TABLE OF CONTENT

Legitimate Sheet *i*
Biography *ii*
Abstract *iii*
Preface *iv*
Table of Content *vi*
List of Figure *ix*
List of Table *x*
List of Appendix *xi*

CHAPTER I INRODUCTION
1.1 Research Background 1
1.2 The Problem Identification 3
1.3 The Problem Limitation 4
1.4 The Problem Formulation 4
1.5 The Objective of Research 5
1.6 The Benefit of Research 5

CHAPTER II LITERATURE REVIEW
2.1 Theoretical Framework 6
2.1.1 Learning Definition 6
2.1.2 Learning Activities 7
2.1.3 Learning Outcomes 7
2.2 Learning Model 9
2.2.1 Problem Based Learning Model 9
2.2.1.1 The understanding and characteristics of PBL 9
2.2.1.2 Theoretical and Empirical Support 11
2.2.1.2.1 Dewey and the Problem-Oriented Classroom 11
2.2.1.2.2 Piaget, Vygotsky 11
2.2.1.3 Syntax of PBL Model 12
2.2.1.4 The Advantages and Disadvantages of PBL 12
2.2.1.5 The Result of Research With The Application of PBL Model 13
2.2.2 Direct Instructional Model 14
2.2.2.1 Theoretical and Empirical Support 14
2.2.2.1.1 Behavioral Theory 14
2.2.2.1.2 Social Cognitive Theory 15
2.2.2.2 Syntax of Direct Instructional Model 15
2.2.2.3 The Advantages and Disadvantages of Direct Instructional 16
2.2.3 Learning Motivation in Science 16
2.2.3.1 Intrinsic and Extrinsic Motivation 17
2.2.3.2 Self Determination 18

2.2.3.3 Self Efficacy 18
2.3 Learning Material 19
2.4 Conceptual Framework 21
2.5 Hypothesis 22

CHAPTER III RESEARCH METHOD
3.1 Location and Time Research 23
3.2 Population and Sample of Research 23
3.2.1 Population of Research 23
3.2.2 Sample of Research 23
3.3 Research Variable 23
3.4 Kind and Design of Research 24
3.5 The Research Procedure 24
3.6 Research Instrument
3.6.1 Instrument of Learning Outcomes 27
3.6.2 Learning Motivation Instrument 27
3.7 Technique of Data Collection 28
3.8 Technique of Data Analysis 28
3.8.1 Normality Test 28
3.8.2 Homogeneity Test 28
3.8.3 Analysis Varians (ANAVA) Two Ways 29
3.8.4 Correlation Test 30
3.9 Hypothesis Testing 31

CHAPTER IV RESEARCH RESULT AND DISCUSSION
4.1 Research result
4.1.1 Pre-test Score of Student in Experiment and Control Class 32
4.1.2 Post-test Score of Student in Experiment and Control Class 33
4.2 Data Analysis 34
4.2.1 Normality Test 34
4.2.2 Homogeneity Test 34
4.2.3 Hypothesis Test 35
4.2.3.1 The first Hypothesis testing 35
4.2.3.2 The second Hypothesis testing 36
4.2.3.3 The third Hypothesis testing 36

CHAPTER V CONCLUSION AND SUGGESTION
5.1 Conclusion 42
5.2 Suggestion 42
REFERENCES 43
APPENDIX 44