

PROJECT-BASED LEARNING IN ENGLISH LANGUAGE TEACHING: DOES IT PROMOTE STUDENTS' HIGHER-ORDER THINKING SKILLS?

Eva Nurmayasari^{1*}, Suciwati Ummu Habibah², Maulidia Rachmawati Nur³,
Enni Erawati Saragih⁴

¹⁻⁴Universitas Ibn Khaldun Bogor

eva.nurmayasari@uika-bogor.ac.id*

*Corresponding author

Article History

First Received:
(September 11, 2025)

Revised:
(September 15, 2025)

Accepted:
(September 28, 2025)

Final Proof Received:
(September 29, 2025)

Published:
(September 30, 2025)

ABSTRACT

This study explores teachers' perceptions of Project-Based Learning in English language teaching to promote Higher-Order Thinking Skills. Using a qualitative case study design, the research involved three junior high school teachers in Bogor Regency, selected through purposive sampling. Data was collected via open-ended questionnaires and semi-structured interviews. Findings showed that teachers viewed project-based learning as a student-centered approach emphasizing real-world relevance, collaboration, product creation, and contextual learning. Implementation included planning, scaffolding, group work, facilitation, and feedback. Teachers reported that project-based learning fostered higher-order thinking skills by encouraging critical analysis, creativity, and reflection, although challenges such as time constraints and diverse student abilities remained. The study underscores the need for teacher readiness, resources, and contextualized instruction to optimize project-based learning in promoting higher-order thinking skills.

Keywords: Project-Based Learning, Higher-Order Thinking Skills, Teacher Perception, Case Study

INTRODUCTION

In English language education, it is essential to foster both linguistic proficiency and higher-order thinking. Various methods have been applied, including Project-Based Learning, Problem-Based Learning, and Cooperative Learning, each of which encourages student-centred, meaningful engagement in learning.

The Merdeka Curriculum emphasizes Higher-Order Thinking Skills such as

analysing, evaluating, and creating, moving beyond rote memorization (Nur & Maulida, 2024). Previous studies found that instructional materials, including the textbook *Bahasa Inggris: Work in Progress*, already incorporate elements of higher-order thinking skills (Husni & Ginting, 2023). However, the success of this curriculum depends not only on materials but also on the strategies employed by teachers.

Among various models, project-based learning is considered effective because it integrates inquiry, autonomy, and authentic tasks that foster critical thinking, collaboration, and creativity (Bell, 2010; Thomas, 2000). Research also highlights its positive impact on students' learning outcomes, especially in enhancing analysis and evaluation skills (Luchang & Nasri, 2023; Sudarso, 2024). In English language instruction, project-based learning provides contextualized learning through meaningful projects that strengthen both communication and cognitive skills (Almulla, 2020).

While much research has examined student outcomes, there is still limited focus on teachers' perspectives in implementing project-based learning under the Merdeka Curriculum. This study therefore explores teachers' perceptions of project-based learning in promoting higher-order thinking skills in English classes.

Project-Based Learning is an instructional approach that emphasizes students' active engagement through meaningful and real-world projects. (Blumenfeld, 1991) describe it as a method designed to engage learners in investigating authentic problems, while (Patton, 2012) highlights that it goes beyond the final product by fostering critical thinking, collaboration, creativity, and communication. In practice, teachers act as facilitators who guide planning, execution, and reflection, while students take responsibility for managing tasks, conducting research, and presenting outcomes. Project-based learning also integrates technology, reflection, and authentic assessment, making it a comprehensive approach that supports both content mastery and the development of 21st-century skills (Thomas, 2000; Bell, 2010) and it provides meaningful learning experiences, supports contextual understanding, and fosters student autonomy (Lutfiyana, 2024).

Its key characteristics include student-centeredness, increased motivation, creativity, collaboration, and continuous feedback (Sheppard, 1995). Previous studies confirm that project-based learning enhances higher-order thinking, problem-solving, and positive attitudes toward learning. However, challenges such as time constraints, evaluation complexity, and the need for teacher readiness and sufficient resources remain significant (Hidayah, 2021). Thus, project-based learning not only enriches language learning but also proven effective in shaping both academic competencies and character development in line with 21st-century demands.

As Project-Based Learning is widely recognized as an effective strategy to enhance higher-order thinking skills by engaging students in authentic, real-world problems that demand critical thinking, problem-solving, and collaboration (Takiddin, 2020; Isnani, 2023). and problem-solving abilities (Halim, 2023), particularly in Indonesian context, however, little empirical research has been undertaken to investigate concerns faced by school English teachers when implementing Project Based Learning in promoting Higher Order Thinking Skill. To fill this void, this study explored the teachers' perceptions of explores teachers' perceptions of Project-Based Learning in English language teaching to promote Higher-Order Thinking Skills.

