Arabic language. The responses of the three informants would illustrate the main themes found.

RESEARCH QUESTION 1
What are AFL teachers' perspectives on using VLE in their language teaching?

This study ascertained Arabic language teachers' points of view of the virtual learning environment (VLE). Based on data analysis from interviews, three significant themes were found that describe their understanding of the use of VLE. First, teachers view it as their responsibility of the teachers to teach online. The second theme is teachers' view of VLE as an interactive educational online platform. Finally, the third theme for this research question reported VLE as autonomous learning.

Table 1. Perspectives on Using VLE

	Themes
Theme 1	Teachers' Current Responsibility to Teach Online
Theme 2	VLE is an Interactive Educational Online Platform
Theme 3	VLE is an Autonomous Learning

Theme 1: Teachers' current responsibility to teach online

First, teachers nowadays view VLE as a responsibility and commitment to teaching online. Teachers must raise the level of education in accordance well with current challenges of education with facilities that could help students understand and help them towards more meaningful learning. According to informant 2, teaching using VLE is current demand and responsibility that every teacher should do. Informant 2 uttered:

"VLE ni adalah memanfaatkan kecanggihan teknologi yang ada sekarang. Dengan gunakan platform atas talian dan adalah menjadi tanggungjawab guru untuk gunakan VLE pada masa kini".

Translation:
"This VLE is to take advantage of the technological sophistication available now. By using an online platform, and it is the responsibility of teachers to use VLE nowadays".

In addition, Informant 1 said that every teacher needs to know about VLE as it is a responsibility to teach online today. Informant 1 said:

"VLE adalah satu kaedah pengajaran secara alam maya..seakan-akan benda tu berlaku dalam dunia yang sebenar la macam pembelajaran secara bersemuka ..tetapi kita buat secara online..sekarang semua guru wajib tahu tentang VLE..jadi tanggungjawab guru masa kini..Itu yang saya faham la secara umum tentang VLE."

Translation:
"VLE is one teaching method in the virtual world… it happens in the real world, just like face-to-face learning…but we do it online…now all teachers must know about VLE. So, it is the responsibility of today's teachers. That is what I generally understand about VLE."

Informant 3 believed that VLE is a current trend that every teacher should perform. He is also concerned about the need for every teacher to be prepared online, as VLE can enhance students learning.

"VLE sudah menjadi trend kan sekarang ini…dan jadi tanggungjawab guru juga…saya kira semua guru hendaklah bersedia untuk guna teknologi dan mengajar secara maya kerana ia mampu meningkatkan kemampuan pelajar masa kini…mengambil kira kelas pada abad ke-21 ini."

Translation:
"VLE has become a trend right now…and it is teachers' responsibility too…I think all teachers should be prepared to use technology and teach virtually because it can improve the ability of today's students…considering this 21st-century classroom nowadays…"

INTERNATIONAL JOURNAL OF ASIAN EDUCATION, Vol. 4, No. 1, March 2023

Theme 2: VLE is an interactive educational online platform.

The second theme is teachers' view of VLE as an interactive educational online platform that allows teachers to deliver the course material. As asserted by informant 1:

"VLE bagi saya satu platform yang menarik. Saya menggunakan SmartUMS untuk menyimpan bahan kemudian pelajar download dan rujuk bahan tersebut. So saya rasakan bermanfaat untuk dikongsi dan dibincangkan bersama."

Translation:
"VLE, for me, is an interesting platform. It is very interactive too…I use SmartUMS to present the material, and then the students download and refer to the material. So, I feel it is helpful to share and discuss together.

Furthermore, informant two additionally uttered that VLE is a very interactive teaching platform, and students seem comfortable and responsive while learning using VLE. She alleged:

VLE ni sangat interaktik. kita juga boleh berkomunikasi dengan pelajar…kadang-kadang kita minta juga pelajar untuk memberikan respon terhadap topic yang saya ajar..Dan Alhamdulillah..pelajar-pelajar ni..sebenarnya saya tengok mereka ini selesa dan mereka ini sangat responsive kalau guna VLE ni"

Translation:
This VLE is very interactive. We can also communicate with students. Sometimes we also ask students to respond to the topics I teach. And Alhamdulillah..these students… I see they are comfortable and very responsive when using this VLE."

While informant three also reported that VLE is valuable and helps enable interaction during learning. Informant 3 asserted:

"saya Nampak VLE ni sangat bermanfaat dan menarik…sangat flexible dan membenarkan kita untuk berinteraksi dengan pelajar.

Translation:
"I find this VLE very useful and exciting..very flexible and allows us to interact with students.

Theme 3: VLE is an Autonomous Learning

The third theme in the interview data is that Arabic teachers view VLE as an effective autonomous learning environment. According to informant 1, by using VLE, students learn according to their capacity to self-direct their learning.

"Dengan menggunakan VLE, pelajar boleh belajar sendiri dalam suasana autonomous atau self-learning…cari tahu maklumat dan mereka belajar ikut kemampuan dan cara tersendiri…dan…memudahkan diorang lah diorang boleh cari masa yang sesuai kan."

Translation:
"Using VLE, students can learn independently in an autonomous learning environment…find out information and learn according to their abilities and methods…and…it makes it easier to find the right time."

Moreover, informant 2 reported the same view, claiming that VLE places great importance on self-learning ability. Informant 2 expressed that:

"Students lah yang akan come up dengan usaha memahami kursus kemudian dia akan kongsikan denganrakan-rakan dan pensyarah…akan bincangkan dan pensyarah akan tambah dan

perbetulkan sekiranya perlu ataupun top up apa-apa yang dirasakan perlu lah. So, VLE sangat mementingkan kemampuan self-learning".

Translation:
> *"Students are the ones who will come up with an effort to understand the course, and then they will share it with their friends and the lecturer...will discuss together, and the lecturer will add and correct if necessary or top up anything that they feel is necessary. So, VLE places great importance on self-learning ability".*

What is more, Informant 3 pointed out that students must be able to control themselves and monitor their learning because VLE revolves around learning to be responsible for themselves.

> *"Bila guna VLE, pelajar mesti mampu mengawal diri dan monitor pembelajarannya..bila belajar secara online ni...mereka terdedah dengan bermacam-macam gangguan...mereka susah untuk engage dalam pembelajaran...kadang mereka seperti sukar bagi tumpuan semasa belajar..jadi bagi saya pembelajaran VLE ni satu pembelajaran yang berkisarkan pelajar belajar bertanggungjawab ke atas pembelajaran diri sendiri"*

Translation:
> *"When using VLE, students must be able to control themselves and monitor their learning...when learning online, they are exposed to various distractions. They also find it challenging to engage in learning...sometimes they seem to have difficulty concentrating while studying...so for me, this VLE revolves around students learning to be responsible for themselves."*

RESEARCH QUESTION 2
What approaches do AFL teachers take when implementing VLE?

Various approaches can be followed when developing and implementing VLE. Teachers can choose an appropriate approach to the situation, learners' needs, and learning context. Based on data analysis from interviews, four main themes were identified as crucial features regarding Arabic teachers' approaches to implementing VLE: blending synchronous and asynchronous delivery, utilizing various technology options, promoting self-regulated learning, and emphasizing collaborative learning.

