

Computer Assisted Language Learning for Learning Arabic as a Second Language in Malaysia: Teacher Perceptions

Mohammed A. Gharawi and Azman Bidin

Abstract—A study was conducted on the perceptions of 35 Malaysian school teachers on their use of Computer Assisted Language Learning (CALL) for teaching vocabulary to learners of Arabic as a Second or Foreign Language (ASL/AFL). Most teachers expressed their favour for using CALL, and especially recognized its potential in helping and encouraging such learners, but also pointed out its time consuming nature. CALL can assist in the teaching and learning of Arabic vocabulary, as it has also been useful in education in general. For instance, it is noted that CALL can present vocabulary in multiple modes simultaneously; it supports interaction, and enables personalized learning. Further research is ongoing on its effectiveness, but CALL could play an important role to assist learners who face difficulties in acquiring Arabic vocabulary, and understanding it in context.

Index Terms—Arabic language, computer assisted language learning, foreign language learning.

I. INTRODUCTION

Vocabulary is an important component of language learning [1], as it integrates the four skills of listening, speaking, reading and writing [2]. In the academic context, an appropriate strategy for acquiring vocabulary becomes a necessity, and an informed teacher is essential [3]. Unfortunately, the traditional teacher-centred method in which the teacher merely lists Arabic words for students to memorise along with their lexical meaning is inadequate [4].

This is apparent in the inability of many students to engage in even a short conversation. Students identify the lack of vocabulary as the primary obstacle to second language learning whereas mastery of vocabulary is essential for functional language proficiency [5]. The evolution of the online learning approach allows the student to develop their learning skills and knowledge base using the internet. This approach of the learning significantly helps in acquiring the key information at various point of instance. The development of online materials is therefore recommended for teaching and learning Arabic as a second language [6].

New and innovative approaches can now be used to teach vocabulary to sustain students' interest and effort in learning [7]. For this purpose, Computer Assisted Language Learning (CALL) courseware could have the potential to enhance vocabulary competency of non-Arabic language learners.

CALL the approach of learning and teaching significantly uses the computer in presenting, assessing, and enforcing the learning material through searching the necessary language teaching materials. CALL can help to reinforce the ability to recall newly acquired words, which was identified as an important skill [7], as long as it is used effectively [8]. The need for such measures is also in line with the efforts of Malaysia's Ministry of Education to improve the acquisition and understanding of foreign languages through innovative methods in education.

With the aim of identifying the objective of the paper, the research study will analyse whether computer can assist learners to learn Arabic language as a secondary language in Malaysia. In this context, the research paper will evaluate the advantages and barriers of computer in learning secondary languages.

II. LITERATURE REVIEW

Learning with the aid of digital media and computers is nowadays expected, as this can help to play an important role in personalising education [9]. Many students are already benefiting from CALL for language learning [10], especially through the availability of rich resources and opportunities for interaction [9]. For language learning, computer mediated tools can help students to learn independently [11]. Teachers also benefit from being able to concentrate on those parts that cannot easily be taught using a computer. CALL can therefore be beneficial for both individual learners and schools alike [9].

Computers are especially useful for presenting repeated drills, personalising the learning, providing choice and control for students, and promoting interaction [12]. This creates a realistic learning environment, as multimedia technologies allow a variety of media to be used together in a single activity. Presenting vocabulary in all three modes, i.e. textually, aurally and visually, has been shown to enhance the teaching and learning of vocabulary because learners benefit more from also experiencing rather than simply reading [11]. Moreover, in this regards, it can be claimed that digital gaming is a new culture in front of the present world, where several digital gaming organizations are developing dynamic computer games to attract a wide range of non-traditional game players. The development of technology in the sphere of computer technology has aided in the development of learning different programming languages with the assistance of different software can be developed [12]. As an example,

Manuscript received May 26, 2014; revised February 23, 2014.

