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# A Model Framework for the Implementation of Gamification in Arabic Teaching in Malaysia

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Abstract—Arabic language education is one of the foreign languages that must be learned in most schools in Malaysia. It focuses on four language skills, namely listening, speaking, reading, and writing. Several past studies found that students' Arabic language proficiency in Malaysia has not yet reached a satisfactory level. This is due to the learning atmosphere, students' attitudes, and teachers' teaching methods that have impacted students' motivation to learn. The gamification approach is a new initiative in technology-based Arabic education in Malaysia and based on the past researchers' findings, this approach has been proven to be effective. Therefore, this paper aims to build a framework for the implementation model of using gamification in Arabic teaching in Malaysia. Gamification is one of the methods dealing with the problem of Arabic language mastery based on the secondary sources. Past studies on gamification were about the problem of mastering the Arabic language among students in Malaysia, gamification approaches in the field of Arabic, the level of knowledge and acceptance of gamification among educators, and the factors driving the use of gamification. This paper will contribute to the knowledge of new innovative methods or approaches that are more effective and further give impact on pedagogical approach in teaching and learning Arabic to improve students' understanding, motivation, and performance.

Index Terms—model framework, gamification practices, teaching, Arabic language, Malaysian students

#### I. INTRODUCTION

Arabic language education in Malaysia is one of the foreign languages that must be learned in most schools apart from English and it has developed since the beginning of the 20th century (Nordin, 2005; Samah, 2012) until now. Arabic language education is also important in the Islamic and Moral Education Curriculum Division, Department of Islamic and Moral Education, Ministry of Education Malaysia (KPM). Arabic has been categorized into two, namely *Bahasa Arab Tinggi* (BAT-Advanced Arabic) and *Bahasa Arab Komunikasi* (BAK- Communicative Arabic) (Sardi & Majid, 2004) under the *Kurikulum Standard Sekolah Menengah* (KSSM-Secondary School Standard Curriculum) and *Kurikulum Bersepadu Dini* (KBD-Early Integrated Curriculum). Teaching and learning Arabic continues to develop by focusing on the four language skills of listening, speaking, reading, and writing. To achieve this goal, the syllabus used in the KSSM and KBD curricula focuses more on the mastery of Arabic vocabulary and grammar.

However, what is worrying, is the findings of previous studies have found that Arabic language proficiency among students is still at low level (Awang et al., 2014; Karim & Husaini, 2016; Misnan & Ghazali, 2019; Baharum & Rahman, 2020; Mokhtar et al., 2020), especially in writing skills (Karim & Husaini, 2016; Sopian, 2019) and speaking (Fauzi et al., 2020). This weakness is increasing daily even though students have been provided with good textbooks, a more robust curriculum syllabus, and teachers who are trained and qualified in teaching Arabic.

The attitude and motivation to learn are essential and they drive students' interest in learning Arabic and contribute to students' success in mastering the Arabic language (Mat & Yunus, 2014). Among the main factors that contribute to the weakness of students' mastery of the Arabic language is lack of motivation to learn Arabic, which stems from an unfavorable learning environment (Abdullah et al., 2015), students' attitudes toward learning Arabic (Mat, 2013; Abdullah et al., 2015; Ariffin@Riffin & Taat, 2020) as well as the teaching methods used by teachers which demotivate students to learn (Ariffin@Riffin & Taat, 2020). This situation can have a negative impact on performance and achievement in learning Arabic. Students' motivation towards foreign language learning is influenced by several factors,

which are internal and external. Internal factors (intrinsic) involve interests, psychology, and direct beliefs. While external factors (extrinsic) are language structure, instructors, modules, and teaching design (Mat & Soon, 2010).

According to Jusuf (2016) and Zin et al. (2021), and Ismath et al. (2022), the gamification method is one of the educator's approaches which allow the use of games to motivate students in teaching and learning. However, based on the researcher's survey, the use of gamification in Arabic teaching and learning in Malaysia still needs to be improved. Arabic language teaching methods focus more on traditional methods (Ariffin@Riffin & Taat, 2020), which are considered to be less effective and bored (Dicheva et al., 2015). This situation has caused weak students to seek help in understanding the content presented by the teacher in class (Jasni et al., 2020). Abdullah and Razak (2021) stated that there are still teachers who prefer to use only old method which is the teacher centered approach. In addition, some teachers focus more on the lecture method (Zakaria et al., 2015) and memorization of facts. Teachers' teaching methods must be diversified by focusing on more than one-way teaching methods. The teacher's tendency to convey facts without paying attention to the student's abilities and interests makes the learning atmosphere slow and dull. This scenario makes teaching and learning less exciting and less effective. Efforts to facilitate the learning process through creative teaching strategies need to be enhanced with activities that can stimulate students' minds (Zulkifli et al., 2021).

