



The Implementation of Project-Based Learning In Indonesian Efl Class Between 2017 To 2022: A Systematic Review

Nixon Halim ¹, Melkisedek Boys ², Farid Fahmi ³, Kayoko Nozaki ⁴, Matsuzaki Wuttipong ⁵

¹ Universitas Indraprasta PGRI, Indonesia

² Universitas Indraprasta PGRI, Indonesia

³ Universitas Indraprasta PGRI, Indonesia

⁴ Tohoku University, Japan

⁵ Shanghai Jiao Tong University, China

Corresponding Author: Nixon Halim E-mail; nixonhalim@live.com

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ABSTRACT

The project-based learning (PjBL) approach emphasizes the learning process, which has a tangible endpoint in the form of a product, and makes students the subject or focal point of instruction. In other words, students are free to choose their educational pursuits and to collaborate on learning tasks until a finished product is produced. Because of this, the degree to which students participate in their education has a significant impact on its success. A systematic review was used as the research methodology to analyze the literature across 15 journals using data from several databases, including Garuda and Google Scholar. The journals were analyzed utilizing a content analysis method and the data are presented in systematic diagrams and tables. The result of the study revealed that Project-based learning (PjBL) was the most used at University with 60% and between 2017-2022. In 2022 was the most popular Project-based learning very high. In addition, research methods in project-based learning were quantitative and qualitative in the same amount. Moreover, the most implemented Project-based learning was to increase speaking and vocabulary skills. Further analysis of advantages related to the use of Project-based was also illustrated.

Keywords: *EFL Indonesia, Learning Project, Project-based learning*

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INTRODUCTION

Project-based learning (PjBL) is an educational strategy in which students learn by actively participating in real-world and personally meaningful projects. In a PjBL setting, students frequently study complicated, open-ended problems or challenges in teams before using what they have learned to produce a final product or presentation that displays their understanding of the subject.

PjBL has its roots in constructivism, a learning theory that asserts that students build their conceptualizations of the world through their experiences and interactions with it (Piaget, 1954). Constructivism holds that knowledge is something that is actively built by the learner rather than something that can be handed from one person to another. This is the foundation of PjBL since it enables students to actively create their understanding of a subject by working through genuine, in-the-real-world issues and obstacles.

PjBL has also been impacted by experiential learning theories, which argue that learning is most successful when it is based on personal experiences and activities (Kolb, 1984). This strategy and PBL are well-aligned since PjBL gives students the chance to learn through practical applications of their knowledge to real-world issues.

PjBL which consists of projects that integrate science, technology, society, history, mathematics, politics, and productive discussion opportunities for students, encourages student inquiry directed towards real-world problems, gives them a passion for learning and teaching becomes effective (Turgut, 2008:61).

PjBL has been proven to be a successful method for involving students and fostering deep learning because it enables them to apply their knowledge and abilities to real-world issues and stimulates their critical and creative thinking (Buck Institute for Education, n.d.). Many of the 21st-century abilities necessary for success in the modern world, like cooperation, communication, and problem-solving, are well-aligned with PjBL (Ertmer & Newby, 2013).

According to studies on PjBL, it can benefit students in several ways, including higher achievement (Blumenfeld et al., 1991), motivation (Krajcik et al., 1998), and knowledge retention (Grossman et al., 1989). PBL can help raise students' interest in the subject matter and their attitude toward learning (Blumenfeld et al., 1991; Krajcik et al., 1998). PBL has also been demonstrated to be particularly successful for underprivileged children since it can help level the playing field and present chances for success for all pupils (Grossman et al., 1989).

The criteria for Project Based Learning are centering, focusing on questions or problems, constructive investigation or design (Abaunza & Rodríguez-Conde, 2016; Al-Ayyoub, 2018; Alshahrani, 2022), giving autonomy to students, and being real. The main components of Project Based Learning are (1) asking questions or problems that are presented to arrange and start activities, and emphasizing several meaningful projects, (2) obtaining the final result or several products as a series of activities, individual communication, or various results of tasks that answer the problem (Lisminingsih, 2010, p.113).

