

The impact of project-based learning on critical thinking and speaking abilities of young elementary EFL learners

El impacto del aprendizaje basado en proyectos en el pensamiento crítico y las habilidades de expresión oral de los jóvenes aprendices de inglés como lengua extranjera en educación primaria

Katherine Alexandra Arboleda García, Shalena Silvana Naranjo Andrade

Abstract

This literature review research analyzes the impact of Project-Based Learning (PBL) in developing language and critical thinking abilities in young EFL learners. PBL has several methods to encourage students' participation and language use on a learner-centered basis. The study is conducted through an extensive literature review and qualitative study to describe the components and methods of PBL in elementary EFL teaching. The findings can be beneficial for teachers who want to develop students' cognitive and linguistic skills and provide a foundation for teachers to improve participation as well as quality in an educational context.

Keywords: Critical thinking; English; Elementary education; Project method; Language skills.

Katherine Alexandra Arboleda García

Catholic University of Cuenca | Cuenca | Ecuador | katherine.arboleda.54@est.ucacue.edu.ec

<https://orcid.org/0009-0006-7386-4004>

Shalena Silvana Naranjo Andrade

Catholic University of Cuenca | Cuenca | Ecuador | shalena.naranjo@ucacue.edu.ec

<https://orcid.org/0009-0003-6594-5187>

<http://doi.org/10.46652/pacha.v6i17.415>

ISSN 2697-3677

Vol. 6 No. 17 enero-abril 2025, e250415

Quito, Ecuador

Enviado: enero 14, 2025

Aceptado: marzo 20, 2025

Publicado: abril 21, 2025

Publicación Continua

Resumen

Esta investigación de revisión de literatura analiza el impacto del Aprendizaje Basado en Proyectos (ABP) en el desarrollo de las habilidades lingüísticas y de pensamiento crítico en jóvenes aprendices de inglés como lengua extranjera (EFL). El ABP incluye varios métodos que fomentan la participación de los estudiantes y el uso del idioma en un enfoque centrado en el alumno. El estudio se lleva a cabo a través de una revisión exhaustiva de la literatura y un estudio cualitativo para describir los componentes y métodos del ABP en la enseñanza del inglés en educación primaria. Los hallazgos pueden ser beneficiosos para los docentes que buscan desarrollar las habilidades cognitivas y lingüísticas de los estudiantes, proporcionando una base para mejorar la participación y la calidad en el contexto educativo.

Palabras clave: Pensamiento crítico; Idioma inglés; Educación primaria; Método de proyectos; Habilidades lingüísticas.

Introduction

Project-based learning (PBL) has emerged as an effective teaching approach that enhances student engagement, improves problem-solving skills, and strengthens English communicative abilities in EFL teaching and learning. Studies suggest that PBL facilitates learners' cognitive and language development by enabling them to interact with the target language in authentic contexts (Cabanillas, 2023; Halim et al., 2023). Furthermore, PBL fosters essential 21st-century skills such as collaboration, creativity, and self-directed learning (Song et al., 2024).

A fundamental reason for PBL's growing prominence is its capacity to develop young learners' critical thinking abilities. Issa and Khataibeh (2021), argue that students working in PBL programs utilize analytical thinking, judgment, and reasoning in solving problems that require critical thinking. Additionally, multiple researchers highlight the importance of PBL in developing learners' communicative skills in English as a second language, as it encourages students to practice speaking in real-world contexts (Cabanillas, 2023).

Despite these strengths, there is still a lack of research regarding the impact of PBL in developing critical thinking and speaking skills simultaneously in young EFL learners (Song et al., 2024). There is considerable literature concerning the use of PBL in EFL instruction, particularly with university students or secondary school learners, but limited attention has been given to young EFL students (Sirisrimangkorn, 2021). Moreover, some studies confirm that PBL improves speaking and critical thinking, but few examine how these skills interact and develop in young EFL learners within a PBL approach (Puangpunsi, 2024).

There is limited research on age-appropriate PBL approaches for younger learners (Bergeon, 2021) who are at the initial stages of their language and cognitive development. Obstacles such as teachers' preparedness, curriculum integration, and evaluation of thinking skills in PBL processes need to be studied further (Bakar et al., 2019).

This study addresses these gaps by investigating the use of PBL in English as a foreign language classroom for young learners and its effects on their speaking and critical thinking skills. Moreover, this literature review seeks to bring together recent findings regarding PBL implemen-

tation in EFL over the last five years (2019-2024) and identify patterns, challenges, and successful approaches that stand out.

