

BORANG PENGESAHAN STATUS TESIS[^]

JUDUL: DEVELOPMENT OF E-LEARNING SCIENCE SUBJECT FOR
STANDARD THREE PRIMARY SCHOOL SYSTEM

SESI PENGAJIAN: SEM 2 2005/2006

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[^] Tesis dimaksudkan sebagai Laporan Projek Sarjana Muda (PSM)

DEVELOPMENT OF E-LEARNING SCIENCE SUBJECT FOR STANDARD THREE
PRIMARY SCHOOL SYSTEM

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LB1044.87 .N87 2006



0000038901

Development of e-learning science subject for standard
three primary school system / Nurhasanah Hj. Ab Halim.

NURHASANAH BINTI HJ. AB HALIM

This report is submitted in partial fulfillment of the requirements for the
Bachelor of Computer Science (Software Development)


FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
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2005

DECLARATION

I hereby declare that this project report entitled
**DEVELOPMENT OF E-LEARNING SCIENCE SUBJECT FOR STANDARD
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is written by me and is my own effort and that no part has been plagiarized
without citations.

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DEDICATION

To my beloved family who always encouraging my highest hope and praising my smallest success....

Hj. Ab Halim bin Hj. Sohot and Hajjah Maimun binti Murah

Roslina Hj Ab Halim

Rosliza Hj Ab Halim

Zuraida Hj Ab Halim

Zulkarnain Hj Ab Halim

ACKNOWLEDGMENT

Alhamdulillah, thanks to THE ALMIGHTY ALLAH for let me finish doing this project successfully. To my beloved family and friends for always being there during the Projek Sarjana Muda (PSM) period.

I also would like to show my appreciation to Mr. Mohd Suffian Sulaiman as my Projek Sarjana Muda (PSM) Supervisor for leading and guiding me and my friends facing the challenges and giving us opportunity to gain new experiences while gaining thoughts and ideas for this proposal. Not forgotten for the other lecturers who help me so much while developing this project.

Next, I would like to say thank you to my friends for the love and supportive friendship since forever. For every single things that all of you have done for me, I can't thank you enough.

May ALLAH bless you.

ABSTRACT

E-Learning Science for Standard Three Primary School System was developed to make sure the learning sessions of the Science subject can be done under minimal supervise. This system is divided into three users which the teachers and the students are the main users of the system. Parents are welcomed to use this system so they can help their children while their children do the revision at the home. The students can make this system as one of their additional material to learn the Science subject. With the interactive presentation, colourful texts, and animations it will help the students to keeping up their understanding of each topic in the Science subject. Besides notes and mind map, this system also provided a few set of quizzes to the students. Here, the students will know how their performance in the Science subject. The E-Learning Science for Standard Three Primary School System also makes the teachers' job become easier where the system will manage the marks record. This system will show the total marks to the students after the students answered all the questions. The teachers did not need to do the marking process manually. For parents, they can supervise their children performance in the Science subject. Object Oriented Analysis and Design methodology was applied while developing the project. However, further improvement can be make such as adding some varieties set of questions to the quizzes.

ABSTRAK

Sistem E-Pembelajaran Sains Tahun Tiga Sekolah Kebangsaan (*E-Learning*) ini dibangunkan bertujuan untuk membolehkan proses pembelajaran Sains dapat dijalankan walaupun dengan kadar bimbingan yang minima. Sistem ini terbahagi kepada tiga pengguna dimana pengguna utamanya adalah guru dan pelajar. Manakala ibubapa turut digalakkan untuk menggunakan sistem ini supaya dapat membantu anak-anak mereka untuk menggunakan sistem ini dirumah. Para pelajar boleh menjadikan sistem ini sebagai sumber tambahan untuk mereka memahami matapelajaran Sains. Dengan corak persembahan yang interaktif, teks yang berwarna-warni dan animasi yang pelbagai, ia mampu untuk meningkatkan pemahaman para pelajar untuk setiap topik dalam subjek Sains ini. Selain nota-nota dan peta minda, sistem ini turut menyediakan bahagian kuiz dimana para pelajar dapat menguji tahap pemahaman mereka dalam matapelajaran Sains. Sistem E-Pembelajaran Sains Tahun Tiga Sekolah Kebangsaan ini juga memudahkan guru matapelajaran ini mengemaskini rekod markah para pelajar kerana sistem ini akan memaparkan markah pelajar serta merta selepas pelajar mengambil kuiz tersebut. Para guru tidak perlu lagi melakukan proses pemarkahan secara manual. Bagi ibubapa pula, mereka boleh memantau prestasi anak-anak mereka melalui sistem ini. Namun demikian sistem ini hanya terhad untuk matapelajaran Sains sahaja. Kaedah Rekabentuk dan Analisa Berorientasikan Objek telah diaplikasikan dalam pembangunan projek ini. Walau bagaimanapun peningkatan kemajuan boleh dibuat terhadap sistem ini seperti memvariasikan bentuk soalan kuiz.

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CHAPTER I

INTRODUCTION

In the cyber world today, there are many applications that can be applied by using the information technology. One of the applications is e-learning. E-Learning Science for Standard Three Primary School System will be developed as one of the alternative for the learning system that we have today. As we can see, the science subject can be a difficult subject for a certain students to learn. So, the e-learning Science for Standard Three Primary School also will help the student to learn the subject in interactive way. Hopefully, the problems such as the students feel boring during the learning session, the problem for the teacher to give the full concentration toward the students, and the lack of Science's subject teacher in certain school can be settled with this system.

