Interactive Courseware: Quranic Verses on the Integration of *Naqli* and *Aqli* Knowledge

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Abstract — This research is an interactive courseware called "Quranic Verses on The Integration of *Naqli* and *Aqli* Knowledge". This courseware is developed to facilitate users especially among students to fully understand about sciences knowledge in Quran and will expose the miracle of the Quran with interactive ways. The targets of this courseware are for all ages that learn about sciences knowledge in the Quran especially students who are learning about this knowledge, lecturers who are teaching their students on this knowledge, scientist, researcher and others. This courseware consists of Quranic verses and their meanings. This courseware provided 15 categories of knowledge and its meaning in Quran from Surah al-Baqarah to Surah al-Naas. Moreover, this courseware also combines the notes and the verses of Quran that are in audio and interactive images forms which is the most effective tool to attract the user to use this courseware. This courseware is developed by using Adobe Flash Player Cs6 as the main platform and some other software is used to support in developing this project. "Interactive Courseware: Quranic Verses on The Integration of *Naqli* and *Aqli* Knowledge" is a courseware that is easy to learn and interactive. We hope that with the development of this courseware, it can assist all people especially the Muslims who would like to learn about this knowledge in understanding the verses of Quran and the science knowledge in Quran in easier way as well as it could be as one of teaching tool for lecturers to teach their students on this knowledge. We also hope with this interactive courseware to be applied, it will expose the miracle of the Quran to the world and introduce the science knowledge that has been in the Quran since its existence.

Keywords— Interactive courseware, Integration, Quran, *Naqli*, *Aqli*.

I. INTRODUCTION

THE meaning of Surah An-Nahl (verse 89) is "And (bethink you of) the day when We raise in every nation a witness against them of their own folk, and We bring thee (Muhammad) as a witness against these. And we reveal the Scripture unto thee as an exposition of all things, and a guidance and a mercy and good tidings for those who have surrendered (to Allah)". All of us learn things from other people who are willing to share their knowledge with us as the same way as we share our knowledge with others. There are many ways to share our knowledge to others. One of them is courseware. Nowadays, it is the technology era of multimedia mediums, and many people use technology to retrieve information or learn something by using it [1]. However, the possibilities of some information retrieved from these mediums are not reliable as there are some irresponsible people who misuse these technologies. Yet, if we manage this circumstance we could gain benefit from it accordingly. Especially, now we have many qualified and sophisticated technologies which can organize a system that can help us in developing knowledge to people [2].

Multimedia is a common medium that people can relate to today. People use multimedia for many reasons such as e-learning purposes (education), entertainment, promotional and advertisement purpose, e-publication, modeling and simulation, public information and others. Multimedia is a field that concern with the computer controlled integration of text, graphics, drawings, still and moving images (video), animation, audio and any other media where every type of information can be represented, stored, transmitted and processed digitally. Besides that, a multimedia application is a best way to spread the knowledge in new design and structure that associated the collection of multiple media sources like text, graphics, images, sound or audio, animation and/or video in interactive way [3].

In Quran, Allah says about the important of knowledge as in Surah Al-'Alaq (verse 1-5): "Read in the name of your Lord Who created (1), He created man from a clot (2), Read and your Lord is Most Honorable (3), Who taught (to write) with the pen(4), Taught man what he knew not (5)". This verse told us to read because by reading we will be those who are knowledgeable and would share and spread our knowledge to others. After that, Allah says in Surah Al-Mujadalah (verse 11) that the meaning is "O you who believe! When it is said to you, Make room in (your) assemblies, then make ample room, Allah will give you ample, and when it is said: Rise up, then rise up. Allah will exalt those of you who believe, and those who are given knowledge, in high degrees; and Allah is Aware of what you do". In this verse Allah says that those who are knowledgeable person will be looked up upon respectively. Allah knows everything. Moreover, Allah endorses to differentiate between knowledgeable persons and without knowledge persons in Surah Az-Zumar (verse 9) that the

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meaning is "What! He, who is obedient during hours of the night, prostrating himself and standing, takes care of the hereafter and hopes for the mercy of his Lord! Say: Are those who know and those who do not know are alike? Only the men of understanding are mindful". So, from these examples abovementioned depicts us relatively about this project is aligned towards the application of interactive multimedia on the "Interactive Courseware: Quranic Verses on The Integration of *Naqli* and *Aqli* Knowledge".