Gamification is learning based on game design elements in non-game contexts (Deterding et al., 2011; Cesp & Lage, 2022). It is a game-based learning approach (GBL) that is student-centered (Sim es et al., 2013). Using gamification in teaching and learning can attract students' interest and encourage them to be active in learning, including the language learning (Sim es et al., 2013; Flores, 2015). It is also a method of applying the experience of active interaction between humans and computers (HCI), psychology, and the development of digital games to stimulate human involvement and motivation (Hanafiah et al., 2019). In addition, gamification can also be classified as an effort to create innovation in modern language education through creativity to improve students' performances in learning. This approach is used by teachers when teaching online using various free applications on the internet, such as Kahoot! Quizizz, Quizlet (Ismail & Kamal, 2019; Zainuddin et al., 2020), Wordwall and Qimkit. Gamification is not only using game elements in a non-game context, but its role is essential to increase fun and motivation in language teaching and learning (Flores, 2015).

The importance of the gamification approach in education cannot be denied any more when several studies have proven that the gamification approach in teaching and learning has positive effects on students' achievements (Jusuf, 2016; Yildirim, 2017; Iberahim & Noor, 2020; Cesp \u00e9n & Lage, 2022) as well as their behaviors towards learning (Yildirim, 2017). Gamification not only impacts students' engagement, and attitudes, but can also improve student learning. In addition, gamification can foster intrinsic motivation and make learning more enjoyable, thereby improving students' knowledge and skills (Dicheva et al., 2015; Khaleel et al., 2016). Therefore, gamification methods need to be practiced in teaching and learning sessions to help students understand something taught by the teacher more effectively.

#### II. A STUDY OF ARABIC LANGUAGE MASTERY AMONG STUDENTS IN MALAYSIA

In their study, Karim and Husaini (2016) have proven that school students have not yet mastered Arabic writing skills. It can be seen through the achievement of only 50% of students answering correctly for the three (3) questions composing sentences and 78.4% of poor students' achievement for questions that test the student's ability to connect stories. Karim and Husaini (2016) stated that although Arabic language learning has long existed in schools in Malaysia with various changes and improvements in the curriculum, students' proficiency in essay writing has yet to reach a satisfactory level. Among the causes of the decline in writing skills are poor vocabulary mastery (Azrin & Baharudin, 2020) and a weak mastery of Arabic grammar (Mokhtar et al., 2017).

A study by Khatib and Zainal (2018) on students' mastery of Arabic vocabulary from the aspect of using nouns and verbs has found that mastery of spelling nouns and verbs is still at a moderate level with a mean score of 10.57. At the same time, the level of mastery in understanding the meaning of words is also moderate, with a mean score of 10.96. Based on these findings, Khatib and Zainal (2018) suggest that Arabic teaching and learning methods must be improved. It is because vocabulary mastery is essential for a student because he needs to master the four language skills: listening, speaking, reading, and writing.

Sopian (2019) has found that the main factor of students' weakness in Arabic language skills is the students have difficulties to understand and acquire grammar compared to vocabulary. This situation is caused by attitude and motivation factors as well as methods and approaches used by teachers. The findings of Sopian's (2019) study are also in line with the findings of a study carried out by Ariffin@Riffin and Taat (2020), who found that there is a significant relationship between students' attitudes (r=0.210, p<0.05) and also teacher's teaching (r=0.229, p<0.05) with Arabic proficiency. The results of this finding show that the teaching implemented by the teacher can influence the students' attitudes toward learning Arabic. This aspect of student's attitude and teacher's teaching is an important matter because it often links to student's success and achievement (Sopian, 2019).

Meanwhile, a study by Fauzi et al. (2020) on the mastery of Arabic speaking skills has also found the overall mean value for the Arabic speaking skill problem construct to be moderately low, only reaching a mean value of 2.93. This problem is caused by the failure of students to master Arabic grammar and pronunciation (Din & Seman, 2019). In addition, there are other factors that contribute to the failure such as the environment that is not conducive, teaching materials and teaching methods used by teachers as well as lack of time to practice speaking skills (Fauzi et al., 2020).

