

THE PROPHET STORY COURSEWARE – SAYA SAYANG RASUL (SSR)

Nor Azila Awang Abu Bakar*, Nur Mimi Adila Ismail, Nazatul Azleen Zainal Abidin

Faculty of Computer and Mathematical Sciences
Universiti Teknologi MARA (UiTM) Terengganu
23000 Dungun, Terengganu, Malaysia

*Corresponding author's email: azila268@tganu.uitm.edu.my

Abstract

This paper aims to highlight the development of a multimedia courseware entitled *Saya Sayang Rasul* (SSR) to serve as a reference tool for level 2 Malaysian primary school students to learn about the *Sirah* topic in *Pendidikan Islam* subject. Currently, the textbook, reference books or notes taken from the Internet are the main sources of reference to study *Sirah*. Although there are many efforts in accompanying the text with attractive colourful pictures, interactive animations is said to capture the attention of the students more. The multimedia elements such as graphic, animation, text, audio and video are manipulated to present the information in a more interactive way so that the student get better understanding and help them to memorize the important information regarding the history of our beloved prophet. This courseware is developed based on ADDIE Model which comprises of Analysis, Design, Development, Implementation and Evaluation phases. Another two phases are added which are Preliminary Study and Documentation to complete the project. The evaluation of the Courseware was conducted on 30 respondents and to three experts. Questionnaire was used as an instrument to collect data. Results from the analysis indicate that the courseware had satisfied the respondents in terms of user interface (mean = 4.47), usability (mean = 4.53) and content (mean = 4.70) of the courseware. The dispersion of standard deviation is also small (< 1) for all categories thus implies there's only insignificant difference in the respondents' satisfactory level.

Keywords: Courseware, Prophet Story, Sirah Topic

1.0 INTRODUCTION

Pendidikan Islam is one of the subjects taught in Malaysian primary education. It serves as a formal medium for Muslim students to get an early exposure on the many branches of the Islamic religion. The syllabus covers the topics on *Akidah*, *Ibadah*, *Sirah* and *Akhlak*. *Sirah* is one of the interesting topics that focuses on the life or biography of prophet Muhammad S.A.W. The history of the prophet and the journey he endured in delivering Islam to the society is the major emphasize.

Currently, the source of reference to study *Sirah* is from the textbook, reference book or notes taken from the Internet. The challenge of using the text book is most of the content is delivered in written textual form. Sometimes it is hard for the students to visualize and memorize the information delivered using text. Though there are many efforts in accompanying the text with attractive colorful pictures, interactive animations is said to capture the attention of the students more (Tanvir & Billah, 2014).

Multimedia elements, such as graphic, animation, text, audio, video and interactivity are the components that can be weaved together in order to help deliver the information in a more interesting way. The use of multimedia to deliver learning contents constitutes a courseware. A carefully designed and developed courseware may contribute to an enjoyable learning session.

The students can use the courseware to learn any particular topic at their own pace of time. Non-linear linking elements allow users to freely control content navigation thus foster more understanding. On the other hand, from the perspective of a teacher, a courseware may serve as an assisting tool to deliver the content in the syllabus. It also may help the teacher to attract the students' attention in learning certain topic.

This courseware is based on the *Pendidikan Islam* subject in the Malaysian primary education syllabus. It focuses on the *Sirah* topic which is related to the life of the prophet Muhammad S.A.W and the journey he had to endure in delivering Islam to the society. This courseware is targeted to the level 2 primary school students aged between 10 to 12 years old.

2.0 LITERATURE REVIEW

2.1 Courseware

An interactive courseware should be able to create an interesting environment with the use of elements that can attract the human sense such as text, audio, graphics, videos and animation. According to Hick (1997), courseware is the use of different communication mediums that refers to audio for music, sound effects, voice-over narration and graphics within a single computer program used to present information to help the users further in understanding the message that is being delivered. It is developed as an aided learning and teaching application that can actually stimulate the users' mind as well as motivate them in the learning and teaching process (Noordin, Ahmad & Yew, 2011).

Courseware characteristics identified by several researchers such as individualization of programs, interactivity, multimedia elements and textology are important for effective and attractive information technology-based learning materials (Kaur, Singh & Abdul Rashid 2010). The courseware must be user friendly and all linked elements function well. Good values of the courseware should be provided with the interface that can entertain end users and able to enhance the level of understanding and experience among the learners.

2.2 Sirah Subject

Sirah is one of the topics covered in *Pendidikan Islam* subject which is taught in Malaysia's primary school. It focuses on the biography of the Prophet Muhammad S.A.W. which includes historical events that occurred in his journey to deliver Islam to the society.