Table 2. Teachers' Approaches When Implementing VLE

Themes	
Theme 1	Blending Synchronous and Asynchronous Delivery
Theme 2	Integrating Various Multimedia Platforms
Theme 3	Promoting the Self-Directed Learning Approach
Theme 4	Emphasizing Collaborative Learning

Theme 1: Blending Synchronous and Asynchronous Delivery

The first theme found from the interview regarding Arabic teachers' approach to merging synchronous and asynchronous, ensuring they are prepped for class in advance. As informant one mentioned:

> *"Saya gunakan kedua-dua yang mana saya merujuk kepada pembelajaran segerak atau tidak segerak. So kalau PDP itu perlu kepada perbincangan real time secara nyata, kita boleh guna perbincangan segerak iaitu secara live lah. Untuk yang tidak segerak, kita boleh buat flipped class. Contohnya, kita rakam satu sesi pengajaran menggunakan skrin khas ataupun rekoder. Kemudian kita bagi kepada pelajar untuk mereka rujuk so bila pelajar rujuk, pelajar mempunyai pendedahan yang cukup mantap sebelum mereka masuk kedalam kelas."*

Translation:

> *"I use both… I think I am referring to synchronous and asynchronous modes. So, if teaching and learning need a real-time discussion, we can use a synchronous discussion live. For asynchronous learning, we can make a flipped class. For example, we may record a teaching session using a special screen or recorder. Then we give it to the students so when they refer to them. Then they have a solid enough exposure before they enter the class."*

Referring to informant two, she said synchronous and asynchronous delivery benefits educators and learners.

> *"Saya akan combine mode pengajaran secara segerak dan tidak segerak. Contohnya, saya rakam video pengajaran dan saya akan minta pelajar tengok semula dan minta mereka siapkan tugasan, berkaitan dengan mengulas video tersebut. Dan kadang-kadang saya akan buat live meeting…kedua-dua mode memberi faedah kepada guru dan pelajar dalam pembelajaran"*

Translation:

> *I will combine synchronous and asynchronous teaching modes. For example, I record a teaching video, and I will ask the students to watch it again and ask them to complete an assignment related to commenting on the video. Furthermore, sometimes I will do a live meeting...both modes benefit teachers and students in learning."*

Moreover, informant 3 reported that blending synchronous and asynchronous delivery is essential as both are effective in learning. Informant 2 articulated that:

> *"Saya gabungkan mode segerak dan tidak segerak, selain sediakan bahan, link dan aktiviti secara tidak segerak, saya suka untuk gunakan FB Live sebagai pembelajaran secara segerak. Ini memang saya punya favourite platform la ni. Facebook Live ni adalah satu kaedah online yang bagi saya sangat interaktif dan sangat berkesan la untuk bagi penerangan dan pejajar akan respon."*

Translation:

> *"I combine synchronous and asynchronous modes and provide materials, links, and activities asynchronously. I like to use FB Live for synchronous learning. It is indeed my favorite platform. Facebook Live is an online method that is very interactive and effective for sharing information and aligning responses."*

Theme 2: Utilizing Various Technology Options / Integrating Various Multimedia Platforms

The second theme of Arabic teachers' approach when implementing VLE is utilizing various technology options to support teaching and enhance student learning. As asserted by informant 1:

> *"Saya menggunakan SmartUMS sebagai platform untuk menyusun tadbir pdp saya di dalam kelas. tapi oleh kerana SmartUMS ni kan sangat terhad…contohnya saiz video yang ada limit. Jadi saya juga guna beberapa option yang lain contohnya Google Classroom sebagai medium penghantaran video. Saya juga menggunakan menteementor dan quiziz sebagai platform belajar…maksudnya, saya masih bergantung dalam platform lain lainlah untuk support saya punya PDP ya."*

Translation:

> *"I use SmartUMS as a platform to organize my PDP, but because SmartUMS is very limited…for example, the video size has a limit. So, I also use some other technology options, such as Google Classroom as a video delivery medium. I also use mentee mentors and quizzes as a learning platform...meaning I still rely on other platforms to support my PDP."*

In addition, while using the VLE, teachers will use various exciting and fun platforms to help students learn better. Informant 2 explained that teachers utilize online resources about using technology to enhance teaching in several ways.

"Saya suka untuk gunakan pelbagai sumber teknologi dalam talian atau beberapa platform pembelajaran berbeza untuk meningkatkan pengajaran dalam beberapa cara yang berbeza...bagi saya sangat interaktif dan sangat berkesan"

Translation:
"I like to use various online technology resources in or several different learning platforms to improve the teaching line in several different ways...for me, and it is very interactive and effective."

Informant 3 further asserted that teachers could use numerous technology tools to facilitate learning and increase students' understanding, especially when teaching grammatical topics.

"Apabila melibatkan penerangan tentang ilmu tatabahasa yang agak teknikal dan complicated untuk difahami. So, terpaksa la saya cari platform yang lain. Contohnya dengan menggunakan apps beberapa bahan-bahan yang saya rasakan perlu untuk memberikan penambahan kefahaman pelajar."

Translation:
"When it involves explanations about the knowledge of grammar which is quite technical and complicated to understand. So, I had to find another platform. So, for example, I need to use apps, other platforms, and some materials to increase students' understanding.

Theme 3: Promoting the Self-Directed Learning Approach
The third theme regarding the Arabic teacher approach when implementing VLE is promoting self-directed learning. Learners should be the one who takes the lead on their learning and takes responsibility for many activities traditionally dictated by the instructor. Informant 1 uncovered:

"Dalam pembelajaran VLE... pembelajaran mestilah lebih kepada pembelajaran terarah kendiri iaitu self-directed learning lah. So pelajar itu sendiri yang menetapkan objektif pembelajaran, dan mengenal pasti sumber untuk membantu mereka mencapai matlamat mereka. Pelajar mestilah mempunyai keupayaan untuk mengendalikan pembelajaran secara autonomi..kita hanya memimpin pembelajaran mereka"

Translation:
"In VLE, learning must be more into self-directed learning. So, the students themselves set the objective learning resources and identify them to help them achieve their goals. Students can control their learning autonomously. We, as an instructor, lead their learning."

Informant 3 reported that students need to be encouraged to manage and coordinate their learning independently. Informant 2 articulated that:

"Pelajar perlu digalakkan untuk menggunakan segala usaha dalam diri supaya dia boleh menguruskan dan menyelaras sendiri pembelajaran itu seharusnya berlaku macam mana dia boleh capai apa matlamat pembelajaran dan laksanakan aktiviti dan kemahiran yang guru cuba sampaikan kepada pelajar"

Translation:
"Students must be encouraged to use all their efforts to manage and coordinate their learning independently...they know how to achieve the learning goals and implement the activities and skills the teacher is trying to convey to the students."

In addition, while using the VLE, teachers will ask students to take the initiative in their learning and determine the learning strategies that they feel are effective. Informant 2 explained that:

> *"saya akan meminta pelajar untuk membuat inisiatif dalam pembelajaran mereka… mereka yang akan menentukan proses belajar sendiri…cari tahu keperluan, tujuan yang ingin dicapai dan tentukan strategi belajar yang mereka rasakan berkesan"*

Translation:
> *"I will ask students to take the initiative in their learning… and they are the ones who determine their learning process themselves… find out the needs, goals to be achieved and the learning strategies that they feel are effective."*

Theme 4: Fostering Collaborative Learning Technique

The fourth theme of Arabic teachers' approach when implementing VLE is fostering collaborative learning. As asserted by informant 1, Arabic teachers must foster collaborative learning techniques such as assigning roles to the members of each group and working together.

