

I - AQQRAN module construction for Arabic vocabulary consolidation: A needs analysis

I- AQQRAN Construcción del módulo para la consolidación del vocabulario árabe: un análisis de necesidades

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ABSTRACT

This is a study of phased needs analysis that is aimed at identifying the needs for the construction of Modul i - AQQRAN in consolidating the Arabic vocabulary mastery among students in one of the public universities in Kelantan. Learning Arabic vocabulary using interactivity, also known as peer-tutoring Arabic vocabulary learning method (*Aqrān*: Arabic), is through the use of interactive multimedia. This in-depth analysis uses survey design and data analysis through a quantitative approach. The sampling techniques used in this study were a stratified random sampling because of the uneven population size and also simple random sampling. The total population of 3600 people yielded the sample size of 346 people. This study also used a set of questionnaire as a research instrument. Before the actual questionnaire was administered to the students. Subsequently, a pilot questionnaire was conducted on 30 students to gain the "Cronbach Alpha" reliability. Once the pilot study's data was confirmed, the actual study was then carried out on the sample of the study. The data were analysed using descriptive statistic that involved mean analysis and standard deviation. The findings show that there is positive response to interactive Arabic learning in the classroom whereby students feel comfortable learning with friends and work with other friends to complete the assignment. Moreover, this interactivity-based technique used in learning Arabic vocabulary in the classroom have shown a high positive response where students ask friends about new words. On the other hand, the skills that are needs in Arabic interactive learning show that students give high positive responses towards Youtube/ video application and learning web sites and software for interactive learning. In conclusion, the findings of this phased needs analysis can be reinforced as inclusive elements in the design phase and the construction of the i - AQQRAN Module in consolidating Arabic vocabulary among the students.

Keywords: Arabic Vocabulary, Interactive Multimedia, Interactive Learning, Needs Analysis, Peer Learning.

RESUMEN

Este es un estudio de análisis de necesidades por fases que tiene como objetivo identificar las necesidades para la construcción de Modulo i - AQQRAN para consolidar el dominio del vocabulario árabe entre los estudiantes de una de las universidades públicas de Kelantan. Aprender vocabulario árabe usando la interactividad, también conocido como método de aprendizaje de vocabulario árabe de tutoría entre pares (*Aqrān*: árabe), es a través del uso de multimedia interactiva. Este análisis en profundidad utiliza diseño de encuestas y análisis de datos a través de un enfoque cuantitativo. Las técnicas de muestreo utilizadas en este estudio fueron un muestreo aleatorio estratificado debido al tamaño desigual de la población y también un muestreo aleatorio simple. La población total de 3600 personas arrojó el tamaño de la muestra de 346 personas. Este estudio también utilizó un conjunto de cuestionarios como instrumento de investigación. Antes de que el cuestionario real fuera administrado a los estudiantes. Posteriormente, se realizó un cuestionario piloto en 30 estudiantes para obtener la confiabilidad "Cronbach Alpha". Una vez que se confirmaron los datos del estudio piloto, el estudio real se llevó a cabo en la muestra del estudio. Los datos se analizaron mediante estadística descriptiva que incluía el análisis de la media y la desviación estándar. Los hallazgos muestran que hay una respuesta positiva al aprendizaje interactivo de árabe en el aula por el cual los estudiantes se sienten cómodos aprendiendo con amigos y trabajan con otros amigos para completar la tarea. Además, esta técnica basada en la interactividad utilizada en el aprendizaje del vocabulario árabe en el aula ha mostrado una alta respuesta positiva donde los estudiantes preguntan a sus amigos sobre nuevas palabras. Por otro lado, las habilidades que se necesitan en el aprendizaje interactivo en árabe muestran que los estudiantes dan respuestas altamente positivas hacia la aplicación de Youtube/video y sitios web de aprendizaje y software para el aprendizaje interactivo. En conclusión, los resultados de este análisis de necesidades por fases pueden reforzarse como elementos inclusivos en la fase de diseño y la construcción del módulo i - AQQRAN para consolidar el vocabulario árabe entre los estudiantes.

