
Need Analysis On Developing Arabic Language M-Learning Basic Level During Covid-19

Mohd Firdaus Yahaya¹, Zulazhan Ab. Halim²
Muhammad Sabri Sahrir³, Mohd Fauzi Abdul Hamid⁴

^{1,2&4} Faculty of Languages and Communication,
Universiti Sultan Zainal Abidin
³ Kulliyah of Education,
International Islamic University Malaysia

Correspondence: Zulazhan Ab. Halim, Faculty of Languages and
Communication, Universiti Sultan Zainal Abidin, 21300 Kuala Nerus,
Terengganu, Malaysia.

Email: zulazhan@unisza.edu.my

Abstract

The Coronavirus (or Covid-19), which spread in early 2020, has resulted in a change of learning mode in known educational institutions where there is a shift from face-to-face to online learning. This study was conducted to identify the needs for developing mobile learning (m-learning) modules at the basic level for Arabic language among students as well as identifying the level of student acceptance for m-learning. A set of questionnaires was distributed to the respondents to identify the need for developing such m-learning. The data obtained were then analyzed using SPSS software and interpreted based on the total mean score and standard deviation. The study found that the respondents saw a great need at developing a module for basic level Arabic m-learning and were positive to use the latest technology in the learning process. This study proposes learning strategies and activities through m-learning that can be used throughout this pandemic in order to continue online teaching and learning sessions.

Keywords: mLearning, Arabic language, covid-19, pandemic,

INTRODUCTION

The spread of Sars coronavirus (SARS-CoV-2), which started from Wuhan, has already stirred panic around the globe, causing educational institutions to be equally affected by its spread. Most are temporarily put to a standstill as a solution to curb the pandemic. This has put forth a new challenge of using distance learning as an alternative to most educational institutions worldwide.

Before the coming of Covid19, educational institutions such as schools, colleges and universities remained steadfast at practising face-to-face learning either in classrooms or lecture halls. Despite efforts to use technology in learning, face-to-face learning is still a preferred option in most educational institutions. However, this scenario has changed when the world was shocked by the spread of the dangerous Covid-19. More than 190 countries in the world have shut down the operations of its educational institutions as a solution to curb

this pandemic from further spreading (Basilaia & Kvavadze, 2020; Biswas, Roy, & Roy, 2020). The World Health Organization (WHO) has reported that as of the end of April 2021, a total of 140,322,903 cases have been recorded. While the number of deaths due to this pandemic is totalling up to 3,003,794 cases, involving more than 220 countries in the world (WHO, 2021).

Malaysia is not exceptional as it is also affected by this pandemic. This dire situation has left the Malaysian government without any choice but to temporarily close all educational institutions, ranging from pre-schools to institutions of higher learning. Therefore, face-to-face learning mode can no longer be practised. As a solution, the use of online and mobile learning (m-learning) are the best alternatives to be considered at this point of juncture. All institutions which have been affected by this pandemic, have begun to shift attention from using the conventional teaching methods (i.e. face to face in the classroom) to a new way of interacting online.

PROBLEM STATEMENT

The present use of technology is without doubt, growing rapidly. Its use is not only limited to industries, but has also expanded in teaching and learning. The use of mobile devices these days is seen as a new way of teaching and learning. which can connect triangularly between teachers, students, and also learning materials, available in websites or cloud storages. Today, the use of mobile devices facilitates the implementation of teaching and learning, especially during the pandemic. M-learning is seen as an enabler to help students become more active in their learning process, as compared to conventional learning. This is because face-to-face learning is no longer allowed in schools in accordance with the instructions of both, the Ministry of Education and the Ministry of Higher Education (MoHE) of Malaysia until situations revolving around Covid-19 have gradually recovered, unless if it is for certain needs (Ministry of Higher Education, 2020). Thus, the learning process during this pandemic took off in the form of online learning, instead of face-to-face learning (Mahendher, Doreswamy, Shenoy, & Uttam, 2021).