This problem can be overcome by diversifying exercises, materials, and teaching methods implemented by teachers so that the learning objectives can be highly achieved (Din & Seman, 2019; Fauzi et al., 2020).

#### III. A REVIEW OF PAST STUDIES ON GAMIFICATION IN ARABIC LANGUAGE EDUCATION

Gamification in Arabic language education in Malaysia is a new initiative to achieve the Malaysian government's desire to optimize the use of ICT in foreign language education as an additional language and create a society awareness of technical aspects in education. It is in line with the Malaysian Education Development Plan 2013-2025 (PPPM 2013-2015), which gives attention and encouragement to second and third languages or foreign languages as additional languages as well as ICT aspects in education as stipulated in the second and seventh shifts of the 2013 PPPM -2025. The transformation of the Malaysian education system has been created to achieve the country's aspiration to produce teachers and students who are knowledgeable, innovative, and able to improve their thinking skills (Kementerian Pendidikan Malaysia, 2013). Therefore, the Malaysian Ministry of Education has provided 4G network internet access for all students in 10,000 schools under the Malaysian Ministry of Education to create a virtual education environment through 1BestariNet. This internet access is the basis for constructing a virtual learning platform that teachers and students can use to share teaching and learning resources, carry out interactive teaching and learning sessions, and communicate virtually.

Only a few past studies found the gamification approach in Arabic language education in Malaysia compared to other language areas, especially English. It is because the gamification method in Arabic language education is innovative, and its usage has yet to be widespread. Among the studies found is a study carried out by Mustari et al. (2012), who conducted a survey on the importance of language game methods in teaching and learning Arabic based on a literature review. Mustari et al. (2012) found that the language game method can strengthen students' understanding of Arabic and other impacts on the additional knowledge through creative teaching methods and stimulating students through repeated learning. The students were also found to show good interest in learning Arabic and were able to increase their self-confidence.

A study by Sukardi et al. (2016) on the gamification of the Arabic language also supports the study of Mustari et al. (2012), who found that the gamification method is suitable to be put into practice to help improve students' mastery. It can also reduce the problem of students' weaknesses in Arabic language mastery. It is in line with the rapid development of technology nowadays, which requires reformation in technology-based education.

Jasni et al. (2019) also surveyed the importance of the gamification approach in learning Arabic in Malaysia. His study also found that gamification methods can improve students' skills, especially the mastering of language skills such as listening, speaking, reading, and writing. It is because the learning process that uses the gamification method involves repetition activities which facilitate the acquisition of the Arabic language. This can be practiced during the learning session.

The study of Mohamad et al. (2019) reinforces the findings of Mustari et al. (2012), Sukardi et al. (2016), and Jasni et al. (2019), who discovered that the gamification approach in learning al-'adad (العدود) and al-m'adūd (المعدود) Arabic had a practical effect on students' performance. It is based on their survey of 60 students at Maahad Ahmadi Gemenchih Negeri Sembilan. The study's findings have proven that the experimental group that used the gamification approach in learning al-'adad and al-ma'dūd has shown a more significant improvement compared to the control group that did not use the gamification approach in learning al-'adad and al-ma'dūd.

Ismath et al. (2022) have shown that the gamification method increases students' knowledge in learning Arabic connecting words by reaching the highest mean score of 4.42. This situation can stimulate students' interest and motivation and further improve students' performance in learning Arabic. The findings of Ismath et al. (2022) on the effectiveness of gamification in learning Arabic connecting words also support the previous studies that found the gamification approach positively impacts students' Arabic language achievement.

The element of language games in the gamification approach gives a new perspective on technology-based learning. Based on several past studies, it is undeniable that the gamification approach in Arabic language education can positively impact learning. Therefore, the gamification approach needs to become a practice among educators in Malaysia as a solution to students' problems in mastering the Arabic language.

