

**BORANG PENGESAHAN STATUS TESIS\***

JUDUL: MOBILE ENGLISH GUIDE OF COMMON ERRORS AND EXPRESSIONS  
FOR SECONDARY SCHOOLS

SESI PENGAJIAN: 2 – 2007/2008

Saya SITI ROZAEMMAH BT ROHANI

mengaku membenarkan tesis (PSM) ini disimpan di Perpustakaan Fakulti Teknologi  
Maklumat dan Komunikasi dengan syarat-syarat kegunaan seperti berikut:

1. Tesis dan projek adalah hakmilik UNIVERSITI TEKNIKAL MALAYSIA,  
MELAKA.
2. Perpustakaan fakulti Teknologi Maklumat dan komunikasi dibenarkan  
membuat salinan untuk tujuan pengajian sahaja.
3. Perpustakaan Fakulti Teknologi Maklumat dan Komunikasi dibenarkan untuk  
membuat salinan tesis ini sebagai bahan pertukaran antara institusi pengajian  
tinggi.
4. \*\*Sila tandakan (/)

\_\_\_\_\_

SULIT

(Mengandungi maklumat  
yang berdarjah keselamatan  
atau kepentingan Malaysia  
seperti yang termaktub di  
dalam AKTA RAHSIA  
RASMI 1972)

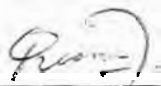
\_\_\_\_\_

TERHAD

(Mengandungi maklumat  
terhad yang telah di tentukan  
oleh organisasi/badan di  
mana penyelidikan  
dijalankan)

\_\_\_\_\_

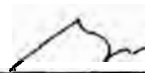
TIDAK TERHAD



Tandatangan Penulis:

Alamat Tetap: Batu 9 ¼ Tangga Batu,  
76400 Melaka.

Tarikh: 23/06/08



Tandatangan Penyelia:  
(Dr. Sazilah bt Salam)

**DR. SAZILAH BT. SALAM**  
Pensyarah  
Fakulti Teknologi Maklumat dan Komunikasi  
Universiti Teknikal Malaysia Melaka

Tarikh: 23/06/08

CATATAN: \*\*Tesis dimaksudkan sebagai Laporan Projek Sarjana Muda (PSM)  
\*\* Jika tesis ini SULIT atau TERHAD, sila lampirkan surat daripada  
pihak berkuasa.

**MOBILE ENGLISH GUIDE OF COMMON ERRORS AND EXPRESSIONS FOR  
SECONDARY SCHOOLS**

**SITI ROZAEMMAH ROHANI**

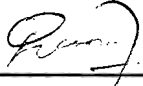
**This report is submitted in partial fulfillment of the requirements for the  
Bachelor of Computer Science (Interactive Media)**


**FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY  
UNIVERSITI TEKNIKAL MALAYSIA MELAKA  
2008**

## DECLARATION

I hereby declare that this project report entitled  
**MOBILE ENGLISH GUIDE OF COMMON ERRORS AND EXPRESSIONS  
FOR SECONDARY SCHOOLS**

is written by me and is my own effort and that no part has been plagiarized  
without citations.

STUDENT :  \_\_\_\_\_ Date: 23/06/08  
SITI ROZAEMMAH BT ROHANI

SUPERVISOR :  \_\_\_\_\_ Date: 23/06/08  
DR. SAZILAH BT SALAM

## **DEDICATION**

Specially dedicated to my beloved parents, siblings and family,

For my supervisor, Dr Sazilah Salam,  
(UTeM)

And lastly to my beloved friends and who have encouraged, guided and inspired me  
throughout my journey in education.

## **ACKNOWLEDGEMENTS**

First and foremost, I would like to take this opportunity to express my highest gratitude to my supervisor Dr. Sazilah Salam who has helped me a lot in sharing her knowledge and experience and giving me useful advises for the project. During the duration of the project, Dr. Sazilah has helped to guide me in order to write a good report and develop the project.

