

LIST OF CONTENT

	<i>Page</i>
MOTTO & OFFERING	i
APPROVAL SHEET	ii
HALAMAN PERNYATAAN ORISINALITAS	iii
HALAMAN PERSETUJUAN PUBLIKASI.....	iv
BIOGRAPHY	v
ABSTRACT	vi
PREFACE	vii
LIST OF CONTENT	ix
LIST OF FIGURE.....	xi
LIST OF TABLE.....	xii
CHAPTER I. INTRODUCTION.....	1
1.1. Background.....	1
1.2. Problem Identification.....	10
1.3. Problem Limitation.....	10
1.4. Problem Formulation.....	11
1.5. Research Objective.....	11
1.6. Research Benefit.....	11
1.7. Operational Definition.....	12
CHAPTER II. LITERATURE REVIEW.....	13
2.1. Theoretical Framework.....	13
2.1.1. Learning Mathematics	13
2.1.2. Mathematical Communication Ability	16
2.1.2.1 Concept of Mathematical Communication Ability.....	16
2.1.2.2 Mathematical Communication Indicator.....	20
2.1.3 Gender	21
2.1.4. Realistic Mathematics Education Approach.....	22
2.1.4.1. Concept of RME Approach	15
2.1.4.2. Principles of RME	30
2.1.4.3. Characteristics of RME.....	32

2.1.4.4. Learning Steps of RME.....	34
2.1.4.5. Advantages and Disadvantages of RME Approach.....	36
2.1.5 Learning Material.....	38
2.2. Relevant Research.....	46
2.3. Thinking Framework.....	47
2.4. Hypothesis.....	49
CHAPTER III. RESEARCH METHODOLOGY	51
3.1. Location and Time Research.....	51
3.2. Population and Sample	51
3.3. Research Variable	51
3.4. Method and Design of Research	52
3.5. Instrument of Research	53
3.6. Data Collection Technique	57
3.7. Research Procedure	58
3.8. Data Analysis Technique	60
CHAPTER IV. RESULT AND DISCUSSION OF RESEARCH.....	72
4.1. Research Result	72
4.2. Description of Research Result Data.....	73
4.2.1 Description of Pretest and Posttest in Experiment Class and Control Class Based on Gender.....	73
4.3 Testing Research Requirements.....	76
4.4 Hypothesis Test.....	82
4.5 Discussion of Research Result.....	87
4.6 Research Opportunities.....	92
CHAPTER V. CONCLUSION	93
5.1. Conclusion.....	93
5.2. Sugestion	93
BIBLIOGRAPHY	94

LIST OF TABLES

Table 3.1 Factorial Design	51
Table 3.2 Quantitative Criteria for Scoring Mathematical Communication	52
Table 3.3 Scoring of Mathematical Communication	54
Table 3.4 Category of Mathematical Communication	57
Table 3.5 Validator Instrument Test	60
Table 3.6 Validity of Pretest Item	60
Table 3.7 Validity of Posttest Item	62
Table 3.8 Conclusion of Validity Test	64
Table 3.9 Reability Categories	66
Table 3.10 Reability of Pretest and Posttest	66
Table 3.11 Summary of Two Way Anova	69
Table 4.1 Tabulation of Research Data	99
Table 4.2 Tabulation of Pretest and Posttest	100
Table 4.3 Data Normality Output Pretest Experiment Class	103
Table 4.4 Data Normality Output Pretest Control Class	103
Table 4.5 Data Normality Output Posttest Experiment Class	105
Table 4.6 Data Normality Output Posttest Control Class	105
Table 4.7 Data Homogeneity Pretest	107
Table 4.8 Data Homogeneity Posttest	108
Table 4.9 Two Way Anova Result	109

THE
Character Building
UNIVERSITY

LIST OF APPENDIX

Appendix 1. Lesson Plan at the 1 st Meeting.....	100
Appendix 2. Lesson Plan the 2 nd Meeting.....	104
Appendix 3. Lesson Plan the 3 rd Meeting.....	108
Appendix 4 Pretest of Mathematical Communication	112
Appendix 5 Alternative Solution of Pretest	115
Appendix 6 Postest of Mathematical Communication.....	120
Appendix 7 Alternative Solution of Postest.....	123
Appendix 8 Latticework of Pretest	130
Appendix 9 Latticework of Postest.....	131
Appendix 10 Scoring of Mathematical Communication	132
Appendix 11 Pretest Data Tabulation of Experiment Class.....	135
Appendix 12 Postest Data Tabulation of Experiment Class	137
Appendix 13 Pretest Data Tabulation of Control Class.....	139
Appendix 14 Postest Data Tabulation of Control Class.....	141
Appendix 15 Normality and Homogeneity Pretest Result.....	143
Appendix 16 Normality and Homogeneity Postest Result	145
Appendix 17 Output of Two Way Anova.....	148
Appendix 18 R-table List.....	151
Appendix 19 F-table List	152
Appendix 20 Documentation	153
Appendix 21 School Reply to Research Permit.....	154