There are several challenges in teaching *sirah*- or history-based subject to the students. A study shows that most of the students feel the history as a non-enjoyable subject, uninteresting and using out-of-date teaching and learning method (Fielding, 2005). Furthermore a study conducted by Salleh et al. (2010) identifies that students prefer to have practical learning experience such as a visit to historical places to gain information rather than learning using the current learning method which is using the textbook. Using computer as a

medium also receives favorable views. Table 1 shows student's perception on learning and teaching methods. The learning and teaching methods are ranked from 1 to 10 where 1 is the least favourable method and 10 is the most favourable method.

Table 1 Student's Perception on Learning and Teaching Methods

Perception/Comprehension Items 'learning and teaching methods'	Student Respondents (N=684) 4-scale (Min)			
	Impression	Rank	Usage	Gap of Min
1. Visit	3.2632	10	1.5906	1.67
2. Video	3.1053	7	1.7076	1.40
3. Computer	2.9474	8	1.6959	1.25
4. Gathering	2.8480	5	2.2632	0.58
5. Project	2.8421	6	2.0526	0.79
6. Play, Drama	2.8304	9	1.5956	1.23
7. Story	2.7845	4	2.4035	0.38
8. Textbook	2.6082	1	3.1287	-0.52
9. Speech, explanation	2.4854	2	2.6491	-0.16
10. Questioning	2.4035	3	2.0494	-0.04
Average of Response	2.8118		2.1497	0.6621

(Source: Salleh & Ayudin, 2010)

The SSR courseware is hoped to act as a complementary reference tool to help the teacher deliver *Sirah* topic in a more interactive way. The courseware is build and distributed via CD-ROM so it can be used independently by the students on their personal computers for learning purposes without the need of an internet connection. According to Delombaerde et al. (2001), multimedia software, whether distributed via CD-ROM or the Internet, provides instructors with the possibility of enhancing or replacing their traditional education methods through multimedia demonstration and simulation.

3.0 METHODOLOGY

In developing SSR courseware, a methodology based on the ADDIE model was adapted and followed. The ADDIE Model is an instructional system design (ISD) model. The acronym refers to major system design processes which are Analysis, Design, Development, Implementation and Evaluation (Molenda, 2003). However, before going into the analysis phase, a preliminary study was conducted to gather the information related to the area of study. Figure 1 illustrates the methodology used in developing SSR.

Table 2 Project Methodology Used in Developing SSR Courseware

Phase	Activity	Outcome
Preliminary Study	Study existing courseware	Problem statement
	Study current approach in teaching <i>Sirah</i> topic	Proposed solution
Analysis	Conduct literature review on suitable content to be included in SSR courseware	Refined problem statement
	Conduct interview with <i>Pendidikan Islam</i> teacher (Subject Matter Expert - SME)	Content of the courseware from SME
Design	Design navigation map	Navigation map
	Design storyboard	Storyboard
	Design user interface	User interface design
Development and Implementation	Develop the courseware based on the storyboard	<i>Saya Sayang Rasul</i> (SSR) courseware
	Publish the courseware for delivery	
Evaluation	Test the developed courseware to the target users	Tested courseware
	Distribute questionnaire to collect user satisfaction data on the interface, usability and content of the courseware	User feedback Analyzed data

4.0 SAYA SAYANG RASUL COURSEWARE

SSR courseware covers four (4) topics of the *Sirah* syllabus. These topics were selected by the Subject Matter Expert during the interview session. The topics are:

- i. *Sejarah Kehidupan Nabi Muhammad S.A.W,*
- ii. *Penerimaan Wahyu,*
- iii. *Penghijrahan Rasulullah S.A.W ke Madinah,* and
- iv. *Kisah Kewafatan Rasulullah S.A.W*

After navigating all the topics covered, the student can continue with answering the quizzes provided to measure their understanding on the topics. Marks will be given as the performance indicator.

The process of courseware development started with designing the navigation map as depicted in Figure 2.

