ENGLISH LEARNING TOOL USING AUTHENTIC MATERIALS (PARTS OF THE BODY AND FRUITS MODULE)

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DECLARATION

The materials in this thesis are original except for quotations, excerpts, summaries and references, which have been duly acknowledge.

FONG SHI YUN HK2003-1946 11 APRIL 2004

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ABSTRAK

ENGLISH LEARNING TOOL USING AUTHENTIC MATERIALS (PARTS OF THE BODY AND FRUITS)

Tesis ini mempunyai objektif utama iaitu membangunkan satu alat pembelajaran English berdasarkan bahanl autentik yang bertemakan Let's Learn and Study. Selain daripada objektif utama, membangunkan Let's Learn and Study dengan menarik dan senang digunakan oleh pengguna juga merupakan objektif bagi tesis ini. Dua modul yang difokuskan dalam alat pembelajaran ini ialah Anggota Badan dan Buah-buahan. Alat pembelajaran ini khas untuk semua pelajar pra-sekolah dan guru di kawasan pedalaman. Setakat ini, belum ada lagi satu alat pembelajaran English yang berdasarkan bahan autentik dalam pasaran. Oleh itu, ini adalah penting untuk membangunkan satu alat pembelajaran English yang berdasarkan bahan autentik kerana pelajar pra-sekolah di kawasan pedalaman boleh mengetahui objek di dalam alat pembelajaran tersebut. 'Multimedia production cycle' yang mengandungi beberapa bahagian iaitu perancangan projek, pra-produksi, produksi dan pos-produksi, proses pengujian dan penghantaran produk diguna dalam membangunkan alat pembelajaran English ini. Perisian komputer yang digunakan dalam alat pembelajaran English ini ialah Adobe Photoshop dan Macromedia Flash. Antara muka bagi Let's Learn and Study adalah interaktif, menarik, konsisten dan mudah. Grafik yang digunakan dalam alat pembelajaran English ini adalah autentik dan menarik. Teks yang digunakan bersama grafik adalah untuk menerangkan makna bagi sesuatu objek yang berkenaan. Oleh itu, keperluan pengguna haruslah dipenuhi terlebih dahulu sebelum membangunkan alat pembelajaran yang autentik ini. Ini adalah untuk memastikan alat pembelajaran English yang akan dibangunkan adalah mudah, konsisten, menarik dan cekap.



ABSTRACT

ENGLISH LEARNING TOOL USING AUTHENTIC MATERIALS (PARTS OF THE BODY AND FRUITS)

The main objective of this thesis is to develop an English learning tool program using authentic materials entitled Let's Learn and Study. Besides the main objective, to develop an interesting and easy-to-use Let's Learn and Study English learning tool is also an objective in this thesis. The modules that are focus in this learning tool are Parts of the Body and Fruits and also with their exercises. This learning tool is targeted to all pre-school students and teaches in the rural areas. Up till now, there seems to be no English learning tools that are using authentic materials available in the market now. Therefore, it is important to build the learning tool based on authentic materials since the pre-school students in rural areas are familiar with the objects in the program. The multimedia production cycle that consists of project planning, pre-production, production and post-production, testing as well as product delivery stages is used to develop this learning tool. The software used to develop this learning tool includes Adobe Photoshop and Macromedia Flash. The interface design of Let's Learn and Study are interactive, interesting, user-friendly, consistent and simple. Besides that, the graphics used in this learning tool are authentic and interesting. The texts accompanied together with those graphics represent the description of the graphics. The purpose of the sound and animation feature is to make the learning tool more interesting and interactive. All the user requirements need to be fulfilled in order to develop an authentic Let's Learn and Study. This is to ensure that the learning tool that is going to be developed is consistent, simple, interesting, effective and yet efficient.



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CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter is to explain about the introduction of the project. The introduction of the project is to discuss about what will be developed in this project, problems faced in developing this project, project scope and objectives of this project one. This chapter consists of: 1.2 which is problem background, 1.3 which is problem statement, 1.4 which is objectives, 1.5 which is project scope and lastly 1.6 which is the organization of the report.

