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Mobile Application of Al-Quran and Arabic Language for Interactive and Self Learning Assistant for support in j-QAF Learning: A Survey

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Abstract
Mobile technology in learning process is quite demanding, nowadays. It has a huge potential as a learning tool and also can be used as distance learning environment. This kind of technology is believed able to solve the current problem in j-QAF learning, especially the Arabic and Quran learning process. It is because, the current method of Arabic and Quran learning method, become less effective and unattractive to be implemented, especially towards the young Muslim generation. Moreover, today’s busy lifestyle needs a modern and technological approach that able to optimize the study time and improve the learning process. This paper seeks to provide a comprehensive review of the findings regarding the j-QAF students and teachers’ perceptions towards the mobile usage in Arabic Language’s and Quranic learning process, mainly in supporting j-QAF programme. Mobile learning is considered as an interactive and self-learning method, which can improve and strengthen the current learning process through utilization of portable tools or device of any mobile application. This could be another alternative due to support the existing method in learning and teaching Arabic and Quran, which can considered as advance teaching tools/aids. In current time, this mobile tool is more preferable to be used during the leisure time and suitable to be implemented with current lifestyle for self-learning and improvement method, due to optimize the study time. Areas with
potential of further expansion are identified for future research in supporting the j-QAF learning.

**Keywords:** j-QAF, mobile technology, Arabic, Quranic, teaching aids

**Introduction**

Mobile technology is a term that normally used to describe the various types of cellular communication technology. Since the beginning of this millennium and technological era, a standard mobile device has gone from being no more than a simple two-way caller of being cellular phone, GPS navigation system, an embedded web browser and many more. Many experts argue that the future of computer technology rests in mobile/wireless computing.

Currently, US Military is using mobile technology as a tool for information dissemination and collection in the battlefield arena. Because of that, educators, and instructional designers recognize the potential of mobile technologies as a learning tool for students and have incorporated them into the distance learning environment. Most of them, including researchers and practitioners have incorporated this technology into their teaching and learning process using mobile devices. (Keegan, 2002) has anticipated that, “Mobile learning is a harbinger of the future of learning”. Mobile learning is a method of learning accomplish with small and portable devices. Moreover, Mobile learning is not one of the new educational paradigms that suddenly blossom in the field of education, that become wildly popular for a few years, and then quietly fade away (Clark, 2007). Nowadays, with the latest technology, learners are being able to learn anything, at any place and any time they needed the knowledge. Thus, mobile phone is the perfect delivery vehicle for learning in near future.

Thus, in this paper we evaluate the data and findings from the survey we had already conducted towards the j-QAF students and teachers’ perceptions of the mobile usage in Arabic Language’s and Quranic learning process. Alternatives method of learning for both Al-Quran and Arabic, and efforts to elevate those elements are highly beneficial indeed and considered as a good deeds in Islam. Moreover, Al-Quran is the foundation of Islam, Islam and the Muslim way of life is based on that. Islam is seen more as a way of life than a religion, and the Quran is seen as containing all the instructions for living a proper Islamic life. Learning and retrieving information from it therefore, is an important aspect and part of a Muslim’s life. In fact, Arabic is the language of the Quran. Thus, to understand the Quran and its interpretations properly, reading and learning Arabic is much more preferred and encouraged.

The Holy Quran should be put into our heart by reading it and developing that habit in leisure time, due to improve Quran reading skills and understand the
meaning and lessons that can be derived from it. Implementation of Islam Hadhari concept in Malaysia, which in turn encourages the development of Islamic teaching and ethics with current available technology. ICT and technology has been used as one of the intelligent system mechanisms, due spread the words of Allah in a right way and appropriate manner with a better understanding of its contents and interpretation. Moreover, reciting Al-Quran in the appropriate way and well defined manner are very important for all Muslims and indispensable in Islamic worship, such as prayers. However, the role of Quranic learning in today’s society is worrying, considering there are a lot of Muslim people still can’t read Al-Quran properly with a better understanding of tajweed rules. Majority of them intend to find another alternative, due to improve their recitation and understanding of Al-Quran. Because of that, there is a growing market for self-learning method to learn Al-Quran as well as Arabic, which also compatible to be used in current busy lifestyle. Today’s busy lifestyle needs a modern and technological approach that can improve learning Al-Quran, as well as Arabic and optimize the study time.