# IV. A STUDY ON KNOWLEDGE AND ACCEPTANCE OF EDUCATORS AND FACTORS DRIVING THE USE OF GAMIFICATION AS A TECHNOLOGY APPROACH IN EDUCATION

Teachers' positive attitudes and responses to the use of ICT are essential in improving the technology usage in education (Mollaei & Riasati, 2013). Based on a study by Iberahim and Noor (2020), the gamification approach still needs to be implemented in schools. Teachers are not interested in using gamification in teaching due to the need for more skills and knowledge (Adukaite & Cantoni, 2016; An et al., 2020; Devendren & Nasri, 2022). Al-Furaydi (2013) stated that teachers' knowledge of using computers in online teaching and learning has a positive relationship with the acceptance of e-learning in the classroom. However, there are still teachers who need to gain knowledge about the ICT policy introduced by the government, which causes the acceptance of teachers in the use of online teaching and learning to still be at a low level (Al-Furaydi, 2013).

Among other external factors that give impact the use of gamification among teachers is the need for more skill in using technology, especially computers, which refers to those teachers who live in rural areas (Kleiman, 2000). This problem can be overcome by encouraging teachers to follow short courses and trainings (Gilakjani & Leong, 2012) or get guidance from gamification experts (An et al., 2020). To achieve the optimal use of gamification in schools, ICT courses, or trainings as well as the use of technology in education, need to be expanded so that teachers' knowledge of using technology in language education can be improved, thus, the objectives of language teaching and learning can be successfully achieved. Teachers' training through workshops and computer facilities provided and previous teaching experience with ICT can influence teachers' attitudes and tendencies towards using ICT (Park & Son, 2009). This is essential because it is significantly related to the success or failure of the implementation of ICT in teaching and learning. Egbert et al. (2002) found that teachers who have experience using ICT in education are more likely to accept e-learning in teaching. It is because the experience of using ICT in teaching and learning can attract students' interest and increase their confidence and motivation in language learning (Park & Son, 2009).

In addition, some teachers face difficulties using the internet to access information or data needed in the teaching and learning process (Adukaite & Cantoni, 2016). The problems are such as the instability of internet access, the constraints of school resource support and technology infrastructure (Adukaite & Cantoni, 2016; Zainuddin et al., 2020), time factors, and aging teachers (Mart Parre ño et al., 2016). Therefore, the role of stakeholders is essential in ensuring that technological infrastructure resources are continuously improved according to the current needs so that the problem of internet access can be overcome well (Gilakjani & Leong, 2012; Ismail et al., 2021). School support plays a vital role as a driving factor (Ismail et al., 2021) as technology usage in education can be used among teachers.

#### V. RECOMMENDATIONS AND CONCLUSION

Based on the literature studies above, it was found that the gamification method needs to be implemented in Arabic teaching in Malaysia. This follows the findings of previous studies that have proven this method can positively and practically affect learning. The practice of using gamification among educators needs to be expanded to have a good impact on the performance of learning Arabic. Therefore, the researchers have built a model framework for the implementation of the practice of using gamification in the teaching of Arabic in Malaysia based on the previous studies, as shown in the following Figure 1:

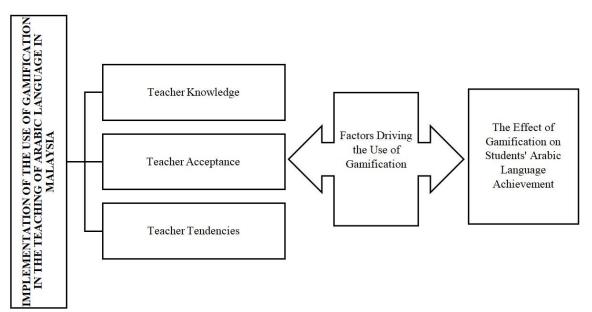


Figure 1. Framework for the Implementation Model of the Practice of Gamification in Teaching Arabic in Malaysia

Based on Figure 1 above, the use of gamification in Arabic language education in Malaysia can be implemented by identifying the level of readiness of teachers based on their knowledge. It is crucial because teachers' knowledge is closely related to acceptance (Al-Furaydi, 2013) and tendency (Egbert et al., 2002) of teachers to practice gamification. The practice of using gamification among educators can be realised by focusing on the driving factors that can encourage its wider use. Schools and the Malaysian Ministry of Education need to increase the number of courses and training in the form of technology and ICT services so that teachers can be exposed to a deeper understanding of the importance of gamification practices and subsequently have an optimal effect in teaching and learning. The level of proficiency in the use of ICT plays an essential role for teachers in implementing ICT because it can influence their motivation (Gobbo & Girardi, 2001) to apply technology-based teaching and learning methods.

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