1.2 Problem background

Nowadays, there are a few problems faced by the current available English learning tool product in the market. The problems are there is no existing authentic English learning tool, the learning tool is not suitable and interesting for the pre-school students and it is complicated to the user. First of all, what is authentic model? Authentic materials are objects which are familiar to the learners and within the knowledge of a learner. For example, tree, eyes, nose, mouth and whatever the learners can see everyday in their surroundings can be an authentic material. Those available products in the market now are not authentic and not suitable for the students in the rural areas. Some of the learning tools are found to be complicated and difficult to understand even for the adult.



1.2.1 No existing authentic English learning tool

The English learning tool those in the market nowadays are not authentic. The graphics and texts that are used in the learning tools product are not authentic and difficult to understand by the pre-school student since some of the graphics are never see before in their life especially the pre-school student in rural areas. For example, a student in rural area might not see a penguin in their life. If the learning tool is using a penguin as graphic in their program, it will be useless for the pre-school students in rural areas.

1.2.2 Not suitable and not interesting for the pre-school students

Beside that, some of the learning tools are seems not that suitable and not interesting for the pre-school students. The graphics that used in those learning tools are based on the pre-school workbook and did not include any critical thinking skills for the students. The pre-school student will learn nothing and feel boring since the contents in the learning tools have been taught in the pre-school and not interesting at all.

1.2.3 Complicated to the user

Furthermore, some the learning tool products are too complicated and not presented in the way of what have we expected. For example, there are so many buttons in the page of the program will confusing the user to use it since the user will expect that the button will link to the page that user want. Therefore, it is difficult to use for the pre-school student since the adults also confusing using those products. As a result, the teaching and learning program in pre-school using those English learning tools are not effective and yet not efficient.

1.3 Problem statement

There are a few problems or challenges that we are facing in order to develop the English learning tools for the pre-school students. As we all know, there are so far no existing English learning tools that is used authentic model in the market for the use in pre-school education. The English learning tools products that are available in the market are not based on authentic model and not suit the learning and teaching process in pre-school education.



1.3.1 Not suitable for pre-school student in rural areas

Those English learning tool products are also not suitable for all the rural areas. The students in the rural areas do not even know how to use and manage the learning tools which are so complicated to them. Therefore, it is difficult to learn and teach in rural areas since the graphics and animation in the learning tools have not been seen by the students and the teachers also. For example, if a learning tool that using a penguin or kangaroo graphic, the pre-school students in Malaysia do not even know what is penguin and kangaroo since they have not seen it before in their surroundings. As a result, the English learning tools in the market now will mean nothing to the pre-school students especially the students in the rural areas. Besides that, there are some English learning tools that are available in the market now which are found complicated, confusing, not effective and hard to use and not understandable even by the adult.

1.3.2 Lack of computer facilities in rural areas

Furthermore, there still have other problems in developing this English learning tool. The pre-school education especially in the rural areas might not accept our English learning tools since there is lack of computer facilities even one computer also do not have in their school. Some of the rural areas are even worst because there do not have any electricity at all to switch on even though just a light so needless to say a computer. It is much more convenient for the teachers to teach in their traditional way such as using chalk and board. The teachers and the students in the rural areas may also have difficulty in handling computer since they do not have enough knowledge about computer. This is because they have never been exposed to the usage of computer in their life before.

1.4 Objectives

The developing of this English learning tool program is meant for the pre-school students and teachers especially in the rural areas. There are two objectives in this thesis. The first objective is to build an English learning tool that is based on authentic materials and the second objective is to develop an English learning tool that is interesting and easy to use.



1.4.1 Based on authentic materials

The objective in developing an English learning tool is to build an English learning tool that is based on authentic materials. This will make the learning tool program more effective and readability since the contents in the learning tool are familiar to the pre-school students especially in the rural areas. Therefore, the pre-school students are more easily to understand the contents while using the learning tool.

1.4.2 Interesting and easy to use

Another objective in this project is to build an English learning tool that is interesting and easy to use by the pre-school students and teachers. This can attract the students to use the learning tool and can get the students attentions while the students learning in the learning tool. The English learning tool should not be complicated to the user since the users are the pre-school students.

