

## TABLE OF CONTENTS

	<b>Page</b>
<b>SHEET OF LEGITIMATION</b> .....	i
<b>DECLARATION</b> .....	ii
<b>ABSTRACT</b> .....	iii
<b>PREFACE</b> .....	iv
<b>ACKNOWLEDGEMENT</b> .....	v
<b>TABLE OF CONTENTS</b> .....	vii
<b>LIST OF TABLES</b> .....	ix
<b>LIST OF FIGURES</b> .....	x
<b>LIST OF APPENDICES</b> .....	xi
<b>CHAPTER I: INTRODUCTION</b> .....	1
A. Background .....	1
B. Problem Identification .....	3
C. Research Problem and Questions .....	4
D. Research Objectives .....	4
E. Research Benefits.....	5
F. Organization Structure of Research Paper.....	5
<b>CHAPTER II: STUDENTS' CREATIVITY AND CONCEPT UNDERSTANDING IN SCIENCE MINI-PROJECT ACTIVITY</b> .....	7
A. Students' Creativity .....	7

Adinda Gladya Puspasari, 2014

*Profile Of Student Creativity And Concept Understanding On Science Mini-Project Activity In Energy Conservation*

Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu

B. Students' Concept Understanding .....	11
C. Science Mini-Project Activity .....	13
D. Energy Conservation Concept Analysis .....	18
E. Relevant Research.....	20
<b>CHAPTER III: METHODOLOGY .....</b>	<b>22</b>
A. Research Method and Design .....	22
B. Subject of Research .....	22
C. Operational Definition .....	23
D. Research Instruments.....	24
E. Data Collection .....	25
F. Data Analysis Technique.....	28
G. Research Scheme.....	31
<b>CHAPTER IV: RESULT AND DISCUSSION .....</b>	<b>32</b>
A. Students' Creativity .....	32
B. Students' Concept Understanding .....	43
C. Students' Response on Science Mini-Project Activity .....	47
<b>CHAPTER V: CONCLUSION AND RECOMMENDATION .....</b>	<b>49</b>
A. Conclusions .....	49
B. Recommendations.....	50

<b>REFERENCES</b> .....	51
<b>APPENDICES</b> .....	54

### LIST OF TABLES

	<b>Page</b>
Table 3.1 – Blueprint of Creativity Scoring based on Its Dimension.....	26
Table 3.3 – Blueprint of Students’ Concept Understanding .....	27
Table 3.4 – Blueprint of Questionnaire Form .....	28
Table 3.5 – Categories of Creativity Scoring .....	29
Table 3.6 – Scoring Guideline of Students’ Response .....	31
Table 4.1 – Very High Novelty of Individual Planning.....	35
Table 4.2 – Students’ Low Resolution Achiever in Individual Planning .....	36
Table 4.3 – Steps to Project-Based Learning in Facilitating Students’ Creativity .....	39

## LIST OF FIGURES

	<b>Page</b>
Figure 2.1 – Creative Product Indicators .....	8
Figure 2.2 – Role of Intelligence in Creativity.....	12
Figure 2.3 – Characteristics of Project Based Learning .....	14
Figure 2.4 – Steps to Project Based Learning .....	16
Figure 3.1 – Scaling Guideline of Students’ Response.....	31
Figure 3.2 – Research Scheme .....	32
Figure 4.1 – Graph of Students’ Creativity Scoring .....	32
Figure 4.2 – Graph of Class’ Creativity Scoring Under Three Dimensions .	33
Figure 4.3 – Graph of Groups’ Creativity Scoring in Three Dimensions.....	34
Figure 4.4 – Example of Group Product Result with Very High Novelty....	35
Figure 4.5 – Example of Group Product Result with Very High Resolution	37
Figure 4.6 – Example of Group Product Result with Very High Elaboration and Synthesis .....	38
Figure 4.7 – Graph of Students’ Multiple Intelligences Profile in Group ....	40
Figure 4.8 – Graph of Pupils’ Concept Understanding and Creativity Result .....	44
Figure 4.13 – Graph of Groups’ Concept Understanding and Creativity Result .....	45
Figure 4.14 – Scale of Students’ Response on First Indicator .....	47
Figure 4.15 – Scale of Students’ Response on Second Indicator .....	47
Figure 4.15 – Scale of Students’ Response on Third Indicator .....	48

**Adinda Gladya Puspasari, 2014**

***Profile Of Student Creativity And Concept Understanding On Science Mini-Project Activity In Energy Conservation***

Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu



## LIST OF APPENDICES

	<b>Page</b>
<b>A. INSTRUCTIONAL TOOLS</b> .....	55
Appendix A.1 - Scheme of Work.....	56
Appendix A.1 – Lesson Plan .....	58
<b>B. RESEARCH INSTRUMENTS</b> .....	64
Appendix B.1 – Rubric Scoring of Students’ Creativity.....	65
Appendix B.2 – Rubric scoring of Students’ Concept Understanding	74
Appendix B.3 – Communication Book .....	75
Appendix B.4 – Questionnaire Form .....	94
<b>C. RESULT OF RESEARCH DATA</b> .....	95
Appendix C.1 – Data Processing of Students’ Creativity Result.....	96
Appendix C.2 – Data Processing of Students’ Concept	
Understanding Result .....	100
Appendix C.3 – Data Processing of Students’ Response Result .....	109
<b>D. INSTRUMENT JUDGMENT</b> .....	110
Appendix D.1 – Instrument Judgement Form 1.....	111
Appendix D.2 – Instrument Judgement Form 2.....	112

<b>E. DOCUMENTATION .....</b>	<b>113</b>
Appendix D.1 – Learning Activity.....	114
Appendix D.2 – Product Presentation .....	115
Appendix D.3 – Product Result .....	116