Background

i. **Linguistic properties of Arabic Language**
Al-Quran is in Arabic language, thus any small mistake in pronunciation of a letter or word may change the meaning of that word. It is an ancient classical language, which influenced by a lot of dialects. It has been used as an official language in more than 22 countries. Arabic is one of the languages that are often described as morphologically complex and the problem of language for Arabic are multipart by the variation of dialectal (Kirchhoff, Vergyri, Bilmes, Duh, & Stolcke, 2004; Maamouri, Bies, & Kulick, 2006; Vergyri & Kirchhoff, 2004; Zaidi et al., 2008). However, only Modern Standard Arabic (MSA) has been used for written and formal communication, because MSA has universally agreed upon the writing standard, as well as for communication purposes (Kirchhoff, 2002; Kirchhoff et al., 2004; Maamouri et al., 2006; Vergyri & Kirchhoff, 2004; Zaidi et al., 2008).

ii. **Al-Quran Learning and Tajweed Rules**
From the generation of the Prophet Muhammad PBUH till now, no one has ever denied the fact that Tajweed is definitely important. It is only now in our generation that people have lost respect and forgotten the status of Tajweed. The role of Quranic learning in today’s society is worrying, considering there are a lot of Muslim people still can’t read Al-Quran properly with a better understanding of tajweed rules (Utusan, 1995). In current situation, Quranic lesson only been taught and stressed out while at school, which is one of the main syllabus in PI (Pendidikan Islam) and j-QAF (BeritaHarian, 2005). Meanwhile, young working adults, as well as older community need to find another alternative, due to improve their recitation and understanding of Al-Quran. Because of that, there is a growing market for self-learning method to
learn Al-Quran, which also compatible to be used in current busy lifestyle. Besides, there is also a need to independently evaluate the user reading and understanding abilities of Al-Quran. The existing solutions only provide learning in one-way direction, which is very subjective in determining improvement, and also difficult in evaluating user performance.

iii. Mobile Learning Technologies

Mobile Learning is a method of using wireless and mobile technologies for education by extending access to a desktop-based online environment to handheld devices such as mobile phones or personal digital assistants (PDA’s) used as part of a mobile community (Farooq. U, Schafer. W, Rosson, & Caroll, 2002). Thus, instructional designers and teachers need a solid theoretical foundation for mobile learning in context of distance education and how to utilize the emerging mobile technologies and integrate them into teaching more effectively.

Survey and Results

A survey has been conducted focus on “Internet and Mobile Usage in Arabic’s and Al-Quran Learning”, during the field trip started from 22nd June 2010 until 24th June 2010 at Sekolah Kebangsaan Padang Garong 2, Kota Bharu, Kelantan. The data of survey has been collected from 2 groups, which are (1) Teachers and (2) Students. The results of the data obtained from both group are described below (SoC, 2010):

i. Teachers

The j-QAF teachers in this school only 4 persons, while another 4 teachers teach Islamic Education (Pendidikan Islam) and 10 other teachers for KAFA (Kelas Agama Fardu Ain). The table shown below is the most significant findings of the data survey taken from these 4 teachers (j-QAF):