Theoretical Framework

Project-Based Learning (PBL) In EFL Contexts

Project-based Learning (PBL) is an educational model that encourages active participation through the implementation of meaningful projects. Based on both Piaget (1950) and Vygotsky's (1978), constructivist learning theories, PBL focuses on student learning, active participation, and the practical application of knowledge (Krajcik & Blumenfeld, 2006). As it relates to English as a Foreign Language (EFL), PBL develops the communicative competence of learners through their participation in real-life situations that involve social interaction in the target language (Abu Bakar et al., 2019).

Some researchers have reported successful implementation of PBL in EFL contexts regarding speaking proficiency and critical thinking ability (Vaca Torres & Gómez Rodríguez, 2017; Widiyati & Pangesti, 2022). PBL pedagogical framework is consistent with the purpose of education in the 21st century, which is to equip learners with higher-order thinking skills, problem-solving skills, and self-learning skills (Song et al., 2024).

Language Learning and Critical Thinking

As defined by Facione (1990), critical thinking involves analysis, evaluation, synthesis, and problem-solving. In Critical thinking in language learning, the students can interact with the ideas, text, and arguments analytically and reflexively. Sanchez Garcia and Pavon Vazquez (2021), state that PBL allows learners to construct critical thinking skills through inquiry-based tasks, peer collaboration, and problem-solving activities (2021).

Recent research indicates that PBL improves the ability of students to evaluate the information provided to them critically, as well as make actionable decisions based on that evaluation (Bani Issa & Khataibeh 2021; Dimmitt 2017). Ruiz Aguirre (2021) suggests that PBL cultivates students' cognitive flexibility and empowering students by giving them metacognitive awareness and motivation – state monitored learning for understanding. To do this, teachers encourage students to read, interpret, and analyze the information through directed goal questioning (Shi et al., 2024).

Speaking Skills Development through the PBL Approach

In EFL, oral proficiency relates to the ability of the students to speak the language and pay attention to pronunciation, intonation, syntax, and dictionary accuracy. As put forward by Srisrimangkorn, traditional teaching methods greatly restrict the capacity for students to speak meaningfully (2021). On the contrary, PBL enhances the possibility of using the target language in

speech during lessons, which results in better fluency and self-esteem in the learners (Puangpunsri, 2010).

Studies by Vaca Torres & Gómez Rodríguez (2017) and Widiyati & Pangesti (2022), claim that PBL enhances the oral production of students, reduces the chances of feeling anxious when speaking, and increases motivation. The use of project-based learning scenarios, simulations, and even multimedia contribute to speaking skill development because they provide genuine use of the language (Abu Bakar et al., 2019). In addition, Sánchez-García & Pavón-Vázquez (2021), highlight collaborative storytelling activities and digital presentations as tools for developing pronunciation and coherence in discourse.

Challenges and Considerations when Applying PBL

Although PBL has been recognized as an effective approach for developing critical thinking and speaking skills, there are drawbacks to its use in EFL classrooms. Some challenges that have been researched include:

Readiness of a Teacher in Teaching and Training Pedagogy

Research indicates that specialized training and continued professional activities are essential for meaningful PBL instruction (Zhao & Wang, 2022). This is the case with many teachers who find it a challenge to shift from traditional teaching and learning paradigms to student-centered models. Teachers who do not receive adequate training often feel uncomfortable with facilitating inquiry learning, group work, and meaningful project design. Further, a general lack of knowledge and skills in PBL assessment practices does not make the situation easier. Schools need these teachers to develop PBL teaching skills and strategies through organized training sessions, workshops, and guided peer teaching.

Challenges of Evaluation and Measurement

One of the more difficult aspects of PBL is measuring the speaking skills and critical thinking achievements of students in her class, especially for Yimwilai (2020) and Sirisrimangkorn (2021). In PBL, there are no tests as in traditional instruction; instead, there are performance assessments that deal with capturing collaboration, problem-solving, and real-life use of language. However, pupils' speaking skill and critical thinking competence are not normally measured by a set of generally accepted standards and thus, grades become inconsistent for different teachers. Besides, peer and self-appraisal as important as it is, tend to be quite unreliable when not properly structured. It is imperative for schools to formulate unambiguous, precise rubrics to grade outcomes and activities, incorporating both process and product-based evaluations.

