



REFERENCE BOOK

PROBLEM-BASED LEARNING IN EFL CLASSROOMS

IMPLEMENTING ARENDS' FIVE-PHASE MODEL



Authors :
Sumartono | Sri Wuli Fitriati
Sri Wahyuni | Zulfa Sakhiyya

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PREFACE

Our deepest gratitude can only be expressed by offering thanks, for it is by the grace and blessings of Almighty God that this book titled *“Reference Book Problem-Based Learning in EFL Classrooms Implementing Arends’ Five-Phase Model”* has been completed and successfully published. It is hoped that this book will contribute to the body of knowledge and broaden the insights of anyone interested in the discussion of *Problem-Based Learning in EFL classrooms through Arends’ Five-Phase Model*.

Nevertheless, we acknowledge that this writing still contains several limitations and is far from perfect, as the saying goes, “there is no ivory that is not cracked,” and indeed, perfection belongs only to God. Therefore, we are sincerely open to receiving any constructive criticism and suggestions from readers, as such input is highly valuable for our ongoing efforts to improve and refine future works.

Finally, we extend our gratitude to all parties who have supported and contributed to the entire process of preparing and publishing this book, enabling its presence before the readers. May this book be beneficial for everyone and provide meaningful contributions to the development of scientific knowledge in Indonesia.

September, 2025

Author

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CHAPTER 1

INTRODUCTION

Teaching English as a Foreign Language faces increasingly complex dynamics in modern education. In many EFL classroom contexts, students do not actively use English in their daily lives, which often leads the learning process to focus on memorizing vocabulary, practicing grammar, and engaging in procedural reading activities. As a result, students' critical thinking and communication skills do not develop optimally. Problem Based Learning, or PBL, emerges as a relevant approach because it places students at the center of the learning process. Through PBL, students learn to solve real problems using English as the medium of communication so they not only understand language material but are also able to apply it in more contextual situations. For this reason, PBL has become an urgent need in EFL instruction to create

CHAPTER 2

FUNDAMENTAL CONCEPTS OF PROBLEM-BASED LEARNING (PBL)

1. Definition and Characteristics of PBL

Problem-Based Learning (PBL) is an instructional approach that positions real-world problems as the starting point of the learning process. In this model, students are encouraged to investigate, analyze, and solve problems through collaborative inquiry. PBL is characterized by several essential features, including learner-centeredness, authentic tasks, self-directed learning, and a strong emphasis on critical and creative thinking. Problems presented in PBL are typically complex, open-ended, and reflective of real situations that require deep reasoning. Through this approach, students develop not only linguistic competence but also problem-solving skills and collaborative abilities.

CHAPTER 3

ARENDS' FIVE-PHASE MODEL IN PROBLEM-BASED LEARNING

1. Overview of Arends' Model

Arends' Five-Phase Model is widely recognized as one of the most practical and structured frameworks for implementing Problem-Based Learning in classroom environments. The model offers a clear and logical sequence of activities that guide both teachers and students through a systematic inquiry process. Arends presents five essential phases, which include orienting learners to the problem, organizing students for study, assisting with independent and group investigations, developing and presenting artefacts or learning products, and analyzing and evaluating the problem-solving process (Arends, 2012). These phases reflect the core principles of PBL as a student-centered, inquiry-driven, and

CHAPTER 4

THE IMPLEMENTATION OF PROBLEM-BASED LEARNING

1. Learning Outcomes And Success Criteria

This subsection clarifies what learners are expected to know and do, and how quality will be judged. It specifies measurable learning outcomes and the success criteria that translate those outcomes into observable performance.

a. Learning Outcomes

The targeted competencies in this guidebook integrate communicative functions, authentic products, and 21st-century skills into a single, assessable PBL arc. First, learners practice arguing, clarifying assumptions, deducing, inferring, and interpreting information as language-for-thinking moves that recur across the unit: they frame claims, identify assumptions behind those claims, select warrants, and interpret texts, data, or visuals to support or revise positions.

CHAPTER 5

ARENDS-BASED PBL IN THE EFL CURRICULUM

1. Integration into the Syllabus and Lesson Plans

Integrating Arends-based PBL into the EFL curriculum requires systematic planning that links learning objectives, language competencies, and student needs. The first step is to identify the core competencies to be achieved such as speaking, writing, critical thinking, collaboration, and information literacy. Teachers then design driving questions that are authentic, relevant, and challenging so that all learning activities are directed by a clear inquiry focus.

