Developing Affordable Teaching Aid Module

Dr Lee Bih Ni
School of Education & Social Development
Universiti Malaysia Sabah
Kota Kinabalu, Sabah, Malaysia

Dr Sopiah Abdullah
School of Education & Social Development
Universiti Malaysia Sabah
Kota Kinabalu, Sabah, Malaysia

Mr Zulfhikar Rabe
School of Education & Social Development
Universiti Malaysia Sabah
Kota Kinabalu, Sabah, Malaysia

Abstract—There is a gap to develop software to enhance the number of software modules, and reduce the burden on the module that lecturers prepare as teaching aid. This study shows that a software is used to develop Ulead COOL 3D3.5 of Microsoft PowerPoint2007, Adobe's Photoshop CS2, Sony stereo forging 8.0, 5.0, 8.0 Ulead GIF animation of Macromedia Flash, and Sony Las Vegas 7.0 software. The software includes multimedia elements, able to attract the attention of students, so that students are more interested in studying this topic, formative and summative evaluation, and the teaching and training courses included vocabulary, and computer network support, and allows for further lecturers explanation and to provide students with the latest information. With the production of this software it’s really hope it can help lecturers in teaching and learning process.

Keywords- Developing Software; Teaching Aid Module

I. INTRODUCTION

Dr. Haydn insisted that history lesson in the role information and communication technologies is to train students in literacy information - to know what they read, what they see. This includes students challenge the popular view, the Internet is the source of all truth and wisdom. [1] A more elaborate computer-assisted teaching effectiveness has been demonstrated in the past three decades. Under normal circumstances, and admonished rate control increases, the use of interactive multimedia teaching and learning process, many of which involve the use of more than one sense, making the learning process more active user control.[2] Therefore, when used in today's educational system is a step in computer technology, is considered to improve the students' level of thinking. Even though its use is also lesson to stimulate student interest. Use of computer software in the education system through Computer-Assisted-Learning (CAL) is vital. This software is not just a separate insert text elements. But there are also graphics, audio, video, animation and interactive elements. All elements combine to produce an interesting integration of the software, as well as to stimulate students' thinking. This is because the use of teaching and learning only the text is still unable to overcome the concept of educational software in the presence of motion or sound.

II. STATEMENT OF THE PROBLEM

Learning scientific solution to the problem is the use of Computer-Aided Software (CAS). However, a Teaching Aid (TA) software tool is very poor. Software has not been fully implemented in schools, due to the lack of local software and parallel with the Malaysia Ministry of Education, educational methods and teaching methods, and ineffective syllabus. (Wayne, 2003) [3] Findings have shown that the use is a key factor in the establishment of teaching and learning science conductive. The study also found that the number or quantity of most secondary schools are not getting enough (Papert & Caperton, 2012), claiming that the computer uses a computer, it can give a concrete experiences and impact on children. [4] [5] This passage clearly shows that the computer can be used as students’ teaching aid regardless of whether children or adults, because they all have the same requirements as in the world of education. In short, we can say that most educators get the right software and the problems faced by educational programs to meet the requirements. This problem may occur because of a lot of software on the market shaping CAL and educators in the teaching process applications.

III. PROJECT OBJECTIVES

The purpose of the project is:

i) to develop Teaching Aid (TA) based on the Microsoft Office PowerPoint 2007, entitled "History of Southeast Asia: Modernization and development", a four years program in Malay Language (Malaysia National Language).

ii) to increase TA use in the delivery of the subject matter by using Malay Language.

iii) to reduce the burden of producing TA by lecturers, entitled "History of Southeast Asia: Modernization and development".

iv) to develop TA software, which is based on Microsoft Office PowerPoint 2007, in Malay language for lecturers.

V) to deal with the problem of lack of history TA for lecturers.

IV. SIGNIFICANCE OF PROJECT

The software is designed to provide clear disclosure to student about the History of Southeast Asia. History of Southeast Asia: Modernization and development would be put forward to a more realistic view instead of just a static image or lecturers’ chart delivery process in the traditional teaching methods so that students can be exposed to graphics, animation, video and audio. This will increase their interest in history subject. Development of this project can also help students to understand the history of Southeast Asian champion in an effort to create a more powerful concept. The project is expected to alleviate the lecturer lectures as an alternative teaching aid. In addition, in order to improve the effectiveness of classroom teaching and learning. The software development is to overcome lack of local software problem.
and follow the education syllabus prescribed by the Malaysia Ministry of Higher Education.

V. PROJECT SCOPE

TA Software of History of Southeast Asia: Modernization and development is focused on Chapter 1: Burma's independence and democratic governance. The software content is in accordance with the history of Southeast Asia syllabus issued by the Malaysian Ministry of Higher Education. This software is focused on the sub topics about human rights and financial interests. The project's target group is four years program students who are major in history.

VI. METHODOLOGY

A. Development Analysis

Selection of design development model discussed in this stage are teaching objectives, target group, list of the education content, questions and valuation understand or realize the objectives, the choice of software development, multimedia software, hardware selection choices, and minimum hardware specifications.