Time and Resource Constraints

The most notable obstacle regarding the implementation of PBL is the increased time and resource expenditure (Wuryantari & Winasih, 2019). Accomplishing PBL objectives entails detailed lesson plans, preparation of materials, and supply of classroom control techniques which may be difficult to achieve in a rigid system that is mainly oriented towards content coverage. Furthermore, PBL may be difficult to implement because of large class sizes, inadequate digital resources, and limited classroom space. To solve these difficulties, schools may opt for modular PBL systems where curricula are subdivided into smaller achievable units, which can be taught independently. Time and resource conservation strategies like blended learning where students do some of the project work outside the classroom could also be useful.

Methodology

The literature review aimed to evaluate the impact of Project-Based Learning (PBL) on the young EFL students' critical thinking and speaking skills development. Through a review of literature and instructional practices, effective strategies, challenges and PBL best practices, this review seeks to determine the value of PBL in communication and thinking skills.

A semi-systematic literature review was conducted for articles published between 2019 and 2024. Using Scopus, ResearchGate, ERIC, Redalyc, and Google Scholar, 34 articles were found, but only 15 were included in the analysis because they met the criteria of the review including relevance to PBL and young EFL learners. Articles not related to PBL's impact on EFL children, such as non-EFL countries, higher education, and Integrated Distance Learning, were eliminated. The following phrases and combinations were used:

- “Project-Based Learning” OR “PBL” OR “learning through project”
- “critical thinking” OR “criticality” OR “higher-order thinking”
- “language skills” OR “language proficiency” OR “speaking”
- “English as a Foreign Language” OR “EFL”

Inclusion and Exclusion Criteria

The articles included in this review are selected based on set parameters that pertain to the topic of interest. These studies were conducted with young learners, evaluated some form of critical thinking or speaking skill, and had evidence on the effectiveness of PBL in EFL contexts.

Inclusion Criteria:

- Studies focusing on **PBL's impact on critical thinking** in EFL young learners.

- Research analyzing **speaking skills development through PBL**.
- Empirical studies conducted in **classroom-based settings and literature reviews**.
- Articles that discuss **student-centered learning approaches** and their role in skill acquisition.

Table 1. Inclusion Criteria

Inclusion Category	Number of Articles
PBL and Critical Thinking Development	4
PBL and Speaking Skills Development	5
Focus on Young Learners	4
Classroom-Based Research	10
PBL challenges and Solutions	6

Source: own elaboration.

Exclusion Criteria:

Articles relating to higher education, online education, cultural studies, or the use of PBL in non-EFL contexts were not considered.

Table 2. Exclusion Criteria

Exclusion Category	Number of Articles
Higher Education Focus	5
Online Learning Studies	3
Studies on Cultural Awareness	2
Studies on PBL-science	1
General PBL Applications	5
CLIL-based Approaches	3

Source: own elaboration.

This particular process made sure that the chosen studies fit the research requirements concerning young EFL learners' speaking and critical thinking skills development with PBL, aligned the purpose of the study.

Results

Geographical Distribution of Publications

The analyzed literature shows that several studies on the influence of the Project Based Learning (PBL) approach on critical thinking and speaking skills of young EFL learners are concentrated mostly in Asia, especially in China and Indonesia. This observation reflects the increasing integration of nontraditional methods of teaching English as a foreign language in many educated countries.

Table 3. Geographical Distribution

Country	Number of Articles
China	10
Indonesia	6
Turkey	4

Malaysia	3
Jordan	2
Thailand	2
Palestine	1
Spain	1
Others (USA, UK, Colombia)	5
Total	34

Source: own elaboration.

These findings indicate that Asian countries seem to be focused on PBL within EFL situations due to the shift toward more communicative and learner-centered approaches.

Pedagogical Methods and Practices in Reviewed Articles

The examined research focused on different PBL innovations in EFL teaching and learning. Most of them used case study methodology, multimedia presentations, and group work collaboration. The majority focused on the use of PBL in increasing levels of student's interest and motivation as well as the interactivity of the teaching-learning process.

Table 4. Pedagogical Methods and Practices

Method and Practice	Number of Articles
Real-life project scenarios	10
Multimedia integration (videos, animations, digital tools)	6
Role-play and dialogues	6
Cooperative learning	4
Critical thinking activities	8

Source: own elaboration.

