Modified Monopoly Deal Game for Learning the Declension of Arabic Words

Tg Ainul Farha Tg Abdul Rahman*, Hasnul Fikri Ahmad Sukri, Hirzi Irsyad Hipni,
Mohamad Harith Mohd Tarmizi, Mohd Redza Riquelme Nisham, Muhammad Arif Hannan Mohamed,
Muhammad Asyraf Yusoff, Muhammad Habib Adnin, Muhammad Najmi Mohd Fauzi
Kolej GENIUS Insan, Universiti Sains Islam Malaysia, Nilai, Negeri Sembilan, Malaysia
*Corresponding author: tgainulfarha@gmail.com

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ABSTRACT

Declension is one of the basic principles of Arabic Syntax that must be mastered by students. However, learning the declension requires students to be familiar with a variety of rules and routines. Thus, it is essential to provide interactive and fun learning activities. Since the teenagers prefer to play card games as one of the tools for language learning, modified Monopoly Deal card game has a high chance of being utilized as a learning tool. This study aimed to (1) explore the steps and procedures in developing modified Monopoly Deal card game for learning the declension of Arabic words and (2) investigate the usability test level of using Arabic - Inovatif - Fun (ArIF) card game among secondary school students in Kolej GENIUS Insan, Universiti Sains Islam Malaysia. The design and development of this card game started with an analysis of three theories relating to the Revised Bloom's Taxonomy (Krathwohl & Anderson, 2009), Grammar Learning Strategies (Pawlak, 2009), Game-based Learning (Gee, 2003). ADDIE model was chosen as a model research framework in this study by running different phases of analysis, design, development, implementation, and evaluation. A set of questionnaires with both open and closedended questions were distributed among 60 students who were purposively sampled. This study contributed experiences on the design and development of an educational card game in learning Arabic Syntax. Findings from the evaluation process showed that ArIF card game scored highly since the card game promotes learning interactively, encourages ease of use, enhances learning, and increases communication skills. 16 closed ended questions of the usability testing questionnaire show that the mean score is above 3.5, which reflect reflects a high level of agreement, by referring to Oxford classification. Analysis of the open-ended questions also indicated students' agreement on the usability, practicality and effectiveness of this card games. Suggestions and comments from different students were synthesized and incorporated with the findings to guide further improvement of the card game and recommendations for future research. This interesting card game will help students in mastering the topic and assist teachers to perform active teaching and to learn in the classroom atmosphere.

Keywords: Game-based Learning, Revised Bloom's Taxonomy, Modified Monopoly Deal Game

INTRODUCTION

The Arabic language is the words used by the Arabs to express their purposes. This language has reached us from the previous generation to the latest generation, which has been transmitted and preserved using the Holy Qur'an and the Noble Hadith. The Arabic language encompasses many sciences of knowledge. Arab Sciences describe the knowledge that leads to the infallibility of the tongue (speaking) and the pen (writing) from articulating the language incorrectly. The Arabic language encompasses thirteen sciences:

morphology (Sarf), syntax (Nahw), calligraphy (Rasm), the study of meanings (Ma'ani), the study of imagery & figurative language (Bayan), the study of wondrous (Badi'), prosody ('Arudh), rhymes (Qawafi), poetry (Sha'er), composition (Inshaa), elucidation, (Khitabah), history of literature (Tarikh al-Adab), and body of language (Matan al-Lughah). Among these sciences, the most important and fundamental knowledge of the language is Morphology (Sarf) and Syntax (Nahw). This knowledge must be understood before proceeding to other Arabic sciences. Syntax (Nahw) is also known as the declension or grammatical status of words (I'rab) as the foundation of syntax science which is referred to as I'rab (Ghalayiniyy, 1989).

In the Malaysian context, the Arabic language subject is an elective subject for secondary school the Malaysian Muslims and even majority of non-Muslim's (https://www.thestar.com.my) select this subject as their second or third language. Syed Ab Hamid et al, (2017) reported that the literature shows a decline in the mastery of Arabic among secondary school students. This can be observed from the worrying decline in the achievement of Sijil Pelajaran Malaysia over the years. The decline in the Arabic language proficiency among students can be attributed to students' weakness in mastering the basic syntax (Nahw) and morphology (Sorf) of Arabic because these two sciences of knowledge are the foundation of the Arabic language (Mokhtar et al, 2017). Syntax also interrelated with other components in the Arabic language such as morphology (Sorf), rhetoric (Balaghah), and also the four Arabic language skills, namely, speaking, writing, listening, and reading. Thus, language proficiency is strongly influenced by the mastery of this science of knowledge. A strong mastery of syntax and morphology enables students to gain a proper understanding of the language and smooth writing of Arabic text. Therefore, the teaching approach should be able to provide positive input to students. It is not a mere translation from Arabic texts only. Activities and approaches that help students to master the knowledge sciences should be applied (Ghani et al, 2019).