METHOD

This study employed a qualitative case study design (Creswell, 2008) to explore English teachers' perceptions of Project-Based Learning in promoting Higher-Order Thinking Skills. The research was conducted in three private junior high schools in Bogor Regency, West Java, with varying accreditation levels (two A and one B). Participants consisted of three English teachers two males and one female selected purposively for their active use of project-based learning; their

teaching experience ranged from two to thirty years. Data were collected through a seven-item open-ended questionnaire, distributed via Google and semi-structured interviews. The questionnaire explored teachers' perceptions, implementation strategies, and challenges in applying project-based learning, while the interviews provided deeper insights into their practices and reflections. Both instruments allowed teachers to share their experiences freely, generating rich and authentic data. The data were analyzed using (Miles Matthew B., 2019) framework involving data reduction, display, and conclusion drawing. Responses were coded thematically under dimensions such as real-world relevance, collaboration, critical and creative thinking, instructional challenges, and assessment complexity. Findings indicated that teachers perceived project-based learning as an effective student-centered approach to foster higher-order thinking skills, though issues such as time constraints, student diversity, and limited resources were identified, underscoring the need for institutional support and professional development for successful implementation.

FINDINGS AND DISCUSSION

The findings showed that there are three main themes: teachers' perceptions of Project-Based Learning, teachers' implementation of project-based learning, teachers' implementation of project-based learning to promote higher-order thinking skills.

Teachers' Perceptions of Project-based Learning

The findings revealed that teachers held a clear conceptual understanding of Project-Based Learning as a student-centred model. They emphasized the active role of learners in exploring materials, collaborating with peers, and making independent decisions, while teachers positioned themselves more as facilitators

than instructors. This aligns with (Sheppard, 1995) and (Almulla, 2020), who argue that project-based learning empowers students through autonomy and inquiry-based learning. Teachers also perceived project-based learning as product-oriented, with learning outcomes demonstrated in tangible forms such as greeting cards, cooking demonstration videos, or product reviews. This perspective is consistent with (Patton, 2012), who highlights the importance of visible products as evidence of skill application. Another perception strongly emphasized was the contextual relevance of project-based learning. Teachers intentionally designed tasks connected to students' real lives, such as local foods or social media reviews, which resonates with (Guo, 2021) who note that authentic contexts promote higher-order thinking and engagement. Finally, collaboration was viewed as a key component, as group work fostered communication, negotiation, and shared responsibility among students, reflecting the cooperative learning principles described by (Blumenfeld, 1991). Although some challenges in group dynamics were noted, teachers agreed that collaboration provided social and cognitive benefits. Overall, teachers believed that project-based learning supports autonomy, creativity, and critical engagement in English language learning.

Teachers' Implementation of Project-based Learning

In practice, teachers implemented project-based learning through systematic and structured steps, beginning with careful planning and preparation of themes relevant to students' interests, such as local culture or tourism. They followed staged frameworks like BKOF (Building Knowledge of the Field), MOT (Modelling of the Text), and ICOT (Independent Construction of the Text), reflecting models by (Patton, 2012) and (Thomas, 2000), which emphasize

scaffolding and gradual development. Teachers acted as facilitators, guiding learners through brainstorming, modelling, practice, and independent production while monitoring group activities. Collaboration was at the core of implementation, as students worked in mixed-ability groups and shared roles to ensure equitable participation. Teachers also embedded assessment and feedback throughout the process, using rubrics to evaluate creativity, teamwork, and language use, consistent with (Bell, 2010) argument that reflection and ongoing feedback are essential in project-based learning. While limited instructional time and differences in student abilities posed challenges, teachers reported that project-based learning encouraged deeper engagement, problem-solving, and creativity, supporting the view that structured, student-centred projects can transform classroom learning into more meaningful experiences.

Teachers' Implementation of Project-based Learning to promote Higher-order Thinking Skills

Teachers also highlighted the role of project-based learning in fostering Higher-Order Thinking Skills. They reported employing three main strategies: (1) designing tasks that required analysis, evaluation, and synthesis of information; (2) encouraging creativity through original product creation; and (3) situating learning in real-life contexts. Activities such as script development, product reviews, or food demonstrations required students to apply Bloom's Revised Taxonomy (Anderson, 2001) by analysing information, making judgments, and presenting ideas logically. Creative tasks, such as designing greeting cards or digital posters, encouraged imagination, originality, and innovation, reflecting (Sheppard, 1995) assertion that creativity is central to project-based learning. Meanwhile, authentic and contextualized tasks, such as creating social media-style

reviews, enhanced relevance and engagement, echoing the findings of (Almulla, 2020) and (Thomas, 2000) on the importance of authenticity in project-based learning. Through these strategies, teachers perceived that students were challenged to move beyond memorization toward critical reflection, problem-solving, and creative expression. Despite constraints such as time limitations and uneven group participation, project-based learning was regarded as effective in promoting analytical reasoning, creativity, and meaningful language application.