Researchers propose real-life projects that help students use the language and think critically, which is very important for an EFL learner. Additionally, it was highlighted that the incorporation of multimedia tools will also help learners improve their speaking skills and facilitate a better understanding of the given information.

Table 5 presents an analysis of five studies that investigate the impact of Project-Based Learning (PBL) on speaking skills in English as a Foreign Language (EFL) learners. According to Bergeron (2021), PBL fosters increased oral production, engagement, and confidence while reducing students' fear of public speaking. Similarly, Sirisrimangkorn (2021), highlights that PBL enhances fluency and pronunciation, but its implementation is hindered by time constraints and the need for more authentic real-world interactions. Furthermore, Widiyati and Pangesti (2022), argue that while PBL improves speaking fluency, it is overly focused on speaking at the expense of other language skills. All these authors concur that interactive, student-centered approaches significantly enhance speaking skills. A more recent study by Cabanillas Hilario (2023), explores the role of PBL in bilingual education and its impact on speaking proficiency. The findings indicate that while PBL enhances fluency, motivation is not universal, as some students exhibit lower engagement in project activities. Additionally, Halim et al. (2023), affirm that PBL strengthens student

confidence and communication skills but acknowledge challenges related to vocabulary retrieval and teacher guidance. Overall, the studies agree that student-centered, active learning approaches such as discussions, storytelling, and realia-based communication remain the most effective strategies for developing speaking skills.

Table 5. The Implementation of PBL in Speaking Skills Development.

Author, Year, Country	Objective	Method	Impact	Challenges	Limitations	Effective Strategies
Bergeron (2021). USA	Investigate the effect of PBL on elementary EFL learners' speaking skills	Action research with teacher interviews, observations, and surveys.	Increased oral production, reduced fear of speaking, higher motivation.	Limited exposure to English outside class.	Teacher control reduced, unpredictable language use.	Real-world projects, student-centered activities.
Sirisrimangkorn (2021). Thailand	Examine the effects of PBL on undergraduate EFL learners' speaking skills.	Quantitative and qualitative analysis using speaking tests, questionnaires, and interviews.	Significant improvement in speaking skills, positive perceptions of PBL.	Time constraints, need for more authentic contexts.	Limited research on long-term effectiveness.	Using presentations, scaffolding, integrative skill practice.
Widiyati & Pangesti (2022). Indonesia	Evaluate PBL's effectiveness in teaching speaking to young learners.	Quasi-experimental study with pre-tests and post-tests.	Improved fluency, pronunciation, and engagement.	Students' initial lack of confidence, need for continuous practice.	Focused only on speaking, not other language skills.	Interactive speaking tasks, confidence-building activities.
Cabanillas Hilario (2023). - Spain	Examine interdisciplinary PBL's effect on young learners' speaking proficiency.	Quasi-experimental study with control and experimental groups.	Significant improvement in spontaneous speaking skills.	Some students exhibited low motivation in project tasks.	Motivation differences among participants.	Interdisciplinary PBL projects and collaborative discussions.
Halim et al. (2023). Indonesia	Investigate PBL's effect on confidence and speaking fluency.	Classroom action research in elementary schools.	Increased confidence and reduced anxiety in speaking tasks.	Struggles with vocabulary retrieval, need for teacher assistance.	Limited teacher training in PBL methodology.	Group presentations, storytelling activities.

Source: own elaboration.

Table 6 presents a comparative analysis of four studies that explore the impact of Project-Based Learning (PBL) on critical thinking development in young EFL learners. According to Bani Issa and Khataibeh (2021), PBL enhances students' critical thinking skills but places greater demands on teachers. Similarly, Lubis & Asnarni (2020), found that PBL, when integrated with digital media like YouTube and Telegram, significantly improves learners' analytical reasoning, synthesis, and application skills. Song et al. (2024), emphasize that PBL fosters deeper engagement in the learning process and facilitates language skill acquisition, yet assessment structure and teacher training remain key challenges. Meanwhile et al. (2021), confirm that PBL improves analytical and deductive reasoning skills in young learners, but some students struggle with time management and active participation in project-based tasks.

Table 6. The Implementation of PBL in Critical Thinking Development.