PjBL (project-based learning) can be an effective method of teaching English as a foreign language (EFL). Students in a PjBL classroom work on a project that requires them to apply their language abilities in actual, real-world circumstances (Aguilar, 2018; Chintalapudi dkk., 2022; Gan dkk., 2022). Students can understand the relevance of the language skills they are learning and how they may be applied in the real world, which can make the learning process more relevant and interesting for them. Therefore, Project-based learning provides opportunities for students to learn accordingly in real life, which can result in permanent knowledge (Gulbahar & Tinmaz, 2006: 309).

The instructor acts as a facilitator in an EFL PjBL classroom, assisting students with project planning, project execution, and any necessary assistance. The instructor can also assist pupils to improve their speaking, listening, reading, and writing abilities by giving them language training and feedback.

One of the main advantages of PjBL in EFL is that it enables students to utilize the language in real-world situations (Aghabalaeei dkk., 2023; Ali, 2022; Cumming, 2018), which can enhance their language ability and self-assurance (Chai & Wong, 2010). PjBL can encourage teamwork, critical thinking, and other abilities that are crucial for success in today's globalized society (Gao & Zhao, 2013).

Overall, PjBL may be a useful method for teaching EFL since it can motivate and empower students while also assisting them in acquiring the language skills necessary to be successful in both academic and professional settings.

The Systematic Review's Purposes

The main objectives of this systematic review were to:

1. Present the state of the research on project-based learning for Indonesian EFL students between 2017 and 2022.
2. Look into how such studies helped EFL students in Indonesia to improve their language abilities.

Research Question

1. What studies on project-based learning of Indonesian EFL students have been conducted between 2017 and 2022?
2. In what ways do those studies help Indonesian EFL students develop their language skills?

RESEARCH METHODOLOGY

The systematic review method was used in the present research. A systematic review is a review of the research literature on a single topic to discover, select, assess, and synthesize all high-quality research findings relevant to that topic (Bettany-Saltikov, 2012). A good systematic review sample takes the necessary precautions to minimize bias and mistakes. (Littell, Corcoran & Pillai, 2008:1). A systematic review follows a well-defined methodology that specifies the aims, concepts, and techniques ahead of time to synthesize the existing research and reach trustworthy findings (Lau, 2007). Following

the development of the research questions, a review methodology was devised to look for relevant studies.

Data collection

Data collection was carried out by identifying and retrieving relevant studies through a comprehensive and systematic literature search from the selected national and international journals. The search was conducted using Google Scholar and Garuda as the database. These databases were selected since they contain the highest number of education-related studies. The search terms used included 'Project-based learning', 'Project-based learning in EFL', and 'Project-based learning in Indonesian EFL'.

Data Analysis

Table 1. Subcategories of the Research Question

Research Question	Sub-categories
(RQ1) What studies have been undertaken on Project-based learning of Indonesian EFL students between 2017 to 2022?	<ul style="list-style-type: none">• Year distribution of the studies• Education levels• Research Method
(RQ2) How do those studies contribute to improving the language skills of Indonesian EFL students?	<ul style="list-style-type: none">• Studied basic language skills• The effectiveness of the Project Based Learning• Advantages of Project-based English Learning• Challenges of Implementing Project-based English Learning

Source: Analyzing journal

After the search technique, the studies to be included in the keyword map were determined using the inclusion and exclusion criteria listed below:

Inclusion criteria

Studies were included if:

1. They were published between 2017 and 2022
2. They focused on EFL
3. They were conducted in Indonesia

Exclusion criteria

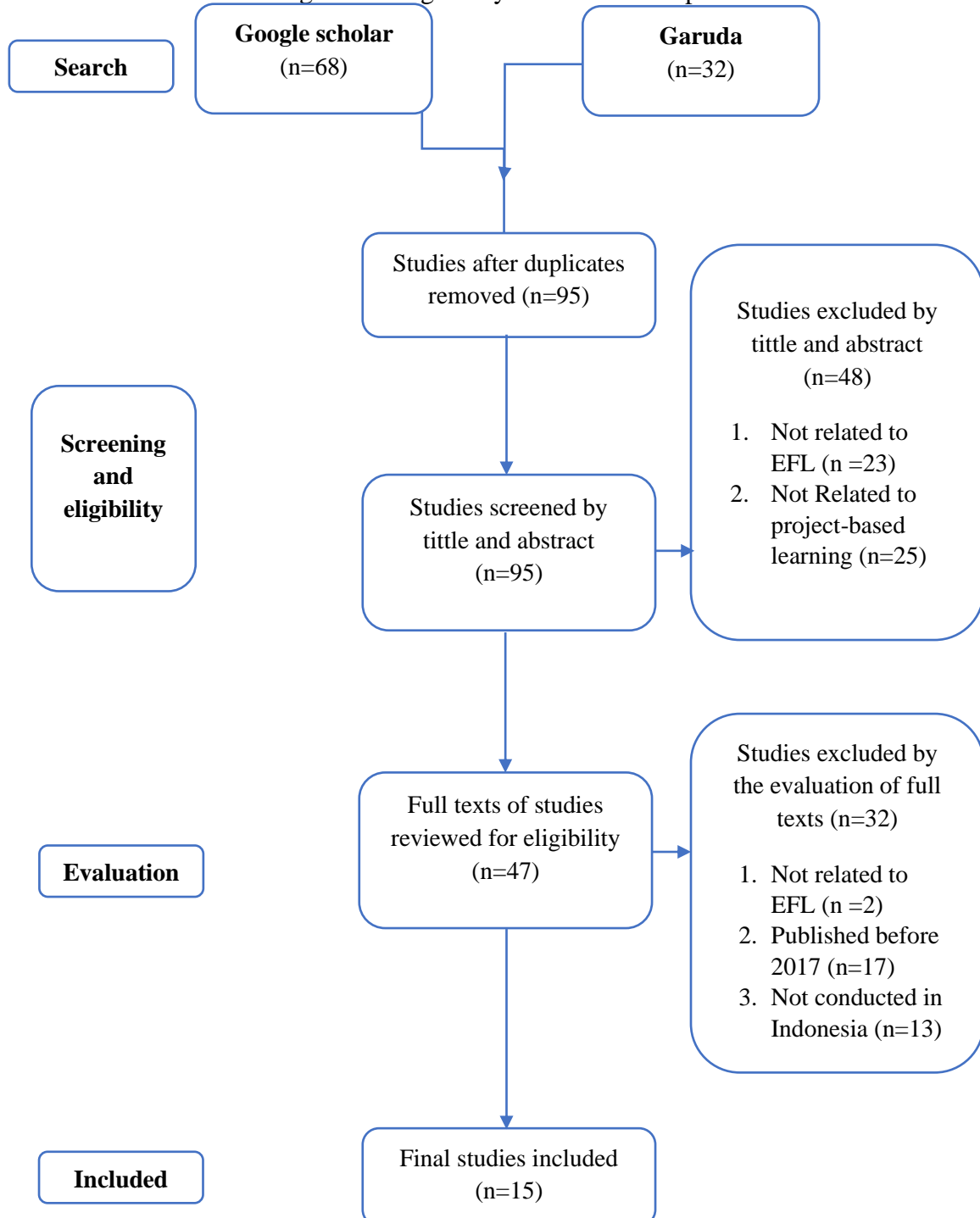
Studies were excluded if:

1. They were published before 2017
2. They did not focus on EFL
3. They were not conducted in Indonesia

The search method provided 100 results from several databases, which were reduced to 95 once duplicates were removed. After reviewing the records, 48 studies were eliminated, leaving 47 full-text papers. Following the evaluation of the full-text papers using the defined inclusion and exclusion criteria, 15 results were produced, which

formed the final results. All the studies examined in this paper were analyzed and made a matrix reference by researchers.

