

TABLE OF CONTENT

ABSTRAK	v
ABSTRACT	vi
PREFACE	vii
TABLE OF CONTENT	ix
LIST OF FIGURES	xii
LIST OF TABLES	xiii
LIST OF APPENDICES	xv
CHAPTER I INTRODUCTION	1
1.1 The Background of the Study.....	1
1.2 Problem Identification.....	6
1.3 Problem Limitation	6
1.4 Research Problem.....	7
1.5 Purposes of the Study	7
1.6 Significances of the Study.....	8
1.7 Thesis Overview.....	8
CHAPTER II LITERATURE REVIEW.....	11
2.1 Theoretical Description	11
2.1.1 Loose Parts.....	11
2.1.2 Problem Solving.....	20
2.1.3 Critical Thinking.....	23
2.1.4 Creativity.....	26
2.2 Previous Study.....	27
2.3 Conceptual Framework	29
2.4 Research Hypothesis	31
2.4.1 Relation between Loose Parts and Problem-solving.....	31
2.4.2 Relation between Loose Parts and Critical Thinking.....	31

2.4.3	Relation between Loose Parts and Creativity	32
CHAPTER III	RESEARCH METHOD	33
3.1	Research Design	33
3.2	Place, Time, and Subject of the Study	35
3.3	Research Procedure	36
3.4	Population and Sampling	37
3.5	Data Collection Technique	38
3.6	Research Instrument	39
3.6.1	Problem-solving skill	39
3.6.2	Critical Thinking Skill	41
3.6.3	Creativity	43
3.6.4	Validity	45
3.6.5	Reliability	51
3.6.	Data Analysis Technique	53
3.6.1.	Descriptive Statistic	54
3.6.2	Mean Test	57
3.7.	Statistical Hypothesis	59
CHAPTER IV	61	
FINDINGS AND DISCUSSIONS	61	
4.1	Findings	61
4.1.1	Data Description	61
4.1.2	Testing Requirements Analysis	71
4.1.3	Hypothesis Testing	76
4.2	Discussion	83
4.3	Research Limitations	87
CHAPTER V	89	
CONCLUSION, IMPLICATIONS, AsudahND SUGGESTION	89	

5.1	Conclusions	89
5.2	Implication	91
5.3	Suggestions	92
	REFERENCES	93
	APPENDICES	99
	BIOGRAPHY	125



LIST OF FIGURES

	page
Figure 2. 1 Conceptual Framework.....	30
Figure 3. 1 Research Procedure	36
Figure 3. 2 Construct Validity Formula	49
Figure 3. 3 Alpha Cronbach formula	52
Figure 3. 4 Mann Whitney U-Test Formula	58
Figure 4. 1 Exploration Stage	61
Figure 4. 2 Exploration Stage	62
Figure 4. 3 Experimental stage	62
Figure 4. 4 Experimental stage	63
Figure 4. 5 Experimental stage	63
Figure 4. 6 Experimental Stage.....	63
Figure 4. 7 Creative Stage.....	64
Figure 4. 8 Creative Stage.....	64
Figure 4. 9 Creative Stage.....	64
Figure 4. 10 Building Meaning Stage.....	65
Figure 4. 11 Building Meaning Stage	65
Figure 4. 12 Building Meaning Stage	66
Figure 4. 13 Control Group Chart.....	67
Figure 4. 14 Experiment Group Chart	68
Figure 4. 15 Student's Project.....	85

LIST OF TABLES

	page
Table 1. Daily Assessment Summary	3
Table 2. 1 Indicators of problem-solving used in the research.	23
Table 2. 2 Indicators for critical thinking used in the research.	26
Table 2. 3 Indicators for creativity used in the research.	27
Table 3. 1 Scheme of Pretest-Posttest Only Control Group Design	34
Table 3. 2 Steps in learning using loose parts.	37
Table 3. 3 Score Distribution	38
Table 3. 4 Instrument for measuring problem-solving skills.	40
Table 3. 5 Indicators for measuring critical thinking skill.	42
Table 3. 6 Indicators for measuring creativity.	43
Table 3. 7 Instrument Scoring.	48
Table 3. 8 CVI Validity Test.	48
Table 3. 9 Validity of Problem-solving Instrument	49
Table 3. 10 Validity of Critical Thinking Instrument (X2).	50
Table 3. 11 Validity of Creativity Instrument (X3)	50
Table 3. 12 Cronbach's Alpha Level	52
Table 3. 13 Problem-solving Reliability	53
Table 3. 14 Critical Thinking Reliability	53
Table 4. 1 Pretest and Posttest of Both Groups	66
Table 4. 2 N-gain of the Control Group	69
Table 4. 3 Descriptive Testing of Control Group (N=26)	69
Table 4. 4 N-gain of the Experimental Group	70

Table 4. 5 Descriptive Testing of Experiment Group (N=26)	71
Table 4. 6 Frequency distribution of variable X1 in control group	71
Table 4. 7 Frequency distribution of variable X2 in control group	72
Table 4. 8 Frequency distribution of variable X3 in control group	72
Table 4. 9 Frequency distribution of variable X1 in experiment group.....	73
Table 4. 10 Frequency distribution of variable X2 in experiment group.....	73
Table 4. 11 Frequency distribution of variable X3 in experiment group.....	74
Table 4. 12 Homogeneity Test of Variable X1	75
Table 4. 13 Homogeneity Test of Variable X1	75
Table 4. 14 Significant values of variable X1 from the two groups	76
Table 4. 15 t-test of Variable X1	77
Table 4. 16 N-gain of Variable X2	78
Table 4. 17 Mann Whitney U-Test of Variable X2	79
Table 4. 18 N-Gain of Variable X3.....	81
Table 4. 19 Mann Whitney U-Test of Variable X1	82

LIST OF APPENDICES

Appendix A. Observation Notes	99
Appendix B Pretest and Posttest Score of Control Group	100
Appendix C Pretest and Posttest Score of Experiment Group.....	101
Appendix D Gain and N-gain of Control Group	102
Appendix E Gain and N-gain of Experiment Group	103
Appendix F Normality N-Gain in Control Group.....	104
Appendix G Normality N-Gain in Experiment Group.....	105
Appendix H N-Gain of both groups.....	106
Appendix I Mean Test of X1	107
Appendix J Mean Test of X2	108
Appendix K Mean Test of X3.....	109
Appendix L- 1 Instrument Validation.....	110
Appendix L- 2 Instrument Validation.....	111
Appendix L- 3 Instrument Validation.....	112
Appendix L- 4 Instrument Validation.....	113
Appendix L- 5 Instrument Validation.....	114
Appendix L- 6 Instrument Validation.....	115
Appendix L- 7 Instrument Validation.....	116
Appendix L- 8 Instrument Validation.....	117
Appendix L- 9 Instrument Validation.....	118
Appendix L- 10 Instrument Validation.....	119
Appendix L- 11 Instrument Validation.....	120
Appendix L- 12 Instrument Validation.....	121

Appendix M Validity and Reliability.....	122
Appendix N Turnitin.....	123
Appendix O Permission Letter.....	124