> *"Saya akan meminta pelajar untuk bekerjasama dan berinteraksi dengan rakan melalui mesej segera, mesej suara…dan tugasan video berkumpulan…yang bermakna mereka perlu belajar dan bekerjasama dalam kumpulan..supaya mereka tidak berasa bosan dan boleh terus terlibat dalam pembelajaran VLE."*

Translation:
> *"I will ask students to collaborate and interact with friends through instant messages, voice messages…and group video assignments…which means they must learn and work together in groups…so they do not feel bored and can stay engaged in VLE learning."*

Besides that, Arabic teachers also foster collaborative learning by showing students how to listen to one another, taking time to discuss, and practicing listening skills among peers and teachers, as informant two disclosed.

> *Saya akan gunakan pembelajaran secara kolaborasi…yang mana pelajar perlu berkomunikasi dengan rakan-rakan dan berkongsi idea. Mereka juga perlu bersama-sama belajar dan perlu juga ada pebincangan bersama"*

Translation:
> *I will use collaborative learning…where students have to communicate with peers and lecturers and share ideas. They also need to study together, and there needs to be a discussion together."*

Furthermore, teachers also like to use a peer-to-peer and group work format in teaching using VLE and consider giving each group a different task to have a more personalized learning experience. As stated by informant 3:

> *"Saya suka gunakan peer-to-peer dan group work format dalam pengajaran menggunakan VLE. Saya juga suka berikan tugasan berbeza bagi setiap kumpulan dan mereka akan bekerjasama dalam kumpulan dan membincangkan isu yang diberi untuk diselesaikan. Jadi, pelajar akan mempunyai pengalaman pembelajaran yang lebih bermakna."*

Translation:
> *"I like to use a peer-to-peer format in teaching using VLE. I also like to give different tasks for them to work together in each group and discuss the issues given to solve. So, students will have a more meaningful learning experience."*

RESEARCH QUESTION 3
How do Arabic Language Teachers utilize VLE to ensure its effectiveness in language learning?

This study further discovered how Arabic language teachers utilize VLE to ensure its effectiveness in language learning. Based on data analysis from interviews on how to make VLE more effective, the

informant's responses were directed to three main themes: mix-up content and collaboration types, emphasis on interaction, and use of gamification to keep students engaged.

Table 3. Perspectives on Using VLE

	Themes
Theme 1	Mix-up Content and Collaboration Types
Theme 2	Emphasis on Interaction
Theme 3	Use of Gamification

Theme 1: mix-up content and collaboration types

The first theme found from the interview regarding how Arabic language teachers utilize VLE to ensure its effectiveness in language learning is mixing content and collaboration types. According to informant 1, the arrangement of the content and materials in VLE is also considered. The foundations of an efficient educational system lie in the thorough planning of a teacher who matches all knowledge resources with the student's learning abilities. Informant 1 uttered:

Bagi saya, kepelbagaian persembahan dan penyusunan kandungan pembelajaran dalam platform pembelajaran maya ni adalah sangat-sangat penting. Dengan menyediakan variasi bahan-bahan yang menarik dan pelbagai jenis media dalam VLE seperti teks, grafik dan video, pelajar akan mampu untuk belajar dengan lebih baik'

Translation:
The variety of presentations and the organization of learning content in this virtual learning platform is very important to me. Students can learn better by providing various interesting materials and different types of media in the VLE such as text, graphics, and video."

Additionally, while using the VLE, teachers should provide separate spaces that offer students options that best suit their learning preferences. As mentioned by informant 2:

"Yang pertama, di peringkat guru itu sendiri...bagaimana guru menyusun dan menvariasikan bahan-bahan pengajaran online. Guru perlu susun pengajaran berdasarkan objektif kemahiran bahasa yang ingin dicapai. Kita tahu kemahiran bahasa ada empat..dan bagaimana pelajar boleh capai kemahiran-kemahiran ini. Selain itu, guru juga boleh menyediakan ruang khas yang memberi pelajar pilihan yang paling sesuai dengan gaya pembelajaran mereka bagi mencapai kemahiran bahasa. Contohnya, sediakan ruang an instructor-led tutor agar pelajar boleh menerima sokongan tambahan daripada guru untuk memahami bahan pembelajaran, atau ruang an active open-group di mana pelajar boleh bekerjasama melalui sembang suara dan video untuk praktis kemahiran bertutur."

Translation:
First, at the level of the teacher himself...how the teacher organizes and varies the online teaching materials. The teacher needs to organize the teaching based on the objective of the language skills to be achieved. For example, we know there are four language skills to be achieved. In addition, teachers can also provide a space that gives students a choice that best suits their learning style to achieve language skills. For example, provide instructor-led tutoring spaces so students can receive additional support from teachers to understand learning material or active open group spaces where students can collaborate via voice and video chat for practicing speaking skills."

As for informant 3, he stated that an independent study room is important where students can study calmly and independently in the learning tasks according to their methods and abilities.

"Selain persembahkan bahan-bahan yang interaktif dalam VLE saya suka sediakan independent workroom di mana pelajar boleh belajar secara tenang dan bebas dalam tugasan pembelajaran

INTERNATIONAL JOURNAL OF ASIAN EDUCATION, Vol. 4, No. 1, March 2023

> *yang diberikan mengikut cara dan kemampuan mereka sendiri. Selain berkolaborasi dengan rakan-rakan, bagi saya, pelajar juga perlukan ruang sendiri agar mereka dapat memahami bahan-bahan pembelajaran dan menguasai isi kandungan tersebut."*

Translation:
> *"Besides offering interactive materials in the VLE, I like to provide an independent study room where students can study calmly and independently in the learning tasks given according to their methods and abilities. In addition to collaborating with friends, for me, students also need their own space to understand the learning materials and master the content."*

Theme 2: emphasis on interaction

The second theme is the emphasis on interaction with students. Based on the findings, all informants agreed that teachers should emphasize interaction with the students when implementing VLE because the learning process occurs correspondingly to the interactions among individuals and their environment. For example, informant 1 put into words:

> *"Bagi saya, keberkesanan VLE ini bergantung pada interaksi dua pihak iaitu guru dan pelajar. Guru dan pelajar perlu berinteraksi secara efektif dengan pelajar contohnya dengan memberikan arahan dan tugasan yang jelas, beri sokongan semasa pembelajaran dan beri maklumbalas hasil tugasan yang diterima ..."*

Translation:
> *" VLE effectiveness depends on the interaction between the two parties, the teacher and the student. Teachers and students need to interact effectively with students, for example, by giving clear instructions and assignments, providing support during learning, and giving feedback on the results of assignments received..."*