The Monopoly Deal is a card game derived from the Monopoly Board Game which is owned and currently published by Hasbro. The goals of the game are each of the player must remain financially solvent while forcing their opponents into bankruptcy by buying and developing pieces of property (https://www.britannica.com). The cards have 110 in total including property cards, rent cards, house and hotel cards, and wild property cards. All the players must obey the rules of the game and collect three Property Card sets with different color to win the game. The Monopoly Deal Card Game can be played by two or more players. It only takes about 15 minutes to complete the game. The *Arabic - Inovatif - Fun (ArIF)* card game was designed based on the Monopoly Deal card game but differ in term of the specific language used (Arabic Language) and the format of the game.

PROBLEM STATEMENTS

The difficulties in learning the Arabic syntax have been studied by several researchers in different provinces in Malaysia. For example, a study conducted in Kelantan recorded that the mastery of syntax among secondary students was very low which led to students considering that the Arabic language is the most challenging subject, difficult to understand the textbook, and not easy to master the syntax knowledge (Musa, 1998). Among the three parts of speech in Arabic language; the nouns, the verbs and the conjunctions, Mat Zin (2009) identified that verb was the hardest component to be mastered by students in Johor, while Abdullah Hashim (2005) determined that the Arabic abrogates (*al-Nawasih*) among the students of religious secondary schools in Pahang demonstrated poor performance.

Among the four language skills, speaking skill is essential for communication purposes. Therefore, the syllabus of language learning should be developed into varied activities, including speaking skill. A suitable activity for improving speaking skill is the use of Monopoly Deal (Mufidah & Rachmajantu, 2013). This game covers 8 language functions on greetings and leave-taking, introducing self and others, thanking, regretting and apologizing, showing sympathy, asking and giving permission, giving commands and requests, and lastly offering things and services. Monopoly Deal game is also utilized in learning other subjects such as accounting principles and practices (Allen et al, 2011) and to

teach Intentional Requirements Engineering (Oliveira et al, 2015). The Monopoly Board game was also employed to support and enhance the understanding of the financial accounting subject (Shanklin & Ehlen 2007). Some researchers had modified the Monopoly Deal game to suit the students' ability and nature of the subjects such as using Gladden Monopoly game in teaching vocabulary could help the teachers and students to collaborate to improve enhance and help the students to acquire a more expansive vocabulary (Hastunar et al, 2014), a modified Monopoly for promoting students higher-order thinking skills and knowledge retention (Kuang, 2018), and Modified Monopoly for experiencing social class inequality (Ender, 2004).

Based on the past research, some of the problems identified in teaching and learning Arabic among school students are limited availability of technology by either students or teachers and poor professional training for Arabic teacher's technological usage (Aziz et al. 2018). Therefore, there is a need to increase the use of educational technology especially game-based learning technique in the lesson's activities. In addition, Zainuddin et al. (2021) presented that a large number of students in Malaysia still cannot speak Arabic because of the quality impairment in the teaching and learning of Arabic in Malaysian schools. Thus, the focus is on learning Arabic vocabulary only as a first step in learning Arabic language. To encourage students to learn Arabic, teachers need to introduce interesting learning strategies such as independent and active learning method. Next, the lack of interest in Arabic which is considered as an unwanted subject by Malay students because of poor motivation among students in Melaka (Fadzil et al, 2019). Zaini et al, (2019) in their study stated that the challenges in teaching and learning Arabic are teacher-centered teaching, grammar approach translation, use of aids, lack of additional reding materials, lack of activities, lack of communication environment and motivation. Therefore, more interactive and contemporary language teaching methods can increase interest to learn Arabic. While Jaafar et al, (2019) added difficulty in obtaining dictionary and references, authentic Arabic audio-visual, and constructing Arabic sentences as the difficulties faced by teacher in teaching process.

From the researchers experiences in teaching and learning Arabic in Kolej GENIUS Insan, Universiti Sains Islam Malaysia, Nilai for session K192, there are 7 out of 44 (15.9%) students who get below 50% in their final exam. 2 of 25 students are represented from class 4AB¹ and 5 of 19 student are represented from class 4UM². One of the methods to improve student's performance is provide them with active learning material in mastering subject especially in learning the declension of Arabic words. Therefore, this study aims to examine the design and development of the modified Monopoly Deal card game for learning Arabic Syntax among secondary school students. This study attempts to address the problem by formulating the following questions:

- (1) What are the steps and procedures in developing modified Monopoly Deal card game for learning the declension of Arabic words?
- (2) What is the usability test level of using the *Arabic Inovatif Fun (ArIF)* card game among secondary school students in Kolej GENIUS Insan, Universiti Sains Islam Malaysia?