M-learning provides students with many advantages such as taking notes, accessing assignments, regardless of place or time, besides the fact that they can mostly collaborate at a convenient time with others and contact teachers at any time while accessing learning materials besides textbooks and library references (Mohd Paris & Saedah, 2016). Thus, m-learning is observed to be potentially useful and convenient during this pandemic, especially in a situation that requires distance teaching and learning or home teaching and learning (PdPR) in line with instructions issued by the Ministry of Higher Education, which emphasizes on the use of teaching and learning online learning during the pandemic (Ministry of Higher Education, 2020; Naomie et al., 2020).

In addition, teaching and learning at home focus more on student-based learning. Students do not only need to be more proactive and exploratory at conducting the activities and making use of the provided learning materials, but also take advantage of the learning materials available online. This form of learning is termed as independent self-learning (ISL) or known as self-learning which involves learning outside the classroom (Ghazali, Nik Mohd, Parilah, Wan Haslina, & Ahmed Thalal, 2011). In addition, the integration of technology in Arabic language learning makes the learning environment more interesting and helps students to be more creative, comprehensive and globally-prepared where learning is now more flexible (Mohd Shahrizal, Mohd Firdaus, Mohd Fauzi, & Muhammad Sabri, 2016; Rahimi, Zawawi,

& Wan Nordin, 2005). Combining common methods with technology is predicted to be welcomed in the teaching and learning process which in turn will change the learning system (Norlidah, 2010). The use of the latest technology can also help teachers and students in terms of teaching and learning strategies. The use of teaching aids that are adapted as according to the sophistication of technology will provide a smooth learning environment. The use of technological devices and software will be effective if teachers and students can use them well (Aida Suraya et al., 2006; Mohd Majid & Zakaria, 2007). Hence, teachers also need to explore the new approach in teaching and learning through social networking technology used by the students nowadays (Radzuwan, Mohd Firdaus, Mohd Fazry, & Kamariah, 2016).

In order to bring life to the learning environment, students should be encouraged to choose their preferred learning methods as well as to express their opinions on online learning using m-learning so that they can be more actively involved in the process of teaching and learning basic Arabic language. Therefore, before developing this m-learning teaching model, a study on needs analysis should be first done on students in order to identify their perceptions on their acceptance as well as to understand their intentions to learn basic Arabic language using technology via mobile devices.

NEED ANALYSIS

This study was conducted to obtain information from students on the need to develop a basic level m-learning module for Arabic language learning in order to solve problems faced by students. In the module development study, the need analysis study is one of the three phases of the study that needs to be conducted by the researchers. This need analysis study is a mandatory phase, which is used to identify problems that occur and to solve problems in a specific context. Thus, this phase is important because researchers are able to obtain information from the target group on the need to design and develop the module (Mohd Ridhuan & Nurul Rabihah, 2020). Thus, the need analysis phase is an important phase in determining which product is most appropriate to be designed and developed in the proceeding phases so that existing problems can be resolved in order to see an effective teaching and learning process (Aliza & Zamri, 2015).

RESEARCH OBJECTIVES

This study was conducted to obtain data in order to develop a module for basic Arabic language learning at the Sultan Zainal Abidin University (UniSZA). The need analysis was conducted to identify students' needs and learning modules before developing modules for basic Arabic language learning in UniSZA.

RESEARCH QUESTIONS

This study answers the following questions:

1. What are students' needs concerning learning aids and the teaching of Arabic at the basic level using m-learning?
2. What is the level of skills and uses of mobile devices in learning of Arabic language among the students?
3. What is the students' level of acceptance and intention of using mobile devices when integrated with Arabic language learning?

RESEARCH METHODOLOGY

This need analysis study used a survey method where a set of questionnaires was distributed to students who are taking basic level Arabic language courses at UniSZA in order to obtain data for needs analysis.

The data was then analyzed to obtain mean values and standard deviations. The obtained data was interpreted based on the interpretation of values to determine the level of the mean. The table of mean interpretation which was used to analyse the level of agreement for needs analysis is based on studies by Mohd Paris & Saedah (2016) and Nor Kamaliah Mohamad & Ahmad Zabidi Abdul Razak (2015) as shown in Table 1.

Table 1: Table of mean interpretation of need analysis.