In spite of that, science is an important subject in our life. Science is a systematics review regarding nature as how nature affects us as well as towards the environment. As a result, many people are interested on this subject due to its necessity of development of a country [4]. It is because Islam, science and technology is something different but they have an important role and contribution in building human civilization especially Islamic civilization. In fact, the Quran itself contains science and technology that are just waiting to be studied and developed by those who understand and imply it. Each verses has a particular meaning and connotation which should be explored, researched and studied, because Quran is the most important and significant source of knowledge.

For example, in Al-Quran, Allah encourages the science of meteorology: "It is God Who sends the winds that stir the clouds in the sky and He spreads He wills, and make it lumpy; then you see the rain come out of the cracks; then, when the rain that fell on His slaves He wills, they suddenly become excited" (Qur'an, 30:48). In another verse of the Quran, Allah encourages the investigation of meteorology and how the rain its can be? "Have you not seen that Allah makes the clouds, then joins them together (parts of) it, then make heaps, it is visible by you rain out of cracks and Allah (also) decrease (granules) of ice from the sky, of (wads of clouds like) mountains, then blamed him (granules) ice it to whom He wills and deluded him from whom He wills. Sparkle cloud lightning that almost eliminates vision" (Qur'an, 24:43). Besides that, Allah encourages us to explore the science of zoology: "Do you not see that Allah is He whom does glorify all those who are in the heavens and the earth, and the (very) birds with expanded wings? He knows the prayer of each one and its glorification, and Allah is Cognizant of what they do" (Quran, 24:41).

From the verses aforementioned, it has led to this idea of multimedia interactive application. In this application, the details studies of the Quranic verses have been made, and also some verses of Quran have been classified especially those that related to the types of sciences knowledge in the Quran. As a result, the data have been improved into an interesting interactive application for users to use it. It is convenient for users to use and read this application as the sciences knowledge of Quran in this application have been separated according to its verses and arranged by categories appropriately. Moreover, the verses in each category have an audio function and its meaning has in two languages of translations which are in Malay and English languages.

This application is friendly for any group of ages that wants to learn about sciences knowledge in the Quran. The mission in this project is to, "ignite the interest of using interactive multimedia application for users as it is easier for users to learn about 15 categories of sciences knowledge in the Quran". It is also to develop the awareness of study in Quran by discover the evidences of sciences knowledge from the verses of Quran as everything in Quran is reliable and truthful.

II. SCOPE

The scope of this application to be developed is to provide easier ways for people to identify and classify the whole verses of Quran according to its modern sciences subjects. Consequently, it is convenient for people to understand the meaning of the Quranic verses that are modern science related to all people including Muslims or non-Muslims. Also, this application is developed as reference or as well as a leaning aid tools. This project focuses on the 15 subjects of modern sciences where it contains the description of each subject of sciences knowledge. This included two language of translations on the sciences knowledge description which are in Malay and English languages. Besides, it has the audio of the Quran verses from the Qari's voice recording.

III. PROJECT SIGNIFICANT

The importance of this project is as a reference to every Muslims and especially for students in eases their study or learning collaboration of sciences and Quran. So, through this application with the right understanding and knowledge about the verses, it can increase users' knowledge on sciences knowledge from the Quran. Also, through this multimedia project, it helps Muslims to discern on the meaning of each categories of sciences knowledge in the Quranic verses easier and in interesting ways. Moreover, it is also a tool for Muslims to be exposed about the secret of verses in the Quran and depicts the sciences knowledge is in the Quran as well.