1.5 Project scope

The English learning tool that we are developing is for the teaching and learning system in the pre-school especially in the rural areas. This learning tool is also targeting the pre-school students that are around 4-6 years old and also the teachers in the rural areas. It also can be used by the public but for education purpose only.

1.5.1 Modules of this project

This learning tool program consists of four modules. They are parts of the body, fruits, occupations and at school. The modules that will be focused on this thesis are parts of the body and fruits.

1.5.2 Target the pre-school students and teachers especially in the rural areas.

The English learning tool is for the teaching and learning system in the pre-school especially in the rural areas. It is also mainly about to built up a computer based mini learning system. This learning tool will cover the pre-school students and teachers in the rural areas. These students will find out that this learning tool is easy to use and interesting since this learning tool that we are going to develop is based on authentic model.



1.6 Organization of report

For final year project report 1, there contains five parts which are introduction, literature review, methodology, system analysis and design and finally a conclusion. The project report include five main chapters which are chapter one is Introduction, chapter two is Literature Review, chapter three is Methodology, chapter four is System Analysis and Design and chapter five is Conclusion of the project one. Furthermore, a Gantt Chart, references and appendices of the project one is also included.

Chapter one is discuss about the introduction of the project, problem background, problem statement, project scope and objectives.

For chapter two, whatever literature review about developing the English learning tools will be included in this project report. This chapter two reviews researches done in the existing systems or applications that are related to the project. The methods or technologies that will be applied on the project will also be discussed in the chapter two.

Chapter three is discuss the methodology of developing the learning tool in order to choose the best software to build this learning tool. This chapter three reports the approaches and overall framework that is taken in building the system or application. The techniques or approaches that will be applied in the design and implementation of this project will also be included. This chapter also discuss about methods used and software and hardware requirements.

Chapter four explains about the system analysis and user interface design of the English learning tool program. Beside that, a preliminary result of the program is expected in chapter four. This chapter four may also discuss about the use case diagram and others depending on the system development model used.

Chapter five explains the implementation of the overall project development. The screen shots are included in this chapter and the step-by-step process of developing the learning tool is discussed.



Chapter six is discuss the testing on the learning tools. This testing is to test whether it is meets the objective of this project. Besides that, testing phase is also test the learning tool program works and the interaction between user and the learning tool.

Chapter seven gives the conclusion of the project report. The summarization of the project and results obtained is also explains in this chapter. Besides that, this chapter also describes further work that need to be improved.



CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

In this chapter, the literature review of developing an authentic English learning tool is going to be discussed. This literature review is to review of the existing systems or programs, concepts or methods that are related to this project. It is also to make a comparison of the existing software and concepts in order to develop an authentic English learning tool program.

This chapter consists of: 2.2 which review on the existing programs, 2.3 which is comparison of reviewed system and 2.4 that is the conclusion of this chapter. It also discusses about the importance of the graphics, sounds, animation and texts that are used in the English learning tool programs. Besides that, the graphics, sound and texts software programs will also be discussed in this chapter in order to choose the most suitable software programs that can used in this project, which is to develop an English learning tool.

2.2 Review of existing system

With the numerous of English learning tool programs in the market now, several English learning tool programs are being chosen and being analyzed on the programming scripting, software used and technology used, the features and interface design contain inside the learning tool programs.

2.2.1 Review on existing English learning tool program

Among the several learning tool programs that are being chosen to be analyzed, three English learning tool programs are chosen for a detailed analyzed. The three English learning tool programs that are being chosen are *Jump Start Kindergarten*, *Little Readers Series* and *ABC 4 Kids Workshop*.



2.2.1.1 Jump Start Kindergarten

JumpStart Kindergarten provides everything your kindergartner needs to succeed in pre-reading, early math, language, and creative arts. JumpStart Kindergarten presents lessons in colorful and imaginative environments designed to make learning more enjoyable. It's designed to reinforce and build upon the skills that your child is learning in school.

Software used

In JumpStart Kindergarten learning tool program, they are using Adobe Photoshop and Macromedia Flash. Besides that, this learning tool programs also using third party software which are Adobe Acrobat Reader, Microsoft DirectX and Apple QuickTime.

