





i-Mumaarasah – Gamified Arabic Topical Practices


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Abstract: Memorizing vocabulary is tedious for learners as a lot of practices are provided. The conventional practice in teaching Arabic cannot be relied on, especially to the learners of the current generation who have been exposed to the technology. The challenges emerge in the teaching of Arabic are lack of supporting activities, lack of exercises and lack of using technology-oriented learning materials. Therefore, the instructors may have difficulties to provide sufficient exercises through a suitable platform in order to ensure learner engagement and at the same time achieve course learning outcomes. Language requires practice. Therefore, to master any languages including the Arabic language, learners should practice it. One of the ways is through doing exercises. Therefore, *i-Mumaarasah – Gamified Arabic Topical Practices* has been designed on a digital online platform using Wordwall for providing exercises. It has been designed covering every topic of the TAC101 (Foundation Arabic Level 1) course offered at Universiti Teknologi MARA. The exercises use only three of the templates provided on Wordwall which are quiz, gameshow quiz and maze chase. This advance approach can be applied in face-to-face and online classes.

Keywords: the Arabic language; learning practice; gamification; Wordwall; engagement.



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1. INTRODUCTION

One of the elements in language learning is to memorise vocabulary which contains a set of words required by a course. It is tedious to memorise vocabulary by doing numerous exercises conventionally provided through workbooks or worksheets. However, the only way to make acquire vocabulary is by practicing the language through exercises. Practice is the main key in the success of the learning process (Samah, 2013). As for the Arabic language, one of foreign languages, the ability to use Arabic passively and actively requires intensive practice (Fawzani & Nurjannah, 2022).

The challenges emerge in teaching Arabic language are lack of teaching aids, teaching materials and supporting activities (Nik Ali, 2020). Technology-based teaching aids such as games, information systems and the Internet of Things (IoT) in the teaching and learning of Arabic are also

inadequate (Zulhemay, Mazlan, & Khairuddin, 2022). The other problems remarked by Samah (2013) are lack of exercises, insufficient additional reading and passives attitude of learners.

Learning Arabic requires a lot of practice through exercises. Conventional exercises normally involve the presence of instructor to conduct lessons in class. This may lead to having more lectures and requiring more face-to-face meetings in class. Language learning focuses only on lecture causes fatigue and loss of focus among learner (Jasni, Zailani, & Zainal, 2019). Moreover, limited class learning sessions also contribute to the challenges in learning Arabic (Zulhemay, Mazlan, & Khairuddin, 2022).

Conventional teaching is instructor-oriented and lack of learner participation that may decrease learner satisfaction in their learning process, resulting in decreased achievement (Wirani, Nabarian, & Romadhon, 2022). One of the conventional practices to memorize vocabulary is by giving specific times to learners to recall and memorize the vocabulary once each topic is completed. The instructor may ask them to answer exercises provided in the textbook either in class or assigned as a homework. The other way to practice is that the instructor provides exercises written on the board and the instructor selects certain learners to go in front of the class to complete questions on the board. All the approaches mentioned require the instructor to provide correct answers and explain mistakes done by learners in class. When the same ways are applied in every learning session, learners may get bored. As a result, their learning engagement will decrease over time.

The application of educational games can overcome the issue of boredom and low engagement in learning. With regard to providing exercises, using educational games allows learners to practice language through the fun way. Prior research indicates that using educational games in learning Arabic increases learners' interest (Fawzani & Nurjannah, 2022; Wirani, Nabarian, & Romadhon, 2022; Nik Ali, 2020; Jasni, Zailani, & Zainal, 2019; Whitton, 2007). It also can transform the traditional way of learning to engage the new generation of learners (Whitton, 2007). The aim of using game-based learning regularly in the learning process is for the practice purpose (Jasni, Zailani, & Zainal, 2019). Game-based learning is one of the alternatives to remain the learning process interesting by using variety of methods, and it is essential as the easy way to strengthen and understand the Arabic language (Nik Ali, 2020; Jasni, Zailani, & Zainal, 2019). Using smartphones or apps might also help the instructor to create a good lesson (Shafie, Nik Yusoff, & Baharudin, 2019). Therefore, a set of online educational games known as *i-Mumaarasah* was designed and developed for providing exercises to practice the Arabic vocabulary according to topics. It is an advanced approach that can be applied for face-to-face and online classes.