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Lego Group is such kind of organization, which is developing digital games for child and youth generation. According to [13], the simultaneous presentation of words and pictures enables learners to establish both verbal and pictorial mental models that help to build more effective connections between the two. In this regard, according to the viewpoint of [14], during the modern days most of the youth have the tendency to be engaged with technology and internet with the aim of learning something new and innovative. [14] claimed internet technology has certain advantages and barriers for language learning. In this context, in order to highlight the advantages of internet-based learning, it can be asserted that playing digital game has been one of the emerged intense of the youth, which motivate youth generation to learn secondary languages along with their academic models. Simultaneously, it will also improve the academic ability of a student. At the same time due to the appearance of internet based learning processes the level of anxiety among the learners has been reduced in the present scenario [14]. Consequently, certain barriers of the internet-based learning can be ascertained in terms of identifying mass number of school students and individuals who cannot access or can barely afford internet or computer during the learning phase of the life. At the same time, according to [14], many teachers and students do not have any short of idea regarding the procedure of operating a computer. In this regard, it can be affirmed that lack of knowledge regarding computers and technology can be considered as a demerit regarding this issue [14]. In this similar regards, [15] affirmed that developing the approach of second language in the school environment is often very difficult as it requires high level of hard work, commitment level, practicing and understanding level and other contributing factors among the students as well as teachers regarding other languages. Indeed, it has also been highlighted that some of the Arabic words are regarded to highly complicated to memorize by most of the Malaysian learners. Besides, in some of the regions of Malaysia the approach of learning Arabic plays a vital role in the lives of the Muslims.

Moreover, the element of interaction makes CALL courseware ideally suited to the communicative approach in foreign language learning. As for personalisation, this can be done, for instance, by integrating the student's name and familiar contexts as part of the task or program [9], and providing learning and assessment tasks according to the attainment level of the student.

The situation with Arabic is the same in that one of the biggest challenges Arabic language learners face is in learning its vocabulary [16]. Multimedia presentation of courseware makes it possible for language learners to be exposed to not only the textual but also the contextual use of words, which can aid in comprehension. This is important as vocabulary is often taught otherwise; isolated from the context [17]. The use of CALL for assisting in the learning of Arabic though is a relatively new innovation. One such attempt was made in 2012 at the Arabic Language Center in Selangor under supervision of the Islamic Affairs Institute, which offers an intensive programme for learning Arabic vocabulary and grammar with a focus on facilitating

understanding.

Several comparative studies have also been made to show the advantages of computer based learning over traditional methods for learning vocabulary. For instance, a study by [18] compared the usefulness of online vocabulary teaching with traditional methods albeit for an English class. The online learners were shown to outperform the other group in terms of being able to better remember the words, and this was evidenced again after a period of 3 months. The greater effectiveness of computer based vocabulary learning strategies has also been established for particular types of learners, such as kindergarteners at risk of learning disabilities [19]. Reference [20] found animations prove to be more useful over paper-based methods because they address more senses that is possible by only using paper-based texts. These findings were made during an investigation carried out at a university, and it was also observed that both teachers and students were more motivated whilst using animations to teach/learn vocabulary. Similarly, the potential for video games in learning vocabulary as noted by [21] in a meta-analysis of studies on international university students learning Bahasa Malaya as a second language in Malaysia. Correspondingly, it can be asserted that due to the development of infrastructure and technology, several learning and gaming organizations have been aiming to develop various kinds of 'games', which are goal-oriented, rule based but playful manner simultaneously. Thus, during the game playing process in the computers, individuals can learn mediate languages, which is related to game and game playing options [21]. The meta-analysis included studies that were both qualitative and quantitative, and again the role of CALL in motivating language learners was noted. Some of these studies in the meta analysis involved Arab subjects, such as that of [22], which also showed the same positive impact on students learning the Arabic language.

The study by [20] also pointed out however, how computer based instruction can become distracting if it is not properly aligned with the content and proficiency level of students. The effectiveness of courseware based on CALL is therefore dependent on how well the technology is integrated into the course, and its ability to engage the learners according to their level. In addition, as [23] showed, a blended approach to learning vocabulary may be better able to provide for more effective learning in terms of ensuring sustained retention.

Besides motivation and engagement, other related and important components for vocabulary learning for ensuring that it takes place effectively are positive attitude and perception. In Saudi Arabia, interviews with English language teachers in a university found there are three main areas of concern, namely availability of technology, the training required to use it, and the effort required to overcome technical obstacles to adopting such technology in classrooms [24]. Nonetheless, the teachers were overall determined to use such technology for the benefit of their students. Another study showed a strong positive attitude among Iranian EFL teachers, but at the same time a reluctance to adopt CALL in their courses due to serious obstacles and limitations, such as relating to computer literacy skills which course designers have not been able to eliminate [25]. More studies are needed for the specific context of teaching and learning ASL/AFL.