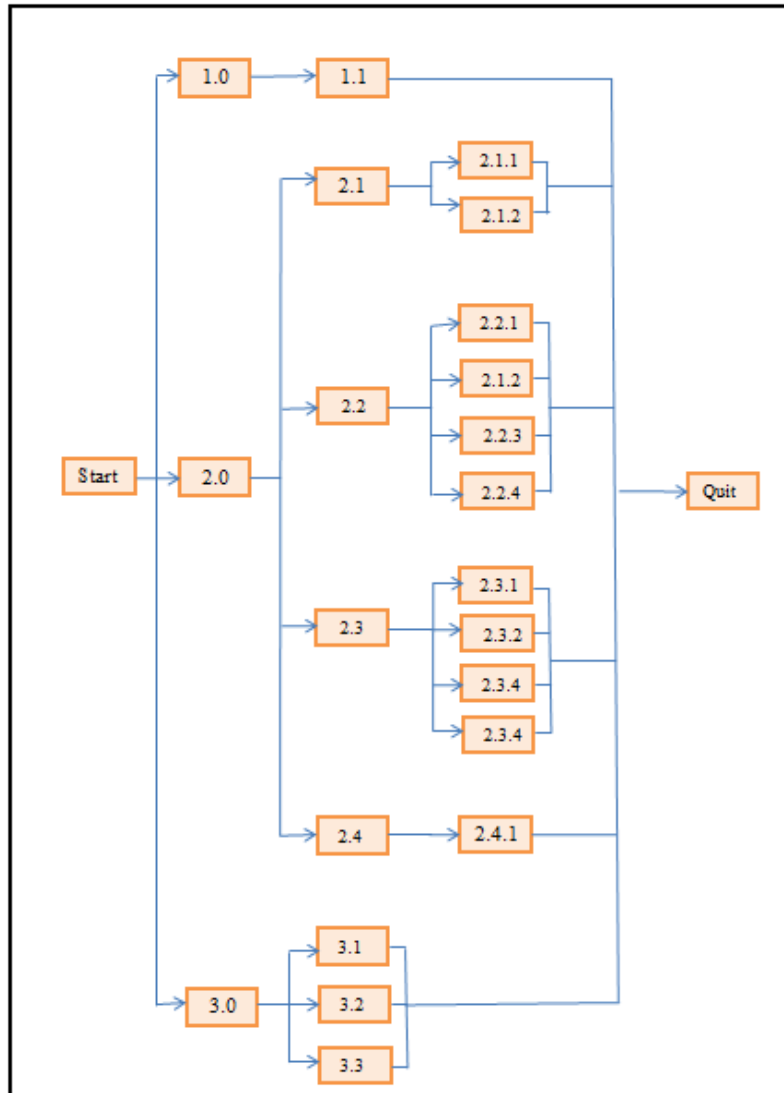


Figure 1 SSR Navigation Map

Table 3 shows a detailed description of SSR navigation map. For each topic, several other related subtopics were also included.

Table 3 Navigation Map Description

Screen number	Screen Description
1.0	Pendahuluan
1.1	Surah Al-Fatihah
2.0	Topik
2.1	Sejarah Kehidupan Nabi Muhammad S.A.W
2.1.1	Biodata Nabi Muhammad S.A.W
2.1.2	Nasyid Kisah Nabi Muhammad S.A.W
2.2	Penerimaan Wahyu
2.2.1	Peristiwa di Gua Hira'
2.2.2	Sebab-sebab Rasulullah ke Gua Hira
2.2.3	Surah Al-Alaq (ayat 1-5)
2.2.4	Pengajaran Peristiwa di Gua Hira
2.3	Penghijrahan Rasulullah S.A.W ke Madinah
2.3.1	Maksud Hijrah
2.3.2	Peristiwa Hijrah Rasulullah
2.3.3	Kisah Hijrah Rasulullah
2.3.4	Video Perjalanan Hijrah Rasulullah
2.4	Kisah Kewafatan Nabi Muhammad S.A.W
2.4.1	Kisah kewafatan Nabi Muhammad S.A.W
3.0	Aktiviti
3.1	Kuiz 1
3.2	Kuiz 2
3.3	Kuiz 3

Next, the storyboard is developed as shown in Figure 2. Feedback from SME is acquired to verify the contents covered in the storyboard. After getting clear flow of the courseware, the development phase took place. The outcome is shown in Figure 3.