CONCLUSION

This study examined English teachers' perceptions and practices of Project-Based Learning in promoting students' Higher-Order Thinking Skills. The findings revealed that teachers viewed project-based learning as a student-centred approach emphasizing product creation, real-life relevance, and collaboration. These perceptions were reflected in classroom implementation through structured project cycles, including planning, step-by-step instruction, group collaboration, assessment, and teacher facilitation. Students were positioned as active participants, encouraged to take ownership of learning, collaborate meaningfully, and produce tangible outputs. To foster higher-order thinking skills, teachers designed critical-thinking tasks, encouraged creativity, and grounded learning in authentic contexts. As a result, students developed not only linguistic competence but also problem-solving, decision-making, and reflective skills. Overall, project-based learning was seen as an effective pedagogical model that makes learning meaningful, student-driven, and connected to real-world applications.

REFERENCES

- Almulla, M. A. (2020). The Effectiveness of the Project-Based Learning (PBL)



- Approach as a Way to Engage Students in Learning. *SAGE Open*, 10(3). doi:https://doi.org/10.1177/2158244020938702
- Anderson, L. W. (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's Taxonomy of educational objectives (Complete ed.).
- Bell, S. (2010). Project-Based Learning for the 21st Century: Skills for the Future. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 83(2), 39–43. doi:https://doi.org/10.1080/00098650903505415
- Blumenfeld, P. C. (1991). Motivating Project-Based Learning: Sustaining the Doing, Supporting the Learning. *Educational Psychologist*, 26(3–4), 369–398. doi:https://doi.org/10.1080/0046152
- Creswell, J. (2008). Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research.
- Guo, P. (2021). The Community of Inquiry perspective on students' social presence, cognitive presence, and academic performance in online project-based learning. *Journal of Computer Assisted Learning*, 37(5), 1479–1493. doi:https://doi.org/10.1111/jcal.12586
- Halim, N. (2023). Implementation of Project-Based Learning in Indonesian EFL Class Between 2017 to 2022. *Journal Neosantara Hybrid Learning*, 1(2), 94–109. doi:https://doi.org/10.55849/jnhl.v1i2.94
- Hidayah, N. (2021). Project-Based Learning (PjBL): Advantages, Disadvantages, and Solutions to Vocational Education (in Pandemic Era). doi:https://doi.org/10.4108/eai.9-9-2021.2313669
- Husni, S., & Ginting, A. (2023). Higher Order Thinking Skills Of Reading Exercises In English Textbook “Bahasa Inggris: Work In Progress” Based On Revised Bloom's Taxonomy. *Journal of applied Linguistics*, 106–114. doi:https://doi.org/10.24114/gj.v12i3.53918
- Isnani, T. (2023). Implementation of Project-Based Learning Approach in Improving Critical Thinking Skills of Elementary School Students. *Jurnal Ar Ro'is Mandalika (Armada)*, 3(1), 47–55. doi:https://doi.org/10.59613/armada.v3i1.2844
- Luchang, A. L., & Nasri, M. (2023). Project-Based Learning (Pbl) In Enhancing Students' Higher-Order Thinking Skills (Hots): Systematic Literature Review. *International Journal of Academic Research in Progressive Education and Development*, 12(4). doi:https://doi.org/10.6007/IJARPED/v12-i4/20404
- Lutfiyana, F. (2024). Project- Based Learning: The Highlighting Teachers' Views of Teaching English Language in Secondary Schools. *Journal of Languages and Language Teaching*, 12(2), 1058. doi:https://doi.org/10.33394/jollt.v12i2.10644
- Miles Matthew B., H. A. (2019). Qualitative Data Analysis : A Methods Sourcebook. In *Sustainability (Switzerland)*, (Vol. 11, Issue 1). doi:http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsci.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484
- Nur, R. M., & Maulida, R. L. (2024). EFL Teacher Agency in Merdeka

- Curriculum. *EFLJADEs Journal of Academia in English Education*, 5(1), 119–144.
doi:<https://doi.org/10.32505/jades.v5i1.8568>
- Patton, A. (2012). Work that Matters: The Teacher's Guide to Project-Based Learning. In *Creative Education (Vol. 1, Issue 1)*, (Vol. 1, Issue 1). Retrieved from http://www.bie.org/research/study/review_of_project_based_learning_2000
- Retnawati, H. (2018). Teachers' knowledge about higher-order thinking skills and its learning strategy. *Problems of Education in the 21st Century*, 76(2), 215–230.
doi:<https://doi.org/10.33225/pec/18.76.215>
- Sheppard. (1995). This is a reproduction of a library book that was digitized by Google as part of an ongoing effort to preserve the information in books and make it universally accessible.
- Sudarso, H. N. (2024). Analyzing the Use of Project-Based Learning in English Education: Enhancing Student Engagement and Communication Skills. *Edu Cendikia: Jurnal Ilmiah Kependidikan*, 4(01), 161–16.
doi:<https://doi.org/10.47709/educendikia.v4i01.4305>
- Takiddin, T. (2020). Improving Higher Order Thinking Skills through Project-based Learning in Primary Schools. *TARBIYA: Journal of Education in Muslim Society*, 7(1), 16–28.
doi:<https://doi.org/10.15408/tjems.v7i1.14052>
- Thomas, J. (2000). Whatever Form a Project Takes , It Must Meet These Criteria To Be Gold Standard Pbl. *Interdisciplinary Journal of Problem-Based Learning*, 22(1), 1–18.