Figure 1. Diagram systematic review process



RESULT AND DISCUSSION

Result

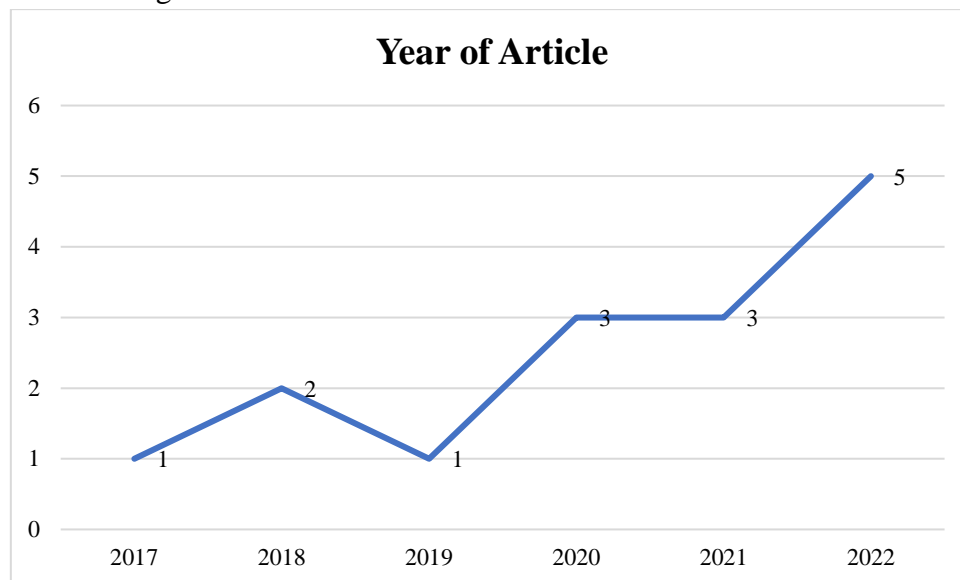
Present the current status of research on Project-based learning of Indonesian EFL students between 2017 to 2022.

To answer RQ1, the following subcategories were defined and examined by the researchers: Distribution of the studies by years and Education levels of samples. In the following section, the subcategories are described in detail.

Year distribution of the studies

The distribution of the studies referring to Project-based learning of Indonesian EFL students between 2017 to 2022 by years is shown in Figure 2. The first research into the area was published in 2017 (n=1), After which there was a decrease and an increase in the number of studies from 2017 until 2022 period. Meanwhile, the most research on project-based learning is in 2022 (n = 5).

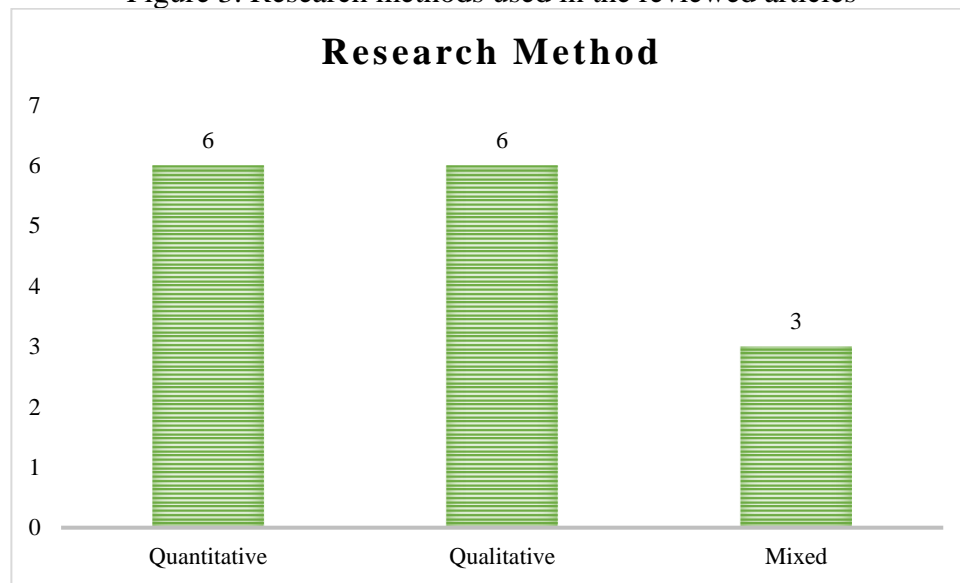
Figure 2. The number of articles between 2017 and 2022