2. METHOD & MATERIAL

The game content is according to the lesson for each topic in the TAC101 course textbook used in class. The games basically are a tool for revision that learners use once each lesson is completed. The content was transformed into games by using the game templates provided by an application called Wordwall. The template chosen depends on the objectives of the exercises. Wordwall was chosen to develop *i-Mumaarasah* because it supports the Arabic alphabets, provides a free access and is user-friendly to instructors and learners. To access exercises using Wordwall, learners are not required to sign up or log in Wordwall. The instructor just needs to provide a link of a game to learners, and they can access the exercise on Wordwall only with a single click of the link given on their device connected to the internet. Wordwall can be played on various digital devices such as smartphones, tablets, laptops and desktops. Learner can play the game provided repeatedly without any restriction whether in the classroom or outside of the classroom. While the instructor can create different games on different templates using the same content entered on Wordwall. On the

other hand, the activities created can also be printed into hardcopy. The games in *i-Mumaarasah* were divided into five topics and developed using several game templates which were quiz, gameshow quiz and maze chase.

The games designed according to each topic in the TAC101 course covering the whole syllabus. The syllabus was divided into five main topics. The following are three figures to illustrate how Wordwall was applied for creating *i-Mumaarasah*. Figure 1 shows the screen layouts of the introduction for the five main topics. Next, Figure 2 shows the templates provided by Wordwall that the instructor can choose from. Finally, Figure 3 shows exercises using different game templates on Wordwall.

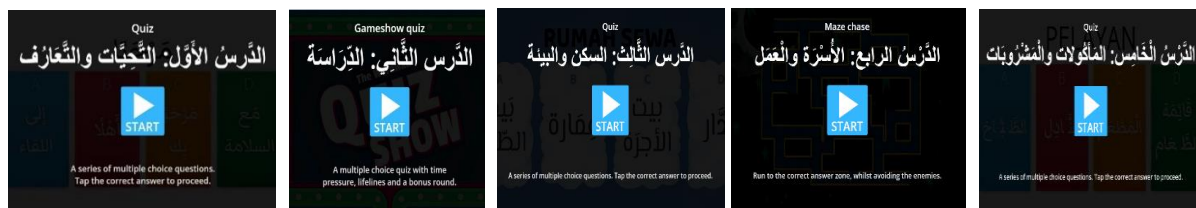


Figure 1. Screen layouts of the introduction for each topic

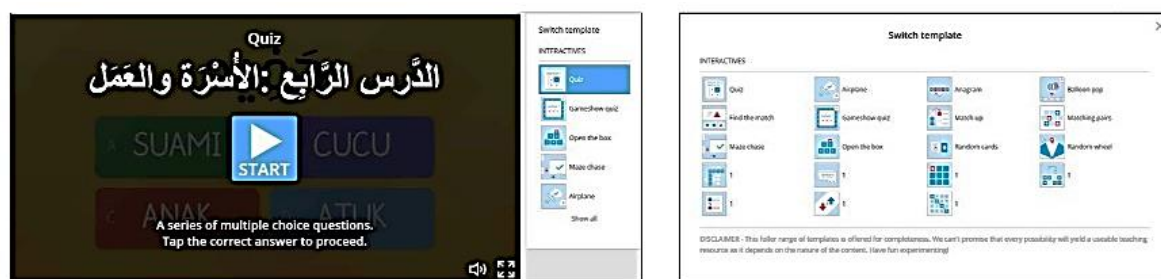


Figure 2. Screenshots of the interactives template available



Figure 3. Screenshots of exercises

This paper aims to evaluate the effectiveness of applying Wordwall for developing *i-Mumaarasah* for practising the Arabic vocabulary. The quantitative data were collected from the summary of one activity on Wordwall assigned to 26 learners on 26 October 2021. The quantitative data were extracted from Wordwall and the summary of results provided by Wordwall in frequencies and charts was presented in the findings.

3. FINDINGS

The activities of the exercise in the form of quiz game are summarized on Wordwall in several ways and can be accessed by the instructor. Figure 1 shows the summary which include the total number of participants, average scores, top score, and the fastest learner answer the exercises according to timing. The correct and incorrect answers are also summarised on the board by presenting through a bar chart.

