

TABLE OF CONTENTS

Legitimate Sheet	i
Biography	ii
Abstract	iii
Preface	iv
Table of Content	vi
List of Figure	viii
List of Table	ix
List of Appendix	x
CHAPTER I INRODUCTION	
1.1 Background	1
1.2 The Problem's Identification	3
1.3 The Problem's Limitation	3
1.4 The Problem's Formulation	3
1.5 The Objective of Research	4
1.6 The Benefit of Research	4
CHAPTER II LITERATURE REVIEW	
2.1 Learning Definition	5
2.2 Learning Model Definition	6
2.3 Learning Purpose	7
2.4 Learning Activities	8
2.5 Learning Achievement	9
2.6 Direct Instructional Learning Model	10
2.6.1 Syntax of Direct Instructional Learning Model	10
2.6.2 The Advantages and Disadvantages	12
2.7 Guided Discovery Learning Model	12
2.7.1 Aims of Guided Discovery Learning Model	13
2.7.2 Syntax of Guided Discovery Learning Model	14
2.7.3 The Advantages and Disadvantages	15
2.8 Conceptual Framework	16
2.9 Teaching Material	16
2.9.1 Comprehension about Wave	16
2.9.1.1 The Basic Wave Equation	17
2.9.1.2 Transversal Wave	18
2.9.1.3 Longitudinal Wave	19
2.9.2 Sinusoidal and Stationer Wave	19
2.9.2.1 Sinusoidal Wave	19
2.9.2.2 Stationer Wave	21
2.9.3 Characteristics of Wave	24
2.9.3.1 Wave Dispersion	24
2.9.3.2 Wave Refraction	24
2.9.3.2.1 Equation of Wave Refraction	26

2.9.3.3 Wave Diffraction	28
2.9.3.4 Wave Interference	29
2.9.3.5 Wave Polarization	29
2.10 Research's Hypothesis	31
CHAPTER III RESEARCH METHOD	
3.1 Location and Time Research	32
3.2 Population and Sample of Research	32
3.2.1 Population of Research	32
3.2.2 Sample of Research	32
3.3 Research Variable	32
3.3.1 Independent Variable	32
3.3.2 Dependent Variable	32
3.4 Type and Design of Research	32
3.4.1 Type of Research	32
3.4.2 Design of Research	32
3.5 Research Instrument	33
3.5.1 Validity Test	34
3.6 Research Procedure	34
3.7 Data Analysis Techniques	37
3.7.1 Determine the Average Value	37
3.7.2 Determine the Standard Deviation	37
3.7.3 Implement Test Normality	37
3.7.4 Determine Homogeneity Test	38
3.7.5 Hypothesis Testing	39
CHAPTER IV RESULT OF RESEARCH AND DISCUSSION	
4.1 Result of Research	42
4.1.1 Students' Achievement in Cognitive Domain	42
4.1.1.1 Pretest Data of Experiment and Control Class	42
4.1.1.2 Posttest Data of Experiment and Control Class	43
4.1.2 Data Analysis Test	44
4.1.2.1 Normality Test	44
4.1.2.2 Homogeneity Test	45
4.1.2.3 Hypothesis Test	45
4.1.3 Students' Learning Achievement in Affective Domain	47
4.1.4 Students' Learning Achievement in Psychomotor Domain	48
4.2 Discussion	50
CHAPTER V CONCLUSION AND SUGGESTION	
5.1 Conclusions	54
5.2 Suggestions	55
REFERENCES	56
APPENDIX	57