

LIST OF CONTENTS

APPROVAL SHEET	
DECLARATION	
ABSTRACT	Error! Bookmark not defined.
PREFACE	Error! Bookmark not defined.
ACKNOWLEDGEMENT	Error! Bookmark not defined.
LIST OF CONTENTS	v
LIST OF TABLES	vi
LIST OF FIGURES	vii
CHAPTER I	Error! Bookmark not defined.
INTRODUCTION	Error! Bookmark not defined.
1.1 Background	Error! Bookmark not defined.
1.2 Research Problem.....	Error! Bookmark not defined.
1.3 Research Objective.....	Error! Bookmark not defined.
1.4 Research Benefit.....	Error! Bookmark not defined.
1.5 Organizational Structure of Research Paper.....	Error! Bookmark not defined.
1.6 Limitation of Problem	Error! Bookmark not defined.
CHAPTER II.....	Error! Bookmark not defined.
LITERATURE REVIEW.....	Error! Bookmark not defined.
2.1. Predict, Observe and Explain (POE).....	Error! Bookmark not defined.
2.2. Students' Conceptual Mastery.....	Error! Bookmark not defined.
2.3. Students' Critical Thinking	Error! Bookmark not defined.
2.4. Vibration and Wave.....	Error! Bookmark not defined.
2.5. Relevant Researches.....	Error! Bookmark not defined.
CHAPTER III	Error! Bookmark not defined.
RESEARCH METHODOLOGY	Error! Bookmark not defined.
3.1 Research Method and Research Design	Error! Bookmark not defined.
3.2 Population and Sample.....	Error! Bookmark not defined.
3.3 Research Instrument	Error! Bookmark not defined.
3.4 Research Procedure	Error! Bookmark not defined.
3.5 Data Analysis	Error! Bookmark not defined.
3.6 Operational Definition.....	Error! Bookmark not defined.
3.7 Assumption.....	Error! Bookmark not defined.
CHAPTER IV	Error! Bookmark not defined.
RESULTS AND DISCUSSION	Error! Bookmark not defined.
4.1 Analysis of Students' Conceptual Mastery ..	Error! Bookmark not defined.
4.2 Analysis of Students' Critical Thinking	Error! Bookmark not defined.
4.3 Analysis of Students' Capability in Predict-Observe-Explain (POE)...	Error!
Bookmark not defined.	
CHAPTER V.....	Error! Bookmark not defined.
CONCLUSION AND RECOMMENDATION	Error! Bookmark not defined.
5.1 Conclusion.....	Error! Bookmark not defined.
5.2 Recommendation.....	Error! Bookmark not defined.
REFERENCES.....	Error! Bookmark not defined.

Dandy Furqani, 2018

THE EFFECT OF PREDICT-OBSERVE-EXPLAIN (POE) STRATEGY ON STUDENT' CONCEPTUAL MASTERY AND CRITICAL THINKING IN LEARNING VIBRATION AND WAVE

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

LIST OF TABLES

Table 2.1 Activities of Teachers and Students in POE Learning Model.	8
Table 2.2 Aspects of Critical Thinking Ability.....	17
Table 2.3 Analysis of Core Competence and Basic Competence on Vibration and Wave	19
Table 3.1 One-Group Pre-test and Post-test Design	28
Table 3.2 The Interpretation Reliability Coefficient.....	30
Table 3.3 The Interpretation of Difficulty Level	32
Table 3.4 The Interpretation of Discrimination Power	32
Table 3.5 Criteria of Indicators of Conceptual Mastery	35
Table 3.6 Indicators of Aspects of Critical Thinking Ability	35
Table 3.7 Interpretation of Indicator of Critical Thinking Ability Aspects	36
Table 3.8 Interpretation of Indicator of Conceptual Mastery	37
Table 4.1 Interpretation of Indicator of Conceptual Mastery	39
Table 4.2 Statistical Analysis for Conceptual Mastery Test	40
Table 4.3 Statistical Result of Wilcoxon Non-Parametric Test	41
Table 4.4 N-gain Scores for Each Aspect of Conceptual Mastery	42
Table 4.5 Scoring and Interpretation of Students' Critical Thinking Ability	43

LIST OF FIGURES

Figure 2.1 Period of two objects.	20
Figure 2.2 Simple harmonic motion	21
Figure 2.3 The Sine Curve Trace on Paper	21
Figure 2.4 Transverse Wave	24
Figure 2.5 Longitudinal Wave	24
Figure 2.6 Longitudinal and Transverse Waves on A Slinky	25
Figure 3.1 Flowchart of Research Procedure	34
Figure 4.1 Students' Average Score on Conceptual Mastery Test	39
Figure 4.2 N-gain Scores for Each Aspect of Conceptual Mastery	42
Figure 4.3 Example of Questions Used in Critical Thinking Test	45
Figure 4.4 Example of Students' Answer in Critical Thinking Pretest	45
Figure 4.5 Example of Students' Answer in Critical Thinking Pretest	46
Figure 4.6 Students' Score in Predict Stage	47
Figure 4.7 Students' Score in Observe Stage	48
Figure 4.8 Students' Score in Explain Stage	49