Mean score	Interpretation
3.67-5.00	High
2.34-3.66	Average
1.00-2.33	Low

RESEARCH FINDINGS

The following are the data obtained based on the analysis of the distributed questionnaire.

Study of the Demographics

Data of the respondents are shown in Table 2 which covers gender, faculty, nationality and their learning experience with Arabic.

Table 2: Study of the Demographics

Items	Descriptions	Frequencies	Percentage
Gender	Male	26	24.1%
	Female	82	75.9%
Faculty	FSSG	40	37.0%
	FPP	26	24.1%
	FP	22	20.4%
	FSK	12	11.1%
	FUHA	7	6.5%
	FRIT	1	0.9%
Citizenship	Malaysia	107	99.1%
	Brunei	1	0.9%
Learning experience with Arabic	Yes	48	44.4%
	No	60	55.6%

The distribution of respondents from the study as shown in Table 2, indicates that the majority of respondents are female which is 82 (75.9%), while the number of male

respondents is only 26 (24.1%). Therefore, a total of 108 respondents were involved in the study of needs analysis. From the 108 samples of students studying Arabic at the basic level, the majority of respondents (37%) are students from the Faculty of Applied Social Sciences (FSSG), totalling 40 individuals. This is then followed by respondents from the Faculty of Business and Management (FPP) which is 24.1%, totalling 26 individuals. Respondents from the Faculty of Medicine (FP) is 20.4% which is 22 students, respondents from the Faculty of Health Sciences (FSK) is 11.1% which is 12 students, respondents from the Faculty of Law and International Relations (FUHA) is 6.5% or 7 individuals and respondents from the Faculty of Innovative Design and Technology (FRIT) with 0.9% or one person only. On learning experiences with Arabic, a total of 60 respondents (55.6%) declared that they have never learned the language while 48 respondents (44.4%) have learned Arabic at school level.

Capacity Level of the Mobile Device Owned

Types of mobile devices and its level of capabilities are listed in Table 3 with details on device ownership for this study.

Table 3: Respondents' Types of owned mobile devices and its capabilities

No1	Items	Descriptions	Frequencies	Percentages
1.	Ownership of mobile devices	Yes	106	98.1%
		No	2	1.9%
		Total	108	
2.	Types of mobile devices	Smartphones	95	88%
		Laptops	97	89.8%
		Handphones	34	31.5%
		iPod / MP4	12	11.1%
		iPads / Tablets	9	7.4%
		None	2	1.9%
		EDGE	1	0.9%
3.	Internet connection	HSDPA / 3G	25	23.1%
		4G and above	80	74.1%
		None	2	1.9%
4.	Device capabilities	Average level(email, internet, camera)	14	13%
		High level (Level 2+GPS + uploading application)	92	85.2%
		None	2	1.9%

Despite the majority of respondents owning a mobile device which is 98.1%, there were two respondents (1.9%) who did not own any mobile devices. All respondents who have a mobile device have access to an internet connection, and most of them have a 3G connection and above which is 97.2% and have a high level of mobile device capability which is 85.2%. Item number 2 shows that respondents had more than one mobile device used i.e. 88% using smartphones (n = 95) and 89.8% using laptops (n = 97). It can be concluded that most respondents have access to the technology as required for their mobile learning.

Frequency of using Technology

Findings in Table 4 indicates respondents' frequency of using technology in their learning within a week.

Table 4: Frequencies using Technology in Learning

	Frequencies using Technology					Mean	(SD)	Interpretation
	Never	Once a week	2-3 times a week	Once a day	Several times in a day			
Smartphones	-	9.3%	26.9%	14.8%	47.2%	3.94	1.19	High
iPad / tablets	87%	2.8%	0.9%	2.8%	4.6%	1.30	.998	Low
iPod	94.4%	0.9%	0.9%	-	1.9%	1.08	.598	Low
Laptops	-	8.3%	45.4%	13%	31.5%	3.62	1.12	Average
Desktops	68.5%	10.2%	9.3%	3.7%	6.5%	1.64	1.21	Low

N=106

Table 4 shows the percentage of technology use for learning purposes among respondents within a week. Besides percentages, the table also shows mean, standard deviation (SD) and interpretation of the use of technology in the learning among the respondents. The mean for the use of smartphones in learning within a week was at the highest level of 3.94 (SD = 1.19). The mean score for the second highest device used by the respondents is laptops which is 3.62 (SD = 1.12) which shows that mobile technology is very relevant and most often used compared to desktop computers. These findings indicate that the respondents are willing to implement m-learning based on their use of mobile technology tools (either smartphones or laptops).

