

Table of Contents

	<i>Page</i>
MOTTO	i
STATEMENT OF ORIGINALITY SHEET	iii
APPROVAL FOR PUBLICATION OF THESIS DINAL PROJECT FOR ACADEMIC PURPOSE SHEET	iv
ABSTRACT	vi
FOREWORD	vii
LIST OF TABLES	xii
LIST OF FIGURES	xiv
LIST OF APPENDICES	xv
CHAPTER I INTRODUCTION.....	1
1.1. Background of the study.....	1
1.2. Problem Identification.....	4
1.3. Scope of Study.....	5
1.4. Scope of Problems.....	5
1.5. Research Questions	6
1.6. Study Objectives.....	7
1.7. Research Purposes.....	7
CHAPTER II LITERATURE REVIEW	9
2.1. Textbooks.....	9
2.1.1. Understanding Textbooks	9
2.1.2. Purpose and Function of Textbooks.....	9
2.1.3. Textbook Building Components	10
2.2. Textbook Development.....	12
2.3. Development Research.....	13
2.3.1 Development Research Model.....	14
2.4. PjBL Learning Model.....	15
2.4.1. Understanding the PjBL Learning Model.....	15
2.4.2. Project Based Learning (PjBL) Learning Model Syntax.....	16
2.4.3. Advantage of Project Based Learning	17

2.4.4. The weakness of Project Based Learning	18
2.5. Tissue Culture	18
2.5.1 Introduction of Tissue Culture	18
2.5.2. Stages in Tissue culture	19
2.5.3 Various Techniques in Tissue Culture	21
2.6. Science Process Skills	23
2.6.1. Understanding Science Process Skills	23
2.6.2. Science Process Skills Objectives	23
2.6.3. Science Process Skills Indicators	25
2.7. Conceptual Framework	26
CHAPTER III RESEARCH METHODS.....	29
3.1. Research Location and Time	29
3.1.1. Research Location	29
3.1.2. Research Time	29
3.2. Subject and Object of Research	29
3.2.1. Research Subject	29
3.2.2. Research Object	29
3.3. Research Design	29
3.4. Operational Definition	30
3.5. Research Instruments	30
3.5.1. Interview Sheet	31
3.5.2. Student Needs Analysis Questionnaire	32
3.5.3. Validation Sheet by Topic Expert	33
3.5.4. Validation Sheet by Design Instructional Expert	35
3.5.6. Questionnaire of Lecturers' Assessment of Textbooks	36
3.5.7. Questionnaire of Student Responses to Textbooks	36
3.5.8. Science Process Skills Instrument	37
3.6. Data Collection Techniques	39
3.6.1. Observations	39
3.6.2. Interviews	39
3.6.3. Questionnaire	39
3.6.4. Tests	40

3.7. Textbook Development Procedure	40
3.7.1 Define.....	41
3.7.2. Design	42
3.7.3. Develop	43
3.7.4. Disseminate.....	44
3.8. Data Analysis Technique	44
3.8.1. Analysis Data of Feasibility Textbook According to Topic Experts	45
3.8.2 Analysis Data of Feasibility Textbook According to Design Instructional Experts	47
3.8.3. Analysis Data of Student Response to the Textbook	47
3.8.4 Analysis Data of Tissue Culture Lecturer to the Textbook	48
3.8.5 Effectiveness of Using the Textbook	49
CHAPTER IV RESULT AND DISCUSSION	51
4.1. Research result	51
4.1.1 Define Stages	51
4.1.2. Design Stages.....	53
4.1.3. Develop Stage.....	62
4.1.4. Disseminate Stage.....	72
4.2. Discussion	77
4.2.1. Define.....	77
4.2.2. Design	79
4.2.3. Development Stage.....	81
4.2.3.1. Feasibility of Tissue Culture Textbook Based on Project Based Learning	81
4.2.4. Disseminate.....	88
4.3. Research Limitations	97
BAB V CONCLUSION AND SUGGESTION.....	98
6.1 Conclusion.....	98
6.2 Suggestion	99
BIBLIOGRAPHY	101
APPENDIX	104