LITERATURE REVIEW

i. The Revised Taxonomy Bloom in Learning

Several taxonomies of cognitive learning are available in educational and cognitive psychology such as Bloom's Taxonomy, Gagné's Taxonomy, and Structure of observed learning outcomes (SOLO)

https://istudent.usim.edu.my/scores/custom/marks_grades/marksheet.php?kursus=QAH4622&sesi=K192&kump=4AB

https://istudent.usim.edu.my/scores/custom/marks_grades/marksheet.php?kursus=QAH4622&sesi=K192&kump=4UM

Taxonomy (Kuang, 2018). Among these three taxonomies, Bloom Taxonomy is the most widely applied scheme and provided educators with a systematic classification of the thinking and learning processes in which the six categories of ability are listed where the first level must be mastered before proceeding to the next level and so on (Forehand, 2010). Benjamin Bloom created this taxonomy to help teachers describe and classify observable knowledge, skills, attitudes, behaviours, and abilities of the students. The theory is based upon the idea that there are levels of observable actions that indicate something is happening in the brain (cognitive activity). An increase of each level shows there is an increase in the level of critical thinking (Kuang, 2018). The revised Bloom Taxonomy consists of (1) remembering, (2) understanding, (3) applying, (4) analyzing, (5) evaluating and the last is (6) creating compared with the previous taxonomy which consisted of (1) knowledge, (2) comprehension, (3) application, (4) analysis, (5) synthesis, and (6) evaluation (Krathwohl, 2002). Bloom's taxonomy comprises two dimensions of cognitive objectives which are knowledge and cognitive process. The knowledge dimension identifies four types of knowledge to be learned, starting from concrete to abstract: factual, conceptual, procedural, and metacognitive knowledge. Factual knowledge refers to the basic elements that people must understand to be familiar with a field or solve problems in it (Krathwohl & Anderson, 2009). Bloom's Taxonomy was also incorporated in designing Monopoly as a learning tool for hotel and lodging industry development. The frameworks of this planning model for learning game development adopted the four levels in the taxonomy which are application, analysis, synthesis, and evaluation of the taxonomy (O'Halloran & Deale, 2010). For language learning, monopoly deal card game can cover the procedural knowledge dimension which is how to do something, methods of inquiry, and criteria for using skills, algorithms, techniques, and methods. The game also serves the cognitive dimension by analyze-break material into its constituent parts and determines how the parts relate to one another and to an overall structure and purpose (Krathwohl & Anderson, 2009). In conclusion, a higher level of cognitive skill in learning the Arabic language can be obtained through the use of the Monopoly Deal card game.

ii. The Challenges in Learning Syntax

Language learning strategies are the often-conscious steps or behaviors used by language students to enhance the acquisition, storage, retention, recall, and use of new information. Many different strategies can be used by language students such as metacognitive techniques, affective strategies, social strategies, cognitive strategies, and memory strategies and also compensation strategies (Oxford, 1989). Meanwhile, grammar learning strategies possess distinctive characteristics as summarized as follows: (1) they are what students do, indicating an active approach, (2) application is at least partly conscious, (3) optional which means students choose, (4) entails goal-oriented and purposeful activity, (5) applied to regulate and control the learning process, and (6) intended to facilitate learning process (Pawlak, 2009). Arabic grammar plays an important role in determining the meaning of verse since a change in the line of words could change the meaning or meaning of the verse. Hence, determining the declension of a word in a sentence depends on Arabic grammar. In addition, mastery of learning in any language in the world is a preoccupation as it is important to correct the use of language. For example, an aspect error in the Arabic language can change the meaning of the word used (Mohamed, 2001). Therefore, Arabic grammar needs significant attention from related parties. Being concerned about Arabic grammar can be translated as taking a deep interest in the syllabus, teaching techniques, teachers and assessment, and focusing on any issues related to Arabic grammar (Mokhtar et al, 2017). The grammatical error is the error found in the sentence structure. A perfect verse is a sentence that does not contain any mistakes (Ismail et al., 2014).

Abdullah Hashim (2005) find that the Arabic abrogates (al-Nawasih) among students in Pahang religious secondary schools demonstrated poor performance and the weakness is primarily attributed to a poor teaching proficiency from the teachers. In Malacca, factors such as parents support, helpful friends, and positive behaviour are very important to help and encourage students to master all components of Arabic language despite the good command and lessons from teachers (Fadzil & Jaafar, 2019). On the other hand, a study done in Selangor showed that the main factors in mastering Arabic language components are personal motivation and learning style, but the role of teachers was identified to be