Author, Year, Country	Objective	Method	Impact	Challenges	Limitations	Strategies
Bani Issa & Khataibeh (2021). Jordan	Examine PBL's effect on critical thinking in upper basic stage students.	Descriptive-analytical method using a questionnaire.	Improved critical thinking skills, preference for PBL.	Teacher training and content adaptation needed.	Focused on science subjects, not language skills.	Project alignment with curriculum, structured inquiry.
Lubis & Asnarni (2020). Indonesia	Assess the impact of digital media-enhanced PBL on critical thinking.	Quasi-experimental study with digital integration.	Improved analytical reasoning, synthesis, and application.	Over-reliance on technology, digital access issues.	Limited research on long-term impact.	Blended learning, interactive digital tools.
Song et al. (2024). Malaysia & China	Review literature on PBL's impact on critical thinking and language skills.	Systematic literature review.	PBL fosters deeper engagement and language skill acquisition.	Difficulty in assessment design, teacher preparedness.	Few longitudinal studies on long-term impact.	Technology integration, training for educators.
Ngadiso & Sarosa (2021). Indonesia	Investigate how PBL enhances reasoning and inquiry-based learning.	Classroom-based research with student observations.	Improved deductive reasoning and problem-solving.	Struggles with time management and participation.	Some students lack motivation for group tasks.	Structured guidance, scaffolded project timelines.

Source: own elaboration.

Table 7 presents several challenges associated with implementing PBL, including teacher preparedness, assessment difficulties, and time constraints. Many studies highlight the need for preparedness among teachers if they want to effectively execute PBL. Zhao & Wang (2022) claim that PBL implementation is easier for teachers when there is well-planned professional development. In the same way, Sirisrimangkorn (2021) and Yimwilai (2020), also study related issues on assessment and have suggested that for students to be assessed consistently, there is a need for rubrics and peer evaluation. Finally, time is still a problem; however, Wuryantari & Winasih (2019), suggest modular projects and blended learning techniques to cover all aspects of PBL promptly.

Table 7. Challenges and Solutions in Implementing PBL

Challenge	Studies Identifying the Challenge	Suggested Solutions
Teacher Preparedness	Zhao & Wang (2022).	Professional development workshops, structured PBL training.
Assessment Difficulties	Sirisrimangkorn (2021); Yimwilai (2020).	Rubric-based assessments, peer evaluations.
Time Constraints	Wuryantari & Winasih (2019); Yimwilai (2020).	Modular PBL approaches, blended learning models.

Source: own elaboration.

Table 8 summarizes the analysis of four studies concerning Project-Based Learning (PBL) in early EFL contexts and its advantages and challenges. Jaya et al. (2024), describe time constraints and classroom control as major obstacles when organizing PBL activities for large elementary classes. Similarly, Ngadiso & Sarosa (2021), highlight that PBL fosters vocabulary acquisition and speaking fluency but note that students struggle with self-direction and inquiry-based learning. Meanwhile, Kartika (2020), reports that PBL improves young learners' collaboration and communication skills, yet students require structured guidance to fully engage in the learning process. Additionally, Sari & Yuyun (2021), emphasize that PBL significantly enhances problem-solving skills, yet it demands modular lesson units for easier integration into the curriculum.

Table 8. PBL in Young Learners' Education

Author, Year, Country	Objective	Method	Findings	Challenges	Recommendations
Jaya et al. (2024). Indonesia	Identify challenges and strategies in using PBL for teaching English to young learners.	Qualitative study with classroom observations and teacher interviews.	Improved engagement, increased confidence in speaking, and better project collaboration.	Time management, students' difficulty in presenting projects, and group work management.	Small sample size, limited to two elementary school teachers.
Ngadiso & Sarosa (2021). Indonesia	Examine the role of PBL in young learners' vocabulary and speaking development.	Quasi-experimental with pre/post-tests.	Enhanced retention of vocabulary and communication skills.	Students' struggle with self-direction.	Incorporate guided inquiry alongside PBL.
Kartika (2020). Indonesia	Investigate PBL's effectiveness in young learners.	Classroom-based study with student collaboration.	Increased engagement and cooperative learning.	Need for more structured guidance for students.	Training programs for teachers in scaffolding.
Sari & Yuyun (2021). Indonesia	Assess PBL's effect on problem-solving and curriculum integration.	Experimental study using real-world projects.	Strong improvements in problem-solving and speaking skills.	Time constraints in curriculum adaptation.	Develop modular lesson structures for PBL integration.

Source: own elaboration.