In syllabus development, the five phases of Arends' PBL should be mapped into the structure of each learning unit. For example, a lesson plan can include a problem orientation session at the beginning of the lesson, followed by group formation, investigation activities, product development, and

CHAPTER 6

CASE STUDY OF IMPLEMENTATION

1. Example of Arends' PBL Practice in Schools

A practical example of Arends' PBL implementation can be observed in a senior high school EFL classroom where students are asked to address the real-world issue of digital well-being among teenagers. The teacher begins the unit by presenting a contextualized scenario in which students must design an awareness campaign for healthier digital habits. This problem is introduced during the orientation phase with an engaging stimulus such as a short video and a set of guiding questions that activate prior knowledge. Students then form groups of four to five members and start identifying what they already know and what they need to learn to solve the problem.

During the investigation phase, the teacher provides curated materials including short articles, simple reports, infographics, and survey data that students can interpret

REFERENCES

- Abed, S. , S., Al-Mekhlafi, A. , M., & Al-Radaideh, A. (2023). Evaluation of problem-based learning in college of medicine: Trends in students' satisfaction and curricular implications. *Education Research International*.
<https://doi.org/10.1155/2023/9955409>
- A-Kamzari, F., A-Bahlani, S., Al-Busaidi, N., & Al-Harthy, S. (2025). A systematic literature review of project-based learning in secondary school physics. *Humanities and Social Sciences Communications*, 12, 263.
<https://doi.org/10.1057/s41599-025-04579-4>
- Alexander, E. , S., White, A. , A., Varol, A., Appel, K., & Lieneck, C. (2024). Team- and problem-based learning in health services: A systematic literature review. *Education Sciences*, 14(5), 515.
<https://doi.org/10.3390/educsci14050515>
- Arends, R. I. (2012). *Learning to Teach* (10th ed.). McGraw-Hill Companies, Inc.

- Ayu, H. , D., Putri, A. , D., & Khoiri, A. (2024). Problem-based learning (PBL) as an effective solution to enhance understanding of physics concepts: A systematic literature review. *Journal of Education and Science Empowerment*, 1(1), 1–12.
<https://joease.id/index.php/joease/article/view/29>
- Cahyono, B. , Y., & Laksmi, E. , D. (2024). Project-based learning and EFL/ESL writing: A meta-analysis. *Journal of Writing Research*, 16(2), 243–271.
<https://doi.org/10.17239/jowr-2024.16.02.02>
- Carless, D., & Boud, D. (2018). The development of student feedback literacy. *Assessment & Evaluation in Higher Education*, 43(8), 1315–1325.
<https://doi.org/10.1080/02602938.2018.1463354>
- Chueh, H. , E., Yu, Y. , H., & Chiu, P. , S. (2024). Integrating problem-based learning with a demand-centric approach for agile learning. *Heliyon*, 10(6), e29568.
<https://doi.org/10.1016/j.heliyon.2024.e29568>

- Clemen, M., Kersbergen, I., & MacDougall, G. (2024). Problem-based learning in North American primary care education: A scoping review. *Canadian Medical Education Journal*, 15(4), e1–e12. <https://doi.org/10.36834/cmej.76953>
- Ellis, R. (2017). Task-based language teaching: Sorting out the misunderstandings. *International Journal of Applied Linguistics*, 27(2), 384–392. <https://doi.org/10.1111/ijal.12204>
- Faix, A. , I. (2023). Six frames, four moves, one habit: Finding ACRL’s Framework in SIFT. *College & Research Libraries News*, 84(2), 62–65. <https://doi.org/10.5860/crln.84.2.62>
- Guo, P., Saab, N., Post, L., & Admiraal, W. (2020). Project-based learning in higher education: Student outcomes and assessment. *International Journal of Educational Research*, 102. <https://doi.org/10.1016/j.ijer.2020.101586>
- Guo, Q., Jamil, H., Ismail, L., Luo, S., & Sun, Z. (2024). Effects of problem-based learning on EFL learning: A systematic review. *PLOS ONE*, 19(12). <https://doi.org/10.1371/journal.pone.0307819>