essential in assisting and guiding students (Ahmad et al, 2012). Results from research conducted in Saudi Arabic among non-Arabic students outline that written grammatical errors of ASL students are characterized by the misuse of many grammatical items. These items mainly consist of proper nouns, common nouns, main verbs, adjectives, time adverbs, manner adverbs, objective pronouns, and central determiners including demonstratives and articles, pronouns, and prepositions (Al-Yaari et al, 2013). A research conducted in the University of Jordan among non-native Arabic students revealed that learning Arabic syntax by speakers of other languages is expected to be easier than learning it from Arabs who are affected by their dialects which are very different from the standard Arabic (Dajani et al, 2014). It is commonly known that there are three different strategies in learning syntax: implicit learning, explicit inductive learning, and explicit deductive learning. The research conducted in International Islamic University Malaysia (IIUM) revealed that the most frequent strategy used by students is explicit inductive learning, which proves that the teachers' methods in teaching Arabic syntax have a close relationship with the learning strategies used by the students (Muslim et al, 2018). This explicit inductive learning may help Arabic as Second Language students in mastering Arabic syntax in an Arab learning environment or in a non-Arabic learning environment. In conclusion, the issue of teaching and learning Arabic syntax is still widely discussed among researchers which emphasize the need to examine the effect of an innovative and fun learning tool in the language learning process.

iii. Modified Monopoly Game is Active Learning

2003 was not just a monumental year for game-based learning as this year marked a milestone for social media and the information age. Today, using digital games in classrooms, chances are that people would not be surprised (Gee, 2003). Games have been promoted and used to help people learn which can be categorized into four types, namely, motivation games, drill and practice game, content mastery game, and 21st century competencies game (Jan & Gaydos, 2016). Playing the card game for language learning reinforces the importance of social interaction between students. Social interaction in the card game provided opportunities for the students to practice various language skills including speaking, listening, vocabulary and grammar without fear of errors (Marquez, 2018). Game is a learning media that can make students feel enthusiastic to learn English because students can learn English fun and easily (Mufiddah & Rachmajanti, 2013). The use of modified Monopoly Deal game called Gladden Monopoly game in teaching vocabulary could help teachers and students engage together to improve students' achievement and assist students to expand their vocabulary (Hastunar et al., 2014). Teachers opine that the English Monopoly card game is good at motivating students to speak English because the game requires cooperative learning (Mufiddah & Rachmajanti, 2013). In cooperative learning, Slavin identified that motivationalist, social cohesion, cognitive-developmental, and cognitive elaboration as the four major theoretical perspectives on the achievement effects of cooperative learning. In motivational theories, group work can motivate personal works. Students who are usually passive should speak up during the game in order to ensure the game runs well. For cognitive theories, one of which deals with developmental theories, state that interaction in group work among students will lead themselves to improve their achievement. This shows that the game is also appropriate for cooperative learning (Slavin, 2011). Not only Monopoly card game motivates cooperative learning, the game also encourages active learning in the classroom atmosphere (Allen et al, 2011).

Next, this game also supports the other industry despite of education, such as hotel and lodging industry. O'Halloran & Deale (2010) clarified that the modified Monopoly game could be a dynamic learning tool that maintains a basic format yet evolves as the lodging industry changes and new innovations, products, and systems are implemented. The adapted Monopoly Deal game also helps in teaching the intentional requirements engineering method as a motivational factor, because researchers realize that students in an undergraduate software engineering course needed an incentive in the introduction of the new concepts in order to improve their understanding of the intentionality in the context of requirements for a software project (Oliveira et al, 2015). Ender, in his study, also modified the game for inequality and allows cadets to experience the euphoria of higher socioeconomic status and the

disappointment of lower socioeconomic status. Students are allowed to experience and consider inequality at different levels immediately prior to reading about it (Ender, 2004). Monopoly game also supports contextual teaching and learning model, which provide opportunities for students to attain knowledge, experience finding, asking, discussing in group, and presentation, helps the teacher to contextualize the material, build small groups, and build good relationship with students in a class (Agustiya et al, 2017). The hands-on learning of the balance sheet and the relationship to income is calculated as residual, utilizing Monopoly tends to speed the learning curve and anchor the information, thus, becoming a better foundation for subsequent financial accounting basic concepts (Shanklin & Ehlen, 2007). Thus, Monopoly Deal game is suitable and supports the nature of the subject with some modifications regarding the learning outcomes.

OBJECTIVE

The purpose of this study has been following specific research objectives, which are:

- 1. To explore the steps and procedures in developing a modified Monopoly Deal card game for learning the declension of Arabic words.
- 2. To investigate the usability test level of using the *Arabic Inovatif Fun (ArIF)* card game among secondary school students in Kolej GENIUS Insan, Universiti Sains Islam Malaysia.

METHODOLOGY

The ADDIE Model was used as the research design in this study. The modified ADDIE model was selected as the instructional design (ID) generic model research framework in this study by using research methods and procedures of design and development research (DDR) as suggested by Richey and Klein (2007) in five different phases of analysis, design, development, implementation, and evaluation.

i. Research Design

ADDIE is an acronym referring to the major processes that comprise the generic instructional system development processes: analysis, design, development, implementation, and evaluation (Molenda, 2003). Thus, this study implemented the ADDIE Model in the design and development process as illustrated in Figure 1:

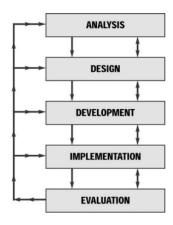


Figure 1: The ADDIE Processes

The ADDIE instructional design process is a common approach that is widely used in the development of instructional courses and training programs. This approach provides educators with useful and clearly defined stages for the effective implementation of instruction (Peterson, 2003).

ii. Conceptual Framework

The three main aspects were considered in the development of the ArIF card game as illustrated in Figure 2.



