Table of Contents

	Page
Legalization Sheet	**i**
Biography	**ii**
Abstract	**iii**
Prepace	**iv**
Table of Content	**v**
Figures List	**ix**
Tables List	**x**
Appendix List	**xi**
CHAPTER I INTRODUCTION	**1**
1.1. Background	1
1.2. Problem Identification	6
1.3. Problem Limitation	7
1.4. Problem Formulation	7
1.5. Research Objective	7
1.6. Research Benefits	8
CHAPTER II LITERATURE REVIEW	**9**
2.1. Theoretical Framework	9
2.1.1. Learning Definition	9
2.1.2. Learning Outcomes	9
2.1.3. Learning Model Definition	11

2.1.4. Cooperative Learning Model 12
2.1.4.1. Characteristics of Cooperative Learning 13
2.1.4.2. Goals of Cooperative Learning Model 14
2.1.4.3. Syntax For Cooperative Learning Model 14
2.1.4.4. Theoretical and Empirical Support Cooperative Learning 15
2.1.4.4.1. The Concept of Democratic Classrooms 15
2.1.4.4.2. Intergroup Relations 16
2.1.4.4.3. Experiential Learning 16
2.1.4.5. Advantages And Disadvantages of Cooperative Learning 16
2.1.4.6. Various Cooperative Learning Model 19
2.1.4.7. Cooperative Learning Group Investigation (GI) 21
2.1.5. Conventional Learning 22
2.1.6. Learning Media 23
2.1.6.1. Objectives of Media 24
2.1.6.2. Macromedia Flash 24
2.1.6.3. Function of Media 25
2.2. Literature of Subject Matter 26
2.2.1. Dynamics Electricity 26
2.2.1.1.Electric Current 26
2.2.1.1.1. Measuring the Electric Current 28
2.2.1.1.2. Switch and Fuse 29
2.2.1.2. Potential Difference 30
2.2.1.3. Ohm's Law 32
2.2.1.4. Resistance and Resistancity 34
2.2.1.4.1. Resistor Types 34
2.2.1.4.1.1. Fixed resistor 34
2.2.1.4.1.2. Variable Resistor 35
2.2.1.5. Series Circuit 38
2.2.1.6. Paralel Circuit 39
2.2.1.7. Kirchhoff's First Law 41

2.2.1.8. Kirchhoff's Second Law 42
2.2.1.9. Electrical Power and Energy 44
2.3. Preceding Research 47
2.4. Conceptual Framework 49
2.5. Research Hypothesis 51

CHAPTER III RESEARCH METHOD 52
3.1. Place and Time of Research 52
3.2. Population and Sample of Research 52
3.2.1. Population of Research 52
3.2.2. Sample of Research 52
3.3. Variable of Research 52
3.4. Type and Research Design 53
3.4.1. Type of Research 53
3.4.2. Design of Research 53
3.5. Instrument of Research 54
3.5.1. Cognitive Instrument 54
3.5.2. Content Validity 54
3.5.3. Prediction Validity 55
3.5.4. Reliability of Test 56
3.5.5. Level of Difficulty Test 56
3.5.6. Test Distinguishing Features 57
3.6. Techniques of Collecting Data (Procedure of Research) 57
3.7. Techniques Of Data Analysis 60
3.7.1. Determine Data 60
3.7.2. Determine Deviation Standard 60
3.7.3. Data Conditional Test 61
3.7.3.1. Normality Test 61
3.7.3.2. Homogeneity Test 61
3.7.4. Hypothesis Test 62

CHAPTER IV RESEARCH RESULTS AND DISCUSSION **64**
4.1 Research Result 64
4.1.1. Description of Research Data 64
4.1.1.1. Research Data of Pretest and Posttest 64
4.1.1.1.1. Pretest Data 64
4.1.1.1.2. Posttest Data 66
4.1.2 Testing Analysis of Data 67
4.1.2.1 Normality Test 67
4.1.2.2 Homogeneity Test of Data 67
4.1.3 Hypothesis Test of Research 68
4.2. Discussion 69

CHAPTER V CONCLUSION AND RECOMMENDATION **74**
5.1. Conclusion 74
5.2. Suggestion 74

REFERENCE **75**