Informant 2 further mentioned that:
> *Pelajar perlu berinteraksi dengan guru, sesama pelajar pun perlu berinteraksi secara sendiri sebab pelajar sesama pelajar ni dia lebih dekat dan lebih kenal. Faham memahami antara satu sama satu dengan yang lain. So kalau pelajar A ada kekurangan, pelajar B dia ni akan bantu top up kelemahan ataupun menyokong A ni lah, jadi macam tu juga dengan B. Dia akan bantu B, kita akan dapat satu kombinasi yang sangat-sangat mantap dan A dan B boleh lebih maju dan belajar mencapai apa sebenarnya matlamat dalam pembelajaran itu dengan baik."*

Translation:
> *Students need to interact with the teacher. Fellow students also require interacting on their own because students are closer and know each other better...understand each other. So, if student A has deficiencies, student B will help top up the weaknesses or support A, so it is the same with B. He will help B, then we will get a very strong combination, and A and B can progress and learn to achieve what the goal in learning is well."*

Furthermore, Arabic teachers also believe that interaction is the key that helps make learning more effective. As reported by informant 3:

> *"Bagi saya, apabila kita terlibat atau melibatkan diri di dalam apa-apa sahaja pembelajaran secara online. Kunci sebenar adalah interaksi. Apabila guru dan pelajar atau pelajar dan pelajar ini berinteraksi, maka mereka terlibat secara aktif dalam pembelajaran."*

Translation:
> *"For me, when we get involved in any interaction online learning. The real key is interaction. When teachers and students or students and students interact, they are actively involved in learning."*

Theme 3: use of gamification

Using gamification is the third theme of how Arabic language teachers make VLE effective in language learning. Informant 2 uttered that gamification in a VLE makes it more interesting for students.

"Bagi saya seorang pengajar itu perlu kreatif dalam pengajaran. Pelajar mungkin rasa terasing, bosan, kurang tumpuan dan tidak mahu ambil bahagian dalam pembelajaran. Jadi penggunaan gamifikasi dalam pembelajaran VLE akan membantu meningkatkan penglibatan pelajar"

Translation:
"For me, a teacher needs to be creative in teaching. Students may feel isolated, bored, lack concentration, and not want to participate in learning. So, using gamification in a virtual language learning environment will help increase student engagement."

Furthermore, Arabic teachers also believe using game elements helps make learning more effective. As reported by informant 2:
"Sebenarnya penggunaan elemen permainan sangat membantu menjadikan pembelajaran itu lebih efektif. Pelajar akan mampu belajar dengan lebih apabila mereka rasa seronok"

Translation:
"Using game elements helps make learning more effective. Students will be able to learn more when they have fun."

Furthermore, informant three similarly agrees that students will be more interested in learning if the teacher can include games in learning. He stated that:

"Saya rasa pelajar akan lebih berminat untuk belajar sekiranya guru dapat menarik perhatian mereka untuk turut serta dalam aktiviti…dan selitkan juga permainan..saya percaya permainan boleh menjadikan pembelajaran menggunakan VLE ni akan lebih berkesan."

Translation:
"I think students will be more interested in learning if the teacher can attract their attention to participate in activities...and the teacher can include games too...I believe games can make learning using this VLE more effective."

DISCUSSION
What are AFL teachers' perspectives on using VLE in their language teaching?

This study explores the perspectives of Arabic teachers about a virtual language learning environment. From the analysis of the interview data, it is found that teachers view VLE as their responsibility to teach online, VLE as an interactive educational online platform, and VLE as autonomous learning. This study found that Arabic foreign language teachers view VLE positively in their teaching. They know its usefulness as an interactive pedagogical learning platform to help them facilitate their teaching on the road to recovery. However, they are also concerned about their role and responsibility in implementing VLE, especially in this new era of technology and meeting the needs of the new generation of learning. It is supported by Mohd et al. (2019), who found that educators need to go online and create teaching and learning innovations to meet the needs and desires of the younger generation.

VLE is a current trend that every teacher should perform to serve the needs of learners nowadays. Teachers must use innovative instructional strategies or materials when teaching and learning online (Tukimin et al., 2018). This study found that Arabic teachers are concerned about the need for every teacher to be prepared online, as VLE can enhance students learning. This finding coincides with Padmavathi (2016) mentioned that because technology improves students' learning, teachers should use and adapt it. It is a fact that 21st-century classrooms must provide technology-supported teaching materials. In Malaysia, Public universities provide their students with a wide range of programs, and they do so using an e-learning or VLE platform. VLE is available in all 18 of Malaysia's public universities to improve teaching and learning sessions (Md Ajis et al., 2017).

Due to its advantages in terms of space, time, and resources, VLE continues to be one of the most potent tools that have long been at the forefront of revolutionizing educational practices, as stated by a prior study (Nwagwu, 2020). We may notice that Arabic instruction is becoming more innovative and dynamic, with a continued focus on the needs and demands of their current students. VLLE is important for language learning because it increases the physical learning environment's space, provides opportunities to challenge both teachers' and students' thinking, and can meet the modern learning needs of the current digital generation (Gamble, 2018). It is a major worry given that "Generation Z" is very tech-savvy (Adnan, 2021). Shahroom and Hussin (2018) claim that things have become more complicated because the current generation has a strong foundation in digital literacy. Additionally, they have a unique understanding, expression, and communication patterns and personalities that tend toward creative learning that incorporates images, audio, video, recreation, and games. The Internet and other contemporary, technologically advanced alternatives are more likely to teach the younger generation new things (Daud et al., 2019).

Furthermore, Arabic teachers found VLE to be an interactive educational online platform that allows teachers to deliver the course material where students seem comfortable and responsive while learning. It is also valuable and helps enable interaction during learning. This study corresponds to the definition stated by many scholars, such as Britain & Liber (2004) and Wilson (1996), who stated that VLE is a computer-based environment that is very interactive, which allows the interaction between users, access to a wide range of resources, the exchange of views, and access to users to obtain various valuable materials. Interactions among students make positive contributions to students' learning. VLE appears in various forms in language learning, including games, platforms, and social networks (Mroz, 2014). It differs from in-person classes where the delivery structure may be synchronous, asynchronous, or both (referred to as bichronous), using various technologies. To increase student engagement, motivation, self-discipline, and autonomy in an online learning environment, VLE offers distinctive learning management system features, enjoyable and attractive learning, and boosting assignments. These characteristics could significantly enhance student involvement in a virtual classroom (Rojabi, 2020).

Besides that, Arabic teachers view VLE as giving an advantage to students to learn on their own or at their own pace. This learning has been demonstrated to be quick, easy, and efficient. Students who self-learn can recognize issues and seek remedies right away. Students should be allowed to learn according to their own time and pace. Aside from that, VLE can also benefit teachers by providing online learning resources for students to use and reference. It will make it easier for students to repeat the lesson independently. The flexibility of online learning allows students to absorb concepts slowly and ensure they are fully understood before proceeding. Eventually, this will attract students to engage in education and learn better.

It can also leverage independent learning and scope, its final benefit (Goertler, 2019; Dhawan, 2020). Many linguists believe that VLLE can create a learning environment similar to the target language's culture and can help students learn the language more effectively (Mroz, 2014). VLLE is unquestionably essential for teaching students who do not speak Arabic because it significantly impacts their learning. Previous studies discovered a beneficial connection between learning Arabic in a virtual setting and expanding one's linguistic vocabulary. When VLLE is used, language learners' speaking, listening, reading, and writing abilities can be strengthened (Mohammed, 2022).

