

ACKNOWLEDGEMENT

First and above all, I praise the Almighty God. This whole journey of completing this thesis had been a humbling experience that taught me to let go of my own will and strength. Only by then, I could start to see and receive His sufficient grace for me to walk each day.

I would like to pay my special regards to Mrs. Oh Yen Nie, S.E., M.Ed. as Dean of the Faculty of Education Universitas Pelita Harapan and Mr. Dr. Niko Sudibjo, S.Psi., M.A. as Head of the Study Program of the Master of Educational Technology Universitas Pelita Harapan.

I would like to express my sincere appreciation to my thesis supervisor, Mr. Dr. Marlin P. Marpaung, M.Sc. for his valuable guidance and support. He patiently encouraged me to keep moving forward even when the road got tough. Without his persistent help, this thesis would not have been completed.

I would also like to thank all the lecturers in Educational Technology graduate program at UPH. Their insightful teaching and feedback throughout my study in this graduate program had pushed me to sharpen my thinking and bring my professional work to a higher level.

In addition, I would like to thank my work colleagues, close friends and all fellows from UPH batch 43A. I may not be able to mention their names one by one but I would like to thank them for their wise counsels and sympathetic ears. They kept me going on and the completion of this thesis would not have been possible without their encouragement.

Finally, I wish to thank my family for their understanding, continuous love and silent prayers. They have always been my motivation to persevere and to always finish what I chose to start.

The researcher,
Kartika Sari Santoso



TABLE OF CONTENTS

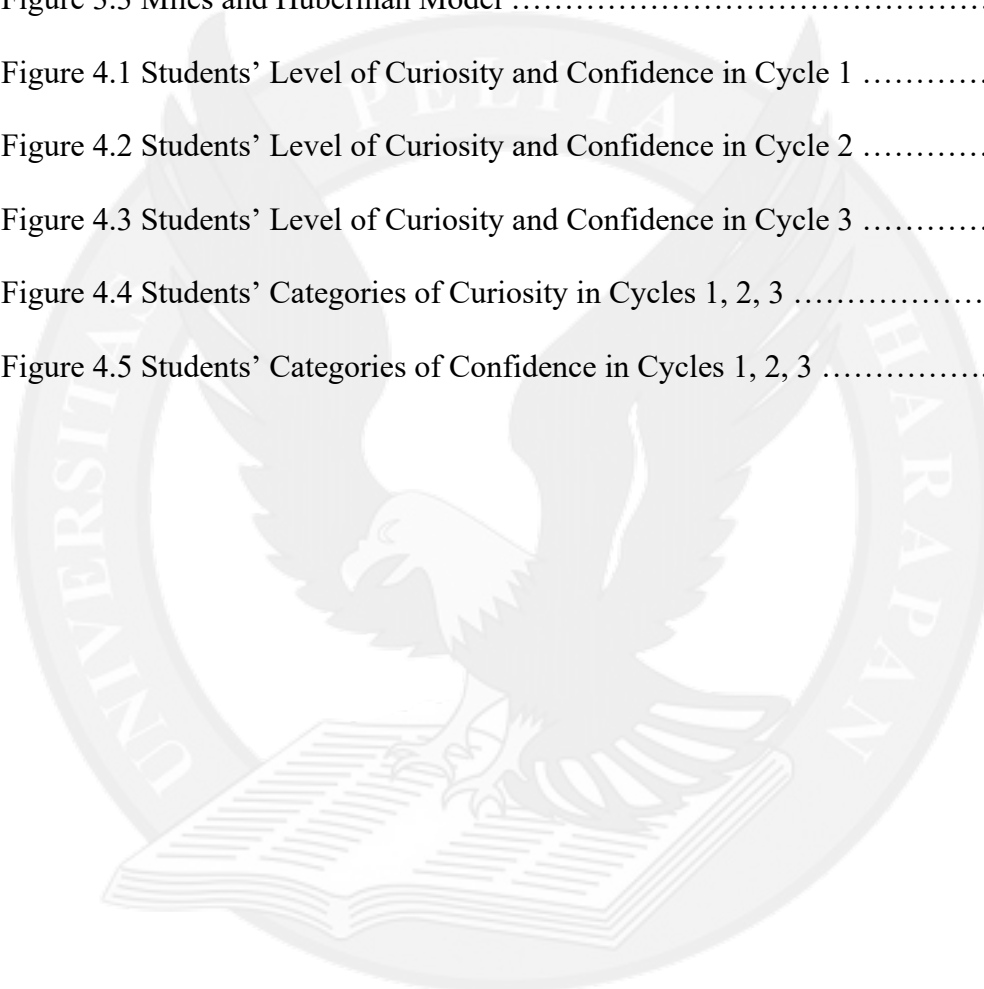
COVER	
ORIGINALITY STATEMENT OF THE THESIS	
THESIS SUPERVISOR'S APPROVAL	
THESIS EXAMINATION COMMITTEE	
ABSTRAK	v
ABSTRACT	vi
ACKNOWLEDGEMENT	vii
TABLE OF CONTENTS	ix
LIST OF FIGURES	xii
LIST OF TABLES	xiii
LIST OF APPENDICES	xiv
CHAPTER I INTRODUCTION	1
1.1 Background of the Study	1
1.2 Problem Identification	3
1.3 Scope of the Study	4
1.4 Research Questions	5
1.5 Purpose of the Study	5
1.6 Significance of the Study	6
1.7 Organization of the Paper	8
CHAPTER II LITERATURE REVIEW	10
2.1 Curiosity	10
2.2 Confidence	12

