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Dancing in the Rain: The Effectiveness of Mobile Platform for Learning Ten Qira'at

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Abstract

Since the last pandemic outbreak, mobile learning platforms have been extensively utilized. This widespread adoption is facilitated by the affordability of smart devices, particularly smartphones, the high internet penetration even in remote areas, and the user-friendly nature of mobile learning platforms. Numerous courseware has been developed to ensure continuous learning beyond the confines of the classroom. However, there is currently a lack of courseware and mobile applications specifically designed to guide and provide materials for the ten Qira'at recitation style. In response, we have developed Qiraat10 as supplemental material for teaching and learning the Qira'at recitation style at UniSHAMS. This paper aims to provide insights into the effectiveness of the mobile learning platform, specifically focusing on the courseware Qiraat10. Based on the data gathered, Qiraat10 has been found to be effective in assisting users, particularly students, in learning the ten Qira'at recitation style.

Keywords: Qira'at Learning, Mobile Platform, SUS

Introduction

The post-pandemic era has witnessed the digitization of educational resources and transformed the teaching and learning landscape. This shift towards digital platforms has significantly impacted Al-Qur'an recitation instruction, offering new avenues to enhance its effectiveness. It is observed that the mastery of Al-Qur'an among students varies significantly, posing a challenge in effectively addressing these varying levels of proficiency (Ab Jabar et al., 2019). Furthermore, the need to adhere to lecture time limits adds an additional constraint which cannot guarantee iterative teaching for the same materials (Sibona, 2018). It is essential to find a solution and opt out from conventional teaching and learning method (Md. Aziz et al., 2019) which enables students to cope with materials taught in the class,

considering their diverse levels of Al-Qur'an mastery and the limited time available for lectures.

To address these challenges and bridge the existing research gap, the development of a new courseware platform, namely Qiraat 10, has been proposed. Qiraat10 aims to complement the functionalities lacking in the previously mentioned platforms, Ez-Warsh (Hussin, 2018) and MyQiraat (Ishak, 2016). The first platform, Ez-Warsh, offers guidelines and instructions, audio and video support, and mobile and storage usage capabilities. However, it lacks the option for cross-platform compatibility and only provides access to seven different qira'at. On the other hand, MyQiraat shares similar features with Ez-Warsh but lacks audio support and offers a limited range of qira'at.

Qiraat10, as a newly developed courseware platform, encompasses comprehensive features that address the limitations of its predecessors. It provides guidelines, instructions, audio and video support, mobile accessibility, and storage usage. Moreover, it offers cross-platform compatibility, allowing users to access it on various devices, and expands the available qira'at to ten. The development of Qiraat10 is a crucial step forward in filling the research gap, as it aims to provide a comprehensive digital platform for Al-Qur'an recitation instruction that caters to the varying proficiency levels of students while adhering to the constraints of limited lecture time.

This quantitative research aims to investigate the effectiveness of utilizing a mobile platform for learning Qira'at, with a particular focus on its ability to assist students in effectively acquiring proficiency in this domain. Our research focuses on the development of a mobile learning platform designed to assist students in Al-Qur'an studies, enabling them to learn the ten qira'at effectively.

Qira'at

Muslims adhere to the Six Pillars of Faith, which constitute the fundamental beliefs and articles of faith in Islam. One of these pillars entails the belief in the divine books, among which Al-Qur'an holds paramount significance as the ultimate and unaltered revelation from Allah the Almighty. This core belief underscores the central role of divine scriptures in shaping the religious worldview of Muslims, signifying the profound reverence and adherence to the teachings contained within Al-Qur'an. As the final and preserved revelation, Al-Qur'an holds a distinctive position in guiding the faith, practices, and spiritual development of Muslims worldwide.

According to historical accounts (The Hadith), the Prophet Muhammad praised be upon him (P.B.U.H) stated that, such as narrated by Umar Al-Khattab, the second Rashidun caliph, Al-Qur'an was revealed in seven different ways, known as seven Ahruf. The Prophet's statement indicated that individuals are encouraged to recite Al-Qur'an in the manner that is most accessible and convenient for them.