What approaches do AFL teachers take when implementing VLE?

The need for teachers to leverage best practices in online teaching and course design is critical. Therefore, this study also identified the approaches Arabic teachers take when implementing VLE through the result of the interview. Four approaches are identified: blending synchronous and asynchronous delivery, integrating various multimedia platforms, promoting self-regulated learning, and emphasizing collaborative learning.

Based on the teacher interview, combining synchronous and asynchronous modes is one of the teaching approaches in implementing VLE and supporting learners. An asynchronous online course is where most of the material is offered online, and students can enroll at any time, from any location. Real-time online or perhaps in meetings are not available. On the other hand, with synchronous, students can attend classes anywhere because most of the material is supplied online. Students can link in from

anywhere to participate in the class in real-time online meetings. Some drawbacks of asynchronous online learning, such as a lack of immediacy, community, engagement, and audiovisual communication, may be lessened by combining it with synchronous learning. Learners can benefit from synchronous and asynchronous learning depending on the learning goal. For synchronous instruction, teachers use pre-recorded instructional videos for student reference. To allow students to repeat the lesson multiple times in their own time. Regarding an asynchronous way of teaching, teachers claimed that live meetings or live discussions were used by Arabic teachers when implementing VLE because of their interactivity and practicality in getting students' responses.

The study is consistent with those of various earlier investigations. According to Duncan et al. (2012), synchronous and asynchronous online forums successfully raise students' performance. Similarly, Coogle & Floyd (2015) found that students performed better overall on the content they learned due to their good learning experiences through active interactions. The interactions included reading, field trips, reflections, and responses to the materials from the students. Rehman and Fatima (2021) said synchronous and asynchronous learning applications boosted student engagement and produced interactive learning. They further hypothesized that the mix of synchronous and asynchronous online learning gave students interactive learning opportunities since they received instructor praise and feedback. When it comes to independent learning, students saw independent tasks in the text or during a live class as helpful elements to improve their learning quality (Coogle & Floyd, 2013).

Furthermore, Arabic teachers believe that integrating various multimedia platforms can assist students in preparing for lessons beforehand, allowing for more concentrated instruction and meaningful involvement and conversation during student-teacher interactions. Teachers found that they do not just rely on any particular platform the university provides. They always support their teaching and learning with suitable media and required apps. They similarly mentioned other supporting platforms used to support teaching and learning.

Teachers should understand that 21st-century classrooms should provide technology-supported teaching materials (Padmavathi, 2016). Therefore, Arabic teachers must increase the quality of their teaching with technology-supported materials, in line with the current challenges of 21st-century education, which could help students towards more meaningful learning. Books, classrooms, whiteboards, technological equipment, and digital resources can help teachers facilitate learning and improve and use their skills more effectively. Smartphones and computers are among the everyday-used examples of technological devices that can boost the knowledge and teaching process. These days, most educators and students have smartphones or notebooks, which are becoming more prevalent for personal or educational reasons, especially in languages. However, it is sad that they do not use them for academic or special purposes in learning Arabic foreign language (Ducate & Lomicka, 2013; Sahrir et al., 2017).

Furthermore, Arabic teachers' approach to implementing VLE also encouraged self-regulated learning. Learners must conduct self-planned and self-implemented learning projects and select or influence the learning objectives, activities, resources, priorities, and level of energy expenditure as the other learners direct and describe self-directed learning as knowledge growth and ability. In addition, through learning by making and learning by doing, students acquire knowledge themselves, including opportunities to share ideas and skills and engage in creative and critical learning in a new media classroom environment. According to Zimmermann & Schunk (2011), self-regulation governs thinking and acting. For example, students can think more carefully about how they learn and what strategies they need to be successful in college. This finding supported Curran & Wetherbee (2014), who stated that the teacher should let the students take charge of their education to pursue their unique needs, skills, and interests.

The last approach is the promotion of collaborative learning techniques. Collaborative online learning is not about replacing the teacher but about using technology to increase and improve communication between teachers and learners. When speaking of collaboration refers to the engagement between teachers and students in carrying out activities related to the classroom. In addition, both must have a mutual understanding when implementing VLE for it to work. Faja (2013) supported this finding as collaborative activities can potentially engage students and create a community in online courses. Students become worn out when they spend hours in front of a computer

screen. Learning is affected, and concentration is reduced as a result. Collaborative learning practices can be used to ensure that students like online learning and perform better. According to the findings, the teachers' teaching strategy can be justified by encouraging collaborative learning strategies, such as giving each group's members duties and cooperating. By practicing listening skills with peers and teachers, taking time to explore topics, and modeling active listening, Arabic teachers also promote collaborative learning. Teachers also enjoy using a peer-to-peer and group work structure when instructing with a VLE, and they are thinking about assigning each group a different task to have a more customized learning experience. The virtual learning environment has become an essential part of education, including language teaching, and is believed to offer unique benefits in the learning process (Shopova, 2014). When designed and taught well, VLE gives opportunities for quality learning. Because of this, teachers are responsible for improving the use of VLE and making it a successful experience for both teachers and students.

How do Arabic Language Teachers utilize VLE to ensure its effectiveness in language learning?

Ultimately, this study examines how Arabic language teachers utilize VLE to ensure its effectiveness in language learning. The three main themes identified in this study are mixing content and collaboration types, emphasizing interaction, and using gamification to keep students engaged. The same content structure may not apply to every course or student when teachers design effective online courses. The key to developing revolutionary educational activities is to be flexible and use a mix of content and types of collaboration. Teachers believe that each student absorbs different information in different ways. For instance, a student can find it challenging to understand reading lengthy material passages. If the same information is provided via a video instead, the student might learn it more effectively. Others might find that reading text passages again at their own pace is more beneficial than watching an audiovisual presentation. Also, Arabic teachers should establish breakout spaces that give students options based on their preferred learning styles. Finally, teachers should emphasize student interaction when implementing VLE since the learning process occurs correspondingly to the interactions among individuals and their environment.

When studying via a VLE, learners' roles might alter from passive to active, and their independent learning now involves looking up information, conversing with others, and analyzing and understanding the content. It entails more than only letting students study. Previous studies discovered a beneficial correlation between Arabic language acquisition in virtual learning environments and language expression. By expanding their vocabulary and absorbing new information, particularly in a foreign language situation, VLLE encourages students to study Arabic (Ghani et al., 2016; Jalaluddin, 2016). In addition, VLLE gives students a variety of possibilities to independently pick up a language and hone their skills using one of the numerous digital media outlets that are readily available.

Second, emphasizing interaction is another critical factor influencing teachers' approach to implementing VLE. Interaction in an online course is usually different than in face-to-face classes. Both students and teachers need interaction to build trust and have meaningful discussions. Apart from that, the content has to be relevant and engaging. It should allow learners to network and collaborate on assignments and assignments. Learning material should encourage participation in discussion groups during and after class and reward meaningful contributions.