Palabras clave: vocabulario árabe, multimedia interactiva, aprendizaje interactivo, análisis de necesidades, aprendizaje entre pares.

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1. INTRODUCTION

In these recent years, teaching and learning approach in the classroom has gradually undergone changes in line with the nation's education policy. Education system transformation is not only oriented to primary and secondary schools which have been implementing 21st century learning, but also to Institution of Higher Education (IPT). Therefore, lecturers at Higher Education Institutions today need to have integrated innovative skills in implementing teaching and learning methods in line with the Industrial Revolution 4.0 (IR4.0). This matter is made significant due to new insights that the 21st century student generation is also categorised as ready-made students for complex life and a challenging academic environment (Gusti, 2015; Innovation & Innovation Skills, 2014). In conjunction with realising the Minister of Higher Education's goals 2018, i.e. to blend Higher Education and Industrial Revolution 4.0 together and to transform traditional teaching and learning methods into the Industrial Revolutionary Teaching and Learning 4.0, it is clear that Teaching & Learning-Industrial Revolution 4.0 has started to emerge positively as the 21st Century Learning (PAK-21) which includes Heutagogy (self-study), Paragogy (peer-to-peer learning) and Cybergogy (virtual learning).

This study is a research of phased needs analysis that aims to identify the needs of the i - AQ-RAN Module in consolidating Arabic vocabulary among the students. The needs analysis phase is the initial phase of study in which information in context and from its environment needs to be analysed and collected (Aliza & Zamri et al., 2015; Saedah, Norlidah, Dorothy, & Zaharah, 2013). In this study's context, needs analysis is implemented at the beginning of the module construction to investigate how appropriate teaching plan or approach is implemented by lecturers so that Arabic vocabulary learning became more meaningful and effective.

Based on the objectives of the study, there are three questions to be constructed in order to answer the objectives of the study, namely:

- a) What are the needs of students in an interactive learning classroom for Arabic?
- b) What is the need for students' interactivity level in learning Arabic vocabulary in the classroom?
- c) What are the needs of students' skills in using interactive Arabic learning materials?

Therefore, in this study, the researchers took the relevant initiative to identify students' needs on peer-tutoring- interactive learning in strengthening their Arabic vocabulary mastery. Arabic vocabulary interactive learning is therefore a method that involves peers' help (*Aqrān*) and the application of interactive multimedia.

Vocabulary learning is one of the biggest challenges in learning a second language. This is because students need to master many vocabularies to succeed in their learning. In order to overcome these challenges, language learners need a method of learning (Mohd Zaki & Kaseh, 2016; Asgari & Ghazali, 2011; Schmitt, 2010; Ellis, 1985; Lightbown & Spada, 1994) especially for vocabulary. The ineffective selection of teaching and learning methods has been identified as a major factor that hinders the mastery of vocabulary among learners. The failure of selecting and varying teaching and learning methods is also identified as the most important source of unsuccessful teaching and learning of the Arabic language. This has led students to feel less and less attracted to learn the language (Fairosnita & Kamarul Shukri, 2015; Saifuddin, 2002). Methods of teaching and learning vocabulary are the primary target for students with a specific aim, in order to achieve in their language learning (Indoor Silk & Indica, 2018).