IV. OBJECTIVE

Prominently, this project aims to achieve the following objective; as to be one of the courseware to study Quran. Furthermore, this study would like to demonstrate the importance of science and technology to promote Islamic civilization. Hence, this application is an invitation tool to read and learn sciences knowledge that has a positive contribution (directly or indirectly) in the community as well as applying this knowledge respectively. This is because Islam, science and technology is connected to each other. Last but not least, this application would ease users to identify Quranic verses by the sciences knowledge's categories.

V. LIMITATION OF PROJECT

In terms of the limitation in this study, the subject of this research is the Quranic verses and its meaning have been described in two languages of translations and audios which are in Malay and English languages merely. Similarly, this application is aimed specifically for as well as for lecturers who are learning and teaching on *Naqli* and *Aqli (QUranic and sciences knowledge area)*.

VI. RESEARCH METHODOLOGY

A. Inductive Method

This study is an inductive approach as the researcher begins by collecting data that are relevant accordingly. Then, the data will be analyzed and examined with its own context rather that from a pre-determined theoretical basis. [5]. At this stage, the researcher looks for patterns in the data, working to develop a theory that could explain those patterns. On top of that, when the researchers use an inductive approach, they start with a set of observations and then they move from those particular experiences to a more general set of propositions about those experiences.

B. Deductive Method

In this study, it starts with a social theory that is found compelling and then tests its implications with the data. Next, it moves from a general level to a more specific one. In a research, a deductive approach is the one that people typically associate with scientific investigation [6]. The researcher studies what others have done, reads existing theories of whatever phenomenon he or she is studying, and then tests the hypotheses that emerge from those theories.

C. Quantitative Method

Quantitative research is based on the measurement of quantity or amount. Here in this study, a process is expressed or described in terms of one or more quantities [7]. The result of this research is essentially a number or a set of numbers. It has been used in this study's survey.

D. Qualitative Method

Qualitative research is concerned with qualitative phenomenon involving quality. If one wishes to investigate why certain data are random then it is a qualitative research [8]. If the aim is to study how random the data is, what is the mean, variance and distribution function then it becomes quantitative. In fact, qualitative methods can be used to understand the meaning of the numbers obtained by quantitative methods.

E. ADDIE Method

In this chapter explain about the methodology that's having been use or implement to our courseware development. Basically the researcher will explain about ADDIE process. This chapter also bears about software that is used to make this courseware successfully done. It also includes the project schedule and the project management.

For this project ADDIE instructional model have been chosen. "ADDIE" has been used as it is a "method as a guide in designing and effectively tracking a project's progress. "ADDIE" stands for Analyze, Design, Develop, Implement, and Evaluate. This sequence, however, does not impose a strict linear progression between each steps. Rather, each stage is a clear instruction on its own.

This means that even if the individual applies ADDIE in the middle of the project, it will still retain its value and be able to provide a sense of structure to the whole program. Educators find this approach very useful having stages clearly defined which makes implementation of instructions effectively. As an Instructional Design (ID), Addie Model has found wide acceptance and use.

VII. COURSEWARE DEVELOPMENT

Before this project initiates, there are few procedures that have been done. Firstly, a discussion have been held on the project is about and the decision to develop the application where the content is the collection of the Quranic verses that elucidate related arenas of knowledge. As a result, "Interactive Courseware: Quranic Verses on The Integration of *Naqli* and *Aqli* Knowledge" has been developed.

After that, the collection of the data for the content of that project such as, the Quranic verses, the knowledge and the software that will be used to develop the courseware by book, website and YouTube have been validated by sketching and storyboard to imagine clearly how the prototype is going to be. Then, the interface design of the courseware has been structured by using an Adobe Photoshop CS6 to edit any images that will be used in the interface as a png. format. Next, the voice of Quran recitation has been recorded by using Audacity software. In editing the audio, there are two softwares which are Cyberlink PowerDirector 10 and Cyberlink WaveEditor has been used. These two processes take quite a time to retrieve the needed quality of that product. Despite that, graphic skill is necessary in this step. However, Adobe Flash Player CS6 has been the main software to develop this application.

After the design process has completed, all the images, the audio, the verses of the Quran and the data of the knowledge are put in the Adobe Flash in order to start developing the application. Testing and reproducing process will be done in this process. After the entire component has run well and complete, it will be amended and save via file in SWF format to be finalized and publish it to the public.