VLE succeeded in improving students' educational experience and raising their level of involvement. The VLE also aims to provide students more control over the time, the content, and the methods they use by enabling on-demand learning and reducing the constraints of distance and time. Researchers say learning can happen anytime, anywhere (Febriani et al., 2020). Students can benefit from using VLE in many ways, including flexibility, convenience, and the opportunity to work closely with teachers and other students. Students gain various advantages, including flexibility, comfort, and collaboration closely with teachers and other students. Teachers should therefore create and thoroughly describe how learning will be conducted. Using gamification is the third theme of how Arabic language teachers make VLE effective in language learning. Arabic teachers also believe that using game elements helps make learning more effective as its ability to engage students more effectively than traditional coursework. Games include numerous components innately appealing to adults and teenagers and significantly influence their habits, adding another learning drive. Gamification has been employed more frequently in educational settings over the past ten years to boost student engagement and promote

social interaction. Hence at all educational levels, games have been implemented in a variety of circumstances. as they can produce positive effects, such as both intrinsic and extrinsic (Fathi et al., 2021), and show their capacity to enhance students' achievement (Seaborn and Fels, 2015; Koivisto and Hamari, 2019). Gamification can make online language learning more effective by using game elements such as points, rewards, and competition to motivate and engage students. Turning language learning into a game makes students more likely to stay motivated and focused on the task, leading to increased learning and retention of material. Additionally, gamification can make the learning experience more interactive, allowing students to participate actively and practice their language skills rather than passively consuming information Can help to build confidence, improve communication skills, and deepen the understanding of the language and culture.

DISCUSSION

In general, this study intends to investigate the usage of VLE in Non-Arabic Speaking Learners' classrooms from the perspective of Arabic teachers in higher education institutions. Therefore, an attempt was made to determine how Arabic teachers use the Virtual Learning Environment (VLE) in Non-Arabic Speaking Learners' classrooms. There were three research questions in line with its goals, examining AFL teachers' perspectives on using VLE in their language teaching, AFL teachers' approaches to implementing VLE, and the effectiveness of VLE in language teaching. The main objective of the current study was to evaluate VLE usage in Non-Arabic Speaking Learners' classrooms from the perspective of Arabic teachers, particularly in the Malaysian higher institution context. For this purpose, one-to-one in-depth interviews were conducted with the three informants.

Semi-structured interviews were used to gather the data to allow the informants to express their experiences in an accessible manner. The researcher applied the thematic analysis (TA) approach in analyzing data. The analysis of this study helps provide such information to universities on the perspectives of Arabic teachers on the use of VLE, their approaches when implementing VLE, and how VLE can be effective in their language teaching in a virtual learning context. This study allows us to understand better how Malaysian Arabic teachers adapt to virtual language learning environments by utilizing VLE at the university level. The findings are anticipated to contribute to the practitioners' consideration of language learning, particularly e-learning education. A considerable limitation of this study is that teachers were prompted to evaluate their perceptions of the utilization of VLE through the interview procedure alone. Therefore, future studies can use other assessment techniques like surveys or observations to understand individuals' thoughts, opinions, desires, inclinations, and personal aspects. Moreover, the students' viewpoints may also be included in future studies and policymakers to generalize the results more. Additional research should also examine how utilizing a VLE affects learning performance and satisfaction, not just its use.

Funding and Conflicts of Interest

REFERENCES

Adas, D., & Bakir, A. (2013). Writing difficulties and new solutions: Blended learning as an approach to improve writing abilities. *International journal of humanities and social science*, *3*(9), 254-266. https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=946f90183397a027979 83b2e357801677cc3e428

Adnan, N. B. A., Rafie, N. A. B. R., Zaini, N. H. B. Z., & Yunazri, T. S. A. B. T. (2021, December). لتعليم مهارة الإستماع والكلام" Ez-Maher" تطوير تطبيق أندرويد. In *Proceeding AEC (Arabic Education Conference)* (Vol. 1, No. 1, pp. 26-38). https://ejournal.uinsaid.ac.id/index.php/aec/article/download/4983/1632

Al Muhsin, M. A., & Mustafa, A. F. F. (2020). Requirements Of Learning the Arabic Language Among Islamic Financial Students Era 4.0. *Hamdard Islamicus Journal*, *43*(S 2), 142-155. https://www.academia.edu/download/62476050/IJHPL-2020-09-03-0420200325-102209-cjcxxr.pdf

Aladdin, A. (2013).

An investigation into the attitudes of the non-Muslim Malaysian learners of Arabic (NMMLA) toward the learning of Arabic as a foreign language. Pertanika Journal of Social Science and Humanities, 21, 183-196. http://www.pertanika.upm.edu.my/resources/files/Pertanika%20PAPERS/JSSH%20Vol.%2021%20(S)%20May.%202013/15%20Page%20183-196.pdf

Al-Rahmi, W. M., Yahaya, N., Aldraiweesh, A. A., Alamri, M. M., Aljarboa, N. A., Alturki, U., & Aljeraiwi, A. A. (2019). Integrating technology acceptance model with innovation diffusion theory: An empirical investigation on students' intention to use E-learning systems. *Ieee Access*, *7*, 26797-26809. https://ieeexplore.ieee.org/iel7/6287639/6514899/08643360.pdf

Baharum, A. S., & Samah, R. (2015). Persepsi pelajar universiti awam terhadap kesalahan bahasa Arab, faktor penyumbang dan implikasi. *Sains Humanika*, *6*(1). https://doi.org/10.11113/sh.v6n1.595

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), 77-101. https://biotap.utk.edu/wp-content/uploads/2019/10/Using-thematic-analysis-in-psychology-1.pdf.pdf

Britain, S., & Liber, O. (2004). A framework for pedagogical evaluation of virtual learning environments. https://hal.science/docs/00/69/62/34/PDF/Liber-2004.pdf

Google, C., & Floyd, K. (2015). Synchronous and asynchronous learning environments of rural graduate early childhood special educators utilizing Wimba© and Ecampus. *MERLOT Journal of Online Learning and Teaching*, *11*(2). https://jolt.merlot.org/Vol11no2/abstracts.htm

Creswell, J. W. (2014). *A concise introduction to mixed methods research*. SAGE publications. https://www.manaraa.com/upload/d11df289-14cd-482b-a413-54c290668e4b.pdf

Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The counseling psychologist*, *35*(2), 236-264. https://doi.org/10.1177/0011000006287390

Curran, B., & Wetherbee, N. (2014). *Engaged, connected, empowered: Teaching and learning in the 21st century*. Routledge. https://www.taylorfrancis.com/books/mono/10.4324/9781315852324/engaged-connected-empowered-ben-curran-neil-wetherbee

Daud, W. A. A. W., Teck, W. K., Ghani, M. T. A., & Ramli, S. (2019). The needs analysis of developing mobile learning application for cybergogical teaching and learning of Arabic language proficiency. *International Journal of Academic Research in Business and Social Sciences*, *9*(8), 33-46. https://pdfs.semanticscholar.org/3e75/33cf0391c6bd2607f65b612b4ed0bdb496ee.pdf

Demers, L., Monette, M., Lapierre, Y., Arnold, D. L., & Wolfson, C. (2002). Reliability, validity, and applicability of the Quebec User Evaluation of Satisfaction with assistive Technology (QUEST 2.0) for adults with multiple sclerosis. *Disability and Rehabilitation*, *24*(1-3), 21-30. https://doi.org/10.1080/09638280110066352

Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of educational technology systems*, *49*(1), 5-22. https://journals.sagepub.com/doi/pdf/10.1177/0047239520934018