According to Nabihah, Harun & Maimun Aqsha, (2018); Nadwah & Nadhilah, (2014), the problems among students who are studying Arabic are the absence of vocabulary, lack of interaction and achievement in Arabic communication because of the lack of support from their environment. The researchers have also found that only through peer-to-peer assistance can help them to understand and master Arabic well. In addition, students also experience boredom during the teaching session because teachers still use traditional teaching and learning methods. Meanwhile, according to Ghazali Yusri and colleagues, (2012), the weakness of Arabic language mastery among university campus students in one of public universities generally happens due to several factors; among others is the use of self - learning methods in teaching and learning. This view is in line with Noor Anida, Rahimah & Zaiton, (2014) i.e. peer-to-peer learning is one of the methods in the self-learning concept. Self-learning is defined as a learning process based on students. There are many studies showings that peer-assisted learning methods have a positive impact on student academic achievement (Elizabeth, Stanley & Edwin, 2016; Ayvazo & Aljadef-Abergel, 2014; Bowman-Perrott, 2013).

According to a study by Nur Khamimi & Muhammad Sabri Shahri, (2016) on the use of Multimedia Software for Arabic Language Teaching among public university students, there is still a lack in the aspect of using computer technology for learning purposes. Most Arabic instructors are found to be inefficient in the use of computers during the teaching and learning process. This is because they lack exposure to the use of technology especially among the generations of veteran instructors (Mohd Feham & Isarji, 2000; Mohd Feham, 2006; Zawawi, 2008). In fact, most multimedia software in the field of Arabic language is not designed using appropriate learning theories and design principles. Hence, in this study, the researchers took the initiative to identify peer-assisted interactive learning needs in strengthening the Arabic vocabulary among students in the Kelantan branch public university. Additionally, the researchers intend to incorporate peer-assisted interactive learning elements into the design and construction phase of interactive peer-assisted learning modules, in order to reinforce Arabic vocabulary learning and teaching so that it would be more innovative and interesting.

Peer Tutoring (Peer-to-Peer Learning)

Peer-to-peer learning is believed to be an effective method for classroom learning. It refers to the teaching process in which a student (tutor) teaches one or more students who are his or her peers (Dyah, 2018; Gregory, Walker, Mclaughlin, & Peets, 2011; Mackinnon, Haque, & Stark, 2009). Peer-to-peer learning methods are often being made a model reference

by educators as they improve the quality of learning, contribute to the development of social skills, develop a variety of other skills and provide emotional well-being to students (Ayvazo & Aljadef-Abergel et al., McKellar, 1986). According to Bowman-Perrott et al., (2013), peer-to-peer learning methods have been accepted as one of the innovative teaching methods in recent years. This method has begun to be implemented at every level of education from primary to tertiary education.

The findings not only enhance student performance, but also have a positive impact on social relationships, attitudes and self-esteem among students. This study is supported by Naseerali, (2013); Hussain, (2011); Robinson, Schofield & Steers-Wentzell, (2005); Topping, (2003); Britz, (1989), there are studies that prove that peer-assisted learning methods are often implemented abroad and this method has given positive results in improving academic achievement, improving students' confidence, forming attitude as well as interest in the course. Therefore, it can be concluded that based on past studies that are related to the use of peer-assisted learning methods, they have shown positive impact on students' achievement. It is more evident that this method has its significant relationship with other various issues highlighted in the study of teaching and learning. The development of this methodology of study is still a major focus for both local researchers and those abroad.

Arabic Vocabulary Learning

Vocabulary learning is one of the biggest challenges in learning a second language. This is because students need to master many vocabularies in order to succeed in their learning (Mohd Zaki & Kaseh et al., (2016); Asgari & Ghazali, 2011; Schmitt, 2010). According to Abdul Razif, Khirsulnizam & Mohd Haron, (2016), vocabulary is a basic element that needs to be emphasised in language learning. An alternative is needed in the learning of Arabic vocabulary as it is a necessity to develop applications, capable of expanding vocabulary among students. According to Faironita & Kamarul Shukri et al., (2015), good vocabulary mastery can directly help students pick up other language skills too. Alternatively, educators should choose effective teaching and learning methods to stimulate students' motivation. This opinion coincides with the views of Irma Martiny, Maimun Aqsha & Zaid, (2017).