Besides that, I would like to express my deepest appreciation to all the lecturers who has shared their knowledge and skills with me which enables me to fulfill this project.

Last but not least, I would like to thank to my beloved family who have been giving me support and motivation throughout my project. I also like to thank to all my friends who have given me tremendous support duration of the project. Thank you to all of you.

## **ABSTRACT**

This report is produced for developing a mobile courseware for learning English entitled “Mobile English Guide of Common Errors and Expressions for Secondary Schools”. This learning application is delivered through mobile devices. The courseware is applied constructivism learning theory and accelerated learning techniques that consist of highlighting, visualization, concept maps and drill and practice to force learning in a fun, interesting and powerful way. The courseware is consists of four modules. The first module; ‘Common Error Guide’ will guide the user in which the items are categorized according to noun, verb, preposition, adjective, negative sentence and time. The graphics are shown to create an illusion of the sentence or to visualize the sentence. User can recognize and differentiate between each of the words through the faces that express the feelings via ‘Feeling-Expression Words’ module. In ‘Basic Grammar Notes’ module, students will be able to learn basic grammar of English. There are quizzes provided in the last module which comprises common error mistakes, feeling-expression words and basic grammar. The courseware is hoped to help lower form secondary school students to aware about grammatical mistakes and vocabulary as the paper-based technique make them ignore to learn grammar and vocabulary which are important in learning English and cause them to do the same errors.

## ABSTRAK

Laporan ini diterbitkan untuk membina perisian pembelajaran telefon bimbit untuk belajar bahasa Inggeris bertajuk “Mobile English Guide of Common Errors and Expressions for Secondary Schools”. Pembelajaran ini adalah disampaikan melalui peranti bergerak. Perisian pembelajaran ini mengaplikasikan teori pembelajaran “Konstruktivism” serta mempercepatkan pembelajaran yang meliputi teknik ‘highlighting’, visual, peta konsep dan juga latih tubi untuk mewujudkan pembelajaran yang menyeronokkan serta berkesan. Perisian pembelajaran ini mengandungi empat modul. Modul pertama ialah ‘Common Error Guide’ yang membantu pengguna mengkategorikan sesuatu mengikut kata nama, kata kerja, kata ganti nama, kata sifat, ayat pasif, dan juga masa. Grafik pula adalah bertujuan untuk menghasilkan pembayang yang lebih jelas kepada ayat yang digunakan. Pengguna akan mampu mengenal dan membezakan dengan menggunakan perkataan yang sesuai untuk reaksi wajah menerusi modul ‘Feeling-Expressions Words’. Melalui ‘Basic Grammar Notes’ pula, pengguna mampu mengenal dan belajar asas tatabahasa bahasa Inggeris. Terdapat beberapa kuiz disediakan di dalam modul terakhir iaitu ‘Basic Grammar’ dan ‘Feeling-Expression Words’. Adalah diharapkan bahawa perisian ini dapat membantu pelajar menengah rendah mengenai kesilapan penggunaan dalam bahasa Inggeris, sama ada dalam tatabahasa ataupun perkataan yang digunakan serta dapat membantu mereka daripada mengulangi kesilapan yang sama.

## TABLE OF CONTENTS

CHAPTER	SUBJECT	PAGE
	DECLARATION	i
	DEDICATION	ii
	ACKNOWLEDGEMENTS	iii
	ABSTRACT	iv
	ABSTRAK	v
	TABLE OF CONTENTS	vi
	LIST OF TABLES	xii
	LIST OF FIGURES	xiv
	LIST OF ABBREVIATIONS	xviii
<b>CHAPTER I</b>	<b>INTRODUCTION</b>	
	1.1 Project Background	1
	1.2 Problem Statements	2
	1.3 Objective	4
	1.4 Scope	5
	1.5 Project Significance	6
	1.6 Conclusion	7
<b>CHAPTER II</b>	<b>LITERATURE REVIEW AND PROJECT METHODOLOGY</b>	
	2.1 Introduction	12
	2.2 Domain	13