1.1 Project Background

As we know, nowadays the Science subject is conducted in English language. From the observation, learning the Science subject in English language can be difficult for some of the students. A few problems may occur during the learning session. Not all the students can catch up what they have learned on the spot. Usually they need an

extra time to understand the topic of the subject. If the parents did not have time to teach these students at the home, they will send them to the tuition class.

The unattractive educational material that used by the teachers make them felt bored to learn the subject and not the entire student can give a full concentration when the teacher is teaching. Sometimes teachers did not supply the notes of the topic and students must make it on their own. The teachers also have the problems. With the class that has at least thirty students, it is impossible to the teacher to give a hundred percent attention to each of the students. Beside, if there's any quizzes or test the teacher will take a long time to do the marking process.

Today, even though the teachers are provided with the personal computer, they still teach the students with the traditional way. In additional they just used the Microsoft Power Point to attract the students. With the E-learning Science for Standard Three Primary School System hopefully it can be a new method to teach and learn the Science subject in interactive way.

1.2 Problem Statements

From the observation, the teachers still use the traditional way while teaching the Science subjects. It also effects the students to learn and understand the topics of the subject. E-learning Science for Standard Three Primary School System will help the company to overcome this problem.

The main problem that occurred while using the current learning system is the method of learning that is not attractive. The students just received the notes of the subjects and the teacher will teach the student without any additional interactive method of teaching. This thing makes the students felt boring during the lesson.

The other problem is, not every student can pick up the lesson during the class hour. Some of the students may take a longer time to understand what they have learnt. Sometimes, these students were left behind than the other students.

The teachers also have their own problem. With the class that have a least 30 students, it is impossible to the teacher to give a hundred percent concentrate to each of the student. This students might felt not satisfy on the lesson that they received.

The marking process of the question papers usually took a long time because it is done manually. The result of the exercise or the examination also took a long time to come out. Indirectly, the teachers need to spend a lot of time to do the marking process.

With this e-learning system, it will help the teacher to teach the Science subject more interactively and the marking process can be done faster. The system also can attract the students to learn the Science subject and automatically it will help the students to improve their understanding in the subject.

1.3 Objective

The objectives of this system are:

- i. To make the lesson session becomes more attractive.
With the colorful text and animation it helps the student to understand the topic of the subjects.
- ii. To help the students from feel bored during the lesson session.
Student can handle their own personal computer with the supervise from the teacher. Besides learning the Science subject they also can learn how to use the computer.

- iii. To help the students to catch up the subject even after the class hour.
Student can access the system wherever they want as long as they have the internet connection especially when they are at home so the parents also can give a help to them.
- iv. To help the students to more understand of the Science subject
The system provides the mind map and notes that can be used by the students to do their revision.
- v. To make the marking process becomes faster.
The system will automatically generate the marks for the students after they do the quizzes.

1.4 Scopes

The scopes of the system are:

- i. The main user of this system is the standard three students. The teachers and the parents also welcomed to use this system so they can teach the students to use the system.
- ii. The interactive system with the colourful texts and the animation picture so it can attract the students to learn the Science subject.
- iii. This system will be developed in the web based environment with the Windows XP as the operation system and the client-server application.

- iv. This system will contain five modules which are learning module, mind map, exercise module and the generate marks.
 - a) Learning Module

State the main objectives that need to achieve for each chapter. The contains of the chapter will be more detailed.
 - b) Mind Map Module

Help the user as one of the technique to learn the Science subject more effectively. The technique is using the mind map for the important fact in the subject.
 - c) Exercise module

Have the set of exercise and quiz questions. The questions will be in objective format and be generated randomly.
 - d) Generate Marks.

The system will generate the marks for the students. The marks can be search by the question ID or the class ID.

1.5 Project Significance

The purposed of the E-Learning Science for Standard Three Primary School System is not totally to replace the current learning system but as one of the alternative to help the students and the teachers in the Science subject. So, if they face any problems while using the system during the learning session, they still can continue the lesson.

The development of e-learning is looked as one of the needed in the educational field for today and the future. With this e-learning system, it can fulfill the students educational needed.

The objective of this system is to overcome the lack of the teachers in the Science subject that happened to the school before this. Sometimes the school management can not find the other teachers to replace the place. By using this system, the problem can be solve with the students can learn the Science subject on their own.

Beside, the E-Learning Science for Standard Three Primary School System can attract the students to learn the subject. With the colourful texts, graphics and animations pictures, the students will not feel boring during the class. Through the individual learning, the students can control their celerity while learning the Science subject. It also helps the student to increase the understanding of the subject. Students also can give a full concentration while the teacher is teaching. With the use one computer for one student, the learning session can become more effective.

The system is also important to the teacher specifically and the parents generally because they need to teach the students how to use the system. Indirectly, they become the main supporter for the student to use the system.

1.6 Expected Output

The E-Learning Science for Standard Three Primary School System can help the students to learn the Science subject effectively. The system will provide the notes with the colourful texts, graphics and animation pictures to attract the students. Students can do the online quizzes and get the marks on the spot. There also a graph to show the achievement of the student for the quizzes that they had taken. The teachers can upload