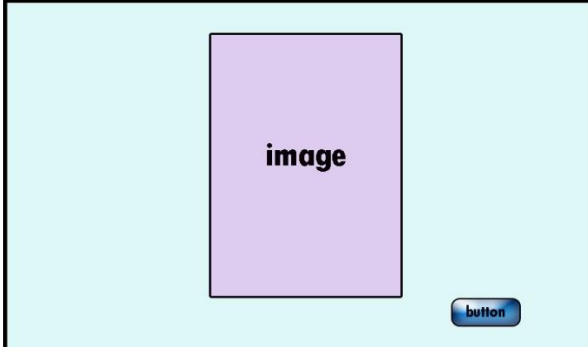
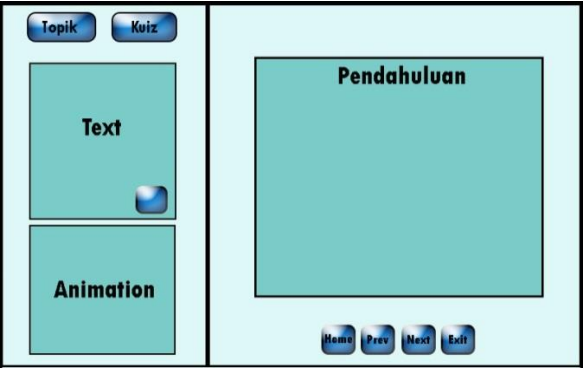
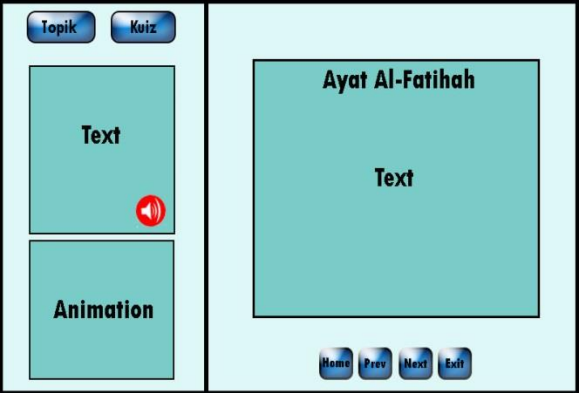
Storyboard	Description
	<p>Start</p> <p>This page contains <i>Saya Sayang Rasul</i> icon, background music and start button. Start button will link user to the introduction page (1.0).</p>
	<p>1.0 Pendahuluan</p> <p>This is an introduction page. It briefly describes SSR courseware.</p> <p>It contains set of buttons: home, prev, next and exit</p> <p>Topik Button – link to the list of topics in SSR courseware (2.0)</p> <p>Kuiz Button - link to the Quizzes page (3.0)</p> <p>Animation Button link to surah Al-Fatihah before the user start using the courseware (1.1)</p>
	<p>1.1 Surah Al-Fatihah</p> <p>This page contains surah Al-Fatihah for the student to read before they start to learn about the prophet.</p>

Figure 2 Storyboard Example



Figure 3 Selected Screenshots from SSR Courseware

5.0 RESULTS

In order to evaluate the SSR Courseware, thirty respondents were selected among primary school students. All the respondents were given the opportunity to explore the courseware and experience the new method of learning *Sirah* before answering a set of questionnaire. The discussions of the results below are based on the feedback from the respondents. Discussion of the result includes demographic data, contents, interface and usability of the courseware.

5.1 Demographic Profile

Demographic data shows that 53% of the respondents are female. All respondents are between 9 to 12 years old. Figure 4 shows the percentage of respondents according to gender while Figure 5 shows distribution of the respondents' age. Majority of the respondents are 10 years old (29%) and the rest are 9, 11 and 12 years old.

