

**INFUSING SCIENTIFIC LITERACY INTO A MODEL OF
TRANSFORMATIVE PROJECT-BASED LEARNING FOR
THE RESEARCH METHODOLOGY COURSE OF ENGLISH
LANGUAGE EDUCATION STUDY PROGRAM**



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ABSTRACT

Neng Herawani. (2025). *Infusing Scientific Literacy into the Transformative Project-Based Learning Model for the Research Methodology Course of English Language Education Study Program*. Thesis. Jakarta” Master Program of English Language Education, Faculty of Language and Arts, State University of Jakarta.

This study aims to develop the model of transformative project-based learning model infused with scientific literacy for the research methodology course of ELESP. This study employed a modified Design and Development Research (DDR) method which consists of Need analysis, Describe the Objectives, Design and Develop the model of learning, Evaluate the Model of Learning, and Design Revision. The data were the component of the existing model of learning in research methodology course of ELESP that were gained from research methodology classroom observations, syllabus documents, interview result and the related theories of the model of learning, scientific literacy, transformative learning, and project-based learning model. The findings indicated that firstly, the existing models of learning had employed transformative project-based learning indicators and had been infused with scientific literacy indicators unevenly. Secondly, the procedure for developing model of transformative project-based learning model infused with scientific literacy for the research methodology course of ELESP consisted of ten steps. Thirdly, the developed model of learning was set for Research methodology course by employing Transformative learning, Authentic learning, Scaffolding learning, Scientific Inquiry, Cooperative learning, and Computer Assisted Instruction which were derived from Constructivist approach, Cognitive approach, Humanistic approach and Behavioral approach. Furthermore, the developed model of learning made use of all selected Transformative Project-Based Learning and scientific literacy indicators, namely: Individual Experience, Critical Reflection, authenticity, Collaboration, Dialogue and Public Product and Reflection. While the indicators of scientific literacy that were employed are: Context, Knowledge, Competence and Science Identity. Fourthly, The Transformative Project-Based Learning (TPjBL) model, incorporating Scientific Literacy for the Research Methodology course, was evaluated for its validity and employability. The model was confirmed by experts and was found to be very valid, aligning with theoretical and pedagogical standards. The model was also found to enhance students' engagement and critical thinking skills, and could be effectively implemented within the existing curriculum structure.

Keywords: *Science Literacy, Transformative Learning, Project-based Learning Model, DDR, HQPBL Framework, Teacher Education, ELESP, Model Development.*

ABSTRAK

Neng Herawani. (2025). *Menanamkan Literasi Ilmiah ke dalam Model Pembelajaran Berbasis Proyek Transformatif pada Mata Kuliah Metodologi Penelitian Program Studi Pendidikan Bahasa Inggris*. Tesis. Jakarta" Program Studi Magister Pendidikan Bahasa Inggris, Fakultas Bahasa dan Seni, Universitas Negeri Jakarta.

Penelitian ini bertujuan untuk mengembangkan model pembelajaran berbasis proyek transformatif yang bermuatan literasi sains pada mata kuliah metodologi penelitian di Program Studi Pendidikan Bahasa Inggris. Penelitian ini menggunakan metode Design and Development Research (DDR) yang telah dimodifikasi yang terdiri dari Analisis Kebutuhan, Mendeskripsikan Tujuan, Merancang dan Mengembangkan model pembelajaran, Mengevaluasi Model Pembelajaran, dan Revisi Desain. Data yang digunakan adalah komponen-komponen model pembelajaran yang ada pada mata kuliah metodologi penelitian di Program Studi Pendidikan Bahasa Inggris yang diperoleh dari hasil observasi kelas metodologi penelitian, dokumen silabus, teori-teori tentang model pembelajaran, literasi sains, pembelajaran transformatif, dan model pembelajaran berbasis proyek, dan metodologi penelitian. Hasil penelitian menunjukkan bahwa pertama, model pembelajaran yang ada telah menggunakan indikator pembelajaran berbasis proyek transformatif dan telah disisipi indikator literasi sains secara tidak merata. Kedua, prosedur pengembangan model pembelajaran berbasis proyek transformatif bermuatan literasi sains pada mata kuliah metodologi penelitian di Program Studi Pendidikan Bahasa dan Sastra Inggris terdiri dari sepuluh langkah. Ketiga, model pembelajaran yang dikembangkan untuk mata kuliah Metodologi Penelitian dengan menggunakan pembelajaran Transformatif, pembelajaran Otentik, pembelajaran Scaffolding, Scientific Inquiry, pembelajaran Kooperatif, dan Computer Assisted Instruction yang diturunkan dari pendekatan Konstruktivis, pendekatan Kognitif, pendekatan Humanistik, dan pendekatan Perilaku. Selanjutnya, model pembelajaran yang dikembangkan menggunakan semua indikator Pembelajaran Berbasis Proyek Transformatif dan literasi ilmiah yang dipilih, yaitu: Pengalaman Individu, Refleksi Kritis, Keaslian, Kolaborasi, Dialog, dan Produk dan Refleksi Publik. Sedangkan indikator literasi sains yang digunakan adalah: Konteks, Pengetahuan, Kompetensi dan Identitas Sains. Keempat, model Transformative Project-Based Learning (TPjBL), yang menggabungkan Literasi Sains untuk mata kuliah Metodologi Penelitian, dievaluasi untuk validitas dan kelayakannya. Model ini telah dikonfirmasi oleh para ahli dan terbukti sangat valid, selaras dengan standar teoritis dan pedagogis. Model ini juga terbukti dapat meningkatkan keterlibatan dan kemampuan berpikir kritis mahasiswa, serta dapat diimplementasikan secara efektif dalam struktur kurikulum yang ada.