- Guo, Q., Jamil, H., & Sun, Z. (2024). Effects of problem-based learning on EFL learning: A systematic review. *PLOS ONE*, 19(12).
- Guo, Q., Xu, X., & Yang, X. (2024). Effects of problem-based learning on EFL learning: A systematic review. *PLOS ONE*, 19(12). <https://doi.org/10.1371/journal.pone.0307819>
- Han, I. (2025a). Application of problem-based learning in English language teaching: A systematic review. *SAGE Open*, 15(1).
- Han, I. (2025b). Application of problem-based learning in English language teaching: A systematic review. *SAGE Open*. <https://doi.org/10.1177/21582440251335706>
- He, P., Guo, F., & Abazie, G. , A. (2024). School principals' instructional leadership as a predictor of teacher's professional development. *Asian-Pacific Journal of Second and Foreign Language Education*, 9(63). <https://doi.org/10.1186/s40862-024-00290-0>
- Iskandar, N., Mustaji, Jannah, M., & Wicaksono, S. , R. (2021). The problem-based learning in enhancing students' critical thinking for reading skills in English teaching at

- vocational school. *IJORER: International Journal of Recent Educational Research*, 2(2), 237–249. <https://doi.org/10.46245/ijorer.v2i2.93>
- Lazonder, A. , W., & Harmsen, R. (2016). Meta-analysis of inquiry-based learning: Effects of guidance. *Review of Educational Research*, 86(3), 681–718. <https://doi.org/10.3102/0034654315627366>
- Li, A., Chai, J., & Wang, C. (2022). How group function impacts outcomes in PBL: A scoping review. *BMC Medical Education*, 22, 919. <https://doi.org/10.1186/s12909-022-03966-8>
- Li, A., Tan, C., & Seah, B. (2022). Does your group matter? How group function impacts individual student PBL outcomes: A scoping review. *BMC Medical Education*, 22, 863. <https://doi.org/10.1186/s12909-022-03966-8>
- Lu, L. (2025a). A meta-analysis of the effectiveness of problem-based learning on critical thinking. *European Journal of Educational Research*, 14(2), 887–904. <https://www.eur-jer.com/a-meta-analysis-of-the-effectiveness-of-problem-based-learning-on-critical-thinking>

- Lu, L. (2025b). A meta-analysis of the effectiveness of problem-based learning on critical thinking. *European Journal of Educational Research*, 14(3), 123–141. <https://www.eur-jer.com/a-meta-analysis-of-the-effectiveness-of-problem-based-learning-on-critical-thinking> European Journal of Educational Research
- McGrew, S. (2024). Interventions to help people read like fact-checkers: Teaching lateral reading. *Journal of Behavioral and Experimental Economics*, 104, 4978. 102062. <https://doi.org/10.1016/j.socec.2024.102062>
- Mutammimah, H. (2023). Problem-based learning in English teaching: A literature review (2013–2023). *Proceedings of the ELLiC Conference (ELT, Linguistics, Literature & Culture)*. <https://jurnal.unimus.ac.id/index.php/ELLIC/article/view/12563> Jurnal UNIMUS
- Nicholus, G., Muwonge, C. , M., & Joseph, N. (2023). The role of problem-based learning approach in teaching and learning physics: A systematic literature review [Version

2]. . *F1000Research*, 12, 951.

<https://doi.org/10.12688/f1000research.136339.2>

Sanches-Garcia, R., Perez-Martines, J., & González-Calvo, G. (2025). Enhancing project-based learning: A framework for effective design and implementation. *Sustainability*, 17(11), 4978. <https://doi.org/10.3390/su17114978>

Sortwell, A., Trimble, K., Ferraz, R., Geelan, D. , R., Hine, G., Ramirez-Campillo, R., & Quan, Q. (2024). Meta-analyses of formative assessment effects in K-12. *Sustainability*, 16(17), 7826. <https://doi.org/10.3390/su16177826>

Wang, C. , C. (2021). The process of implementing problem-based learning in a pre-service teacher education course: A case study. *Cogent Education*, 8. <https://doi.org/10.1080/2331186X.2021.1996870> Taylor & Francis Online

Wijnia, L., Loyens, S. , M. M., & Derous, M. (2024). The effect of problem-project, and case-based learning on students' motivation: A meta-analysis. *Educational Psychology Review*, 36(79).