Ducate, L., & Lomicka, L. (2013). Going mobile: Language learning with an iPod touch in intermediate French and German classes. *Foreign Language Annals*, *46*(3), 445-468. https://doi.org/10.1111/flan.12043

Duncan, M. J., Smith, M., Cook, K., & James, R. S. (2012). The acute effect of a caffeine-containing energy drink on mood state, readiness to invest effort, and resistance exercise to failure. *The Journal

of Strength & Conditioning Research, *26*(10), 2858-2865. https://www.academia.edu/download/43622174/Peak_power_prediction_in_junior_basketba20160311-29532-135jq98.pdf

Faja, S. (2013). Collaborative learning in online courses: Exploring students perceptions. *Information Systems Education Journal*, *11*(3), 42. https://isedj.org/2013-11/N3/ISEDJv11n3p42.pdf

Fathi, J., Greenier, V., & Derakhshan, A. (2021). Self-efficacy, reflection, and burnout among Iranian EFL teachers: the mediating role of emotion regulation. *Iranian Journal of Language Teaching Research*, *9*(2), 13-37. https://ijltr.urmia.ac.ir/article_121043_acd981758a128582cba252b669d36d8d.pdf

Febriani, S. R., Widayanti, R., Amrulloh, M. A., & Mufidah, N. (2020). Arabic learning for an elementary school during the COVID-19 emergency in Indonesia. *OKARA: Jurnal Bahasa dan Sastra*, *14*(1), 67-80. http://ejournal.iainmadura.ac.id/index.php/okara/article/view/3194

Florungco, J. K. E., & Caballes, D. G. (2022). Educators' Perspective On The Progressivist Approach In Teaching Science Online. *International Journal of Asian Education*, *3*(3), 166–171. https://doi.org/10.46966/ijae.v3i3.265

Gamble, C. (2018). Exploring EFL university students' acceptance of e-learning using TAM. *Kwansei Gakuin University Humanities Review*, *22*, 23-37. https://core.ac.uk/download/pdf/151651395.pdf

Ghani, M. T. A., Hamzah, M., Wan Daud, W. A. A., & Muhamad Romli, T. R. (2022). The Impact of Mobile Digital Game in Learning Arabic Language at Tertiary Level. *Contemporary Educational Technology*, *14*(1). https://files.eric.ed.gov/fulltext/EJ1331727.pdf

Ghani, M. T. A., Ramli, S., & Hamat, M. Z. A. (2019). Arabic Sentence Construction Among Sultan Idris Education University (UPSI) Students: Pembinaan Ayat Bahasa Arab Dalam Kalangan Pelajar Universiti Pendidikan Sultan Idris (UPSI). *al-Qanatir: International Journal of Islamic Studies*, *15*(1), 12-22. http://www.al-qanatir.com/index.php/aq/article/download/204/137

Ghazali, N., Nordin, M. S., Hashim, S., & Hussein, S. (2017, October). *Measuring content validity: Students' self-efficacy and meaningful learning in massive open online course (MOOC) scale. In International Conference on Education in Muslim Society* (ICEMS 2017) (pp. 128-133). Atlantis Press. http://academypublication.com/issues2/jltr/vol08/03/21.pdf

Ghazizadeh, T., & Fatemipour, H. (2017). The effect of blended learning on EFL learners' reading proficiency. *Journal of Language Teaching and Research*, *8*(3), 606. http://academypublication.com/issues2/jltr/vol08/03/21.pdf

Goertler, S. (2019). Normalizing online learning: Adapting to a changing world of language teaching. *From theory and research to new directions in language teaching*, 51-92. https://annotate.net/user/Mike-Winans/Goertler-2019--Normalizing-Online-Learning-Adapting-to-a-Changing-World-of-Language-Teaching

Hamdan, A. R., & Mohd Yasin, H. (2010). Penggunaan alat bantu mengajar (ABM) di kalangan guru-guru teknikal di Sekolah Menengah Teknik Daerah Johor Bahru, Johor. *Penggunaan Alat Bantu Mengajar (ABM) Di Kalangan Guru-Guru Teknikal Di Sekolah Menengah Teknik Daerah Johor Bahru, Johor*, 1-8. http://eprints.utm.my/id/eprint/10879/1/Penggunaan_Alat_Bantu_Mengajar.pdf

Hamidah, H., Audina, N. A., & Mubarak, M. R. (2022). How is an Arabic Lecturer's Personality Competence as Expected by Students? An Analysis of Students' Perceptions in Indonesia. *Education*, *33*, 48. https://www.researchgate.net/profile/Mahfuz-Mubarak/publication/365301461_How_is_an_Arabic_Lecturer's_Personality_Competence_as_Expected_by_Students_An_Analysis_of_Students'_Perceptions_in_Indonesia/links/636e05cc54eb5f547cc2c7c1/How-is-an-Arabic-Lecturers-Personality-Competence-as-Expected-by-Students-An-Analysis-of-Students-Perceptions-in-Indonesia.pdf

Hamidin, N. M. (2015). Effective technique of teaching and learning Arabic language in the classroom: A case study in selected national religious secondary schools (SMKA) in Selangor. In *International Conference on Language, Literature, Culture, and Education. Selangor: Kolej Universiti Islam Antar Bangsa*. http://icsai.org/procarch/2icllce/2icllce-109.pdf

Hamidin, N. M., Ismail, W., Ahmad, Z., Ismail, A., Mansor, N., Mahmood, N., & Yasim, I. M. M. (2019). The practice of Content and Language Integrated Learning Methodology Characteristics in 'Dini'Curriculum: Students' Assessment. *Journal of Social Science and Humanities*, *2*(5), 28-34. https://www.jsshjournal.com/uploads/2/6/8/1/26810285/20032019-jssh-15-20.pdf

Hamouda, A. (2020). The effect of virtual classes on Saudi EFL students' speaking skills. *International Journal of Linguistics, Literature, and Translation*, *3*(4), 175-204. https://al-kindipublisher.com/index.php/ijllt/article/download/1096/893

Hashim, H. U., Yunus, M. Y., & Hashim, H. (2018). The Use of Massive Open Online Course (MOOC) for ESL Learning: An Analysis of Learning Theories. *International Journal of Engineering and Technology*, *7*, 136-138. http://dx.doi.org/10.24093/awej/call5.8

Herrera, A. B., Bersano, M. S., & Idul, R. G. R. (2021). Readiness of Students in Flexible Learning Modality: A Convergent Parallel Mixed-Methods Study. *International Journal of Asian Education*, *2*(4), 514-530. https://doi.org/10.46966/ijae.v2i4.118

Jalaluddin, M. (2016). Using YouTube to enhance speaking skills in ESL classroom. *English for Specific Purposes World*, *17*(50), 1-4. http://www.philologician.com/Articles_50/Mohammad_Jalaluddin.pdf

Jamain, R. R., Putro, H. Y. S. ., & Sadewa, M. I. (2022). Development of a Collaborative Digital Module on the Zedemy Platform to Improve Student Engagement. *International Journal of Asian Education*, *3*(3), 197–204. https://doi.org/10.46966/ijae.v3i3.302

Koivisto, J., & Hamari, J. (2019). The rise of motivational information systems: A review of gamification research. *International Journal of Information Management*, *45*, 191-210. https://www.sciencedirect.com/science/article/pii/S0268401217305169