2.2.1	Common Errors and Feeling Expressions	13
2.2.2	e-Learning	14
2.2.3	The existence of m-Learning	14
2.2.3.1	Usability concept and design principles of m-learning	15
2.2.3.2	Benefits of m-Learning	16
2.2.3.3	Limitations of m-Learning	16
2.2.3.4	Relationship between e-Learning and m-Learning	17
2.2.4	Learning Theory	18
2.3	Existing System	19
2.3.1	Techniques Applied in Existing System	20
2.3.1.1	Multimedia elements for secondary schools	20
2.3.1.2	Accelerated learning techniques	23
2.3.1.3	Highlighting techniques	25
2.3.1.4	Visualization	26
2.3.1.5	Concept Maps	28
2.3.1.6	Evaluation Techniques (Drill and Practice)	29
2.3.2	Comparison of Existing System	31
2.3.2.1	SEEDS (School wide English Enrichment & Development Strategies)	33

	Program	
	2.3.2.2 The Oxford Dictionary of Current English for Malaysian Students Special Edition with a Common Errors Guide and a new Word Power Supplement	35
	2.3.2.3 Video CD of My First English Grammar Volume 2	36
	2.3.2.4 CHAMPS Online	37
	2.3.2.5 MASTER IT CD ROM	37
2.4	Project Methodology	38
	2.4.1 Instructional Design (Learning Applications)	43
	2.4.1.1 Educational Goals	43
	2.4.1.2 Course Map / Flowchart	44
	2.4.1.3 Detailed Course Content	45
	2.4.1.4 Test Question	46
	2.4.1.5 Metaphor	49
2.5	Project Requirements	51
	2.5.1 Software Requirements	51
	2.5.1.1 Development's tools	51
	2.5.1.2 Operating system	51
	2.5.2 Hardware Requirements	51
	2.5.3 Other Requirement	52
2.6	Conclusion	52

## **CHAPTER III ANALYSIS**

3.1	Current Scenario Analysis	53
-----	---------------------------	----

3.2	Requirement Analysis	55
3.2.1	Project Requirement (Learning Content)	56
3.2.1.1	Need Analysis	56
3.2.1.2	User Analysis	57
3.2.1.3	Content Analysis	58
3.2.1.4	Technical Analysis	68
3.2.1.5	Resource Analysis	71
3.2.1.6	Requirement Gathering	72
3.2.2	Software Requirement	78
3.2.2.1	Development's tools	78
3.2.2.2	Operating system	80
3.2.3	Hardware Requirement	80
3.2.4	Other Requirements	81
3.3	Project Schedule and Milestone	81
3.4	Conclusion	82

## **CHAPTER IV DESIGN**

4.1	Introduction	83
4.2	System Architecture	84
4.3	Preliminary Design	86
4.3.1	Learning Storyboard	86
4.4	User Interface Design	92
4.4.1	Navigation Design	92
4.4.2	Input Design	93
4.4.2.1	Input text field	93
4.4.2.2	Multiple choices	94
4.4.2.3	Radio button	94
4.4.3	Output Design	95
4.4.4	Media Creation and Integration	96

4.5 Conclusion	101
----------------	-----

## **CHAPTER V IMPLEMENTATION**

5.1 Introduction	102
5.2 Media Creation	102
5.2.1 Production of Texts	103
5.2.2 Production of Graphic	106
5.2.3 Production of Audio	109
5.2.4 Production of animation	110
5.3 Media Integration	113
5.3.1 Multimedia Components Integration	114
5.4 Product Configuration Management	127
5.4.1 Configuration Environment Setup	127
5.4.2 Version Control Procedure	128
5.5 Implementation Status	130
5.6 Conclusion	131

## **CHAPTER VI TESTING**

6.1 Introduction	132
6.2 Test Plan	133
6.2.1 Test User	133
6.2.2 Test Environment	134
6.2.3 Test Schedule	136
6.2.3 Test Strategy	136
6.3 Test Implementation	137
6.3.1 Test Description	137
6.3.2 Test Result and Analysis	147
6.3.3 Analysis Testing	149
6.4 Conclusion	154