The use of Arabic language vocabulary is one of the main components that must be mastered in Arabic language learning. According to Fadhilah, Isa, Harun, (2017), the use of cognitive strategies in learning Arabic vocabulary should be addressed to enhance the consolidation process of existing vocabularies as well as new words. In addition, students need to make full use of cognitive strategies in learning Arabic language vocabulary in order to strengthen their vocabulary retention in the long run. The studies trend shows various issues in relation to Arabic vocabulary research that are implemented in a more interesting design. This proves that until today, issues regarding Arabic language vocabulary continue to gain attention from researchers, regardless of location whether within the country or abroad. The development of Arabic language vocabulary has led to a diversification and widening of strategy in teaching and learning.

Use of Interactive Multimedia for Arabic Language Learning

According to Norhayati, Shaferul and Mohd Fauzi, (2013), the use of technology in Arabic learning is still in its early stages. This is a challenge for Arabic language lecturers. Lecturers also need to be more creative and innovative in giving their students the best. According to Zahratun Fajriah, (2015), there is an increase in the mastery of Arabic language vocabulary among students who apply animation in interactive multimedia assisted learning. Based on the study by Nurkhamimi & Muhammad Sabri Sahrir et al., (2016) on public university students majoring in Multimedia Courseware for Arabic Language Teaching, it is found that even though the use of these educational software cannot be generalised for all teaching purposes and settings, some designs and development principles can be applied in the same context.

Correspondingly, the study can also be emulated by other institutions based on problem situations and learning issues. According to Siti Zulaidah and colleagues et al., (2017), the use of interactive multimedia modules is the best and effective way of presenting information as it is easy to learn and understand. In addition, the learning theory also supports the use of pictures, graphics, video and voice to help students understand and remember what they are learning well. This view coincides with Hashiroh & Norshuhada's opinion, (2017); Lowenthal, (2008), that the presentation of instructional media needs to be more interactive and innovative to provide an innovative way of delivering creative learning content.

2. METHODOLOGY

This study uses a survey questionnaire and the study data is analysed through a quantitative approach. The main focus of this study is to conduct a needs analysis to determine the required basis in the designing and constructing phase of the i - AQRAN module which is meant for the consolidation of Arabic vocabulary among students in one of public universities in Kelantan. This study uses survey methods through online surveys that are extended to a number of public university students throughout Malaysia. In this study, the sample selection used was stratified random sampling because of the uneven population size and was followed by the use of simple random sampling. The selection of study sample was made based on students' intakes that were obtained from the public university student management information system, which was estimated to be a total of 3600 students.

Accordingly, the researcher calculated and determined the number of samples based on referenced to Krejcie & Morgan, (1970) sample determination table- which states that for a population of 3600 people, the number of suitable samples were 345 people. Thus, the total number of samples were appropriate and sufficient for the generalisation purpose of Arabic subject takers at the Kelantan branch public university in Malaysia. Students with a Bachelor of Arabic Language courses were selected as they have had Arabic language learning experience and knowledge while taking Arabic course at their previous campus. Therefore, they were expected to be accustomed to

the Arabic teaching and learning atmosphere at the campus.

The set of questionnaire that was developed for the students consisted of 2 sections i.e. part A- concerning students' demographic information, and part B- on 3 constructive questions involving 5 likert scales with the scoring method of Strongly Disagree (SD): one point score, Disagree (D): two points scores, Less Agree (LA): three points, Agree (A) with four points and Strongly Agree (SA) with a score of five points. This set of questionnaire was developed based on the adaptation and modification of previous questionnaires that had been implemented for a similar purpose by Harun, (2014); Ghazali Yusri, Nik Mohd Rahimi & Parilah et.al, (2012).

Before the actual needs analysis was administered to the students, the set of questionnaires had been adapted based on the critical reviews by three experts who lectures at public universities in Malaysia, i.e. an Arabic language lecturer, and a Multimedia Technology lecturer. Later, a pilot study was conducted on 30 Arabic Language Students at the Kelantan branch. For reliability test the "Cronbach Alpha" was computed with the aid of SPSS Version 24 package through "item correlation and reliability" analysis, to obtain the reliability and validity of the questionnaire.