Kata Kunci: *Literasi Sains, Pembelajaran Transformatif, Model Pembelajaran Berbasis Proyek, DDR, Kerangka Kerja HQPBL, Pendidikan Guru, ELESP, Pengembangan Model.*

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TABLE OF CONTENTS

ABSTRACT	iii
ABSTRAK	vi
ACKNOWLEDGEMENT	vii
TABLE OF CONTENTS	viii
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF APPENDICE	xii
CHAPTER I INTRODUCTION.....	1
1.3. Objectives of the Research	14
1.4. Scope of the Research	14
1.5. Significance of the Research	14
1.6. Definition of Key Terms.....	16
1.7. State of the Art.....	17
CHAPTER II LITERATURE REVIEW	19
2.1 Models of Learning	19
2.2 Project-Based learning.....	31
2.3 Transformative Learning	40
2.4 The Integration of Project-Based Learning and Transformative Learning.....	53
2.5 Scientific Literacy.....	55
2.5.2.1 The PISA 2015 Framework.....	59
2.5.2.2 The PISA 2018 Framework.....	62
2.5.2.3 The PISA 2025 Framework.....	66
2.6 Research Methodology	82
2.7 English Language Education Study Program.....	85
2.8 Conceptual Framework.....	86
CHAPTER III METHODOLOGY	89
3.1 Research Method and Design	89
3.2 Data, Data Source, and Instruments	93
3.3 Data Collecting Procedure.....	94
3.4 Data Analysis Procedure.....	95
CHAPTER IV FINDING AND DISCUSSION.....	98

4.1 The Analysis of Transformative Project-Based Learning and Scientific Literacy in the Existing Models of Learning.....	98
4.1.1 Interview Result	98
4.1.2 Syllabus Document and Class room Observation Result	104
4.1.2.1 University A	104
4.1.2.2 University B	111
4.1.2.3 University C	117
4.2 The Procedure for Developing Model of Transformative Project-Based and Scientific Literacy Infused Learning in the Research Methodology Course of ELESP	123
4.3 The Development of Model of Transformative-Project-Based and Scientific literacy Infused Learning in the Research Methodology Course of ELESP	125
4.4 The Validity and Employability of the Development of Transformative Project-Based Learning Model Infused with Scientific Literacy for the Research Methodology Course of ELESP	144
CHAPTER V CONCLUSION AND SUGGESTION	148
5.1 Conclusion	148
5.2 Suggestion	149
REFERENCES.....	151
APPENDIX	162

Intelligentia - Dignitas

LIST OF TABLES

Table 2.1 Bridging Concept of Models of learning.....	20
Table 2.2 Framework of High Quality PJBL model by BIE (2018)	36
Table 2.3 The Modified Framework of Project-based Learning Indicators from HQPJBL	39
Table 2.4 The Framework of Transformative Learning	42
Table 2.5 The Modified Framework of Transformative Learning Indicators	45
Table 2.6 The Modified Framework of Transformative Project-Based Learning Indicators	54
Table 2.7 Aspect of the Scientific Literacy Assessment Framework for PISA 2015	60
Table 2.8 Aspects of the Scientific Literacy Assessment Framework for PISA 2018 (OECD, 2019).....	65
Table 2.9 PISA Frameworks (OECD 2017, 2019, 2023).....	67
Table 2.10 The Modified Scientific Literacy Framework (OECD 2017, 2019, 2023)	71
Table 3.1 Data, Data Source, and Instruments of the Study.....	93
Table 3.2 The Data Collection Procedure along with the Stages of DDR	94
Table 3.3 Table of Analysis of Transformative Project-Based Learning in the Existing Model of Learning	96
Table 3.4 Table of Analysis of Scientific Literacy Indicators in the Existing Model of Learning.....	96
Table 3.5 Validation Sheet of Model of Transformative Project Based and Scientific Literacy Competencies Infused of Learning.....	97
Table 4.1 The Evidence of the Existing Models of Learning in University A	105
Table 4.2 TPBL and Scientific Literacy Indicators in the Existing Models of Learning	107
Table 4.3 The Evidence of the Existing Models of Learning in University B	112
Table 4.4 TPjBL and Scientific Literacy Indicators in the Existing Models of Learning	114
Table 4.5 The Evidence of the Existing Models of Learning in University C	118
Table 4.6 TPjBL and Scientific Literacy Indicators in the Existing Models of Learning in university C.....	120
Table 4.7 The preliminary Design of The Model of Project Based and Scientific Literacy Infused in The Research Methodology Course of ELESF.....	135
Table 4.8 Lesson Plan Prototype for The Research Methodology Course.....	142
Table 4.9 The Result of Validation of the Model of Learning	145
Table 4.10 The Employability of the model of Learning	146