## **CHAPTER VII PROJECT CONCLUSION**

7.1	Observation on Weaknesses and Strengths	155
	7.1.1 Project Weaknesses	155
	7.1.2 Project Strengths	156
7.2	Propositions for Improvements	157
7.3	Contribution	157
7.4	Conclusion	158

<b>REFERENCES</b>	159
-------------------	-----

<b>BIBLIOGRAPHY</b>	161
---------------------	-----

## **APPENDICES**

Appendix A – Gantt Chart
Appendix B - Storyboard
Appendix C - Questionnaire
Appendix D – Example of Testing Form

## LIST OF TABLES

<b>TABLE</b>	<b>TITLE</b>	<b>PAGE</b>
1.4 (a)	<b>Description of each module</b>	6
1.4 (b)	<b>Pros and Cons using Flash Lite Version</b>	8
2.3 (a)	<b>Comparison between Typical Parameters of Mobile Devices Used For M-Learning</b>	31
2.3 (b)	<b>Current Problems and potential technological solutions using portable devices for m-Learning</b>	32
3.2 (a)	<b>Sub Module 1 (Preposition)</b>	58
3.2 (b)	<b>Sub Module 1 (Noun)</b>	58
3.2 (c)	<b>Sub Module 1 (Verb)</b>	59
3.2 (d)	<b>Sub Module 1 (Adjective)</b>	59
3.2 (e)	<b>Sub Module 1 (Negative Sentence)</b>	60
3.2 (f)	<b>Sub Module 1 (Time)</b>	60
3.2 (g)	<b>Sub Module 2</b>	61
3.2 (h)	<b>Minimum specification for Windows XP platform</b>	68
3.2 (i)	<b>Nokia mobile phones that support Flash Lite</b>	69
3.2 (j)	<b>Mobile Phone Specification for Testing Purposes</b>	70
3.2 (k)	<b>Techniques and sources used</b>	72
3.2 (l)	<b>Student's Gender</b>	73
3.2 (m)	<b>Type of medium that students use to learn English</b>	75
5.2 (a)	<b>Production of Text</b>	103
5.2 (b)	<b>Example of graphic used</b>	107
5.2 (c)	<b>Example of audio used</b>	110
5.4 (a)	<b>Configuration environment setup</b>	128

<b>5.4 (b)</b>	<b>Version Control Procedure</b>	<b>129</b>
<b>5.5 (a)</b>	<b>Overall duration Schedule</b>	<b>130</b>
<b>5.5 (b)</b>	<b>Implementation Status</b>	<b>130</b>
<b>6.2 (a)</b>	<b>Minimum hardware requirement for testing</b>	<b>135</b>
<b>6.2 (b)</b>	<b>Schedule of testing activity</b>	<b>136</b>
<b>6.3 (a)</b>	<b>Forms for Functionality Testing by Multimedia Expertise</b>	<b>138</b>
<b>6.3 (b)</b>	<b>Usability Testing Form for English Teachers</b>	<b>144</b>
<b>6.3 (c)</b>	<b>User Acceptance Testing Form for Students</b>	<b>145</b>
<b>6.3 (d)</b>	<b>Results of Functionality Test</b>	<b>147</b>
<b>6.3 (e)</b>	<b>Results of Usability Test</b>	<b>148</b>
<b>6.3 (f)</b>	<b>Results of User Acceptance Test</b>	<b>148</b>
<b>6.3 (g)</b>	<b>Results of Understanding Test</b>	<b>149</b>