The analysis shows the value of Alfa Cronbach based on 3 constructs which the first construct is Arabic interactive classroom learning = 0.88, the second construct (interactivity in learning Arabic vocabulary in classroom) = 0.86 and the third construct (skills requirement for Arabic interactive learning) = 0.81. Cronbach Alpha value which exceeds 0.70 is often used by researchers as a reliability index in the study (Mohd Majid, 1990). The higher the value of Alpha Cronbach, the higher the reliability of the item. Normally, values of 0.7 and above are accepted as justifiable reliability values (Nunally, 1978).

Once the pilot data had been obtained, the actual study was carried out on the sample of the study. The data obtained were analysed using descriptive statistic involving mean analysis, percentage and standard deviation. Therefore, this needs analysis may answer the research objectives of i - AQ-RAN Module construction for the purpose of strengthening the Arabic vocabulary among the students. Additionally, the data obtained are helpful in the process of selecting and determining the appropriate content and elements that should be included in the design phase and construction of the i - AQ-RAN as supplementary learning material for Arabic vocabulary reinforcement effort.

3. RESULT AND DISCUSSION

Analysis of this study was conducted according to what had been suggested through the quantitative approach. The focus of this study is to conduct a needs analysis to determine the basis required in the designing and constructing phase of the i - AQ-RAN module among students. Below is the analysis for this evaluation.

Table 1 Arabic Interactive Learning in Classroom

NO	Item	Mean	Standard Deviation	Interpretation
1	I cooperate with my friends to complete the assignments.	4.27	0.63	High
2	I spend time to discuss the lesson with my friends.	4.08	0.69	High
3	I feel courageous enough to give my opinion when I'm with my friends.	4.13	0.71	High
4	I feel confident to communicate spontaneously with my friends.	3.97	0.85	High
5	I feel comfortable in my group.	4.27	0.72	High
Total Mean		4.14	0.72	High

Based on table 1, the total mean of the five items is (mean = 4.14) and the standard deviation (0.72) is at the high-level min interpretation. Among the items that show a high level of mean interpretation are item (5): "I work with my colleague to complete the assignment" (mean = 4.27, sd = 0.63), item (1) which is the second highest mean value: "I feel comfortable in my group" (mean = 4.27, sd = 0.72), item (3): "I feel courageous enough to give opinion when I'm with my friends" (mean = 4.13, sp = 0.71), item (2): "I spend time to discuss the lesson with my friends" (mean = 4.08, sd = 0.69), and item (4): "I feel confident to communicate spontaneously with my colleagues" (mean = 3.97, sd = 0.85). There are no items in this section that have recorded a mean score of the medium and low levels. This shows that not even one of the Arabic interactive learning in the classroom items has been rejected entirely, and this is directly relevant as a necessity in interactive learning in the classroom.

Based on the first objective of this study, the findings showed that the highest-level mean value was scored by “Students feel comfortable in a group of friends” (item 5). This finding supports the opinion of Nabihah, Harun & Maimun Aqsha et al., (2018); Soly Mathew Biju, (2018); and Horan, (2016), the main reason for the successful use of learning methods with peers is that students are more comfortable with the instructions from other students rather than the teachers’ instructions. Learning through peer-to-peer learning methods can yield better communication links between tutors (tutors) and tutee (other students).

According to Emily Hudson, (2014) and Webb, (2002), educators need to create a positive group environment that makes students feel comfortable and less anxious when they contribute answers to a question during learning discussions. In other words, they can give detailed explanation and not just a brief reply. In addition, teachers need to focus on the concept of understanding the lesson and not just memorisation procedures. Meanwhile, according to Popejoy & Asala, (2013), creating learning methods with peers improves students’ confidence in obtaining higher grades in class and achievement in the exam. This opinion is in line with Hanita & Norzaini’s views, (2018) and Bandura, (1989), i.e. peer support in learning can encourage students to learn and improve their academic achievement.