The quiz game assigned to learners was Maze Chase where the deadline was not set in order to allow learners to use the game for practising the Arabic exercise repeatedly. Figure 4 shows that (1) the game was assigned to 26 learners and 25 learners participated in the exercise, (2) the average score was 12.4 points, (3) there two learners obtained the top score which was the full marks (25 points), and (5) the fastest learner was registered as “luqman” who managed to complete the game in 21.2 seconds.

Other than that, Figure 4 also presents two bar charts to show results by question in terms of how many learners got the answers correct and wrong, and score distribution. The results indicate that the majority of the learners answered the questions correctly.

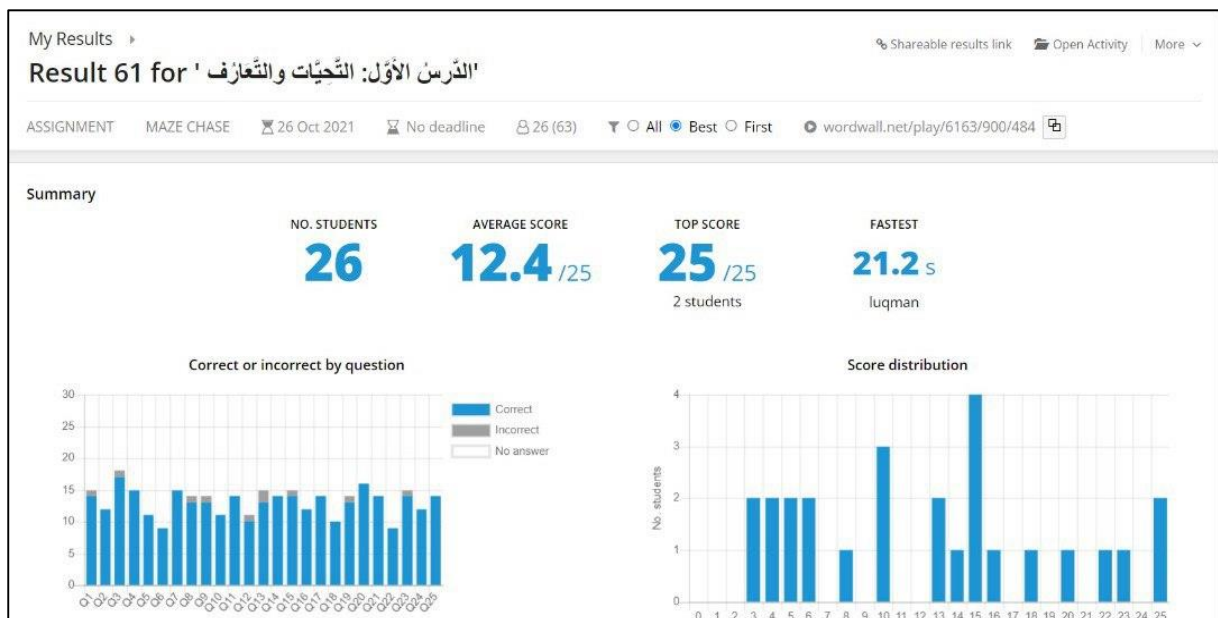


Figure 4. Screenshot of result summary

Figure 5 shows the results by questions. It informs how many questions learners answered correctly and wrongly. The instructor can sort the results by three options: (1) Number, (2) Correct and (3) Incorrect. In the figure, the instructor chose to sort the results by number. The results demonstrated that the highest score of correct answer was recorded by Question 3 while the lowest score of correct answer was recorded by Question 6.