Students' Perceptions of Arabic Language Learning

Table 5 below is an analysis of findings from students' perceptions on Arabic language learning.

Table 5: Students' Perception on Arabic language as a subject

No.	Statements	Yes	No	Uncertain
Why do you learn Arabic language?				
1.	Interest	85 78.7%	5 4.6%	18 16.7%
2.	A required subject	65 60.2%	43 39.8%	0 0%
3.	For communication	35 32.4%	73 67.6%	0 0%
4.	To further understand sources of religion such as Quranic texts and Hadith	62 57.4%	46 42.6%	0 0%
5.	Is 2-hours of lecture in a week sufficient to learn Arabic language?	67 62%	41 38%	0 0%

N=108

In addition to learning Arabic language as a compulsory subject, the findings from Table 5 also indicated that the majority of students (78.7%, n = 85) are interested in learning Arabic language. Most respondents also agreed (62%, n = 67) that learning basic Arabic subjects is sufficient for only two hours in a week.

Consent to Develop Learning Aids in Mobile Form.

Table 6 shows consensus among the respondents to develop learning aids in mobile form to learn Arabic at the basic level.

Table 6: Consensus to develop m-learning for Arabic language at basic level

No.	Statements	Yes	No
1.	Do you agree that learning content for Arabic language should be developed in a mobile form?	100 92.6%	8 7.4%

Based on Table 6, it was found that the majority of the respondents agreed (92.6%, n = 100) to develop a module of Arabic language learning aids through the use of m-learning.

Level of Acceptance of M-learning (Expected Performance)

The distribution of items in Table 5 shows the level of students' acceptance for the use of m-learning in the learning process.

Table 7: Level of students' acceptance for m-learning

No.	Statements	Mean	SD	Interpretation
1.	I expect the use of m-learning to be useful in learning Arabic language.	3.81	.837	High
2.	The use of m-learning accelerates my process of learning.	3.58	.763	Average
3.	The use of m-learning increases my learning performance.	3.54	.766	Average
4.	The use of m-learning provides me the opportunity to improve my level of mastery in Arabic vocabulary.	3.78	.777	High
5.	The use of mobile devices allows my easy interaction with the lecturers.	3.85	.759	High
6.	Skillful use of the mobile device makes me more proficient in applying m-learning.	3.69	.729	High
7.	The experience of using a mobile device makes it easier for me to use it in m-learning.	3.77	.756	High
8.	I like using m-learning in learning.	3.39	.936	Average
9.	A variety of exciting applications available via mobile devices encourages me to apply for m-learning.	3.69	.769	High
10.	I have always been positive about using mobile technology in the implementation of m-learning.	3.71	.724	High
11.	M-learning will assist me in learning if it is implemented.	3.65	.701	Average
12.	I plan to use m-learning in the future process of learning.	3.47	.803	Average
13.	I feel m-learning can help me learn Arabic language.	3.62	.817	Average
14.	If I was given a choice, I will use m-learning for Arabic language learning sessions.	3.44	.921	Average
15.	I use m-learning in other subjects.	3.69	.744	High
16.	My lecturers encouraged me to use m-learning.	3.72	.771	High
17.	Friend encouraged me to use m-learning.	3.44	.835	Average
18.	The university encouraged and provided support using m-learning.	3.81	.751	High
19.	I will use the latest learning method in line with the	3.83	.690	High

mainstream.

N=108

Based on Table 5, it is found that the majority of students' acceptance for the use of m-learning in Arabic language learning is high while the remaining is at a moderate level.

Level of Acceptance of M-learning (Concerns)

Table 6 shows the level of respondents' acceptance of m-learning (concerns) in their learning process.