III. OBJECTIVES AND METHODOLOGY

A survey was conducted to investigate this potential in using computer based educational courseware to assist in strengthening the teaching of vocabulary skills. The study involved ascertaining the perceptions of teachers in using CALL in teaching Arabic as a Foreign Language (AFL) including its perceived advantages and disadvantages, specifically for teaching vocabulary. The students of these teachers were Arabic language learners studying in upper grade secondary schools in Malaysia.

In order to conduct this research study, a qualitative research approach has been taken into consideration in this research paper. In terms of justification, it can be affirmed that this particular research approach has been chosen for this study because the research intends to identify whether the adoption of CALL in teaching can ensure learning Arabic as a second language in Malaysia. In this regard, with the aim of gathering the viewpoint of the respondents, a primary research has been conducted. Moreover, for determining the sample size, Malaysian teachers have been chosen whose age is more than 40 years. Similarly, during choosing the sample number 35 teaches have been chosen randomly.

On the other hand, the secondary data was mainly collected by reviewing peer-reviewed journals, articles and books, which are relevant to the subject matter of the research study. Apart from this, online websites as well as university reports have been taken into consideration for gathering secondary data. Thus, in terms of rationally it can be asserted that for collecting the secondary data the research paper relied on reviewed journals and articles, because these are most reliable sources through which genuine information can be accessed. Finally, it can be asserted that during the research study, the paper intends to ensure validity and reliability of the data by considering ethical practices more adequately. In this context, the response that has been gathered through the mean of primary research was kept confidential for the future research prospects. Besides, in order to gain a proper comprehensive conclusion only the suitable, recently published journals, books as well as the educational reports has been reviewed for the research study. [26].

IV. RESULTS OF THE STUDY

A survey was held of 35 Arabic language teachers in Malaysia already using CALL for teaching AFL. A higher preference for using CALL was noted among teachers aged 40 and above (100%) whereas the proportion for those aged 23-40 was 70%, and gender-wise among females, it was also 100% whereas the preference by males was 76.9%. In terms of educational background, teachers with a Masters background were more in favour (81.8%) compared to those with a Bachelors background (77.8%). Overall, those in favour amounted to 82.4% and those not in favour were 17.7%. The majority are therefore in favour, and they are more likely to be above 40, and female with a Masters degree.

On the perception of CALL being able to help AFL learners and encouraging them, all 100% of the participants agreed to both (Fig. 1). This implies that the participants believed that Arabian language is the part and parcel for most of the

Malaysian learners. The motivating potential however, was agreed to by 88.2%, and its scope for enabling individual learning was agreed to by 94.1%, both still majority proportions. On the other hand, it was acknowledged by more than half of the teachers (52.9%) that CALL can be too time consuming, as the learners as well as teachers need to acquire high level of technical knowhow for efficient learning. The aforementioned results are summarised in the table below.

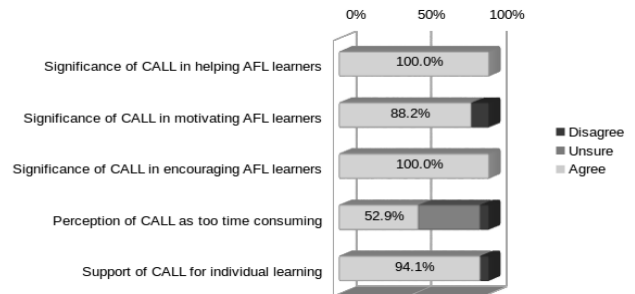


Fig. 1. Significance/perception/support of CALL.