According to Arsaythamby, Ruzlan & Sitie, (2016), cooperative learning is a good teaching and learning method to achieve high academic performance among students. This opinion coincides with the views of Umi Kalthom & Ahmad, (2014), i.e. cooperative learning (group work) can help one to be a good problem solver because through discursive engagement, students can get various perspectives on problem solving. Individual accountability in cooperative learning also takes place when individual student makes a public performance, i.e. performing or sharing what they have learned or mastered in front of their group members (Kagan & Kagan, 2009).

Apart from that, the findings of the study show that the highest mean score is for “Students work with their peers to complete the task” (item 1). This is in line with the views of Bhavani & Zamri et al. (2017), i.e. students in a group should practice the value of cooperation and be responsible in providing assistance to their group members so that they can all understand the concepts that are learned, and help each other especially the one chosen to represent their group in providing answers for their presentations. The sense of responsibility of each individual of a group project also becomes evident through the completion of a task which requires contribution of specific roles or skills that are combined together to produce a quality assignment.

According to Puji & Jayne C., (2016) and Kagan & Kagan, (2009), the individual’s sense of responsibility becomes effective in a co-operative learning setting when the individual student performs a presentation i.e. sharing what he or she has learned with their group members. This activity does not exist in conventional learning and becomes disadvantageous to the students (tutors) who are supposed to have the opportunity to train themselves using the target language with their own peers and friends.

Table 2 Interactivity in Learning Arabic vocabulary in the classroom

No	Item	Mean	Standard Deviation	Interpretation
1	I ask my lecturer so that I know the meaning of a new word.	3.86	0.75	High
2	I ask my classmates about the meaning of a new word.	4.15	0.66	High
3	I mention the word I learned repeatedly to other students.	3.87	0.81	High
4	I ask for Arabic language lecturer to help check the meaning of new words.	3.79	0.84	High
5	I interact and use the word along with other students who can speak Arabic	3.68	0.86	High
6	I mix the words I learned in Arabic with words from my first language when I talk. Example: __ <i>suka</i> ____	3.69	0.86	High
Total Mean		3.90	0.79	High

Based on table 2, the total mean for six (6) items is (mean = 3.90) and standard deviation (0.79) which is at high level mean interpretation. Among the items that are recorded the mean value at high level is item (2): “I ask my classmates about the meaning of a new word” (mean = 4.15, sp = 0.66), which is followed by item (3): “I mention the word I learned repeatedly to other students” (mean = 3.87, sd = 0.81), item (1): “I ask my lecturer so that I know the meaning of a new word” (mean = 3.86, sd = 0.75), item (4): “I ask for Arabic language lecturer to help check the meaning of new words” (mean = 3.79, sd = 0.83), item (6): “I mix the words I learned in Arabic with words from my first language when I talk” (mean = 3.69, sd = 0.86), and item (5): “I interact and use the word along with other students who can speak Arabic” (mean = 3.68, sd = 0.87).

The findings show that there are no items that has recorded a mean score of average and low level. This shows that there is no interactivity elements in Arabic vocabulary learning that is rejected entirely, and indirectly this shows that interactivity in i - AQRAN learning is relevant. However, the selection of interactivity needs in the study of Arabic vocabulary in the classroom requires items that have scored mean value of high level for the designing and construction phase of the

i - AQ-RAN module.