## LIST OF FIGURES

DIAGRAM	TITLE	PAGE
1.2 (a)	Students' Difficulties with English	3
1.2 (b)	Solutions to difficulties in English	4
1.4 (a)	Type of hand phone that is currently used	9
1.5 (a)	Course content that students wish to use in mobile phone	10
2.2 (a)	Relationship of m-learning and e-learning	17
2.3 (a)	The Dale's Cone of Experience	21
2.3 (b)	Interface of My First English Grammar CDs (Part 1)	22
2.3 (c)	Interface of MASTER IT CD ROM (Part 1)	22
2.3 (d)	Interface of My First English Grammar CDs (Part 2)	23
2.3 (e)	Interface of MASTER IT CD ROM (Part 2)	25
2.3 (f)	Interface of SEEDS Program (Part 1)	26
2.3 (g)	Interface of SEEDS Program (Part 2)	26
2.3 (h)	Interface of CHAMPS Online (Part 1)	27
2.3 (i)	Interface of CHAMPS Online (Part 2)	28
2.3 (j)	Interface of CHAMPS Online (Quiz)	29
2.3 (k)	Interface of Simpulan Bahasa (Part 1)	30
2.3 (l)	Interface of Simpulan Bahasa (analysis of answers)	30
2.3 (m)	SEEDS Program	33
2.3 (n)	The Oxford Dictionary of Current English for Malaysian Students	35
2.3 (o)	Menu of My First English Grammar CDs	36
2.3 (p)	Interface of MASTER IT CD ROM (Part 3)	37



<b>2.4 (a)</b>	<b>ADDIE Model</b>	<b>39</b>
<b>2.4 (b)</b>	<b>Course Map of Mobile Learning English</b>	<b>44</b>
<b>2.4 (c)</b>	<b>Character for Mobile English project</b>	<b>50</b>
<b>2.4 (d)</b>	<b>Character and background for Mobile English project</b>	<b>50</b>
<b>3.1 (a)</b>	<b>A general classification of m-learning systems</b>	<b>54</b>
<b>3.1 (b)</b>	<b>Model for m-learning adoption</b>	<b>55</b>
<b>3.2 (a)</b>	<b>Sub Module 3 (Noun)</b>	<b>62</b>
<b>3.2 (b)</b>	<b>Sub Module 3 (Pronoun)</b>	<b>63</b>
<b>3.2 (c)</b>	<b>Sub Module 3 (Adjective)</b>	<b>64</b>
<b>3.2 (d)</b>	<b>Sub Module 3 (Verb)</b>	<b>65</b>
<b>3.2 (e)</b>	<b>Sub Module 3 (Adverb)</b>	<b>66</b>
<b>3.2 (f)</b>	<b>Sub Module 3 (Preposition)</b>	<b>67</b>
<b>3.2 (g)</b>	<b>Sub Module 3 (Conjunction)</b>	<b>67</b>
<b>3.2(h):</b>	<b>Grade Scored for English in the examination</b>	<b>73</b>
<b>3.2 (i):</b>	<b>Level of English among Secondary School Students</b>	<b>74</b>
<b>3.2 (j)</b>	<b>Number of students facing problems in English</b>	<b>75</b>
<b>3.2 (k)</b>	<b>Students/Parents' Hand phone Model</b>	<b>76</b>
<b>3.2 (l)</b>	<b>Does the student ever heard about m-learning</b>	<b>77</b>
<b>3.2 (m)</b>	<b>Percentage of level of usage of the application</b>	<b>78</b>
<b>4.2 (a)</b>	<b>General M-Learning Architecture</b>	<b>85</b>
<b>4.3 (a)</b>	<b>Story Board of Main Menu</b>	<b>86</b>
<b>4.3 (b)</b>	<b>Story Board of Module 1</b>	<b>87</b>
<b>4.3 (c)</b>	<b>Story Board of Module 2</b>	<b>88</b>
<b>4.3 (d)</b>	<b>Story Board of Module 3</b>	<b>89</b>
<b>4.3 (e)</b>	<b>Story Board of Module 4</b>	<b>91</b>
<b>4.4 (a)</b>	<b>Navigation Design for Mobile English</b>	<b>92</b>
<b>4.4 (b)</b>	<b>Interface for input text field</b>	<b>93</b>

