

## TABLE OF CONTENTS

	Page
<b>CHAPTER 1 : INTRODUCTION</b>	
1.1 Background of the Study	1
1.2 Rationale of the Study	2
1.3 Research Questions	4
1.4 Significance of the Study	4
1.5 Limitations of the Study	6
<b>CHAPTER 2 : LITERATURE REVIEW</b>	
2.1 Brief history of CAI	7
2.2 Past Researches on CAI	8
2.3 Development of CAI in Malaysia	10
2.3.1 Computer Projects in Schools	10
2.3.2 IT Training for Teachers	12
2.3.3 The SMART School Project	13
2.4 Past Researches on Achievement	15
2.5 Gender Differences	17
2.6 CAI Research on Perception	17
2.7 Summary	18

## CHAPTER 3 : METHODOLOGY

3.1	Introduction	19
3.2	The Subjects	19
3.2.1	Students' Prior Knowledge Achievement	20
3.2.2	Gender	21
3.3	The Teaching Sessions	21
3.4	Instrumentation	22
3.4.1	The Teaching Software	23
3.4.2	The Achievement Test	25
3.4.3	The Questionnaire on Students' Perception of CAI	26
3.5	Calculation of Mean Score for Achievement	26
3.6	Assessment of Students' Perception of CAI	27
3.7	Pilot Study	27
3.8	Data Collection	28

## CHAPTER 4 : RESULTS, INTERPRETATIONS AND DISCUSSIONS

4.1	Introduction	29
4.2	Descriptive Statistics	29
4.2.1	The <i>t</i> -test Comparisons of Mean Achievement Scores	30
4.2.2	The <i>t</i> -test Comparisons of Achievement Scores for Boys and Girls	32

4.2.3 The <i>t</i> -test Comparisons of Students' Perceptions of CAI	33
--	----

## CHAPTER 5 : SUMMARY

5.1 Introduction	37
5.2 Discussions	38
5.2.1 CAI Achievement	38
5.2.2 Influence of Gender on Achievement	38
5.2.3 Changes in Students' Perception Towards CAI	39
5.4 Limitations of the Study	40
5.5 Conclusions	41
5.6 Implications	42
5.7 Recommendations for Further Research	42

REFERENCES	44
------------	----

APPENDIX A : Sampel of Pre-Treatment Test	48
---	----

APPENDIX B : Sampel of Post-Treatment Test	49
--	----

APPENDIX C : Sampel Questionnaire	50
-----------------------------------	----

## LIST OF TABLES

	Page
Table 3.1      CAI Group : Distribution of the Subjects According to Gender	21
Table 3.2      Non-CAI Group : Distribution of the Subjects According to Gender	21
Table 3.4      Level of Positive Perception Towards CAI	27
Table 4.1      The <i>t</i> -test Comparisons of Mean Achievement Scores for CAI and Non-CAI Group	30
Table 4.2      The <i>t</i> -test Comparisons of Achievement Scores for Boys and Girls	32
Table 4.3      Frequency Distribution and Percentages in Perception Score in Using Computers of the CAI Group	34
Table 4.4      The <i>t</i> -test Comparisons of Students' Perceptions of CAI before and after the CAI treatment	34
Table 4.5      The <i>t</i> -test Comparisons of Students' Perception of CAI for Boys and Girls	35

## LIST OF FIGURES

	Page
Figure 2.1 A human-computer dialogue (Barker, 1985)	9
Figure 3.3 The main Flow-chart of the IMI program	24