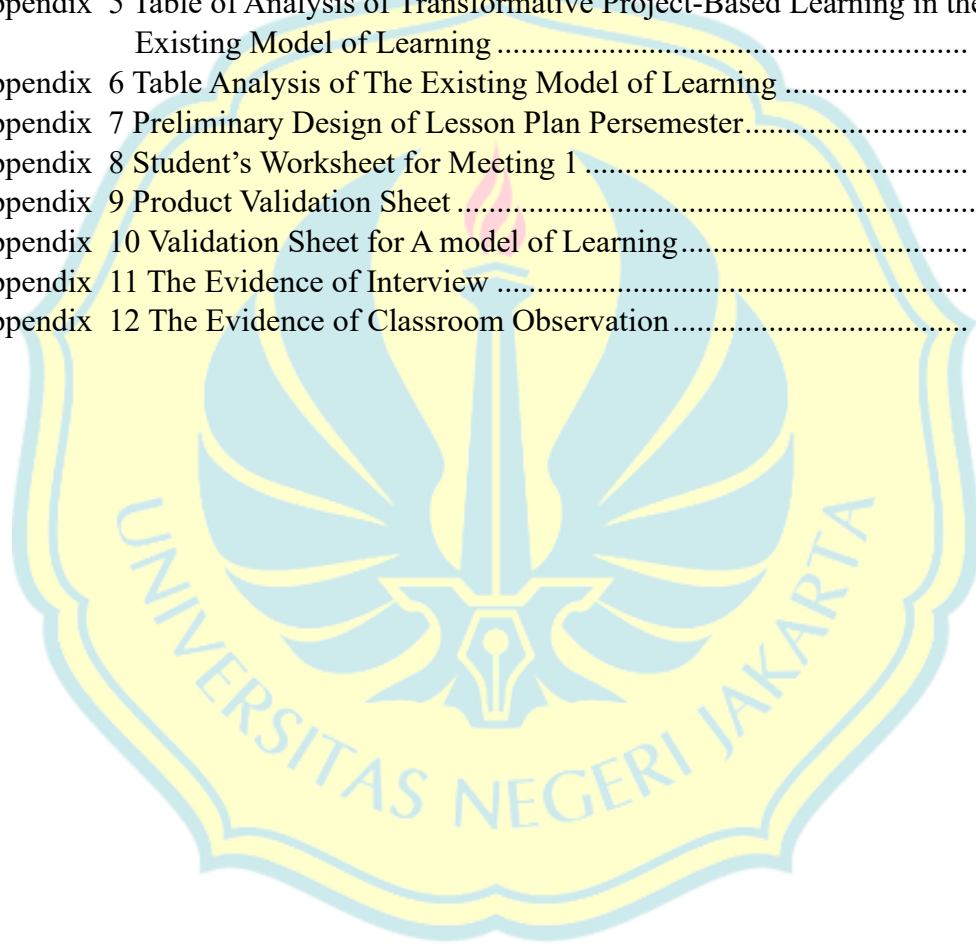
LIST OF FIGURES

Figure 2.1 Designing Models of Learning	31
Figure 2.2 The framework of Gold Standard Project-based Learning	35
Figure 2.3 Framework of PISA 2025 Science Assessment (OECD, 2023)	67
Figure 2.4 Conceptual Framework of the Study	88
Figure 3. 1 The Modified Steps of Design and Development Research	90
Figure 4.1 Chart of The Development of Model of Transformative Project-Based Learning infused with Scientific Literacy for the Research Methodology Course of ELESP	



LIST OF APPENDICE

Appendix 1 The Modified Framework of Transformative Project-Based Learning Indicators.....	162
Appendix 2 The Modified Scientific Literacy Framework (OECD 2015, OECD 2018, OECD, 2023)	166
Appendix 3 Lecturer's Interview Protocols	177
Appendix 4 Student Interview Protocol.....	180
Appendix 5 Table of Analysis of Transformative Project-Based Learning in the Existing Model of Learning	182
Appendix 6 Table Analysis of The Existing Model of Learning	185
Appendix 7 Preliminary Design of Lesson Plan Persemester.....	186
Appendix 8 Student's Worksheet for Meeting 1	208
Appendix 9 Product Validation Sheet	211
Appendix 10 Validation Sheet for A model of Learning.....	217
Appendix 11 The Evidence of Interview	220
Appendix 12 The Evidence of Classroom Observation.....	221



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