Figure 2: Model for Development of Arabic- Interactive-Fun (ArIF) Card Game

iii. Research Sampling

The targeted respondents in this study are students sitting for the *Sijil Pelajaran Malaysia (Kurikulum Bersepadu Sekolah Menengah)* syllabus, Arabic language subject at Kolej GENIUS Insan, Universiti Sains Islam Malaysia, Nilai. This college is a gifted and talented educational institution created to help the government groom future Islamic scholars among the selected students who had been chosen through standardized intelligence test (Zakaria et al. (2017). A total of 60 students who are non-native Arabic speakers participated in this survey. Purposive sampling was employed in this research study.

iv. Instrument

For the first phase of analysis, a needs analysis survey was carried out by administering a set of questionnaires adapted from previous studies (Ghani et al, 2019). The questionnaire is divided into 2 sections; Section A presents on the demographic background information of the students while Section B contains questions on the needs for card game-based learning which comprise of closed-ended questions which used a 5-point Likert scale. The scales range from 1 = strongly disagree, 2 = disagree, 3 = partially agree, 4 = agree, and 5 = strongly agree.

In the design and development phase, the Monopoly Deal card game concept was adopted and amended to suit the nature of the Arabic language subject. For the fourth and fifth phases of implementation and evaluation, the study used usability testing questionnaire which was adopted from previous research (Hashim et al., 2019). The questionnaire was divided into 4 sections; (1) card game promotes learning in a fun way, (2) ease of use of card game, (3) card game enhances learning, and (4) card game increases communication skills.

For the fourth and fifth phases, usability testing questionnaire which contained 16 items that assessed the need for card game-based learning was used.

v. Data Analysis

Two questionnaires were used in this study, (a) needs analysis questionnaire and (b) usability testing questionnaire. The data were categorized as student's demographic, need for card game-based learning, and usability testing of learning Arabic language using card game. The descriptive statistics for the data were obtained through IBM-SPSS. These results were then presented in three sections which were students' demographic information, need analysis for card game, and usability testing of the card game.

vi. **Pilot Study**

The study adapted a questionnaire developed by Hashim et al. (2019) to evaluate the usability testing of the Arabic card game. The test consisted of sixteen items, with four sections, and each section had four items. The Cronbach's Alpha reliability of the test was 0.955 and the item discrimination values were higher than 0.7. The Cronbach's α value of the questionnaire demonstrated good reliability in internal consistency.

FINDINGS

First Phase: Needs Analysis

Demographic Background Information

Section A probes on the students' demographic background information. The items probe on five demographic aspects – gender, class, Arabic Language result, primary school, Arabic language background, the hardest component of Arabic language, and students' preference of card game-based learning. The results are tabulated in Table 1:

Table 1: Demographic Background Information

	Item	Sub item	Frequency	Percentage
1)	Gender	Female	28	46.67%
		Male	32	53.33%
2)	Class	Abu Bakar	27	45%
		Hamzah	17	28.3%
		Umar	16	26.7%
3)	Primary School	National School	48	80%
		Private School	4	6.7%
		Integration School	2	3.3%
		Religious School	2	3.3%

		Others	4	6.7%
4)	Arabic as	Third language	60	100%
5)	Arabic language result	A	20	33.4%
		В	26	43.3%
		C	8	13.3
		D	4	6.7%
		E	2	3.3%
6)	Hardest Arabic Component	Syntax	5	8.3%
		Morphology	15	25%
		Rhetoric	15	25%
		Composition	14	23.3%
		Vocabulary	11	18.3%
7) What is your opinion if Arabic language learning is done by using Monopoly card game?		Strongly Disagree	1	1.7
		Neutral	18	30.0
		Agree	18	30.0
		Strongly Agree	23	38.3

a) Open-ended question for needs analysis:

Suggestions or comments to improve Arabic teaching and learning.

The following table presents the most important points from students' responses on the question. It must be noted that the question is optional.