1) Selection of Design Development Model

Training or education for multimedia design and development: first, select the appropriate design development model. In the form of education, the result will be something that should help students in the learning process.[6] Therefore, the teaching of various theories and models in the design model and development guidelines recommended by psychologists to ensure that members are used outside the rail or in the multimedia software technology development and design learning process. There are various different models of development, such as ASSURE model. ASSURE model is geared classroom model. In this model, it has six key steps [7]:

A   Analyze learners (Analyzing student)
S    State Objectives (Stating the objectives)
S    Select methods, media & material (Choose method, media and materials)
U   Utilize media & material (using media and materials)
R   Require Learner Participation (Requires student participation)
E   Evaluate & Revise (Doing evaluation and modification)

i) Analysis of student
At this stage, the designer must determine the user's general characteristics, such as gender, age, talent, learning style, class and socioeconomic status. The basic characteristics of the user should be fine related to the theme and content, then enter into another phase.

ii) State the specific learning goals
Developed applications need to have direction and meet the requirements. Then the target should be set out. Targets can be drawn, syllabus, curriculum guides, textbooks, documents or specialist quality assurance reports. In addition, the objectives of the program should be based on the level of performance to be achieved, learning conditions and standards or level of achievement.

iii) Selection of methods, media and materials
At this stage, the designer must choose a mean of communication and information for the consumer in order to ensure smooth delivery needs. Students' abilities and information learning may achieve the target level, providing the appropriate resources, media consumption environment, and adequate laboratory and content. Researchers need to determine the correct selection methods, media and materials.[8]

iv) Use of media and materials
Attractive learning environment, graphics, text, audio and video are appropriate to attract users to learn. [8]

v) Requirement of students to participate
Designers need to provide training exercises and quizzes, so to promote student participation in the learning process. In addition, the views and feedback from the user also needs to be considered.

vi) Review and revision
Software is ready to be evaluated to obtain user feedback to ensure their effectiveness, the inherent flaws and weaknesses in the software. [9]

2) Objectives of Teaching

Teaching objectives is an important part of the software, because it leads to a result set, and the students are expected to change their behavior.

At the end of the course, students should be able to:

a) understand the Middle East conflict or unrest occurred in the comprehensive historical background.

b) analyze the Western powers role of politics in the Middle East.

c) explain the impact of the Middle East conflict development to the world.

3) Target

Under normal circumstances, TA's main objective is for the lecturers who taught History of Southeast Asia to do their own learning whereas students can also use this software if they have a computer at home and have basic computer knowledge.[10]

4) List of Contents

TA software content contained lesson of [10]:

a) Historical background conflict or unrest comprehensive occurring in the Southeast Asia.

b) The ASEAN’s role in the Southeast Asia political & Socioeconomic development.

c) The affect of Southeast Asia conflict development to the world.
5) **Question / Performance Rating**

Software developed TA, as well as the formative evaluation of each topic. Before building the next topic, the problem is to test students' understanding. At the end of the lessons, there are also a summative assessment to ensure that the goal in the teaching session is achieved. If the assessment shows the students are not satisfied with teaching, lecturers can modify instruction to meet specific goals. [11]

6) **Selection of Software Development**

The software used in this module development are Power Point in Microsoft Office 2007 and Google Translate. The software has the ability to translate materials in English to Malay language. This software also has the ability to create a hyperlink in which two or more elements or object relationship between the application and connection (link).

7) **Multimedia Software Selection**

In addition to use Microsoft Power Point, it is also some software selected to create this TA module software, such as Adobe Photoshop CS2, Ulead Video Studio cool 3D3.5, Sony Sound Forge 7.0, GIF animation 5.0, Sony Las Vegas 7.0, and Macromedia Flash8. These softwares also have the ability to build a hyperlink in which two or more elements or object relationship between the application and connection (link).

VII. DECISION

Software modules have been used in Microsoft Office Power Point year 2007 and 2013 in the CD packaging. The purpose is to bring together all of the files related to the Microsoft Office software files titled "History of Southeast Asia: Modernization and development. Power Point slides, Graphics files, import sound files and others will automatically collected. Flash files software will be collected. Software developers do not have to trouble to gather the required files into CD feature because each section is broken down into sub-theme file. [11] TA software module has been packaged, copied and stored on the disc (CD-ROM) to facilitate the use of this software in different position.

VIII. DISCUSSION

In order to generate a TA module titled "History of Southeast Asia: modernization and development", efforts to enrich the collection of the Malay language version of the TA can arouse students' interest and effective learning in the course. Use of Microsoft Office Power point 2007 supply the development of software is very simple, but the development of the software need to use a lot of visual media such as graphics, video and audio. The capabilities are essential. It is preferable to use multimedia software to other media such as audio, visual and video multimedia software development, based on Microsoft Office Power Point 2007 in an appropriate way and high quality teaching. Lecturers also need to actively explore Microsoft Office Power Point 2007's function in real practice. In fact, more features in PowerPoint can be used in Visual Basic. Has this capability, Microsoft Office Power Point 2007 capacity like other programming software can be included in the development of software functions such as interactive and a mouse button.

IX. CONCLUSION

TA module software with titled "History of Southeast Asia: Modernization and Development" in Malay language has been successfully developed by using Microsoft Office 2007 in Power Point and other multimedia software. Researchers want this software development to help educators in the teaching and learning process. This anti-missile module software increases the amount of content to create lesson delivery in Malay language. Moreover, the lack of suitable teaching aid in history courses among history lecturers was overcome. Lecturers have reduce their burden load in preparing teaching aid for “History of Southeast Asia: Modernization and Development”.

REFERENCES