TABLE OF CONTENT

Approval Sheet	i
Biography	ii
Abstract	iii
Preface	iv
Table of Content	vi
Figure List	ix
Table List	x
Appendix List	xi
CHAPTER I	
INTRODUCTION	
1.1 Background	1
1.2 Problem Identification	4
1.3 Problem Limitation	4
1.4 Problem Formulation	4
1.5 Research Objectives	5
1.6 Research Benefits	5
CHAPTER II	
LITERATURE REVIEW	
2.1 Theoretical Framework	6
2.1.1 Problem Based Learning Model	6
2.1.1.1 Characteristic of Problem Based Learning	7
2.1.1.2 Purpose of Problem Based Learning	9
2.1.1.3 Stages of Problem Based Learning	10
2.1.1.4 Advantages of Problem Based Learning	12
2.1.1.5 Disadvantages of Problem Based Learning	13
2.1.2 Definition of Learning	13
2.1.3 Learning Theory	14
2.1.3.1 Constructivism	14
2.1.3.2 Piaget and Vygotsky Learning Theory	15
2.1.3.3 Bruner Learning Theory	15
2.1.4 Conventional Learning	16
2.1.5 Learning Outcomes	17
2.1.5.1 Cognitive Aspect	17
2.1.5.2 Affective Aspect	19
2.1.5.3 Psychomotor Aspect	20

2.1.5.4 Problem Solving Skill 21
2.1.6 Learning Matter 22
2.1.6.1 Current 22
2.1.6.2 Potential Difference 22
2.1.6.3 Resistance 23
2.1.6.4 Ohm's Law 23
2.1.6.5 Series Circuit 24
2.1.6.6 Parallel Circuit 25
2.1.6.7 Kirchhoff's Law 26
2.1.6.8 Electric Power 27
2.1.7 Relevant Research 28
2.2 Conceptual Framework 30
2.3 Hypothesis 30

CHAPTER III
RESEARCH METHOD
3.1 Location and Time of Research 31
3.2 Population and Sample Research 31
3.2.1 Population of Research 31
3.2.2 Sample of Research 31
3.3 Research Variable 31
3.3.1 Independent Variable 31
3.3.2 Dependent Variable 31
3.4 Type and Research Design 31
3.4.1 Type of Research 31
3.4.2 Design of Research 32
3.5 Research Procedure 32
3.6 Research Instrument 37
3.6.1 Test Result Learning 35
3.6.2 Validity of Test 35
3.7 Data Analysis Techniques 36
3.7.1 Determine Average Mean 37
3.7.2 Determine the Standard Deviation 37
3.7.3 Normality Test 37
3.7.4 Homogeneity Test 38
3.7.5 Hypothesis Test 39
3.7.6 N-Gain Test 40

CHAPTER IV
RESULT AND DISCUSSION
4.1 Processing and Data Analyze 42
4.2 Data Pretest Student Problem Solving Skill in Experiment Class and Control Class 42
4.3 Pretest Analyze 44
4.3.1 Normality Test Data 44
4.3.2 Homogeneity Test Data 45
4.3.3 Hypothesis Test 45
4.4 Data Posttest Student Problem Solving Skill in Experiment Class and Control Class 46
4.5 Data of Student Problem Solving Skill Experiment Class and Control Class 48
4.6 Problem Solving Skill 52
4.7 Posttest Analyze 52
4.7.1 Normality Test Data 53
4.7.2 Homogeneity Test Data 53
4.7.3 Hypothesis Test 53
4.8 N –gain Test 54
4.9 Discussion 55
4.9.1 Student Problem Solving Skill with Problem Based Learning Model 55
4.9.2 Student Problem Solving Skill with Conventional Learning 56
4.9.3 Comparison Student Problem Solving Skill between Problem Based Learning Model and Conventional Learning 57

CHAPTER V
CONCLUSION AND SUGGESTION
5.1 Conclusion 61
5.2 Suggestion 61

REFFERENCES 63