However, it is important to note that Muslim scholars, both from the Salaf (early generations of Muslims) and the Khalaf (later generations), concur that the seven Ahruf should not be equated with the seven renowned Qira'at or recitation styles of Al-Qur'an. These scholars emphasize that the precise nature of the seven Ahruf and their interpretation remains a

subject of scholarly discourse and should not be equated with the different recitation styles of Al-Qur'an that have been historically documented.

There are seven qira'at collected by Abu Al-Qasim ibn Firruh Asy-Syatibi and three qira'at added by Abu Al-Khair Syamsuddin Muhammad ibn Muhammad ibn Muhammad ibn Ali ibn Yusuf Al-Jazari (Shah, 2015). All ten qira'at are known as Al-Qiraat Al-'Asyarah Al-Kubra (Hanief, 2015). The acquisition of proficiency in the various Qira'at (recitation styles) of Al-Qur'an presents a formidable challenge within Islamic scholarship. To embark upon this journey, learners are required to first develop a strong foundation in Tajweed, the set of rules governing Al-Qur'an recitation, and attain mastery in the correct recitation of the Al-Qur'an verses.

Proficiency Level

Prioritizing the acquisition of Tajweed and accurate recitation is considered an essential prerequisite before delving into the complexities of Qira'at. Notably, research conducted by Khairuldin (2017) that examined the proficiency levels of higher education students enrolled in Al-Qur'an studies programs reveals significant variations in their ability to recite the verses of Al-Qur'an. This observation underscores the significance of recognizing and addressing the diverse proficiency levels exhibited among students, emphasizing the need for tailored pedagogical approaches to effectively enhance their recitation skills. Without proper guidance and teaching, students would not be able to recite Al-Qur'an properly. Traditionally, Islam practice teaching and learning Al-Qur'an via face-to-face method where both teachers and students can see how each word is pronounced (Lilik, 2020). This shows that the teaching process is important in teaching and learning Al-Qur'an, especially in recitation skill.

In 2021, 94.8% of Malaysian citizen own at least a smartphone and 99.3% of smartphone users in Malaysia does have access to the internet. Besides that, the global pandemic experienced worldwide during 2020 and 2021 inadvertently created a conducive environment for self-learning. While traditional methods of teaching and learning remain relevant in the present day, the integration of digital and self-learning approaches should not be disregarded. Numerous studies (Anggrawan & Qudsi, 2018; Rahmayani, 2018) have demonstrated the efficacy of transitioning from traditional teaching and learning methods to digital and self-directed learning modalities. These research endeavors have provided substantial evidence supporting the necessity of digital and online self-learning in fostering student engagement and cultivating a deeper enthusiasm for learning.

Mobile Platform

Since early 2000, the term "mobile platform" has been agreed as the means and intent that allow users to access – usually digital services, on the go (Alshurideh, 2019; Lee , 2009; Ye & Yang, 2020). As previously stated, the numbers of smartphone users in Malaysia alone have reached 98.4% which can be utilized as a platform for teaching and learning digitally. This is not something strange considering all smartphone users have gone through pandemic in 2020 until 2021 where almost all user has fully utilized their smartphone capabilities.

Many studies have proven that mobile learning platform can offer many benefits Chen (2020); Kacetl & Klímová, (2019) to users such as flexibility Kukulska (2020), discovering knowledge Kusmaryani (2019), centralized Chen & Tsai (2021), and many others. Adding to that, Kulbi

(2019) found that students are more interested to learn Islamic Education when mobile learning are used in the learning process. The content of what is taught in the class can be made available in the mobile learning platform which can be utilized by students for their outside classroom learning or self-learning.

To make the services available on the go, service providers including content developer must produce whether a stand-alone application or native application that can be installed to the mobile devices such as smartphone or make it available as a web-based platforms or called as web application. Native application is a software program that is meant to be used by user to complete a specific task and specific to a certain mobile operating system while a web application is a website that is developed to allow it to be viewed in mobile browser. Both have their own advantages and disadvantages that can be differentiate by their storage usage, processor usage, and network access Bhilare (2019) such as shown in the Table 1 below:

Table 1
Comparison Between Native and Web Applications Based on (Bhilare, 2019)

	Native application	**Web application**
Storage usage	Higher	Lower
Processor usage	Full	Browser
Network access	Option	Full

Considering the findings from previous studies (Bhilare, 2019; Malavolta, 2016; Nowlan, 2015) that elucidate the merits of web applications in contrast to native applications, the selection of web applications is highly recommended, particularly for the development of a mobile learning platform aimed at fostering student engagement. This choice is particularly relevant due to the elimination of installation requirements and the avoidance of smartphone storage utilization, thereby enhancing the platform's appeal to students. The present assertion finds support in previous empirical studies (Puspitasari & Ishii, 2016) where mobile Internet emerged as the predominant choice among young and educated users, serving diverse purposes.