Based on the second objective of this study, the findings showed that the mean score of the highest in terms of “Students ask classmates about the meaning of the new word” was (item 2). This insight is supported by the opinion of Martin Martiny, Maimun Aqsa & Zaid Arafat, (2017), i.e. students spend some time searching for vocabulary meaning by asking teachers and friends instead of searching the meaning of words in the dictionary. They are perceived to be more confident of working with friends to get information faster than referring to the dictionary on their own. According to Noor Anida, Rahimah & Zaiton et al., (2014) and Baharin, Othman, Syed Mohd Syafiq & Haliza et al., (2017), students tend to ask question regarding the meaning of words more from their friends rather than refer to the manual dictionary. This type of collaboration is therefore seen as helping students to master the language. Additionally, students feel more comfortable communicating with their friends because they feel they are the same in terms of knowledge level of a foreign language.

Table 3 Needs of Skills in Arabic Language Interactive Learning

No.	Item	Mean	Mean	Standard Deviation
1	Learning Websites	3.95	0.74	High
2	Blog	3.68	0.88	High
3	Wiki	3.62	0.91	High
4	You Tube/ Video	4.05	0.77	High
5	Powtoon	3.87	0.86	High
	Total Mean	4.43	0.83	High

Based on table 3, the total mean of five (5) items is (mean = 4.43) with standard deviation of (0.83) which is at high level of mean interpretation. Among the items that show high-level min interpretation are item (4) “You Tube / Video” (mean = 4.05, sd = 0.77) , and the second highest mean value is item (1) “Learning Websites” (mean = 3.95, sd = 0.74). Meanwhile, item (5) “Powtoon” has scored (mean = 3.87, sd = 0.86). Item (2) “Blog” follows with (mean = 3.68, sd = 0.88). There is one item i.e. (3) “Wiki” which has scored an average mean level of interpretation (mean = 3.62, sp = 0.91). Overall, the findings show that respondents agreed with the overall skills requirement for interactive Arabic learning purpose. This is based on most of the skills that are needed in Arabic language interactive learning has scored total mean value of high level of interpretation.

Based on the third objective of this study, the findings of the skills requirement in Arabic interactive learning have shown that the highest score of mean is for “You tube / video” (item 4). This result is supported by Salmi & Noor Shuhada (2017), i.e. the video has become one of the most popular media among educators. The combination of multimedia elements such as text, graphics and audio has proven to attract students’ attention and interest and can stimulate visual and auditory senses. In line with the 21st century learning features which include student-centered learning with intentions, throughout the teaching and learning process the role of the student is more important than the lecturer, who only plays the role as a guide.

Besides, according to Berlian, Anis, Mohamad Jafre & Amelia, (2017) and Tuzi & Mori (2008), videos that contain precise language content can be applied as teaching model that focus on grammar and vocabulary usage such as introducing new words and grammar components. It can be done through various activities such as training, scripts, surveys, and others. This is further elaborated by W. Marc, (2014) and O’Connor, (2011), when teachers see the potential of getting involved with discussions and collaborative activities after watching Youtube video of microteaching. This method seems very good in establishing professional relationships among them. There are also teachers’ education studies that have been conducted by Abendroth, Golzy, and O’Connor, (2012), which have expressed that the use of Youtube in microteaching has helped these teachers in preparing themselves for class presentation that applies student-oriented classroom setting.

In addition, the findings of skills requirement in interactive Arabic learning show that the mean score is the highest for “learning website” (item 1). This is supported by Mohd Noorhadi & Zurinah, (2017), i.e. teaching and learning method which is based on learning web sites is an integration of information and communication technology in the education system. Other than creating active involvement by students in the learning process, it also enhances the level of learning among students and makes the teaching process of lecturers at public university easier and smoother (Chang, 2001). Moreover, Norliza, (2017), has stated that teaching and learning based on the learning website is not only aimed at facilitating lecturers and students but also a transformation towards high quality and effective education.

