PROMOTING EFL STUDENTS’ HIGHER-ORDER THINKING SKILLS THROUGH ONLINE LEARNING

A THESIS

Submitted in partial fulfilment of the requirements for
Master’s degree in English Education Program

RAHMALIA ANANDAYU
1706656

ENGLISH EDUCATION PROGRAM
SCHOOL OF POST-GRADUATE STUDIES
UNIVERSITAS PENDIDIKAN INDONESIA
2022
PROMOTING EFL STUDENTS’ HIGHER-ORDER THINKING SKILLS THROUGH ONLINE LEARNING

A THESIS
By
RAHMALIA ANANDAYU
1706656

Approved by

Supervisors,

Prof. Fuad Abdul Hamied, M.A, Ph.D.
NIP. 195008211974121001

Ahmad Bukhari Muslim, M.Ed., Ph.D.
NIP. 197401232001121003

The Head of English Education Program
Faculty of Post Graduate Study
Universitas Pendidikan Indonesia

Prof. Dr. Didi Soeridin, M.Ed.
NIP. 194211011987121001
DECLARATION

I hereby declare that this thesis entitled “Promoting EFL Students’ Higher-Order Thinking Skills through Online Learning” is my own work and that it contains no material which has been submitted or presented for the award of any other degree in any university or institution. I am completely aware that I have quoted some ideas and statements from other sources and they have been properly acknowledged in this thesis.

Bandung, January 2022

Rahmalia Anandayu
ABSTRACT

Studies on promoting students’ higher-order thinking skills (HOTS) have been mostly carried out in traditional classroom settings, but there are still few studies regarding the issue through online teaching. This study investigated how HOTS were promoted in the online setting that involved two high school English teachers. Data of this study were generated from semi-structured interviews of teachers, classroom observations, and document analysis. The study used revised Bloom’s taxonomy (Anderson et al., 2001) to analyse the data. The study found out teachers implemented inquiry learning method to promote HOTS as it provided students with time and space to analyse texts. To assist students’ understanding of concept and contexts, pictures and questioning were presented. HOTS were also promoted through higher-level questions that involved analysing and evaluating items in the assessment process. Unfortunately, the teachers still had difficulty to promote HOTS in grammar lesson. The challenges on promoting HOTS in online learning were related to three aspects, namely students, teachers, and technical problems. The study also offers pedagogical implications as well as suggestions for future research.

Keyword: Higher-order thinking skills, HOTS, online learning, online teaching.
# TABLE OF CONTENTS

DECLARATION ........................................................................................................................................... i
PREFACE ................................................................................................................................................... ii
ACKNOWLEDGEMENTS .......................................................................................................................... iii
ABSTRACT .................................................................................................................................................. iv
TABLE OF CONTENTS ................................................................................................................................. v
LIST OF TABLES .......................................................................................................................................... vii
LIST OF FIGURES ......................................................................................................................................... viii
CHAPTER I ................................................................................................................................................. 1
  1.1 Background of the study ......................................................................................................................... 1
  1.2 The research questions ........................................................................................................................... 3
  1.3 Purposes of the study ............................................................................................................................. 3
  1.4 Significances of the study ....................................................................................................................... 3
  1.5 Paper organization .................................................................................................................................. 4
CHAPTER II ................................................................................................................................................ 5
  2.1 Defining higher-order thinking ............................................................................................................. 5
  2.2 Higher-order thinking skills taxonomy ................................................................................................. 8
    2.2.1 Remembering ................................................................................................................................... 9
    2.2.2 Understanding ............................................................................................................................... 9
    2.2.3 Applying .......................................................................................................................................... 10
    2.2.4 Analyzing ....................................................................................................................................... 10
    2.2.5 Evaluating .................................................................................................................................... 11
    2.2.6 Creating ........................................................................................................................................ 11
  2.3 Promoting students’ HOTS through online learning ............................................................................. 13
    2.3.1 Understanding concept and context ............................................................................................... 13
    2.3.2 Encouraging higher-level questions ............................................................................................... 14
    2.3.3 Engaging students in online discussion .......................................................................................... 17
    2.3.4 Reflective learning ........................................................................................................................ 18
  2.4 Learning methods to promote HOTS in the online setting .................................................................. 19
    2.4.1 Project-based learning .................................................................................................................... 20
    2.4.2 Problem-based learning .................................................................................................................. 21
2.4.3 Inquiry/discovery learning .................................................. 22
2.4.4 Flipped-classroom .............................................................. 23