2.3 Educational Approach	13
2.3.1 Teacher-Centered Approach	14
2.3.2 Student-Centered Approach	15
2.4 Cooperative Learning	18
2.4.1 Cooperative Learning Elements	20
2.4.2 Cooperative Learning in Mathematics	22
2.5 Previous Studies	24
2.6 Conceptual Framework	27
CHAPTER III RESEARCH METHOD	29
3.1 Research Design	29
3.2 Research Place, Time and Subject	31
3.3 Research Setting	31
3.4 Research Procedure and Data Collection	33
3.4.1 Research Procedure	33
3.4.2 Research Instruments	39
3.5 Data Analysis	41
3.5.1 Data Analysis for Curiosity Variable	42
3.5.2 Data Analysis for Confidence Variable	44
3.5.3 Validation and Triangulation	46
CHAPTER IV RESEARCH FINDINGS AND DISCUSSIONS	48
4.1 School Profile	48
4.1.1 Classroom Condition	49
4.2 Description of Classroom Action Research	50
4.2.1 Cycle 1	51

4.2.1.1 Planning	51
4.2.1.2 Action and Observation	51
4.2.1.3 Reflection	57
4.2.2 Cycle 2	60
4.2.2.1 Planning	60
4.2.2.2 Action and Observation	61
4.2.2.3 Reflection	65
4.2.3 Cycle 3	68
4.2.3.1 Planning	68
4.2.3.2 Action and Observation	69
4.2.3.3 Reflection	74
4.3 Data Analysis	76
4.3.1 Description of Curiosity Progress	76
4.3.2 Description of Confidence Progress	78
4.4 Limitations of the Study	81
CHAPTER V CONCLUSION AND RECOMMENDATIONS	83
5.1 Conclusion	83
5.1.1 Implementation of Cooperative Learning Strategy	83
5.1.2 Students' Level of Curiosity Development	84
5.1.3 Students' Level of Confidence Development	85
5.2 Recommendations	85
REFERENCES	87

LIST OF FIGURES

Figure 2.1 Conceptual Framework	28
Figure 3.1 Action Research Model of Kurt Lewin	30
Figure 3.2 Kemmis and McTaggart Model	32
Figure 3.3 Miles and Huberman Model	42
Figure 4.1 Students' Level of Curiosity and Confidence in Cycle 1	59
Figure 4.2 Students' Level of Curiosity and Confidence in Cycle 2	68
Figure 4.3 Students' Level of Curiosity and Confidence in Cycle 3	76
Figure 4.4 Students' Categories of Curiosity in Cycles 1, 2, 3	78
Figure 4.5 Students' Categories of Confidence in Cycles 1, 2, 3	80



LIST OF TABLES

Table 3.1 Cycle 1 Plan	34
Table 3.2 Cycle 2 Plan	36
Table 3.3 Cycle 3 Plan	38
Table 3.4 Data Collection Methods and Instruments	40
Table 3.5 Curiosity Student-Observation Form	42
Table 3.6 Curiosity Scoring Rubric	43
Table 3.7 Curiosity Level Classification	44
Table 3.8 Confidence Student-Observation Form	44
Table 3.9 Confidence Scoring Rubric	45
Table 3.10 Confidence Level Classification	46
Table 4.1 Students' Scores of Curiosity and Confidence in Cycle 1	59
Table 4.2 Students' Scores of Curiosity and Confidence in Cycle 2	67
Table 4.3 Students' Scores of Curiosity and Confidence in Cycle 3	75
Table 4.4 Students' Scores of Curiosity in Cycles 1, 2, 3	76
Table 4.5 Students' Categories of Curiosity in Cycles 1, 2, 3	77
Table 4.6 Students' Scores of Confidence in Cycles 1, 2, 3	78
Table 4.7 Students' Categories of Confidence in Cycles 1, 2, 3	80

LIST OF APPENDICES

Appendix A – Session Plans	A-1
Appendix B – Student-Observation Form	B-1
Appendix C – Scoring Rubric	C-1
Appendix D – Curiosity Observation Result	D-1
Appendix E – Confidence Observation Result	E-1