**Table 1:** Teachers response (SoC, 2010)

<table>
<thead>
<tr>
<th>NO.</th>
<th>QUESTIONS</th>
<th>ANSWERS TEACHERs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>Gender</td>
<td>Women</td>
</tr>
<tr>
<td>2</td>
<td>Age</td>
<td>33</td>
</tr>
<tr>
<td>3</td>
<td>When did you start teaching of j-QAF’s subject, Arabic?</td>
<td>2005</td>
</tr>
<tr>
<td></td>
<td>When did you start teaching of j-QAF’s subject, Al-Quran?</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Were you given specialized training to teach this subject?</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>If yes, please indicate the form of training provided.</td>
<td>Training in group, HSP Training, PKSR Training</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>6</td>
<td>If you are using computer software, indicate the name of the software and software manufacturers.</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>The effectiveness of using that software in P&amp;P process.</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>Have you provide self-instructional materials (own creation) with the use of ICT applications?</td>
<td>No</td>
</tr>
<tr>
<td>9</td>
<td>If so, what software do you use in preparing the teaching materials?</td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>What form of testing that you normally use to evaluate the performance of students?</td>
<td>Speaking Test Writing Test</td>
</tr>
<tr>
<td>11</td>
<td>In your opinion, is the usual method of P&amp;P process for this subject already sufficient without the assistance of ICT?</td>
<td>No</td>
</tr>
<tr>
<td>12</td>
<td>The overall performance of students in this subject.</td>
<td>Satisfied</td>
</tr>
<tr>
<td>13</td>
<td>Do you have a computer and internet connection at home?</td>
<td>Yes, both</td>
</tr>
<tr>
<td>14</td>
<td>The level of expertise in the use of ICT,</td>
<td>Expert</td>
</tr>
</tbody>
</table>
According to above table, these 2 teachers were expert and specialized in teaching Arabic language, meanwhile another 2 teachers were expert in Quranic teaching. They also have skills in ICT, especially computers, and thus, believed the ICT technology; through implementation of Internet and Mobile application may help improving the P&P process of Arabic and Quranic learning. The current method of learning and teaching for both Arabic and Al-Quran, through manual method is still not sufficient for P&P process, if it is still without the assistant of ICT technology. Furthermore, the implementation for those technology still not yet been implemented in Malaysia. Hence, ICT implementation in both subjects is quite necessary to be performed, due to improve the j-QAF learning progress.

ii. Students
The results of the output data survey were obtained from 30 respondents (students of standard 5, 11 years old), which is j-QAF students. The majority of these sampling data were derived from the female students with a percentage of 60% (n=18), while another 40% (n=12) of the respondents was male. The results of the findings are based on the questions from the questionnaires, which have been divided and categorized as below:

(a) Interest

2) How does your interest in the j-QAF’s subject, Al-Quran? (Both Tasmik & Khatam Al-Quran Model)
3) How does your interest in the j-QAF’s subject, Arabic?
For Quranic learning (Tasmik & Khatam Al-Quran model), 13 students (43%) shows their interest (very interested), while 15 students (50%) were interested (moderate) and only 2 students shows their less interest towards Quranic learning. Meanwhile in Arabic, 23% of students stated that they are very interested in this j-QAF’s subject of Arabic Language, while another 63% (n=19) stated that they are interested (Moderate) and the rest (n=4) are less interested in the subject.

4. **Is the process of learning this subject interest you?**

Almost all students (n=28) stated that learning of this subject is really much interesting.
(b) **Teaching Aids**

5. **State teaching aid which is normally used by your j-QAF’s teacher**

Based on the response from those 4 teachers in Table 1, text book and exercise book are the main teaching aids that normally been used by the teachers during P&P process. In other hand, the answer for the question no.5 shows that, text books (n=28) are the main teaching aids, that most commonly used by teachers, followed by exercise books. Meanwhile, another 2 alternatives teaching aids stated in this survey, such as computer software and others support tools that could be considered as teaching aids are not been used in Arabic and Quranic process of learning.

![Chart showing teaching aids used]

(c) **Test and Assessment**

6. **What is a test that your j-QAF’s teachers frequently used to assess your performance?**

In overall, 50% (n=15) of the students state that their teachers frequently use writing test as the main type of evaluation tools and assessment, in evaluating their performance in class; whereas 37% (n=11) of students choose the verbal test and the remaining students, 13% (n=4) choose the practical test as the main assessment, used by j-QAF teachers.
7) Is the existing education system is sufficient to improve your skills?

63% (n=19) of students said that the existing education system is sufficient to improve the skills of the students, while 37% (n=11) say it is still not sufficient.

(d) Computer and Internet

8) Do you have a computer and internet connection at home?

Based on this question, majority of the students did have neither computers nor internet in their house. It has been proven, through the percentage gained, shows that only 33% (n=10) of students have both computer and internet connection at home; while 30% (n=9) of students only have computer and the others, 37% (n=11) of students did not have both.

9) Your computer skills:

Results obtained from previous question number of 8, had clarified this situation. Only 17% (n=5) of students stated that, they are very skilled with computers; 40% (n=12) say they are skilled; 40% (n=12) more clarified that, they are less skilled; while 3% (n=1) say they are not skilled. Most of students which categorized under skills and less skills of computer conquered about half of percentage that only know how to use the computer in moderate skills. They
have chances to use the computer and learnt how to use while at schools, in computer lab only.