- Wijnia L., Noordzij, G., Arends L., R., Rikers, R. M. J. P., & Loyens, S. M. M. (2024). The effects of problem-based, project-based, and case-based learning on students' motivation: A meta-analysis. *Educational Psychology Review*, 36, 29. <https://doi.org/10.1007/s10648-024-09864-3>
- Yan, Z., Brown, G. , T. , L., & Carless, D. (2022). Self- and peer-assessment interventions: A meta-analysis. *Educational Research Review*, 36. <https://doi.org/10.1016/j.edurev.2022.100452>
- Yan, Z., Chiu, M. , M., & Ko, P. , Y. (2022). Effects of self-assessment and peer-assessment interventions on academic performance: A meta-analysis. *Studies in Educational Evaluation*, 74. <https://doi.org/10.1016/j.stueduc.2022.101128>
- Yan, Z., Lao, H., Panadero, E., Fernández-Castilla, B., Yang, L., & Yang, M. (2022). Effects of self-assessment and peer-assessment interventions on academic performance: A meta-analysis. *Educational Research Review*, 37. <https://doi.org/10.1016/j.edurev.2022.100484>

- Yew, E. , H. , J., & Goh, K. (2016). Problem-based learning: An overview of its process and impact on learning. *Health Professions Education*, 2(2), 75–79.
<https://doi.org/10.1016/j.hpe.2016.01.004>
- Yew, E. H. J., & Goh, K. (2016). Problem-Based Learning: An Overview of its Process and Impact on Learning. In *Health Professions Education* (Vol. 2, Issue 2).
<https://doi.org/10.1016/j.hpe.2016.01.004>
- Zhan, Y., Yan, Z., Wan, Z. , H., Wang, X., Zeng, Y., Yang, M., & Yang, L. (2022). Effects of online peer assessment on higher-order thinking: A meta-analysis. *British Journal of Educational Technology*, 54(4), 817–835.
<https://doi.org/10.1111/bjet.13310>
- Zhan, Y., Zhang, J., & Li, Y. (2023). Effects of online peer assessment on higher-order thinking: A meta-analysis. *British Journal of Educational Technology*, 54(5), 1941–1960.
<https://doi.org/10.1111/bjet.13310>

- Zhang, L., Li, X., & Chen, Y. (2023). A study of the impact of project-based learning on student learning effects: A meta-analysis study. *Frontiers in Psychology, 14*. <https://doi.org/10.3389/fpsyg.2023.1202728>
- Zhang, L., & Ma, Y. (2023a). A meta-analysis of project-based learning effects on student outcomes. *Frontiers in Psychology, 14*. <https://doi.org/10.3389/fpsyg.2023.1202728>
- Zhang, L., & Ma, Y. (2023b). Project-based learning effects on student outcomes: A meta-analysis. *Frontiers in Psychology, 14*. <https://doi.org/10.3389/fpsyg.2023.1202728>

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Sumartono was born in Purworejo, Central Java. He is an English lecturer in the English Education Department of Universitas Pancasakti Tegal, and a doctoral candidate in Language Education at the Faculty of Languages and Arts, Universitas Negeri Semarang. His doctoral research focuses on the implementation of Problem-Based Learning (PBL) by English teachers and its impact on students' critical-thinking skills in Indonesian senior high schools. Through this work, he aims to bridge the gap between curriculum policy, classroom practice, and measurable learning outcomes. He has been actively involved in various national teacher professional development programs, including the Teacher Professional Education Program (PPG) and the Teaching Campus Program of the Indonesian Ministry of Education, Culture, Research, and Technology. These experiences have strengthened his commitment to supporting teachers in designing meaningful, student-centered learning activities. His academic interests

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REFERENCE BOOK

PROBLEM-BASED LEARNING IN EFL CLASSROOMS

IMPLEMENTING ARENDS' FIVE-PHASE MODEL

This book presents a comprehensive overview of the implementation of Problem-Based Learning (PBL) through Arends' Five-Phase Model in English as a Foreign Language (EFL) instruction. Combining both theoretical and practical perspectives, it helps educators understand the conceptual foundations of PBL and its relevance to modern instructional demands that emphasize active learner engagement and higher-order thinking skills.

The discussion begins with an in-depth explanation of the theoretical rationale behind Arends' Five Phases, detailing the mechanisms, objectives, and instructional logic of each phase. The book then connects these theoretical insights to practical application, offering guidance on designing PBL units using backward design to ensure alignment between learning outcomes, assessments, and learning experiences.

In its later chapters, the book outlines concrete strategies, step-by-step implementation procedures, as well as risks and mitigation strategies that teachers may encounter during the PBL process. By integrating theory and practice, this book serves as a valuable reference for educators, researchers, and students seeking to deepen their understanding and application of PBL in EFL contexts, ultimately fostering more dynamic, inquiry-driven, and meaningful learning experiences.

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