This phased need analysis study has contributed to the design phase and the construction of the i - AQ-RAN Module in strengthening Arabic vocabulary among students in one of public universities in Kelantan. In summary, the overall findings of this study have shown a positive response to the needs of the students to design and build the i - AQ-RAN Module. Obviously, students feel comfortable when they are with friends and work together to prepare for something. This shows that students who often learn together will feel comfortable to sit and spend time among themselves in a group. Additionally, shame or fear of being ridiculed by other friends can soon be controlled. The desire to do work co-operatively will strengthen the relationship between students and they can get used to each other. Space and opportunities with colleagues do not only happen in the classroom, but also happen outside the classroom (Noor Anida, Rahimah & Zaiton et al., 2014).

Introspectively, the implementation of interactive learning through interactive multimedia has also shown positive results to the reinforcement of Arabic vocabulary. This shows that the use of peer-to-peer interactive multimedia helps students to reinforce their Arabic vocabulary. This is because interactive multimedia learning can nurture and increase the student’s interest in continuing to learn. The help of multimedia elements increase the student’s concentration and

understanding of the presentation contents and the topics being discussed.

The implication of this study also encourages lecturers to diversify their teaching and learning methods from time to time. Lecturers need to transform the traditional learning methods into innovative and effective learning methods. This is because, if the lecturers still retain the old teaching and learning methods, it will create a passive and 'dim' teaching and learning atmosphere, especially among students. In addition, through this method, it will help Arabic lecturers to make improvements in their teaching pedagogy and to find suitable solutions to the problem of vocabulary mastery.

According to Rafiza & Maryam (2013), it is important for educators to choose the teaching methods that suit their student's ability in order to stimulate and attract students' interest, so that the teaching and learning process achieves its objectives. This is further supported by Mohamad Bilal and colleagues, (2013), i.e. it is undeniable that the use of multimedia technology in education promises great benefits to educators as well as to students, given the importance of multimedia technology application in the field of education.

The implication of this study is to provide input to the students to improve the quality of learning by using a particular strategy, especially to achieve academic excellence and at the same time to be able to control the environment so that it becomes positive. Additionally, this method gives students the opportunity to express their views which can be added with certain evaluation to Arabic language teaching and learning. The results of the study help students to realise in depth their own problems in Arabic language vocabulary mastery for betterment purpose.

Besides, the results of this study also implicate in terms of assisting the faculty or language learning centre to identify problems of students' language performance and to improve teaching and learning methodology and quality. This will indirectly fulfill the objective's outlines- to have students perform excellently in their academic assessments and to achieve good academic pointers in general. Therefore, the administration of Arabic Language courses in the Academy of Language Studies needs to plan and form a module specifically for strengthening the Arabic language mastery among students. Teaching courses and workshops need to be organised for lecturers in order to strengthen teaching skills among the Arabic lecturers. Continuous lecturer training is important to encourage lecturers to use the most appropriate methods of teaching that suits the current environment needs, and transform them to be up-to-date and effective for students.

4. CONCLUSION

It can be concluded that Malaysia is now heading towards becoming a developed nation in the globalised era in terms of education. Therefore, the need for education transformation should be emphasised, in particular, by the Institute of Higher Education. This matter coincides with the mandate of the Minister of Higher Education, i.e. to realise Higher Education to be affiliated with the Industrial Revolution 4.0., and thus requires lecturers to be skillful and competent in the teaching and learning field. It is important for them to be more innovative and to compete healthily with other developed countries in terms of education technology.

This goal is also in line with the 21st Century Learning core element which emphasises 11 paradigm shifts for the transformation of the education system under the Malaysian Education Development Plan 2013-2025. Hence, the findings of this study can contribute to the university in general to improve academic achievement and to minimise traditional teaching and learning methods. In addition, it is a source of information to the faculty or the language academy to formulate more effective methods to enhance the reinforcement of Arabic vocabulary with more interactive and innovative learning methods in the classroom. The result of this study also gives meaningful input to the Kelantan branch public university in Malaysia, and the Ministry of Higher Education in identifying interactive learning methods that are appropriate for language learning that goes along with the Industrial Revolution 4.0.

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