2.5 Assisting students’ to understand ........................................ 24

2.5.1 Using relevant materials to students’ world ....................... 24
2.5.2 Utilizing various digital media ............................................ 25

CHAPTER III ................................................................. 27

3.1 Research design ............................................................... 27
3.2 Research site ................................................................. 27
3.3 Participants ........................................................................ 28
3.4 Data collection .................................................................... 28

3.4.1 Class observation .......................................................... 29
3.4.2 Interview ....................................................................... 30
3.4.3 Documents ..................................................................... 30

3.5 Data analysis ........................................................................ 31

3.5.1 Analysis of class observation ......................................... 31
3.5.2 Analysis of interview ..................................................... 31
3.5.3 Documents ..................................................................... 32

CHAPTER IV ................................................................. 33

4.1 Assisting students’ understanding ....................................... 33
4.2 Providing higher-level questions ......................................... 37

4.2.1 Analyzing questions ...................................................... 38
4.2.2 Evaluating questions ....................................................... 40

4.3 Implementing inquiry learning method ................................ 41

4.3.1 Stimulation .................................................................... 42
4.3.2 Problem statement ........................................................ 45
4.3.3 Data collection ............................................................... 47
4.3.4 Data processing .............................................................. 48
4.3.5 Verification .................................................................... 49
4.3.6 Generalization ............................................................... 50

4.4 Online discussion ............................................................... 53
4.5 Challenges .......................................................................... 55

4.5.1 Students ......................................................................... 55
4.5.2 Teachers ................................................................. 57
4.5.3 Technical problems ................................................ 60
CHAPTER V ........................................................................ 62
5.1 Conclusions .................................................................. 62
5.2 Limitations .................................................................... 65
5.3 Recommendations ....................................................... 65
REFERENCES ..................................................................... 69
APPENDICES ..................................................................... 81
Appendix 1 Informed Consent .................................................. 81
Appendix 2 Interview Questions ............................................ 83
Appendix 3 Observation Checklist ......................................... 84
Appendix 4 Samples of Interview Transcript ......................... 86
Appendix 5 Samples of Observation Results ......................... 84
Appendix 6 Samples of Lesson plan ....................................... 98
Appendix 7 Samples of teaching materials ............................. 107
Appendix 8 Samples of assessment items ............................... 108
LIST OF TABLES

Table 2.1 Revised Bloom's taxonomy adapted from Anderson et a. (2001) .. 6
Table 2.2 Types of Socratic Questions (Paul & Elder, 2007).................... 14
LIST OF FIGURES

Figure 2.1 Flipped Classroom (Alsowat, 2016) .................................................. 23
Figure 4.1 T1’s teaching materials ................................................................. 34
Figure 4.2 T2’s teaching materials ................................................................. 36
Figure 4.3 Pictures in T1’s stimulation stage .................................................. 42
Figure 4.4 Pictures in T2’s stimulation stage .................................................. 43
Figure 4.5 T1’s data collection stage ............................................................... 47
Figure 4.6 Past simple tense exercises .......................................................... 47
REFERENCES


Assaly, I. R., & Smadi, O. M. (2015). Using Bloom’s taxonomy to evaluate the cognitive levels of master class textbook’s questions. *English Language Teaching, 8*(5). https://doi.org/10.5539/elt.v8n5p100


Bergmann, J., & Sams, A. (2012). *Flip your classroom: Reach every student in every class every day*. International Society for Technology in Education.


Brookhart, S. M. (2010). *How to assess higher-order thinking skills in your classroom*. ASCD.


Comer, D. R., & Lenaghan, J. A. (2013). Enhancing discussion in the asynchronous online classroom: The lack of face-to-face interaction does not lessen the


http://scholar.uwindsor.ca/ossaarchive/OSSA11/papersandcommentaries/105


Wahyudi, R., Rukmini, D., & Bharati, D. A. L. (2019). Developing discovery learning-based assessment module to stimulate critical thinking and