Table 2: Open-Ended Question for Needs Analysis

No	Item
S 1	by applying active learning
S2	to vary the learning style by using VARK concept
S 3	use more interactive initiatives in teaching and learning to make more it more interesting
	I would suggest repetition and more active recall when building vocabulary. For <i>Insya'</i> , I think
S 4	introducing more phrases or formats where we can form better sentences would be great

- S5 Add some kinesthetic activities which conclude all of the students to talk in Arabic Arabic games should be made available online! Plus, it should be very convenient, suitable for
- S6 every student, great design and decorations, and suitable with the 21st century learning!
- S7 More games other than Monopoly
- S8 I need more exciting environment in learning Arabic language
- S9 Memorize at least 5 vocabularies daily
- S10 have a more fun way teaching and have two-way communication

a) Need for card game in classroom

Section B probes the students' need for using card game in the teaching and learning of Arabic for *Sijil Pelajaran Malaysia*. Table 3 presents the mean value (M) and standard deviation (SD) of all the items. The ranking uses Oxford (1990) classification, which stated that the mean score ranging from 3.5 - 5.0 reflects a high level of agreement, mean ranging between 2.5 and 3.4 reflects medium level of agreement, and a mean value between 1.0 and 2.4 reflects low level of agreement.

Table 3: Need for Card Game in Classroom

No	Item	Level	Mean	SD
1	I need an interactive learning tool to learn Arabic	High	4.33	.837
2	I need challenges in learning Arabic	High	3.82	1.033
3	I need an exciting environment in learning Arabic	High	4.47	.747
4	I play card game because it is fun	High	4.40	.785
5	I play card game because it is a calming thought	High	3.97	.938
6	Games help me in increasing my creativity	High	4.30	.788

Second Phase: Design and Development

In the second and third phases of design and development, the researchers designed the card game by adapting the Monopoly Deal concept (http://monopolydealrules.com/) in accordance with the following changes:

 Table 4: ArIF Modified Monopoly Deal Game Concept

	Monopoly Deal Game	Arl	IF Modified Monopoly Deal Game
ca	9 property cards, including 28 normal property ards, 9 bi-colored property wild cards and 2 ulti-colored property wild cards.	•	The assets changed to mimic the declension in Arabic words as properties
	7 action cards (can use as money cards), cluding 10 color rent cards, 3 any rent cards, 2	•	Changed the 3 Debt Collectors with 1 Deal Breakers, 1 Forced Deal cards, 1 Sly Deal cards, and remove the cards

Deal Breakers, 3 Forced Deal cards, 3 Sly Deal cards, 3 Just Say No Cards, 3 Debt Collectors, 3 It's My Birthday cards, 2 Double the Rent cards, 3 houses, 2 hotels and 10 Pass Go cards.

20 money cards, including 6 1M cards, 5 2M cards, 3 3M cards, 3 4M cards, 2 5M cards and 1 10M card

of 3 houses and 2 hotels

Remain the concept

Removed

• 4 Quick Start Rule cards

Total card games: 110 pieces Total card games: 101 pieces

Fourth and Fifth Phase: Implementation and Evaluation

All of 60 students who are sitting for the Arabic language *Sijil Pelajaran Malaysia* (*Kurikulum Bersepadu Sekolah Menengah*) examination were involved in this implementation and evaluation phase. They are required to play the card game before answering the usability testing questionnaire.

a) Closed-ended Questions for Usability Testing

This questionnaire collected data about the usability of the Arabic card game prototype. There were four main constructs in this section which included card game promote learning in a fun way (four items), ease of use of card game (four items), card game enhances learning (four items), and card game increases communication skills (four items).

Table 5: The responses from students

No	Item	Level	M	SD
	Construct 1: Card Game Promotes Learning in a Fun Way			
1	Playing Arabic card game in learning Arabic is fun	High	4.08	.809
2	Playing Arabic card game in learning Arabic is interesting	High	4.28	.640
3	I am interested to play card game to learn Arabic	High	4.22	.846
4	I like to play card game to learn Arabic	High	4.05	.872
	Construct 2: Ease of Use of Card Game			
5	Playing Arabic card game in learning Arabic is easy	High	3.70	1.030
6	Playing Arabic card game in learning Arabic is comprehensible	High	3.98	.854
7	Arabic card game is portable and handy to be carried anywhere as to learn Arabic	High	4.30	.766
8	Playing Arabic card game in learning Arabic is easy as the game can be played in pair or in a group of not more than 6 players	High	4.20	.819

	Construct 3: Card Game Enhances Learning			
9	Playing Arabic card game can help to develop domains of words that I need to learn	High	4.33	.705
10	Playing Arabic card game can help to retain the words that I have learnt	High	4.20	.732
11	Playing Arabic card game can help me to understand the words that I have learnt better	High	4.25	.704
12	Playing Arabic card game can help me to apply the words that I have learnt	High	4.22	.761
	Construct 4: Card Game Increases Communication Skills			
13	Playing Arabic card game can help to develop my self-confidence in communicating by using the words that I have learnt	High	4.08	.809
14	Playing Arabic card game provides opportunity for me to use the words that I have learnt	High	4.17	.806
15	Playing Arabic card game can help me to practice by repeating the words that I have learnt verbally	High	4.20	.777
16	Playing Arabic card game can help to improve my self-confidence in communicating by using the words that I have learnt	High	4.09	.808

b) Open-ended Question for Usability Testing

Suggestions or comments for the betterment of the card game

The following table presents the most important points from students' responses on the question. It must be noted that the question is optional.