<b>4.4 (c)</b>	<b>Interface for multiple choices</b>	<b>94</b>
<b>4.4 (d)</b>	<b>Interface for radio button</b>	<b>94</b>
<b>4.4 (e)</b>	<b>Example of wrong answer</b>	<b>95</b>
<b>4.4 (f)</b>	<b>Example of correct answer</b>	<b>95</b>
<b>4.4 (g)</b>	<b>Example of Result Display</b>	<b>96</b>
<b>4.4 (h)</b>	<b>The development of project using ‘scene by scene’ technique</b>	<b>97</b>
<b>4.4 (i)</b>	<b>Interface of zoom in</b>	<b>98</b>
<b>4.4 (j)</b>	<b>Interface of zoom out</b>	<b>98</b>
<b>4.4 (k)</b>	<b>Key navigation using hidden key button</b>	<b>99</b>
<b>4.4 (l)</b>	<b>Frame using labels for quiz module</b>	<b>100</b>
<b>4.4 (m)</b>	<b>Example of frame using labels for quiz module</b>	<b>100</b>
<b>5.2 (a)</b>	<b>Example of text used in the project</b>	<b>105</b>
<b>5.2 (b)</b>	<b>Example of dynamic text used in the project</b>	<b>105</b>
<b>5.2 (c)</b>	<b>Graphics Integration Flow</b>	<b>107</b>
<b>5.2 (d)</b>	<b>Example of vector graphic</b>	<b>109</b>
<b>5.2 (e)</b>	<b>Example of mask layer</b>	<b>111</b>
<b>5.2 (f)</b>	<b>To soften the edges of text</b>	<b>111</b>
<b>5.2 (g)</b>	<b>The implementation of sliding pages</b>	<b>112</b>
<b>5.2 (h)</b>	<b>Action script for sliding window</b>	<b>112</b>
<b>5.3 (a)</b>	<b>Media Integration Flow</b>	<b>114</b>
<b>5.3 (b)</b>	<b>Example of the Action Script for Adding Listener</b>	<b>115</b>
<b>5.3 (c)</b>	<b>Action Script to Load Movie</b>	<b>115</b>
<b>5.3 (d)</b>	<b>Action Script in Adding and Removing the Key Listener</b>	<b>116</b>
<b>5.3 (e)</b>	<b>Action Script for Setting Key ‘0’ To Zoom In and Zoom Out</b>	<b>116</b>
<b>5.3 (f)</b>	<b>Action Script for scrolling using soft key</b>	<b>116</b>
<b>5.3 (g)</b>	<b>Action Script for random questions and</b>	<b>122</b>

	<b>calculate the total marks</b>	
<b>5.3 (h)</b>	<b>Action Script for display answer and to disable other button after user has chosen the answer</b>	<b>124</b>
<b>5.3 (i)</b>	<b>Publish Settings</b>	<b>126</b>
<b>5.3 (j)</b>	<b>Flash Lite Version 2.0</b>	<b>127</b>
<b>6.3 (a)</b>	<b>Result of Functionality Testing</b>	<b>150</b>
<b>6.3 (b)</b>	<b>Result of Usability Testing</b>	<b>151</b>
<b>6.3 (c)</b>	<b>Result of User Acceptance Testing</b>	<b>153</b>
<b>6.3 (d)</b>	<b>Result of Understanding Testing</b>	<b>154</b>

## LIST OF ABBREVIATION

2D	--	two Dimension
CS3	--	Creative Suite 3
SWF	--	Shockwave Flash
JPEG	--	Joint Photographic Experts Group
MP3	--	MPEG-1 Audio Layer 3
HTTP/HTTPS	--	Hypertext Protocol/Secure
SMS	--	Short Messaging System
MMS	--	Multimedia-Messaging System
XML	--	Extensible Markup Language
v2	--	Version 2.0
FLV	--	Flash Video
API	--	Application Programming Interface
SMK	--	Sekolah Menengah Kebangsaan
E-Learning	--	electronic learning
M-Learning	--	Mobile Learning
PC	--	Personal Computer
PDA	--	Personal Digital Assistant
CD	--	Compact Disc
UTeM	--	Universiti Teknikal Malaysia Melaka
MB	--	Mega Bytes
IrDA	--	Infrared Data Association
Wi-Fi	--	Wireless Fidelity
WAP	--	Wireless Transfer Protocol
GPRS	--	General Packet Radio Service
GPS	--	Global Positioning System