Table 8: Level of respondents' concerns while using m-learning

No.	Statements	Mean	SD	Interpretation
1.	I am worried about my internet quota.	3.90	1.289	High
2.	I am worried about the available internet accessibility in campus.	3.52	1.242	Average
3.	I am worried about the use of m-learning that will delay my learning process.	3.62	1.133	Average

N=108

Based on Table 6, the respondents expressed their concern over the increasing use of their internet data due to using m-learning in their learning process with a mean score of 3.90 and a standard deviation of 1.289. However, if they use m-learning in the campus area, it will not be a hassle for them.

DISCUSSION

Findings for the first research question is about students' needs for learning aids and teaching of Arabic at the basic level in m-learning. The findings showed that the majority of respondents agreed to develop a learning module or aid for basic level Arabic language learning in mobile form, even though they faced concerns over the increasing use of their internet data on a daily basis. This is because teaching and learning which was previously conducted, has now turned from face-to-face learning mode to online learning. Thus, these respondents argued that there is a need to develop a learning module in mobile form. The mobile Arabic m-learning module can help students to learn independently anytime and anywhere irrespective of time and place. Not only it is easy to access but can be used when they need to.

In answering the second research question of the study which is on the level of skills and use of mobile devices in the learning of Arabic language students, most of the respondents own a mobile device and have more than one mobile device to use in their learning process. Respondents also agreed that their experience of using mobile devices will make it easier for them to use m-learning in learning Arabic language. In addition, they are also very positive about using the technology available today. Respondents are also willing to use m-learning not only for one subject, but in other subjects they are studying.

As of the third question which revolves around the level of students' acceptance and their intention of using mobile devices when integrated with learning Arabic, it is found to be also at a high level. The data also shows that the respondents agreed to use the latest learning methods in line with the current use of technology in education. This is supported by the data that the level of device usage in a week is high, either by using smartphones or laptops. However, the level of acceptance for m-learning which helps the learning of Arabic language

is found to be at a moderate level only. Another interesting finding about the respondents' preference to use m-learning in Arabic language learning also showed at a moderate level. It is possible that if a module can be developed better and then applied in the right way by teachers or supervisors, then it will have a positive impact on students in line with the findings of Mohd Majid & Zakaria (2007) and Aida Suraya et al. (2006).

CONCLUSION

In conclusion, the level of students' acceptance for the use of m-learning in Arabic language at the basic level is mostly at a high level, followed by a moderate level. Students are positive and optimistic at accepting innovations in their learning process in line with the technological sophistication in teaching and learning. However, there are also concerns expressed by students about the use of m-learning Arabic later. If it is not applied properly and used correctly, it will result terribly as expressed by the respondents. Thus, teachers and educational institutions play an important role at ensuring that the hope to develop a student learning aid or m-learning module can achieve its objectives and in line with current needs and requirements.