Results by question

SORT BY Number Correct Incorrect

Question	Correct	Incorrect
1 ▶ مَرْحَلًا	14	1
2 ▶ كَيْفَ خَالَكَ	12	0
3 ▶ فَرَسَةٌ سَوِيَّةٌ	17	1
4 ▶ مَا اسْمُهُ؟	15	0
5 ▶ مَن هَذَا؟	11	0
6 ▶ هَلْ أَنْتَ يَاقِينُ؟	9	0
7 ▶ هَلْ هُوَ طَلَبٌ؟	15	0
8 ▶ أَنْتَ مِنْ أَيِّ وِلَايَةٍ؟	13	1
9 ▶ أَنْتَ مِنْ بِلَدٍ؟	13	1
10 ▶ مَا هَذَا؟	11	0
11 ▶ مَن هُوَ؟	14	0
12 ▶ SELAMAT TINGGAL	10	1
13 ▶ أَحْمَدُ مِنْ وِلَايَةِ	13	2
14 ▶ مَدِينَتِي _____ فَاطِمَةُ	14	0
15 ▶ مَتَى فَصَلْتُكَ؟	14	1
16 ▶ مَا هَذَا؟	12	0
17 ▶ صِبَاغُ الْخَيْرِ	14	0
18 ▶ أَيْنَ تَسْكُنُ؟	10	0
19 ▶ مَتَى أَنْتَ؟	13	1
20 ▶ مَعَ السَّلَامَةِ	16	0
21 ▶ BUKU LATIHAN	14	0
22 ▶ مَا اسْمُهَا	9	0
23 ▶ PENSYARAH (P)	14	1
24 ▶ NEGARA	12	0
25 ▶ مَن وِلَايَةُ أَنْتَ؟	14	0

Figure 5. Screenshot of results by question

Results by student

SORT BY Submission Name Correct + Time

Student	Submitted	Correct	Incorrect	Time
▶ Nurulhuda izzati	10:47 - 26 Oct 2021	6	1	2:11
▶ NURADILA	10:47 - 26 Oct 2021	4	2	2:43
▶ Nash2020	10:49 - 26 Oct 2021	6	2	3:26
▶ Nursyuhada binti Faizal	10:49 - 26 Oct 2021	5	2	3:05
▶ mimi	10:52 - 26 Oct 2021	15	1	5:40
▶ Najmuddin Akmal	10:54 - 26 Oct 2021	4	1	1:49
▶ Najmudin	10:54 - 26 Oct 2021	10	3	5:38
▶ Aqilah Huda	10:59 - 26 Oct 2021	15	1	6:19
▶ محمد نعيم بن محمد ناصر	10:59 - 26 Oct 2021	14	3	5:34
▶ نور الشهيبي نجاد	10:59 - 26 Oct 2021	3	2	1:29
▶ DILA	11:00 - 26 Oct 2021	15	1	6:50
▶ معز الدين	11:01 - 26 Oct 2021	13	1	5:12
▶ SITI FATIMAH	11:01 - 26 Oct 2021	10	1	4:38
▶ Nurul Adnin	11:02 - 26 Oct 2021	22	1	8:18
▶ MUHAMMAD NABIL BIN FAUZI	11:02 - 26 Oct 2021	5	1	2:34
▶ Sarah Aqilah	11:03 - 26 Oct 2021	20	1	7:14
▶ Najmudin (real)	11:03 - 26 Oct 2021	16	3	6:52
▶ putrisofea	11:05 - 26 Oct 2021	23	3	9:21
▶ izzah	11:05 - 26 Oct 2021	10	1	4:56
▶ سيني عاتلة بنت محمد مورشيني	11:05 - 26 Oct 2021	15	2	5:22
▶ Nursyuhada binti Faizal	11:06 - 26 Oct 2021	3	2	2:04

Figure 6. Screenshots of result by learner

Figure 7 shows the leaderboard which ranked the performance of learners in answering the assigned exercise according to the time to complete the exercise and score. It shows that “luqman” was ranked at the first place, followed by other learners.

Leaderboard

Rank	Name	Score	Time
1st	Iuqman	25	8:50
2nd	Lutfi	25	9:14
3rd	putrisofea	23	9:21
4th	Nurul Adnin	22	8:18
5th	Sarah Aqilah	20	7:14
6th	Muhammad Lutfi Aiman Bin Zuraidi	18	6:58
7th	Najmudin (real)	16	6:52
8th	سويلى عائشة بنت محمد مورشيدى	15	5:22
9th	mimi	15	5:40
10th	Aqilah Huda	15	6:19
11th	DILA	15	6:50
12th	محمد نعيم بن محمد لخصر	14	5:34
13th	Udin	13	5:08
14th	مجز الدين	13	5:12
15th	SITI FATIMAH	10	4:38
16th	izzah	10	4:56
17th	Naimudin	10	5:38

Figure 7. Screenshots of leaderboard

4. DISCUSSION

Almost all learners (25 out of 26 learners) participated in the assigned exercise. This indicates that they were interested in participating in the exercise. When an interactive learning process provided by the instructor, it can sustain the participation of learners because they involve in the learning activity according to their interests (Wirani, Nabarian, & Romadhon, 2022). Game-based learning approach is one of the effective language teaching methods because it helps learners to be more interested and motivated to learn Arabic (Nik Ali, 2020; Jasni, Zailani, & Zainal, 2019).