TV	--	Television
HDD	--	Hard Disk Drive
GB	--	Giga Byte
MS	--	Microsoft
SDK	--	Software Development Kit
OS	--	Operating System
PSD	--	Photoshop Document
DVD	--	Digital Versatile Disc
RGB	--	Red Green Blue
CMYK	--	Cyan Magenta Yellow Key (Black)
PNG	--	Portable Network Graphic

# CHAPTER I

## INTRODUCTION

### 1.1 Project Background

Media globalization has been made possible by the ongoing changes and developments in information and communications technology. Mobile phones as medium have become a new cultural phenomenon in the modern society. Mobile phones are no longer just phones. The content of the application that is been developed is same as some of the content of dictionary for secondary school students added with 2D animated images. However, it is developed as a mobile application for Malaysian secondary school students which are more practical and interactive compared to using the thick dictionary.

From Wikipedia (2007), one definition of mobile learning is: *Learning that happens across locations, or that takes advantage of learning opportunities offered by portable technologies*. The term covers: learning with portable technologies, where the focus is on the technology (which could be in a fixed location, such as a classroom); learning across contexts, where the focus is on the mobility of the learner, interacting with portable or fixed technology; and learning in a mobile society, with a focus on how society and its institutions can accommodate and support the learning of an increasingly mobile population.

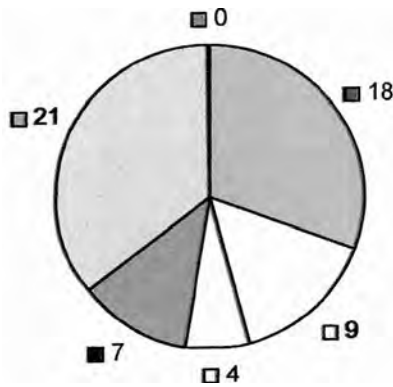
Thus, the user can learn English on their mobile, for example, while waiting for the bus, or when hang out with friends, rather than putting aside time or leaving

work to bring and searching manually in dictionary. Because they can be easily carried out, mobile learning resources can be even more convenient than manual dictionary. Mobile devices enable anytime and anywhere access to resources designed for mobile learning use while manual dictionary are often the worst way to carry out.

Students always have difficulty to remember and usually do several common grammar mistakes; therefore, this project do a research based on accelerated learning techniques and technology including multimedia, mobile computing. According to Bobbi De Porter (2001), accelerated learning techniques are multifaceted, encompassing a wide variety of creative methods and techniques based on current theories and research of how people learn best. Speech recognition technology has the potential to enhance the English learning process in an attractive ways.

## **1.2 Problem Statement(s)**

When asked about the difficulties in English, the students said that most of their problems stemmed from their lack of knowledge of grammar besides the problem of being shy and scared of speaking in English. They also mentioned vocabulary and meaning, as their second major obstacle, and considered lack of comprehension only as a third problem. The student's difficulties with English can be seen through Figure 1.2 (a) that resulted from a survey. The survey will be explained in detail in chapter 3.



**Students' Difficulties with English**

Key:

- A. Lack of comprehension of grammar rules
- B. Lack of knowledge of the vocabulary
- C. Lack of comprehension of the content of the texts dealt with in class
- D. Pronunciation
- E. Being shy and scared of speaking in English in class and making mistake

**Figure 1.2 (a): Students' Difficulties with English**

According to Figure 1.2 (b), students usually look up words in the textbook or in a dictionary to solve their problems if they have any difficulty in understanding or finding out words in English. The other way is they will ask someone for help (the teacher, classmates, or relatives).