 Table 6: Open-ended Question for Usability Testing

No	Item
S1	Make variation on all Arabic language branches
S2	Give better design with colorful words so that it would be easier for us to memorize
S 3	I think it should have a lot of different versions so more vocabulary and knowledge can be obtained by the students.
S4	Make an instruction and quick how-to to play the card game.

S5 Take many interesting challenges in the card game
S6 Make it simple
S7 Use the difficult and rarely used "verb" in card game
S8 Make it a digital one
S9 Make it more fun or in different way other than card game

Use many words that are easy to understand

DISCUSSION

Analysis:

S10

Table 1 presents the demographic background information of the students who participated in this study. The results illustrated that 46.67% of the students are female while the remaining respondents (53.33%) are male students. All of the students are non-native Arabic speakers with Malay as their first language and English as their second language. Most of the respondents were from national schools (80%) while the remaining attended private schools, integrated schools, and Islamic schools with the percentage of 6.7%, 3.3%, and 3.3% respectively. Based on the result, a total of 20 students (33.4%) obtained A, 26 students (43.3%) attained B, 8 students (13.3%) attained C, 4 students (6.7%) attained D in the Arabic language subject and the remaining two students failed this subject. For the last question, majority of the students expressed that they strongly agree (38.3%) with using Monopoly card game in their teaching and learning process. Muhammad Yusuf, M.A et al. (2018) in their study found that these students showed their needs to the use of an enjoyable platform learning tool to help them understand the Arabic vocabulary and remember it well.

Table 3 illustrates the relevance of using card game in Arabic language classrooms for secondary school students. The results indicated that the students highly agreed in using card game in the classroom. The data show that the students need an exciting environment in learning Arabic (M=4.47, SD=0.747), because of that the students play the card game because it is fun (M= 4.40, SD= 0.785), at the same time the students need an interactive learning tool to learn Arabic (M=4.33, SD=0. .837). Since the card game is one of the interactive tools in learning, the students feel that games can help them in increasing their creativity (M=4.30, SD=0.788). The students also like to play card game because the game is a calming thought (M=3.97, SD=0.938) and lastly, the students do not really feel that they need challenges in learning Arabic, (M= 3.82, SD=1.033). These findings support the previous finding found by Agustiya et al (2017), Monopoly game also supports contextual teaching and learning model, which provide opportunities for students to attain knowledge, experience finding, asking, discussing in group, and presentation, helps the teacher to contextualize the material, build small groups, and build good relationship with students in a class. While Ender, (2004), found that students are allowed to experience and consider inequality at different levels immediately prior to reading about it by playing Monopoly game for inequality class.

Design and Development:

The Monopoly Deal game contained 110 pieces which consist of 39 property cards, 47 action cards, 20 money cards and 4 quick start rules cards. For the modified Monopoly Deal game, the cards were reduced into 101 pieces by removing the 4 quick start rule cards and remove the cards of 3 houses and 2 hotels from the 47 action cards. As there is no necessity for debt collectors in the game, these 3 Debt Collectors

cards were changed to 1 Deal Breaker, 1 Forced Deal card, and 1 Sly Deal card. The property of buildings as the main assets in the original Monopoly Deal game, while in ArIF card game, the assets were modified into mirror the declension in Arabic words as properties, so that the students should build their own business by buying as much as possible of the Arabic texts in order to win the game. Previous studies also adapted and modified the card game based on their need to fulfill the objective of the studies (Ender 2004, Shanklin & Ehlen 2007, O'Halloran & Deale 2010, Allen et al 2011, Mufiddah & Rachmajanti, 2013, Hastunar et al 2014, Oliveira et al 2015, Agustiya et al 2017, Kuang, 2018).

Implementation and Evaluation:

In the phase of evaluation using usability testing, the students' responses reflect a high level of agreement, which stated that mean score ranging from 3.5 to 5.0. The data represented the acceptance and relevancy of the ArIF card game in the secondary school learning environment.

Table 5 demonstrated students' belief regarding four sections of questions. The first response is on playing an Arabic card game in learning Arabic language is interesting with a mean of 4.28 and standard deviation of 0.64. Then, based on their perception, they are interested and enjoy playing Arabic card game in learning Arabic in the classroom (M=4.22, SD=0.84). At the same time, they also believe that playing Arabic card game in learning Arabic language is fun (M=4.083, SD=0.81), thus, they like to play and use card game in their teaching and learning process (M=4.05, SD=0.87). These findings support the previous finding found by Allen et al (2011), Monopoly card game motivates cooperative learning and encourages active learning in the classroom atmosphere. While O'Halloran & Deale (2010) proved that the use of the game progresses it would be possible to compare students' learning progress in classes using the game with that of students not using the game through quizzes or other forms of assessment.