TABLE I: SUMMARY OF KEY RESULTS

Summary of key results (selected)		
Preference/Acceptance for using CALL		
Age	22-39	70%
	40 and above	100%
Gender	Male	76.9%
	Female	100%
Education	Bachelors	77.8%
	Masters	81.8%
Overall	In favour	82.4%
	Not in favour	17.7%
Significance of CALL in helping AFL learners		
Overall	In agreement	100%
	Not in agreement	0%
Significance of CALL in motivating AFL learners		
Overall	In agreement	88.2%
	Not in agreement	11.8%
Significance of CALL in encouraging AFL learners		
Overall	In agreement	100%
	Not in agreement	0%
Perception of CALL as too time consuming		
Overall	In agreement	52.9%
	Not in agreement	41.2%
	Unsure	5.9%
Support of CALL for individual learning		
Overall	In agreement	94.1%
	Not in agreement	5.9%

V. CONCLUDING DISCUSSION

The prime objective of the research study was to determine the perception of the Arabic language teachers' about the use of CALL in promoting Arabian as the second language in Malaysia. In this regard, study investigated the perceptions of Malaysian schoolteachers on the use of CALL for teaching vocabulary to ASL/AFL learners from 35 teachers. Overall, the perceptions were highly positive with 82.4% being in favour of its use, especially among the over 40 age group, female teachers, and Masters level teachers.

According to teacher perceptions, CALL is particularly advantageous in helping AFL learners and encouraging them, as all the teachers surveyed agreed in these two aspects. The vast majority also agreed in CALL being suitable for

supporting individual learning, and for motivating AFL learners. The only recognised disadvantage of CALL is its time consuming nature. Furthermore, in this regard, it can be affirmed that with the significant development in the Information Technology (IT) and its important contribution in the learning process, computer has evolved as contributing role in the language learning.

The study therefore supports the use of CALL, at least from the teacher perspective. It could be useful however, to carry out further studies in this area, especially quantitative studies, to examine the actual impact on learning Arabic vocabulary. The next paper will investigate further teacher perceptions, specifically for low achievers engaged in learning Arabic as a second or foreign language. Besides, with the assistance of CALL, learners as well as teachers become highly motivated because it provides the platform to integrate the information and technology of computer in the learning environment. Furthermore, CALL program presents a stimulus that the responders needs to respond. This stimulus includes text, image, audio messages or video. Similarly, responders need to respond in a reliable manner to this stimulus. Nevertheless, the feedback mechanism enables the learner as well as teachers to know whether they responded in the right or wrong manner through pointing out the errors.

Investigating the perceptions of teachers towards the use of educational technology is important because usually there is either a mismatch between these perceptions and the actual integration of technology [27], or only marginal support for its effectiveness [28]. The latter study also found that teachers' beliefs and attitudes correlate with instructional practices of integrating technology, hence the importance of ascertaining teacher perceptions. Besides, based on these arguments and evidences, it be asserted that environment of the modern era has changed substantially in the early 21st century. In this regard, it has been observed that most of the youth and adolescents have been addicted to computers and internet for watching movies, playing games and stories. At the same time, youth also rely on computers for their academic studying requirement. As an effect, it has been evidently observed that this approach have few positive and negative aspects. Furthermore, the result of the primary research revealed that some of the teachers had the perception that CALL program is too time- consuming mechanism. Besides, the negative aspects are regarding the availability of equipments, as students and teachers have to use the equipment within the restricted time. Additionally, the increase in the overall cost could be of considerable disadvantage as well as lack of training and availability of trained teachers is the major reason that obstructs the use of the program in the schools. Considering all the pros and cons, it can be claimed in this modern era, children can learn about secondary languages with the assistance of the CALL approach. In this regard, kids can apply their cognitive thinking capabilities to learn alternative languages.

A study by [29] investigated the perceptions of English and Arabic teachers in the UAE towards the use of technology. Thus, in this regard, it can be affirmed that CALL program has its own advantages as well disadvantages, so the educational environment should be aware of the strengths and weaknesses while applying the CALL approach. English

teachers were found to have higher scores on perception compared to Arabic teachers in certain areas related to applying to technology, such as in using computer related terminology, and using computer technology for providing distance education. But, Arabic teachers scored higher for data and multimedia presentations. This study confirmed that attitude and teacher support heavily determines the success of instructional technology integration. The finding in this new study that Malaysian teachers are on the whole strongly receptive towards the adoption of CALL in teaching AFL therefore may bode well for the future of teaching and learning Arabic vocabulary in Malaysia.

ACKNOWLEDGMENT

Mohammed A. Gharawi, would like to thank Dr. Azman for his professional supervision of the progress of this research.

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