Games are a type of teaching aids. Teaching aids should be used to attract and increase the knowledge and ability of learners, so that ICT tools can also contribute to their achievement (Samah, 2013). Therefore, games should be part and parcel of learning, including foreign languages learning (Klimova, 2015). The development of Computer Assisted Language Learning material enhanced understanding of language pedagogy since it is much related to education systems (Ahmed Mukhtar, Sahrir, & Hassan, 2013).

The results also indicate that digital exercises in the form of games designed by using Wordwall enable learners to participate in digital exercises where the instructor could monitor their participation and learning progress through the summary of activities provided by the application. Each learners' activities were reported in detail as shown in Figure 6. Every activity must involve every learner to give them opportunity to participate in classroom activities (Samah, 2013). The summary of activities provided by Wordwall can be used as a tool to inform the instructor about the learners' participation in the learning activity provided on Wordwall. Therefore, using games in language learning is essential in order to ensure that the participation of every learner can be monitored effectively.

The other summary of results is in the form of leaderboard (see Figure 7) where the instructor and learners can view. In the exercise, learners were ranked according to score and the time spent to complete the exercise. Since the exercise is the form of game which can be played more than once, learners can compete to be the top player. A leaderboard creates competition among learners to be ranked at the first place in the learning activity. It benefits learning by increasing competitiveness and sense of comparison among learners (Bai, Hew, Sailer, & Jia, 2021). When they play the game many times, they actually practise the language without realising it as it is done through the fun way.

The innovation of this approach by transforming conventional exercises into games on Wordwall is rebranding the traditionally practices to accessible exercises. By this way, providing exercises is not only restricted by using textbooks, and the activities are not filling up exercises in

book manually or whiteboard oriented. Therefore, the exercises in the form of games can be answered many times, at any time and from anywhere if devices are connected to the Internet.

Traditionally, learners get the correct answers after completing their exercises through the instructor's explanation and discussion in the classroom. Through this innovation, other than having learning in a fun way, it also can save time in each learning session. It is because the game provides immediate feedback to verify correct or wrong answer and learners are also informed about their learning achievement through score and a leader board which are automated in the game system.

4.1 Novelty of the product

The product is novel as is developed specifically for a course (TAC101). The contents for the exercises were specifically selected based on specific syllabus which meet the learners' need. Moreover, the exercises only apply three of the templates provided in Wordwall which are quiz, gameshow quiz and maze chase. This is due to the application of the templates can attain the purpose of providing the exercises to practice the Arabic vocabulary.

4.2 Commercialisation potential of the product

The product cannot be commercialized. However, from the application of Wordwall benefits learner as well as the instructor. The product is not restricted to be used for the TAC101 course only, but it can also be used by any Arabic learner at the beginner level.

5. CONCLUSION

The Innovation of *i-Mumaarasah* Gamified Arabic Topical Practices has transformed the traditional exercises into digital online quiz games. Previously, learners memorized the vocabulary by themselves using a textbook or exercise book with their own way. Therefore, their engagement and learning progress outside the classroom are difficult to be monitored. Therefore, the instructor decided to create digital online quiz games called *i-Mumaarasah* that promote learning through the fun way by applying several gamification elements such as verification feedback, score, timer, leaderboard and interesting background music to increase their engagement. The vocabulary learning activities promote engaging learning process and their learning progress can be tracked quickly and easily. *i-Mumaarasah* can be played repeatedly until they get the highest and the best score. This repetition will enhance and strengthen learners' memorization of the same vocabulary. *i-Mumaarasah* has been designed to include every topic in the syllabus to ensure that learners can memorise the vocabulary they have to learn for every topic straight away after each lesson. Therefore, Wordwall was chosen for the purpose as it provides the gamification elements and support fun learning. Another advantage of using Wordwall is that the quiz templates can be changed depend on the intended learning objectives. There are 19 different templates that can be chosen. For *i-Mumaarasah*, only three of the templates provided in Wordwall were used which were quiz, gameshow quiz and maze chase. Learners also can access the quiz games via the Wordwall phone app and web browsers. This advance approach can be applied in face-to-face and online classes.

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