- Main page contains eight buttons in the main page which are play, help, exit, assessment, workbook, JumpStart preview, JumpStart Website and Smart Tools.
- · Help Click on the Help button to access this Help system.
- · Exit If the user wish to exit the Autorun screen, click on this button.
- Assessment The Assessment Test enables the parent and child to take a
 grade-appropriate test prior to entering the program. A friendly host
 character will guide the child through the Assessment Test and then to the
 Progress Report screen to study the results.
- Workbook The Activity Guide takes the child through a series of exercises that reflect those in the JumpStart Kindergarten program. The user can browse through the activities to print the exercise of the user choice or the user can print the book in its entirety.
- JumpStart Preview a preview of other products in the JumpStart Learning System.
- JumpStart Website To access JumpStart website,
 www.KnowledgeAdventure.com or www.JumpStart.com to go on-line.
- SmartTools On/Off The SmartTools Toolbar allows the user to access the JumpStart Around the World and J*Mail from within JumpStart Kindergarten (if installed) as well as JumpStart.com.



 Alphabet and Number learning - In this learning tool program, the children can learn all the alphabets and numbers.

c. System Interface

The system interface for *JumpStart Kindergarten* is very simple but user-friendly. This is because it contains several buttons to access certain features in the program. The information that are being provided by the this learning tool programs are vary clear and simple Therefore, it is not complicated to the user to access this program Besides that, the cartoon animal pictures in the interface make the entire interface interesting, colorful and can attract children's attention.

2.2.1.2 Little Readers Series

Little Readers Series is an English learning tool program that is easy to use, interesting and attract children's attention. This learning tool programs also include digital story telling.

a. Software Used

In Little Readers Series learning tool programs, the software that are being used are Adobe Photoshop and Macromedia Flash.

- Alphabet learning the child can learn all the alphabets and words throughout this learning tool program.
- Number learning In this learning tool program, the number learning features is also included to learn by the child.
- Story telling This features are using the multimedia system to create a digital story telling in order to let the child learn more and gain more knowledge in the story.
- Question & Answer section In Little Readers Series learning tool program, there have question and answer section to test the knowledge of the students. This will also lead to the critical thinking of the students.
- Realistic speech to teach the Alphabets and Picture Objects In this
 learning tool program, the children can learn the pronunciations of the
 alphabets and picture objects by listening to the audio and looking at that
 particular text.



c. System Interface

The system interface in this learning tool program is based on the animated cartoon. The graphics, animation and sound in this learning tool program can attract children's attention and make the entire program user-friendly and interesting. It is easy to use and simple since the program will lead the user to use the functions. Other than that, this learning tool programs is not an authentic learning tool program.

2.2.1.3 ABC 4 Kids Workshop

ABC 4 KIDS Workshop is an easy to use method of learning the Alphabets using Pictures, Realistic Speech Audio and Self-testing for pre-school's students. ABC 4 KIDS Workshop makes learning the Alphabets and grasping the basic concepts easy, using a logical step-by-step process that is both interesting and fun to use for the pre-school's student.

Software Used

In this learning tool program, the software that is being used is audio-visual software and Adobe Photoshop.

- Full Alphabets from A Z In this learning tool program, all the alphabets are going to be learned by the children.
- Over 100 different Picture Objects to spell The children can learn, identified and recognized the pictures objects and spelling of all the objects. This is to make sure that the children will know what the picture objects represent is.
- Realistic speech to teach the Alphabets and Picture Objects In this
 learning tool program, the children can learn the pronunciations of the
 alphabets and picture objects. With the speech and the audio sound in the
 system, the children can listen to it and learn the pronunciations.
- Self-testing to test out spelling The children can be test out the spelling
 of the picture objects by themselves throughout this learning tool
 program.
- Easy to use Interface specifically designed for children In this learning tool program, the interface is plain, simple and easy to use by the children.



c. System Interface

The interface is very straightforward and designed for ease of use and simplicity by children. The graphics that being used in this program is two-dimensional and not animated. There is a picture display in the main left corner of the system interface and a mode selector button is next to the picture display. There also have spelling tester, picture object selector and virtual keyboard in the interface. This learning tool program just based on one main interface which all the features and function inside one interface. Other than that, the color being used in this learning tool programs is very dull and not interesting.