Research methods used in articles

As shown in Figure 3, the most used research method was the Quantitative (n = 6) which has the same amount as The Qualitative method (n = 6) and The least commonly used methods were The Mixed Method.

Figure 3. Research methods used in the reviewed articles



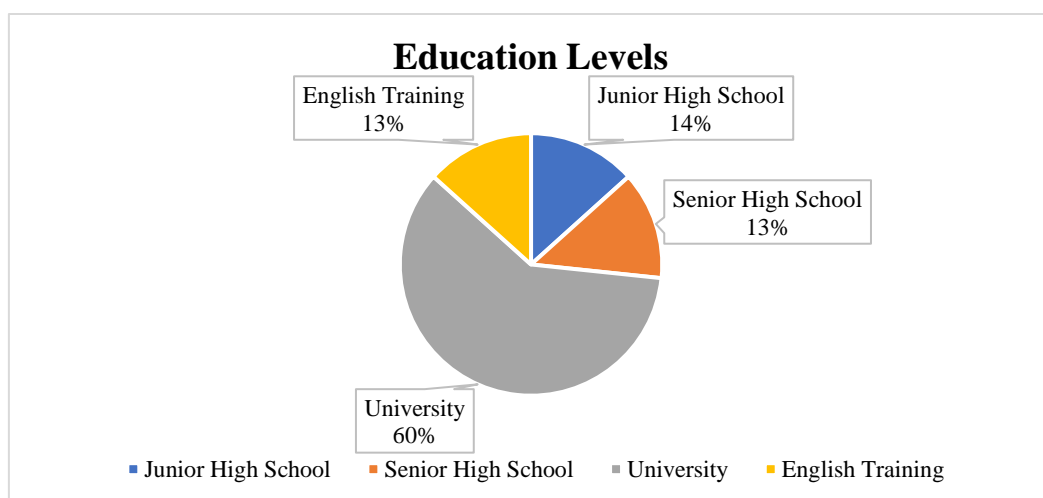
Education levels of samples

Table 2 and Figure 4 reveal that the vast majority of articles (60%) selected University (n=9), (13,3 %) Junior High School (n=2), (13,3 %) Senior High School (n=2), and (13,3 %) English Training (n=2).

Table 2. The number of education levels of the sample

Education Levels	Number	Percentage
Kindergarten	0	0%
Elementary School	0	0%
Junior High School	2	13%
Senior High School	2	13%
University	9	60%
English Training	2	13%