The digitization of Al-Qur'an recitation instruction has opened opportunities for students to access learning resources conveniently and repeatedly (Zaki, 2021). Through the development of a mobile learning platform, we aim to address the challenges faced by educators in teaching accurate pronunciation and individualized instruction in Al-Qur'an recitation.

Methodology

To conduct this study, a research methodology predominantly relying on quantitative data collection and analysis will be employed. The selected participants, who are students currently enrolled in Hifz Al-Qur'an and Islamic Studies programs, will interact with the instructional content provided through the developed mobile platform. Their level of experience will be assessed by evaluating their responses to comprehensive survey, encompassing their engagement with diverse video and textual instructional materials throughout the learning process. There are 39 respondents involved in this study with 25 of

the respondents are male students and 14 are female students. Table 2 below shows the gender of the respondent which indicates a distinct distribution of gender within the sample.

Table 2
Respondent Gender Distribution

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	25	64.1	64.1	64.1
Female	14	35.9	35.9	100.0

The mobile learning platform developed for this research study will incorporate history, theory of the recitation style, and multimedia resources to engage and motivate students in their Al-Qur'an recitation learning journey. Through this platform, students will have access to both multimedia resources and learning materials, allowing for a comparative analysis of their impact on learning outcomes. By providing students with a platform that offers repetitive practice, individualized instruction, and a comprehensive learning experience, this paper aim to investigate the effectiveness of Al-Qur'an recitation courseware provided to students via mobile platform.

Results and Discussions

In this section, evaluation of the effectiveness of the platform developed is presented. To measure the effectiveness of the platform, a survey was conducted to a total of 39 respondent that is currently students of Islamic Study program in Universiti Islam Antarabangsa Sultan Abdul Halim Mu'adzam Shah (UniSHAMS) and the survey questions is based on John Brooke's System Usability Scale (SUS) (Brooke, 1996) such as shown in Table 3 below:

Table 3
SUS Survey Questions

Question Number	Question
Q1	I think that I would like to use this system frequently
Q2	I found the system unnecessarily complex
Q3	I thought the system was easy to use
Q4	I think that I would need the support of a technical person to be able to use this system
Q5	I found the various functions in this system were well integrated
Q6	I thought there was too much inconsistency in this system
Q7	I would imagine that most people would learn to use this system very quickly
Q8	I found the system very cumbersome to use
Q9	I felt very confident using the system
Q10	I needed to learn a lot of things before I could get going with this system

Brooke (1996) defined effectiveness as "*the ability to complete tasks using the system, and the quality of the output of those tasks*". As per AlRawi (2021) findings, the attainment of system effectiveness, with respect to its objectives, is realized when users are capable of accomplishing tasks through the utilization of the system. In order to assess the efficacy of the Qiraat10 courseware on the user, or conversely, the impact of the user on the effectiveness of the courseware, a comprehensive analysis of the provided tables shall be conducted. The following are the mean and standard deviation of every question based on the SUS:

Table 4
Descriptive Statistics of System Usability Survey

	N	Mean	Std. Deviation
Q1	39	4.103	1.046
Q2	39	2.590	1.141
Q3	39	4.308	0.731
Q4	39	3.385	1.426
Q5	39	4.256	0.751
Q6	39	2.436	1.294
Q7	39	4.128	0.951
Q8	39	2.051	1.146
Q9	39	4.231	0.742
Q10	39	3.308	1.281