Secondly, table 5 also shows the students' responses on four items of the ease in using card game, starting with Arabic card game is portable and handy to be carried anywhere as to learn Arabic. The mean value (4.30) shows that they feel that the card is easy to move. They also agree that the card game was easy to learn in a group of 6 players (M=4.20, SD=0.82). Next, the students feel that the card game was comprehensible (M=3.98, SD=0.85) and but not too easy to play and adapt with the game (M=3.70, SD=1.03). These data show that this game is a learning media that can make students feel enthusiastic to learn because students can learn language fun and easily and motivate students to speak because the game requires cooperative learning (Mufiddah & Rachmajanti, 2013). While Kuang (2018) found that this game help to increase of the level of critical thinking.

Thirdly, students' responses for the card game established that the game enhances learning. The same table presents the belief of students in playing Arabic card game can help to develop domains of words that they need to learn, with a mean of 4.33. Then, they also expect that playing Arabic card game can help them to understand the words that they have learnt for better understanding (M=4.25, SD=0.70). In terms of applying the words that they have learnt, with a mean of 4.22, students believe that playing card game will help them in learning. Lastly, playing Arabic card game can help them to retain new words and vocabularies that they have learnt (M=4.2, SD=0.73). These results reflect the data from Hastunar et al, (2014) whose found that the modified Monopoly Deal game could help teachers and students engage together to improve students' achievement and assist students to expand their vocabulary. The game also demonstrated a significantly higher level of enjoyment and enthusiasm to continue the use of the Modified Monopoly Deal game (Kuang, 2018).

The last section examines the responses for the card game in improving communication skills, after asking students on whether game promotes learning, ease of use, and can the game enhance learning. The data show that card game can help students in practicing vocabularies by repeating the learnt words verbally (M=4.20, SD=0.77), at the same time, the students agree that playing Arabic card game provides an opportunity for them to use the learnt words (M=4.17, SD=0.81). Then, the students believe that the card game can help them to improve (M= 4.09, SD=0.809) and develop their self-confidence in communicating by using the words that they have learnt (M=4.08, SD=0.808). In addition, students in an

undergraduate software engineering course also realized that this Monopoly Deal card game helps in teaching the intentional requirements engineering method as a motivational factor (Oliveira et al, 2015) and this game also becoming a better foundation for subsequent financial accounting basic concepts (Shanklin & Ehlen, 2007).

CONCLUSION

Based on students' responses in the analysis phase, the study concluded that there is a vital need to develop a card game as one of the interactive tools for learning Arabic in the classroom in order to provide students with an exciting learning environment. As they think that games are fun and can increase their creativity, they also feel that they can release stress by playing educational card games that are adapted in order to learn Arabic. In the design and development phase, the number of card game pieces for Arabic-Interactive-Fun (ArIF) modified Monopoly Deal game was reduced into 101 pieces from the original 110 pieces. The deduction of card pieces is regarding the nature of the subject and targeted learning outcome. For the phase of implementation and evaluation, it is concluded that card game promotes learning Arabic in a fun and interesting way and the card game is moderate in terms of difficulty so that the students can enjoy the game individually or with a group of 6 players.

Next, for 16 closed ended questions of the usability testing questionnaire, the data show that the mean score is above 3.5, which reflect reflects a high level of agreement, by referring to Oxford classification. For open ended questions, the Kolej GENIUS Insan' students demonstrated positive responses for the use of card game in enhancing Arabic language learning as the card game helps them in domain development, vocabulary understanding, words retention, and proper vocabulary application. This game also fulfils the criteria of a good card game as a teaching medium which gives the students a fun and relaxing atmosphere, and opportunities to learn. Teacher can modify and add possible variations in order to ensure this card game can be utilized as a suitable instructional education tool.

This study has theoretical and practical implications. First, the developing of modified Monopoly Deal for learning Arabic declension based on ADDIE model, which started with need analysis of the card game and ended with the evaluation the prototype card game. The modified ADDIE model was selected as the instructional design (ID) generic model research framework in this study. ADDIE model provides a structured framework for development of ArIF card game. Secondly, the study illustrated the results of usability test for using ArIF card game among secondary school students in USIM. All the students gave good responses towards the usability of *Arabic - Inovatif - Fun (ArIF)* card game. They need an interactive learning tool and exciting environment to learn Arabic. They took Arabic language as their required subject for *Sijil Pelajaran Malaysia* level. Thus, it shows that Arif card game is necessary for students to develop self-confidence by using Arabic language as their medium of communication.

As a consequence of the results and limitations addressed, the current study can be extended along several lines. First, future studies could implement another instructional design (ID) generic model research framework in developing educational tool prototype. Second, next study able to test other card game than Monopoly Deal as game-based learning tool in the teaching and learning process. Lastly, the sampling of the student can beyond the secondary school level, since the declension of Arabic language is learnt by several students in different levels of the higher education.

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