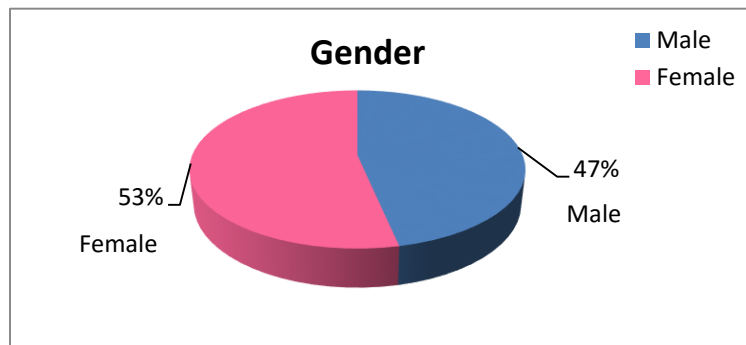


Figure 4 Respondents' Gender

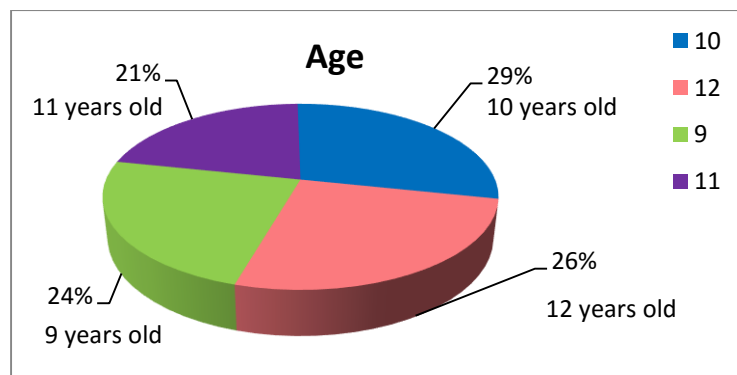


Figure 5 Respondents' Age Range

5.2 Contents

Table 4 shows all of the questions asked were ranked 5 by the respondents. This shows that the respondents strongly agreed that the contents of the SSR courseware are suitable with the coverage of the *Sirah* topic. Other information from the table is mean and standard deviation. The highest mean value is 4.73 with standard deviation of 0.521 for item C3, while the lowest mean value is 4.53 with standard deviation 0.507 for item C1. The mean value proved that on average the respondents had accepted the contents provided in SSR courseware. Since the value of standard deviation for each item is small, we can conclude there is a small difference in satisfactory level for the content of the courseware.

Table 4 Contents of the SSR Courseware

Item	Question	Mode	Mean	Std.Deviation
C1	Contents of the courseware are suitable with <i>Sirah</i> subject.	5	4.53	0.507
C2	Contents of the courseware are definite and easy to understand.	5	4.70	0.466
C3	Contents of the courseware enhance my knowledge about Prophet Muhammad S.A.W.	5	4.73	0.521
C4	I like the topic included in this courseware.	5	4.70	0.651

5.3 Interface

User interface is an important element in a multimedia project because good interface design can attract users to use the courseware. Table 5 shows that all of the questions asked were ranked 5 by the respondents. This finding indicates that the respondents were satisfied with the design of SSR courseware interface.

Another information from the table is mean. The highest mean value is 4.47 for item I4 and the lowest mean value is 4.37 for item I2. The mean value verified that on average the respondents had accepted the interface design. In addition, the highest value of standard deviation is 0.964. Since the value of standard deviation for each item is small, we can conclude that there is a small difference in satisfactory level for SSR interface among the respondents.

Table 5 User Interface Satisfaction of the SSR Courseware

Item	Question	Mode	Mean	Std. Deviation
I1	Interface are design in a clear and understandable manner.	5	4.50	0.572
I2	The color of the interface is suitable.	5	4.37	0.964
I3	I think the SSR interface is suitable with the content delivered.	5	4.40	0.675
I4	Overall the interface of SSR is interesting	5	4.47	0.571

5.4 Usability

Based on Table 6, it can be seen that all questions received rank 5. The highest mean value is 4.53 for item U2, while the lowest mean value is 4.40 for item U1. From the responses given, it can be concluded that respondents feel that the courseware is usable.

The standard deviation data of the usability construct are ranked in the range of 0.621 to 0.629. This result shows that the dispersion was not too big thus implies that the courseware is usable.

Table 6 Usability of the SSR Courseware

Item	Question	Mode	Mean	Std. Deviation
U1	I feel comfortable using this courseware.	5	4.40	0.621
U2	This courseware is easy to use.	5	4.53	0.629

6.0 CONCLUSION

SSR courseware has been successfully tested by the respondents and experts. Based on the positive response revealed through analysis, SSR is seen as a complementary source of reference to learn *Sirah* of the prophet and can be used by various stakeholders including primary school students, teachers as well as general users who want to learn basic *Sirah*. In the future, SSR courseware will go through further enhancement to complement the contents with a complete set of quizzes of various formats to ensure the effectiveness of learning can be thoroughly measured.

References

- Delombaerde, F., Madramootoo, C.A. & Mehdi, B. (2001). *Development of a Hydrology Multimedia Courseware*. McGill University.
- Fielding, J. (2005). Engaging Students in Learning History. *Canadian Social Studies*. 39 Number 2, Winter 2005.
- Hick, S. (1997). *Benefits of Interactive Multimedia Courseware*. Trican Multimedia Solutions Inc. Retrieved from <http://http-server.carleton.ca/~shick/mypage/benefit.html>
- Kaur, T., Singh, R., & Abdul Rashid, M. (2010). Teachers' Perceptions Towards the Usage of Courseware in the Teaching and Learning of Economics at Malaysian Secondary Schools. *International Journal for Educational Studies*.
- Molenda, M. (2003). The ADDIE Model. *Educational Technology: An Encyclopedia*. ABC-Clio.
- Noordin, S., Ahmad, W. F., & Yew, K. H. (2011). Study of Effectiveness and Usability of Multimedia. *International Journal of Computer Application*.
- Salleh, M. J., & Ayudin, A.R. (2010, December 2). Innovations of History Education in the High Schools, ICSS, Malaysia. *International Journal of History Education*. XI, 73-88.
- Tanvir, S.I., & Billah, M.M. (2014). Interactive Edification: The Effectual Approach for Apprentices. *Journal of Education and Practice*, 5, 51-60.