2.2.1.4 Kids Learning Program

Kids Learning Program was developed by the previous University Malaysia Sabah (UMS) students for their final year project last year. This program is also an easy-to-use method of learning English and provides basic concept and step by step process of learning English.

a. Software Used

In this learning tool program, the software that this program used is Adobe Photoshop and Macromedia Flash.

- Alphabet learning The child can learn all the alphabets and words throughout this learning tool program.
- Number learning In this learning tool program, the number learning features is also included to learn by the child.
- Animal's sound This learning tool program included animal's sound so that the students can recognize the sound of the animals.
- Body parts In this learning tool program, the students can learn the body parts of a human.
- Question and Answer Section In this section, the knowledge and understandability of the students will be tested after learning all the contents or features in the learning tool program.



c. System Interface

The interface is also straightforward and designed for ease of use by pre-school students. The graphics that being used in this learning tool program is two-dimensional and animated. Beside that, the color of the interface is dull and not interesting. The system interface of Kid Learning Program is simple and yet user-friendly since it contains several button to access every features in the learning tool program.

2.2.2 Review of Graphics and texts using in existing learning tool program.

Among the entire learning tool programs that have been reviewed, the graphics and texts in the system interfaces are mostly based on the animated cartoon theme and pre-school workbook's graphics and texts. Beside that, some of the system interface is not user-friendly and complicated to the user. Furthermore, some of the graphics and texts in certain learning tool program are not authentic and not suitable for the student's education.

a. Most of the learning tool based on cartoon theme

In some of the pre-school education, the current English learning tools that are using in the pre-school are based on a cartoon story theme. The learning tool program use animated cartoon graphics and all the graphics are mostly in two dimensional in these learning tools. The texts are not use widely in these learning tools. This learning tool just use sound in the program to lead the user where suppose to go. Therefore, it is sometimes make the user so confuse and do not know what to do next. For example, *Little Readers Series* is one of the learning tool programs that are using the animated cartoon as the program's theme.

Using pre-school workbook's graphics and texts

Besides that, some other learning tools are using the graphics and text in the preschool's workbook. The graphics of these programs are the extraction of the picture in the pre-school's workbook. Then, some animation and sound are combined to that graphic and text and compile it as an English learning tool program. This kind of the learning tools is much more simple and easy to use since the contents of those programs have been learned in the pre-school already. For example, ABC 4 Kids Workshop is one of the learning tool programs that are using the graphics and texts in the pre-school's workbook.



c. Complicated to the user

Furthermore, there is also having some current English learning tools that are complicated to the user. Some of the graphics that used in the programs have not seen before by the children even some of the adults have not seen the graphics before. Therefore, these kinds of learning tool programs are not effective and efficient. The readability and the reliability of the programs are also affected.

d. No existing Authentic learning tool

There are so far do not have an English learning tool program that is developing based on authentic model. All the existing English learning tool programs in the market now are not using authentic model to build it. Therefore, those programs might not be useful in the rural areas since the graphics that are use in the learning tool programs are not authentic and have not seen by the students and even the teachers in the rural areas. Jump Start Kindergarten, Jump Start Pre-school and Little Readers Series are some of the learning tool programs that are not an authentic learning tool programs.

e. Not suitable for the pre-school students

Furthermore, there also have some English learning tools are just based on the alphabet and number learning only. These programs do not have so many graphics and the graphics is so simple and two dimensional. For this kind of program, texts are widely used. Audio sound was added to the texts in order to make the texts easier to read, learn and interesting. For example, ABC 4 Kids Workshop is one of the learning tool programs that are using alphabet and number learning only.

2.3 Comparison of Reviewed System

In this section, a set of ten websites are being compared and reviewed in different fields. The comparison is on the programming languages that are being used on the websites, the system features and also on the system interface itself.

2.3.1 Comparison of the Software Used

Among all the learning tool programs that are being reviewed, Adobe Photoshop and Macromedia Flash is the most common and the most multimedia program that are being used in building the learning tool programs. This is because Adobe Photoshop



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