REFERENCES

- Aida Suraya, M. Y., Zakaria, K., Azizan, A., Bahaman, A. S., Suhaimi, N., Mohd Zul, M. Y., ... Hasmah, A. W. (2006). Use of webcasting technology in teaching higher education. *International Education Journal*, 7(7), 916–923.
- Aliza, A., & Zamri, M. (2015). Analisis Keperluan terhadap penggunaan sasaran modul pendekatan berasaskan bermain. *Jurnal Kurikulum & Pengajaran Asia Pasifik*, Bil 3(1), 1–8.
- Basilaia, G., & Kvavadze, D. (2020). Transition to Online Education in Schools during a SARS-CoV-2 Coronavirus (COVID-19) Pandemic in Georgia. *Pedagogical Research*, 5(4). <https://doi.org/10.29333/pr/7937>
- Biswas, B., Roy, S. K., & Roy, F. (2020). Students Perception of Mobile Learning during COVID-19 in Bangladesh: University Student Perspective. *Aquademia*, 4(2), ep20023. <https://doi.org/10.29333/aquademia/8443>
- Ghazali, Y., Nik Mohd, R., Parilah, M. S., Wan Haslina, W., & Ahmed Thalal, H. (2011). Kepercayaan jangkaan keupayaan sendiri dalam kalangan pelajar kursus bahasa Arab. *GEMA Online Journal of Language Studies*, 11(1), 81–96.
- Kementerian Pengajian Tinggi. (2020). Panduan Pengendalian Program Pendidikan Tinggi Semasa dan Pasca Perintah Kawalan Pergerakan. Retrieved August 23, 2020, from <https://www.mohe.gov.my/media-kpt/kenyataan-media/1130-advisory-note-no-4-2020-panduan-pengendalian-program-pendidikan-tinggi-semasa-dan-pasca-perintah-kawalan-pergerakan>
- Mahendher, S., Doreswamy, H., Shenoy, V., & Uttam, R. (2021). Covid-19: Lockdown - perception of faculty and students towards life, society, teaching, and learning. *Journal of Contemporary Issues in Business and Government*, 27(1), 2811–2833. Retrieved from https://cibg.org.au/pdf_9421_d306972bc7ae39d5ea2675ed8fca292f.html
- Mohd Majid, K., & Zakaria, K. (2007). Penerapan hasil pembelajaran dan kemahiran insaniah dalam kurikulum pengajian tinggi. In A. A. Sidek, K. Mohd Majid, M. Hamidah, A. Mansor, J. Mohd Farid, W. Zaidan Abdul, ... M. Nor Azirawani (Eds.), *Monograf Pengajaran dan Pembelajaran IPTA* (pp. 280–288). Serdang: Pusat Pembangunan Akademik (CADE) UPM.
- Mohd Paris, S., & Saedah, S. (2016). Analisis Keperluan Pembangunan Model Pengajaran M-Pembelajaran Mata Pelajaran Sejarah Sekolah Menengah. *Jurnal Kurikulum &*

- Pengajaran Asia Pasifik*, 4(4), 12–24.
- Mohd Ridhuan, M. J., & Nurul Rabihah, M. N. (2020). *Kepelbagaian metodologi dalam penyelidikan reka bentuk dan pembangunan*. Selangor: Qaisar Prestige Resources.
- Mohd Shahrizal, N., Mohd Firdaus, Y., Mohd Fauzi, A. H., & Muhammad Sabri, S. (2016). Analisis respons pelajar terhadap reka bentuk laman E-Pembelajaran Bahasa Arab melalui EZ-Arab.net untuk pelajar sekolah rendah. *Jurnal Sultan Alauddin Sulaiman Shah*, 3, 1–18.
- Naomie, S., Chan, W. H., Shuhaimi, M., Nor Erne Nazira, B., Safiya, A., Ahmad Athif, M. F., ... Shaekh Mohammad, S. (2020). COVID-19 epidemic in Malaysia: Impact of lockdown on infection dynamics. *MedRxiv*, (May).
<https://doi.org/10.1101/2020.04.08.20057463>
- Nor Kamaliah Mohamad, & Ahmad Zabidi Abdul Razak. (2015). Kepimpinan Sekolah dan Pembelajaran Sepanjang Hayat Dalam Kalangan Guru di Dungun, Terengganu. *Jurnal Kepimpinan Pendidikan*, 3(2), 45–63.
- Norlidah, A. (2010). *Pembangunan modul pedagogi berasaskan teknologi dan gaya pembelajaran Felder-Silverman kurikulum fizik sekolah menengah*. Universiti Malaya. Retrieved from <http://studentsrepo.um.edu.my/3140/>
- Radzuwan, R., Mohd Firdaus, Y., Mohd Fazry, A. R., & Kamariah, Y. (2016). Teachers' informal learning via social networking technology. *International Journal of Emerging Technologies in Learning*, 11(10). <https://doi.org/10.3991/ijet.v11i10.5908>
- Rahimi, M. S., Zawawi, I., & Wan Nordin, W. A. (2005). Pengajaran dan Pembelajaran Bahasa Arab Berasaskan Web. *Pendidikan Bahasa Arab Di Malaysia Cabaran Dan Inovasi*.
- World Health Organization. (2021). Coronavirus disease (COVID-19) pandemic. Retrieved April 19, 2021, from <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>