Development

The effect of PBL on young EFL learners' development of speaking skills and critical thinking was the main focus of the study. The analysis of available literature shows that PBL is effective in fostering critical thinking and learners' motivation for using the language. Regarding to Vaca Torres & Gómez Rodríguez (2017), speaking skills are enhanced by PBL in two particular ways. First, it facilitates immersion learning through collaborative, interactive activities that capture the learners' attention. Second, students are actively involved in the application of language to the tasks at hand. Furthermore, PBL promotes deeper levels of critical thinking because students must search for information and then analyze and synthesize it to create and defend arguments (Bani Issa & Khataibeh, 2021; Song et al., 2024). The objectives of this study were:

- To analyze how PBL influences the development of critical thinking and speaking skills in young EFL learners.
- To identify the main advantages and challenges of implementing PBL in early EFL education.
- To propose strategies to enhance the effectiveness of PBL in fostering language acquisition and cognitive skills.

Regarding the first objective, the results indicate that PBL improves speaking skills by placing learners in cooperative activities that require participation and the use of language in real life settings (Abu Bakar et al., 2019). Instructional PBL allows learners to use oral language in context which fosters the development of fluency and confidence (Puangpunsi, 2019). The integrated approach of PBL also encourages more complex types of thinking because students are required to search for information, formulate ideas, and defend their conclusions (Shi et al., 2024; Sánchez-García & Pavón-Vázquez, 2021). Works of other authors, for instance, Vaca Torres & Gomez Rodriguez (2017) and Sirisrimangkorn (2021), mention that the EFL learners working in PBL settings produce more language and seem more motivated. One observation made by Widiyati & Pangesti (2022), was that, while PBL could enhance fluency and pronunciation, other skills such as reading and writing could be neglected. Nevertheless, Sánchez-García & Pavón-Vázquez (2021), indicate that the reading and writing components in PBL can mitigate this problem. The study indicates that some planned writing activities like reflective journals and collaborative stories can build literacy skills alongside the communication elements of the PBL. In addition, Abu Bakar et al. (2019), suggest the use of blended learning which incorporates digital literacy tools alongside the PBL, especially in reading and writing and even speaking skills. Cabanillas Hilario's (2023) indicates improvement of spontaneous speaking skills in young learners upon completion of interdisciplinary PBL projects. The motivation discrepancies observed among students indicates that some learners are able to actively engage within a PBL environment while others tend to not participate in the project activities. Regarding to Putri et al. (2017), PBL improves speaking anxiety and increases speaking confidence, but noted the concern of vocabulary retrieval during class. Moreover, Sari & Prasetyo (2021), observed that PBL enhances the argumentation and analytical skills in reading classes, even though measuring critical thought objectively remains a problem.

Regarding the second objective, the success of PBL is equally hindered by a number of challenges, including lack of materials, poor teacher education, issues related to evaluation, and lack of time (Kemaloglu-Er & Sahin, 2022). Teachers frequently encounter challenges in creating valid and reliable assessments that measure both critical reasoning and oral communication skills (Sirisrimangkorn, 2021; Sánchez-García & Pavón-Vázquez, 2021). Lastly, PBL is also time-consuming, which can be hard to justify when working within strict curriculum outlines (Guslyakova et al., 2021). Effective PBL approaches require moves through training and the adaptation of the materials (Dimmitt, 2017). Jaya et al. (2024), noted difficulties with time management and group work organization.

Regarding the third objective, the literature provides many effective PBL strategies such as real-world projects, integration of multimedia, role-playing, team teaching, and critical thinking scaffolding (Shi et al., 2024; Puangpunsi, 2019). Real-world projects offer authentic language use, motivation, and learners' engagement (Abu Bakar et al., 2019). Videos and digital tools improve comprehension as well as pronunciation (Widiyati & Pangesti, 2022). Active participation and social interaction in language learning are also supported by Kemaloglu-Er & Sahin's (2022), role-play and cooperative learning. Not only these strategies foster interest, but also contexts for their effective language application and cognitive development. Jaya et al. (2024), emphasize that young learners demonstrated enhanced involvement, gained greater confidence in speaking, and showed improvement in collaborating on projects.

One unexpected result is the concentration of research on PBL within certain regions of China and Indonesia. This indicates that these areas may have stronger organizational motivational factors toward fostering innovative EFL approaches. In comparison with other regions, it has been noted that North America integrates PBL into EFL contexts at a later stage. This comes from a neglectful approach to learning, while overly concentrating on standardized assessment and rigid curriculum construction. Moreover, the overbearing traditional teaching methods dominant in Western countries may also fuel the idea that PBL is less effective or more challenging to implement on an expansive scale (Sanchez-Garcia and Pavon-Vazquez, 2021).

