LIST OF CONTENT

	Page
Ratification Sheet	i
Biography	ii
Abstract	iii
Preface	iv
List of Content	vi
List of Figure	ix
List of Table	X
List of Appendix	xi
CHAPTER I INTRODUCTION	
1.1 Research Background	1
1.2 Problem Identification	4
1.3 Limitation Problem	4
1.4 Problems Formulation	4
1.5 Research Objectives	4
1.6 Research Benefits	5
CHAPTER II LITERATURE REVIEW	
2.1 Definition of Learning	6
2.2 Definition of Learning Model	7
2.3 Learning Purposes	8
2.4 Learning Activities	8
2.5 Learning Outcomes	9
2.6 Definition of Science	11
2.6.1 Importance of Science Teaching	11
2.6.2 Approaches to Science Teaching	12
2.6.3 Process of Science	13
2.7 Conventional Learning Model	14
2.7.1 Steps of Conventional Learning	14

2.7.2 The Advantages and Disadvantages	15
2.8 Discovery Learning Model	16
2.8.1 Aims of Discovery Learning	16
2.8.2 Syntax of Discovery Learning	17
2.8.3 The Advantages and Disadvantages	19
2.9 Teaching Material	20
Temperature and Heat	20
2.9.1 Thermometer and Temperature Measurement	20
2.9.2 Body Expansion	23
2.9.3 Heat	28
2.9.4 Heat Transfer	32
2.10 Journal about Discovery Learning Model	35
2.11 Conceptual Framework	37
2.12 Research Hypothesis	38
CHAPTER III RESEARCH METHOD	
3.1 Research Location and Research Time	39
3.2 Population and Sample of the Research	39
3.2.1 Population of Research	39
3.3.2 Sample of Research	39
3.3 Research Variable	39
3.4 Type and Research Design	39
3.4.1 Type of Research	39
3.4.2 Design of Research	39
3.5 Research Instrument	40
3.5.1 Validity Test	41
3.6 Research Procedure	41
3.7 Observation	44
3.8 Data Analysis Techniques	47
3.8.1 Determine Average Value	48
3.8.2 Determine The Standard Deviation	48

3.8.3 Normality Test	48
3.8.4 Homogeneity Test	49
3.8.5 Hypothesis Test	49
CHAPTER IV RESEARCH RESULT AND DISCUSSION	
4.1 Research Result	53
4.1.1 Pre-test Data of Student in Experiment and Control Class	53
4.1.2 Post-test Data of Students in Experiment and Control Class	54
4.2 Data Analysis	54
4.2.1 Normality Test	54
4.2.2 Homogeneity Test	54
4.2.3 Hypothesis Test	55
4.3 Observation of Student's Learning Activities	56
4.4 Discussion	56
CHAPTER V CONCLUSION AND SUGGESTION	
5.1 Conclusion	62
5.2 Suggestion	62
REFERENCES	63