VIII. PROJECT INSTRUCTION

First step: Open the SWF file and wait for the loading to be done and click 'Enter' button. Second step: The homepage will appear and choose the knowledge by click it. Third step: The description page will appear which explains about the delivered knowledge and users can change the language for the text by clicking the language button. After that, click the 'Surah' button to go to the Quranic verses page. Fourth step: In the Quranic verses page, users could choose any verses to recite the verses.

Fifth step: The verses of Quran will appear when users click the button 'List of Quranic Verses' on the previous page and users can choose the language that they preferred which is Malay or English languages by clicking the 'Language' button. Also, users can listen to the recitation of the Quranic verses by click the 'Play' and 'Stop' button. Sixth step: Every page has a few buttons such us 'Back' button where the function is when users want to go to the previous page and 'Home' button is to go the list of knowledge page. This two buttons will be appeared in each main page to ease the users when they use this courseware.

IX. PROJECT FEATURE

On this courseware there are few features that can help the users to use this application. Its feature is as follows:

Dual Language – In this courseware there are two languages which are Malay and English languages. It will ease users including the non-Muslims to understand and know the content without misunderstanding from the application of this courseware.

Icon and Button - These applications have a few of buttons and icons that will help the users to use the application without any instruction. This is because the buttons and icons that are used is simple.

User-Friendly – This application is a user-friendly. This is because the button icon will show the navigation of where the users have browsed. For example, the number of surah's page; which when the list of surah are too many listed or opened or browsed, there will be another page with number button that change to blue color to indicate the looked upon pages.

Visual – This courseware has audio feature for recitation of the Quranic verses. From that, users can listen and follow the voice to recite the verses. That audio will help those who are not really well in reciting the Quran that would be as the learning aid tool for them. That audio feature also will give a benefit for the blind person to listen to the recitation of the Quran along even they can't see the word.

X. CONCLUSION

A. Overview

In this section, it will reflect the development of "Interactive Courseware: Quranic Verses on The Integration of *Naqli* and *Aqli* Knowledge" project, as how this courseware has contributed towards *dakwah* process for others people especially Muslims. Moreover, this application recommends solution or suggestion to be acquired for further improvement in developing this courseware to be more interesting.

B. The Strengths

After the development process there are few strengths of this application have been identified whereby this application would attract people in exploring and learning the sciences knowledge of Quran and expose the miracle of Quran to the world. Meanwhile on the interactive side on its color and graphic; this courseware has been built with suitable colors and the interfaces are suitable for all kind of ages. The color is not too dull and not too striking that make the users like it and the design of the entire interface looks appropriate. In addition, it is a simple and user-friendly interface which it has a consistent navigation for each screen to assist users to understand the navigation instantly.

C. The Weakness

On the other hand, the downside of this application is it is insufficient for the users to use more multimedia application like this courseware for any other the knowledge in the Quran as it is an easy to learn and more interactive in education purpose. Also, the users claimed that this project use the same way or concept from the beginning till the end as they want something different or other kind of features on the next page.

XI. CLOSING

It is hoped that this courseware will be a major help and source for people as among students to learn more about sciences knowledge in the Quran. This application will give a big impact for Muslims to understand and relate *Naqli* and *'Aqli* knowledge in pratice. The Quran is the book of Allah. Quran contains science and technology that are just waiting for humankind to study, understand and imply it. Each verses has a particular meaning and connotation which should be explored, researched and studied, because Quran is the most important and significant source of knowledge.

One is the fact that a number of scientific truths that we can only express the technology of the 20th century appears to have been declared in Qur'an about it since 1400 years ago. But, of course the Quran is not a book of science. It is later that, in a number of Quranic verses there are many scientific facts that are expressed very accurately and completely of new technology has found in the 20th century. These facts cannot be known at the time the Quran was revealed, and this further proves that the Quran is the word of Allah and has much knowledge in it other than mere sciences knowledge that this application could do.

ACKNOWLEDGMENT

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