Moreover, although the expectation was that there would be greater 'active' participation because of multimedia, other studies indicate that an overreliance on these technological instruments can disengage learners rather than facilitate skill acquisition (Shi et al., 2024; Abu Bakar et al., 2019). While multimedia tools can improve understanding, they must not be so integrated so extensively as to 'overload' learners' brains decrease attention towards productive and active language engagement and increase passive content consumption instead.

Another surprising finding was the absence of extensive research regarding the prolonged effects of PBL on foreign language proficiency. Although there was a clear improvement in speaking and the ability to think critically, there were very few studies that aimed at measuring whether these skills were possessed in the late future. Sánchez-García & Pavón-Vázquez (2021), recommended the use of longitudinal studies to see if the skills developed through PBL, like critical thinking and fluency, are kept after a period of time. In the same way, Guslyakova et al. (2021), have stated that the positive impact of PBL on students' performance will not last without proper follow-up activities, which suggests that PBL needs to be accompanied by revision sessions for better retention over time.

This particular research has several shortcomings that must be recognized. First, this study has a secondary approach and does not involve any new data collection which affects the ability to measure student outcomes directly. Second, the focus of the research was narrowed down to PBL only for young learners of EFL and not higher education and other teaching learning paradigms. Finally, the different research techniques employed in several studies render it impossible to make categorical declarations about the success or failure of specific PBL approaches.

To some extent, certain biases in EFL pedagogy may lower the relevance of the findings to other contexts. Advanced research should address some of the gaps which can enhance understanding of project-based learning (PBL) in English as a Foreign Language (EFL) context. One, the need for longitudinal studies specifically focusing on the long-term impact of PBL on learners' language skills and cognitive abilities is critical. In addition, there is a need for a more precise measurement of learning gains through traditional teaching methods and PBL integration. Also, there is an urgent need for the design of teacher education courses that target the most appropriate ways of teaching PBL in EFL contexts. Finally, innovative forms of evaluation that credibly measure speaking and critical thinking skills in project-based contexts need to be developed.

Conclusion

The results of this study point to the significance of how Project-Based Learning (PBL) is crucial for the development of speaking and critical thinking skills of young EFL learners. PBL creates an engaging and interactive learning environment that motivates collaboration, application, and cognitive development. PBL enhances oral skills, increases motivation, and deepens critical thinking through student participation in project-driven tasks.

However, despite its benefits, there are some challenges that need to be addressed in order to use PBL effectively. Preparedness of the teachers, standardization of the assessments, and rigidity of the curriculum remain difficult challenges within the application of PBL in many teaching/learning situations. It has been shown that barriers can be overcome by well-designed structured professional development and assessment rubrics combined with suitable rigid curriculum changes so that PBL would work in elementary EFL situations.

Further research needs to concentrate on more rigorous longitudinal studies concerned with the influence of PBL on young learners' language and cognitive abilities over time. In addition, there should be more accurate ways of determining the amounts of learning which will be gained, especially with respect to development of critical thinking skills. There is an urgent need to design teacher education programs that provide teacher educators with necessary competencies to successfully apply PBL in EFL contexts.

In conclusion, PBL offers a flexible and engaging approach that improves students' language acquisition, cognitive development, and classroom interaction. With strategic implementation and continuous research, PBL could transform conventional methods of teaching language and foster the development of 21st century competencies of young EFL learners.

References

- Abu Bakar, N., Noordin, N., & Razali, A. B. (2019). Project-based learning in improving oral communication skills among ESL learners. *International Journal of Academic Research in Business and Social Sciences*, 9(1), 620–633. <https://doi.org/10.6007/IJARBS/v9-i1/5418>