Figure 4. The percentage of education levels of the sample

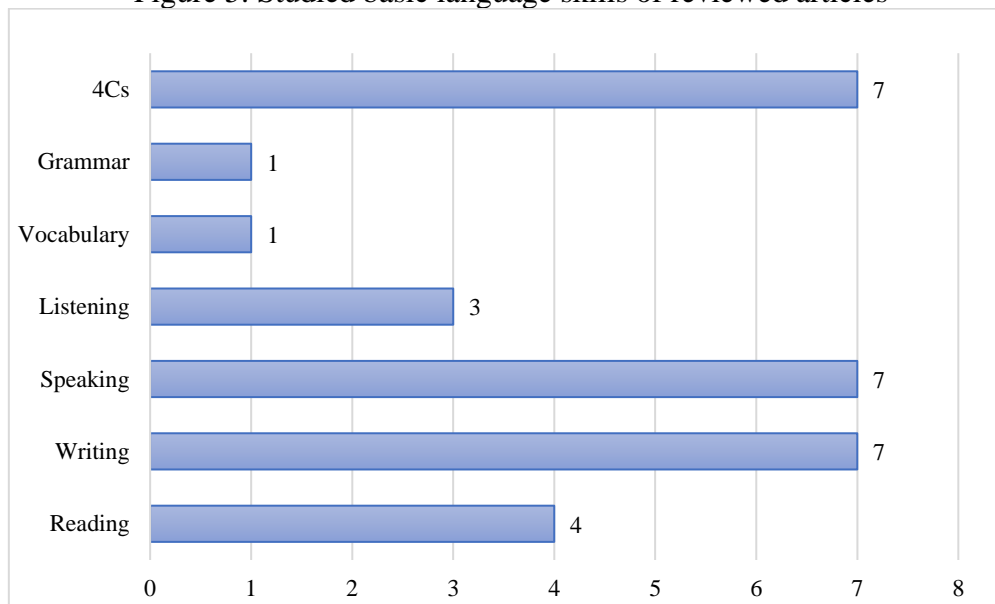


Investigate the contribution of those studies in improving the language skills of EFL students in Indonesia.

In response to RQ2, the authors investigated the subcategories of basic language skills; and the advantages and challenges of project-based learning.

Studied basic language skills

Figure 5. Studied basic language skills of reviewed articles



As shown in Figure 5 of the 15 articles, almost every journal contains several skills, not just one skill in each article. The most learned skill in Project Based English learning is 4Cs (Collaboration, Creativity, Critical Thinking, Communication) (n = 7), Speaking (n = 7), Writing (n = 7), Then followed by Reading skill (n = 4), Listening skill (n = 3), and the least are Grammar (n = 1) and Vocabulary (n = 1)

The Effectiveness of Project-based English Learning

As shown in Table 3, a total of 15 articles measured the effectiveness of project-based English learning for young learners. 12 of 15 studies mentioned that project-based English learning is effective, two studies are inconclusive because they only conclude that project-based learning has a positive impact, and one study concluded that no difference for young learners.

Table 3. The Effectiveness of the Project-Based Learning

Effective	<i>f</i>	Sample Articles
Effective	12	Sari & Yuyun (2021), Ning (2017), Artini & Made (2018), Ngadiso & Sarosa (2021), Syukri & Marhalisa (2022), Alvionita (2022), Haniah & Ngadiso (2021), Puspitasari (2022), Andanty (2022), Wuryantari (2019), Nargis (2018), and Kartika (2020)
Make Positive Impacts	2	Andriyani & Anam (2022), Firdausah & Dina (2022),
No difference	1	Lubis & Asnarni (2020)

Advantages of Project-based English Learning

Table 4 reveals the advantages of Project-based English learning. The most mentioned include developing critical thinking (n = 15), improving communication (n = 13), improving writing skills (n = 12), increasing creativity (n = 11), and improving reading skills (n = 11).