10) **Have your teachers use the Internet for learning process of this subject?**
12) **Have your teacher using a mobile phone application or other mobile devices for learning process of this subject?**

Both questions shown above, that all students say that their teachers never used the Internet and mobile applications for learning in the classroom.

14) **In your opinion, how far both applications (the Internet and mobile) can help in improving the learning process of this subject?**

About 47% (n=14) of the students stated that, both applications are very helpful in enhancing the learning process; 40% (n=12) say somewhat helpful and 13% (n=4) are saying it does not help at all. Based on the result, most of students totally agreed about the benefits of using and implementation of ICT application, such as mobile and internet, in teaching and learning both Arabic and Al-Quran in j-QAF. Those teaching aids could be considered as alternative tools to support P&P process for supporting the j-QAF programme.
15) **Are you interested in using ICT applications (computers, internet etc.) to help enhancing your skills?**

Majority of the students (87%; n=26) are very interested in using ICT applications (computers, internet etc.) to help improve their skills. This shows us that, technology ICT play the major role to grab the students’ interest and increase their motivation to learn Al-Quran through interactive way, thus, make them easier to understand about the teaching modules intended.
(e) Learning Practices

16) Do you practice what you learn outside of school?

About 83% (n=25) of the students to practice what they have learned in school while he was outside of school.

17) If so, by how do you do it? (Check all that apply)

Most of the students try to speak in Arabic at home and some of them also try to speak with their teachers and friends outside of school.

Discussion

Based on the data survey collection, which obtained from the targeted respondents (students); majority of them are very interested in learning Arabic, as well as Al-Quran. They practically learned those subjects at school with friends and teachers. Although the students and the j-QAF teachers know how to use computers and internet, but they still do not been exposed with any technologies or ICT in their learning and teaching (P&P), during the school hours. They just intended to use the conventional method such as text book and exercise book. Majority of the students believed that, both applications (the Internet and mobile) can help them to improve the learning process, as well as able to motivate them to learn more about Arabic and Quran. Furthermore, today’s busy lifestyle needs a modern and technological
approach that able to optimize the study time, as well as improve the learning process. With the huge demanding of technology in Malaysia, interactive and self-learning tools using ICT could be the right choice to be implemented nowadays.

Alternative method of learning through ICT approach is believed able to draw the student’s intention. It is because, ICT could provide interactive platforms, which dealing with varieties of ways in learning and teaching through interesting method, such as music, games, drilling, quiz and others. The method of learning through ICT is recommended in teaching pedagogy, because it is considered as an attractive approach, in which influenced the psychological and mood of the students. In context of Al-Quran learning, the existing product/technology available currently in the market, were only capable to show Al-Quran texts and/or play stored Al-Quran recitation. They just provide learning in one-way direction, which is very subjective in determining improvement, and also difficult in evaluating user performance. Thus, new development of mobile application needs to be invented due to provide a two-way direction of Al-Quran learning tool, with capabilities to evaluate the user performance. Meanwhile for Arabic, the learning methods are slightly different from Quran because it only focuses on languages, pronunciation, and teach on how to use each vocabulary, nouns and others. Same with Quran, the Arabic learning software also do not provide two way learning direction, in which difficult to evaluate the user performance. The new technological approach through ICT for teaching and learning Al-Quran and Arabic need to be aligned with the new innovation and technology, due to ensure the j-QAF learning is easy to understand, fun and really efficient to be implemented in current time, till the children are keen to learn the Quran and Arabic.

Conclusion

In this paper, all different answers collected from the questionnaires of survey have been discussed, by considering all feedbacks towards Arabic and Al-Quran model in j-QAF program. Although there are a lot of software available free from the market, we need to consider the demands and needs of students, as well as teachers due to improve their learning process. Implementation of mobile technology application in Quran and Arabic learning is more preferable to be used during the leisure time and it is more suitable to be implemented with current lifestyle for self-learning and improvement method, due to optimize the study time. Due to that matter, a new design of mobile technology for Quran and Arabic need to be developed, to fulfill the needs of targeted users (j-QAF students and teachers), in which considered as portable device, used as assistive tools learning. The proper actions need to be put into consideration, due to improve the development of this mobile application and make it more compatible and useful for the end users, as it is designated for that purposes.
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