Mahuda, I., Nasrullah, A., Putri Mubarika, M., Meilisa, R., & Fajari, L. E. W. (2022). Android-Based Mathematics Learning Media Assisted by Smart Apps Creator on Self-Regulated Learning. *International Journal of Asian Education*, *3*(3), 160–165. https://doi.org/10.46966/ijae.v3i3.292

Md Ajis, A. F., Md Jali, J., Mazlan, M. A., Nordin, S. K., & Ahmad Kamal, J. I. (2017). Assessing Virtual Learning Environment in Malaysia's Public University. https://core.ac.uk/download/pdf/189476817.pdf

Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative research: A guide to design and implementation*. John Wiley & Sons. http://nuir.nkumbauniversity.ac.ug/xmlui/bitstream/handle/20.500.12383/987/Qualitative%20Research%20%28%20PDFDrive%20%29.pdf?sequence=1&isAllowed=y

Mohammed, T. (2022). Designing an Arabic Speaking and Listening Skills E-Course: Resources, Activities, and Students' Perceptions. *Electronic Journal of e-Learning*, *20*(1), pp53-68. https://doi.org/10.34190/ejel.20.1.2177

Mohd, K. N., Mohd Adnan, A. H., Yusof, A. A., Ahmad, M. K., & Mohd Kamal, M. A. (2019, February). *Teaching the Arabic language to Malaysian university students using education technologies based on Education 4.0 principles*. In Proceedings of the International Invention, Innovative & Creative (InIIC) Conference, Series (pp. 38-51). https://www.academia.edu/download/63834392/PROCEEDINGS_InIIC_2_201920200705-25669-z17sut.pdf#page=43

Mroz, A. (2014). 21st-century virtual language learning environments (VLLEs). *Language and Linguistics Compass*, *8*(8), 330-343. https://doi.org/10.1111/lnc3.12089

Muhajirah, M. (2020). Basic learning theory:(behaviorism, cognitivism, constructivism, and humanism). *International Journal of Asian Education*, *1*(1), 37-42. https://dx.doi.org/10.46966/ijae.v1i1.23

Nwagwu, W. E. (2020). E-learning readiness of universities in Nigeria-what are the opinions of the academic staff of Nigeria's premier university? *Education and Information Technologies*, *25*(2), 1343-1370. https://link.springer.com/article/10.1007/s10639-019-10026-0

Padmavathi, M. (2016). A Study of Student-Teachers' Readiness to Use Computers in Teaching: An Empirical Study. *Journal on School Educational Technology*, *11*(3), 29-39. https://files.eric.ed.gov/fulltext/EJ1131872.pdf

Patton, M. Q. (2002). Two decades of developments in qualitative inquiry: A personal, experiential perspective. *Qualitative social work*, *1*(3), 261-283. https://doi.org/10.1177/1473325002001003636

Rehman, R., & Fatima, S. S. (2021). An innovation in Flipped Class Room: A teaching model to facilitate synchronous and asynchronous learning during a pandemic. *Pakistan Journal of Medical Sciences*, *37*(1), 131. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7794122/

Rojabi, A. R. (2020). Exploring EFL Students' Perception of Online Learning via Microsoft Teams: University Level in Indonesia. *English Language Teaching Educational Journal*, *3*(2), 163-173. https://files.eric.ed.gov/fulltext/EJ1268365.pdf

Sahrir, M. S., Ismail, T., & Tajri, S. A. S. (2017). An insight into an internship program for undergraduate Arabic language learners in Malaysia. *O-JIE: Online Journal of Islamic Education*, *4*(1), 28-36. http://ijie.um.edu.my/index.php/O-JIE/article/download/5245/3042

Sahrir, M. S., Yahaya, M. F., & Nasir, M. S. (2013). EZ-Arabic for children: A virtual learning resource tool for Malaysian primary schools. *Procedia-social and behavioral sciences*, *90*, 396-404. https://doi.org/10.1016/j.sbspro.2013.07.108

Samah, R., Puteh-Behak, F., Saad, N. S. M., Ali, S. M., Darmi, R., & Harun, H. (2016). Effective methods in learning the Arabic language as a foreign language. *Mediterranean Journal of Social Sciences*. https://doi.org/10.5901/mjss.2016.v7n3p349

Seaborn, K., & Fels, D. I. (2015). Gamification in theory and action: A survey. *International Journal of human-computer studies*, *74*, 14-31. https://doi.org/10.1016/j.ijhcs.2014.09.006

Shahroom, A. A., & Hussin, N. (2018). Industrial revolution 4.0 and education. *International Journal of Academic Research in Business and Social Sciences*, *8*(9), 314-319. https://pdfs.semanticscholar.org/12fb/a84f89c7d3bc9faf1a7402e1f6f741680354.pdf

Shopova, T. (2014). Digital literacy of students and its improvement at the university. *Journal on Efficiency and Responsibility in Education and Science*, *7*(2), 26-32. https://doi.org/10.7160/eriesj.2014.070201

Shukri. K, M. T., Raihan, M. A., Nor Asmawati, I., & Noradilah, A. W. (2019). Strategi dan pelaksanaan iklim dini terhadap kemenjadian pelajar: Satu kajian rintis. *The Sultan Alauddin Sulaiman Shah Journal (JSASS)*, *3*, 151-161. http://eprints.unisza.edu.my/6668/

Sikder, M. K. U. (2022). An Investigation on University Physics Education in Bangladesh. *International Journal of Asian Education*, *3*(4), 264-271. https://doi.org/10.46966/ijae.v3i4.305

Tukimin, R., Yusoff, N. M. R. N., Baharudin, H., & Hussain, F. (2018). Innovative Arabic Language Teacher: A Dream or A Hope. *International Journal of Academic Research in Progressive Education and Development*, *7*(4), 158-165. https://www.researchgate.net/profile/Harun-Baharudin/publication/329236858_Innovative_Arabic_Language_Teacher_A_Dream_or_A_Hope/links/5bfe305e4585157b8172b5a0/Innovative-Arabic-Language-Teacher-A-Dream-or-A-Hope.pdf

Wilson, B. G. (1996). *Constructivist learning environments: Case studies in instructional design*. Educational Technology. https://www.google.com/books?hl=id&lr=&id=mpsHa5f712wC&oi=fnd&pg=PR5&dq=Wilson,+B.+G.+(1996).+Constructivist+learning+environments:+Case+studies+in+instructional+design.+Educational+Technology.+&ots=s_giAecSMl&sig=sqJFhiwVpUECpk5PfYyD-bjQIV8

Zimmermann, B. J., & Schunk, D. H. (2011). Self-regulated learning and performance: An introduction and an overview. In B. J. Zimmerman, & D. H. Schunk (Eds.), Handbook of Self-Regulation of Learning and Performance (pp. 1–12). Routledge https://www.taylorfrancis.com/chapters/edit/10.4324/9780203839010-4/self-regulated-learning-performance-barry-zimmerman-dale-schunk

Zou, C., Li, P., & Jin, L. (2021). Online college English education in Wuhan against the COVID-19 pandemic: Student and teacher readiness, challenges and implications. *PloS one*, *16*(10), e0258137. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0258137