Table 4 presents a summary of the survey results which includes mean value for each question and its' standard deviation. Based on the standard deviation presented, a significant variability is shown from Q1, Q2, Q4, Q6, Q8, and Q10 while other questions are less varied. This overall result of the survey can be further analyzed and understand using SUS score:

$$Score = 2.5(\Sigma(v_o - 1) + \Sigma(5 - v_e))$$

where v_o represent the respondent's answer value for odd numbered question (Q1, Q3, Q5, Q7, Q9) and v_e represent the respondent's answer value for even numbered question (Q2, Q4, Q6, Q8, 10). Respondent's scores are divided into tertiles according to the SUS score as shown in the bar chart in Figure 1 below:

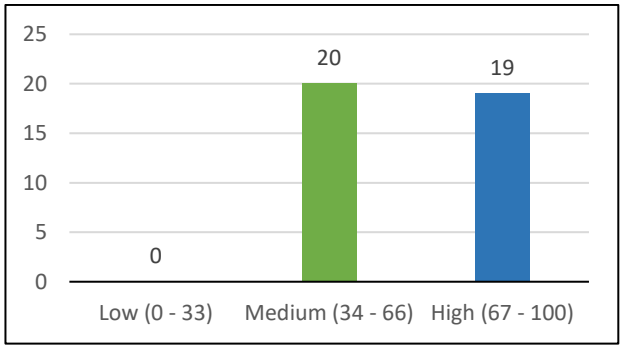

Figure 1: System Usability Score for Qiraat10

Figure 1 clearly shows that out of 39 respondents, 51% score fall in "Medium" category and 49% fall in "High" category. The survey question elicited predominantly neutral responses, with most of respondents selecting the value of 3 on the 5-point scale or 3.479 in average based on Table 4.

To mitigate response bias, the SUS questions were arranged alternately in negative and positive formats (Brooke, 1996), By aligning the mean values in Table 4 with this alternating arrangement, the effectiveness of the courseware becomes evident, as depicted in Figure 2 below:

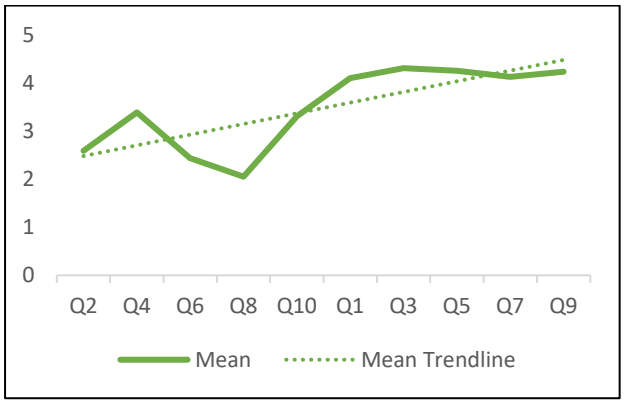

Figure 2: Mean and Trendline of Mean

The trendline of mean such as presented in Figure 2 above shows positive inclination. As even numbered questions are a negation to the good usability and effectiveness of the courseware, the value should be low while the odd numbered question mean value should be high. This depicted the good usability rate and effectiveness of the courseware. The mean value for Q4 falls within the range of strong agreement to neutral, suggesting that users may require additional guidance on specific aspects of the courseware. The analyzed results provide valuable insights into users' preferences regarding the presentation of the courseware, enhancing its potential to facilitate effective learning of the ten Qira'at in the classroom.

Conclusion and Future Works

This paper reports the effectiveness level of Qiraat10 courseware to help students learn ten Qira'at. In conclusion, the digitization of educational resources, including the field of Al-Qur'an recitation instruction, has brought about significant changes in teaching and learning approaches. Qiraat10 offers comprehensive features, including guidelines, audio and video support, mobile accessibility, and cross-platform compatibility. By leveraging the benefits of mobile learning platforms, students can access instructional materials conveniently and repeatedly, fostering engagement and individualized instruction. The effectiveness of the Qiraat10 platform was evaluated through a survey, indicating moderate to high usability and positive user experiences. Overall, Qiraat10 represents a significant advancement in digital platforms for Al-Qur'an recitation instruction, catering to diverse proficiency levels and enhancing learning outcomes.

The Qiraat10 courseware will be upgraded to meet the users' needs, as previously discussed. Additionally, it will be integrated with interactive modules, including gamification-based

exercises, to assist students in identifying their weaknesses and facilitating easy access to relevant learning materials.

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