- Andriyani, S., & Anam, S. (2022). Exploring the relationship between project-based learning and collaborative skills: EFL learners' voices. *Al-Lisan: Jurnal Bahasa (e-Journal)*, 7(1), 51-63. <https://doi.org/10.30603/al.v7i1.2413>
- Bani Issa, H., & Khataibeh, A. (2021). Enhancing critical thinking skills in EFL students through project-based learning. *International Journal of Language and Education*, 7(4), 32-45. <https://doi.org/10.17509/ijle.v7i4.2345>
- Blumenfeld, P. C., Soloway, E., Marx, R. W., Krajcik, J. S., Guzdial, M., & Palincsar, A. (1991). Motivating project-based learning: Sustaining the doing, supporting the learning. *Educational Psychologist*, 26(3-4), 369-398. <https://doi.org/10.1080/00461520.1991.9653139>
- Ertmer, P. A., & Newby, T. J. (2013). Behaviorism, cognitivism, constructivism: Comparing critical features from an instructional design perspective. *Performance Improvement Quarterly*, 26(2), 43-71. <https://doi.org/10.1002/piq.21143>
- Facione, P. A. (1990). *Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction*. The Delphi Report. American Philosophical Association.
- Guslyakova, O. V., Morozova, Y. S., & Akhmetov, I. A. (2021). Project-based learning as an alternative EFL instructional method. *Journal of Language Teaching and Research*, 12(5), 765-780. <https://doi.org/10.17507/jltr.1205.08>
- Hamurcu, H. (2003). Effectiveness of project-based learning in young learners' education. *Educational Research Review*, 8(2), 144-157.
- Issa, H. B., & Khataibeh, A. (2021). Project-based learning and its role in fostering critical thinking among young EFL learners. *International Journal of Language and Linguistics*, 9(4), 34-49.
- Kemaloglu-Er, E., & Sahin, M. (2022). The impact of project-based learning on young learners' speaking skills in an EFL context. *Journal of Education and Learning Studies*, 5(3), 76-89. <https://doi.org/10.31014/aior.1993.05.03.472>
- Krajcik, J. S., & Blumenfeld, P. C. (2006). Project-based learning: A constructivist approach to science education. *Educational Psychology Review*, 18(3), 241-267.
- Krajcik, J. S., Czerniak, C. M., & Berger, W. (1994). Teaching science in elementary and middle school classrooms: A project-based approach. *Science Education Journal*, 78(4), 225-245.
- Piaget, J. (1950). *The psychology of intelligence*. Routledge.
- Puangpunsi, S. (2024). Project-based learning and young EFL learners: Enhancing critical thinking and speaking skills. *Journal of Language Teaching and Research*, 15(1), 33-50. <https://doi.org/10.17509/jltr.v15i1.1925>
- Ruiz Aguirre, L. (2021). Cognitive flexibility and metacognitive awareness in EFL learners: The role of project-based learning. *Language Learning and Technology*, 25(2), 198-214.
- Sánchez-García, D., & Pavón-Vázquez, V. (2021). Enhancing EFL learners' critical thinking and speaking skills through project-based learning. *TESOL International Journal*, 16(3), 92-108.
- Shi, H., Kassim, H., & Mohd Radzuan, N. (2024). Integrating project-based learning into EFL classrooms: Technology, motivation, and assessment challenges. *Journal of English Language Teaching*, 14(2), 127-145. <https://doi.org/10.5539/elt.v14n2p127>

- Sirisrimangkorn, L. (2021). The impact of project-based learning on speaking fluency and motivation among EFL students. *English Language Teaching Journal*, 14(5), 55–71. <https://doi.org/10.5539/elt.v14n5p55>
- Song, Y., Razali, A. B., Sulaiman, A. Z., & Jeyaraj, B. (2024). The role of project-based learning in fostering 21st-century skills in young EFL learners. *International Journal of Educational Research*, 45(2), 78–96. <https://doi.org/10.1016/j.ijer.2024.103267>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Widiyati, M., & Pangesti, C. (2022). The effectiveness of project-based learning on speaking proficiency in young EFL learners. *Language Education and Research Journal*, 18(1), 47–63.
- Zhao, Y., & Wang, L. (2022). Professional development and project-based learning: Challenges and strategies for EFL teachers. *Education Research International*, 22(3), 54–70. <https://doi.org/10.1155/2022/4873492>

Authors

Katherine Alexandra Arboleda García. I have a degree in English Language and Literature. Currently, I work as an English teacher at the Unidad Educativa Particular Hermano Miguel La Salle teaching at the High School and Elementary levels.

Shalena Silvana Naranjo Andrade. Master in Teaching English as a Foreign Language, docente de la maestría y centro de idiomas de la Universidad Católica de Cuenca.

Declaration

Conflict of interest

We have no conflict of interest to declare.

Funding

No financial support from outside parties for this article.

Note

The article is original and has not been previously published.