

## TABLE OF CONTENTS

	<b>PAGE</b>
Abstract	ii
Abstrak	iv
Acknowledgements	vi
Table of contents	vii
List of tables	x
List of charts	xi
<b>CHAPTER ONE: INTRODUCTION</b>	<b>1 – 13</b>
1.0 Background to the study	1
1.1 Computers in the Malaysian education system	2
1.1.1 Computer Assisted Language Learning	3
1.1.2 CALL in ELS	5
1.2 Objectives of the study	6
1.3 Research Questions	7
1.4 Statement of the problem	8
1.5 Research Methodology	9
1.6 Limitations of the study	10
1.7 Definition and terminology	11
<b>CHAPTER TWO: LITERATURE REVIEW</b>	<b>14 – 52</b>
2.0 Introduction	14
2.1 The early years of CALL	15
2.2 Pioneers in CAI/CALL	15
2.2.1 PLATO	16
2.2.2 TICCAT	17
2.2.3 WICAT	18
2.3 Learning theories and CALL	19
2.3.1 Behavioral theories in CALL	19
2.3.2 Cognitive theories in CALL	24
2.3.3 Communicative CALL	26
2.4 Theoretical Framework for CALL	28
2.5 Applications of CALL	29
2.5.1 Drill and Practice	29
2.5.2 Tutorials	31
2.5.3 Simulation	33
2.5.4 Games	34
2.5.4.1 Extrinsically instructional	34
2.5.4.2 Intrinsically instructional	35
2.6 CALL and learning environment	36
2.7 Review of CALL	40
2.7.1 Learner Motivation in CALL	40
2.7.2 Learners' attitude towards CALL	43

2.7.3 Implications of CALL	45
2.8 Conclusion	51
<b>CHAPTER THREE: RESEARCH METHODOLOGY</b>	<b>53 – 69</b>
3.0 Introduction	53
3.1 Research Questions	53
3.2 Research Premise	54
3.3 The software-NETPLUS	54
3.4 Subjects	57
3.5 Instruments	61
3.5.1 Questionnaires	61
3.5.2 Interviews	63
3.5.3 Language Tests	65
3.6 Research Process	66
3.7 Data collection	67
3.8 Data Analysis	68
3.9 Conclusion	69
<b>CHAPTER FOUR: RESEARCH FINDINGS AND DATA ANALYSIS</b>	<b>70 – 123</b>
4.0 Introduction	70
4.1 Data from the tests	72
4.2 Detailed Analysis of tests	76
4.3 Results of questionnaires	95
4.3.1 Questionnaire One (Questions 1-4)	96
4.3.2 Questionnaire One (Questions 5-10)	98
4.3.3 Questionnaire Two	105
4.4 Analysis of interviews	111
4.4.1 Teacher interview	112
4.4.2 Student interview	116
4.5 Conclusion	122
<b>CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS</b>	<b>124 – 133</b>
5.0 Introduction	124
5.1 Summary of the study	124
5.2 Conclusions	126
5.2.1 Effectiveness of CALL	127
5.2.2 Effectiveness of the CALL approach as compared to the traditional approach	128
5.2.3 Motivation in CALL	129
5.2.4 Attitude shown by learners	130
5.3 Recommendations and suggestions	131
5.4 Conclusion	133

**BIBLIOGRAPHY****134 – 141****APPENDICES****142 - 175**

Appendix 1	142
Appendix 2	160
Appendix 3	162
Appendix 4	164
Appendix 5	165
Appendix 6	174

## LIST OF TABLES

		<b>PAGE</b>
Table 3.1	Students selected randomly for interview	64
Table 4.1	Scores obtained by students in class 101A during CALL lessons.	72
Table 4.2	Scores obtained by students in class 101A during non CALL lessons.	73
Table 4.3	Scores obtained by students in class 101B during CALL lessons.	74
Table 4.4	Scores obtained by students in class 101B during non CALL lessons.	75
Table 4.5	Particulars of students in class 101A.	96
Table 4.6	Particulars of students in class 101B.	97
Table 4.7	Results of Questionnaire Two (S01-S10)	106
Table 4.8	Results of Questionnaire Two (S11-S20)	109

## LIST OF CHARTS

		<b>PAGE</b>
Chart 2.1	Typical Drill and practice program	31
Chart 2.2	Process of tutoring by computer	32
Chart 3.1	Composition of male and female students in Class A	58
Chart 3.2	Composition of male and female students in Class B	58
Chart 3.3	Age groups of students in Class A	59
Chart 3.4	Age groups of students in Class B	59
Chart 3.5	Nationalities of students in Class B	60
Chart 3.6	Nationalities of students in Class B	60
Chart 4.1	Analysis of Test 1	76
Chart 4.2	Analysis of Test 2	77
Chart 4.3	Analysis of Test 3	78
Chart 4.4	Analysis of Test 4	79
Chart 4.5	Analysis of Test 5	80
Chart 4.6	Analysis of Test 6	81
Chart 4.7	Analysis of Test 7	82
Chart 4.8	Analysis of Test 8	83
Chart 4.9	Analysis of Test 9	84
Chart 4.10	Analysis of Test 10	85
Chart 4.11	Analysis of Test 11	86
Chart 4.12	Analysis of Test 12	87
Chart 4.13	Analysis of Test 13	88
Chart 4.14	Analysis of Test 14	89
Chart 4.15	Average Scores of Class 101A	90

Chart 4.16	Average Scores of Class 101B	92
Chart 4.17	Average Performance of the same lessons between Class 101B (CALL) and 101 A (Non CALL)	93
Chart 4.18	Average Performance of the same lessons between Class 101A (CALL) and 101 B (Non CALL)	94
Chart 4.19	Analysis of Question 5	98
Chart 4.20	Analysis of Question 6	99
Chart 4.21	Analysis of Question 7	100
Chart 4.22	Analysis of Question 8	102
Chart 4.23	Analysis of Question 9	103
Chart 4.24	Analysis of Question 10	104
Chart 4.25	Analysis of Questionnaire Two (S01-S10)	107
Chart 4.26	Analysis of Questionnaire Two (S11-S20)	110