Table 4. The Advantages of Project-based English Learning

Advantages	<i>f</i>	Sample Articles
Developing Critical Thinking	15	Sari & Yuyun (2021), Ning (2017), Artini & Made (2018), Andriyani & Anam (2022), Ngadiso & Sarosa (2021), Lubis & Asnarni (2020), Syukri & Marhalisa (2022), Firdausah & Dina (2022), Alvionita (2022), Haniah & Ngadiso (2021), Puspitasari (2022), Andanty (2022), Wuryantari (2019), Nargis (2018), and Kartika (2020)
Improving Communication	13	Sari & Yuyun (2021), Ning (2017), Artini & Made (2018), Andriyani & Anam (2022), Ngadiso & Sarosa (2021), Lubis & Asnarni (2020), Alvionita (2022), Haniah & Ngadiso (2021), Puspitasari (2022), Andanty (2022), Wuryantari (2019), Nargis (2018), and Kartika (2020)
Improving Writing Skill	12	Sari & Yuyun (2021), Ning (2017), Artini & Made (2018), Andriyani & Anam (2022), Syukri & Marhalisa (2022), Firdausah & Dina (2022), Alvionita (2022), Haniah & Ngadiso (2021), Puspitasari (2022), Andanty (2022), Nargis (2018), and Kartika (2020)
Increasing Creativity	11	Sari & Yuyun (2021), Ning (2017), Andriyani & Anam (2022), Ngadiso & Sarosa (2021), Lubis & Asnarni (2020), Alvionita (2022), Haniah & Ngadiso (2021), Puspitasari (2022), Andanty (2022), Wuryantari (2019), and Kartika (2020)
Improving Reading Skill	11	Sari & Yuyun (2021), Artini & Made (2018), Ngadiso & Sarosa (2021), Syukri & Marhalisa (2022), Firdausah & Dina (2022), Alvionita (2022), Puspitasari (2022), Andanty (2022), Wuryantari (2019), Nargis (2018), and Kartika (2020)
Developing Self-Confidence	10	Ning (2017), Artini & Made (2018), Ngadiso & Sarosa (2021), Lubis & Asnarni (2020), Alvionita (2022), Haniah & Ngadiso (2021), Puspitasari (2022), Andanty (2022), Wuryantari (2019), and Nargis (2018)
Improving Speaking Skill	10	Sari & Yuyun (2021), Ning (2017), Artini & Made (2018), Syukri & Marhalisa (2022), Alvionita (2022), Haniah & Ngadiso (2021), Puspitasari (2022), Andanty (2022), Wuryantari (2019), and Nargis (2018)
Increasing Motivation	9	Ning (2017), Artini & Made (2018), Andriyani & Anam (2022), Ngadiso & Sarosa (2021), Lubis & Asnarni (2020), Syukri & Marhalisa (2022), Alvionita (2022), Haniah & Ngadiso (2021), and Kartika (2020)

Enhancing Collaboration	8	Andriyani & Anam (2022), Ngadiso & Sarosa (2021), Lubis & Asnarni (2020), Syukri & Marhalisa (2022), Haniah & Ngadiso (2021), Puspitasari (2022), Andanty (2022), and Kartika (2020)
Improving Listening Skill	7	Sari & Yuyun (2021), Ngadiso & Sarosa (2021), Lubis & Asnarni (2020), Alvionita (2022), Andanty (2022), Wuryantari (2019), and Nargis (2018)
Improving Responsibility	5	Ning (2017), Artini & Made (2018), Andriyani & Anam (2022), Puspitasari (2022) and Kartika (2020)
Developing Self-Discipline	3	Artini & Made (2018), Andriyani & Anam (2022), and Andanty (2022)
Improving Vocabulary	3	Syukri & Marhalisa (2022), Alvionita (2022), Wuryantari (2019)
improving Curiosity	2	Artini & Made (2018), Puspitasari (2022)
Improving Grammar Ability	2	Syukri & Marhalisa (2022), Firdausah & Dina (2022)

Challenges of Implementing Project-based English Learning

The process might not be as smooth as expected. Table 5 reveals the most commonly reported challenges as the teacher struggled in managing the time to do the project (n = 5), some students as members were not cooperative in doing the project material (n = 1), and the teacher struggled in grading the students' participation fairly. (n = 1), and making students bored (n = 1).

Table 5. The Challenges of Implementing Project-based English Learning

Challenge	<i>f</i>	Sample Articles
Students struggled in managing the time to do the project	5	Artini & Made (2018), Andriyani & Anam (2022), Ngadiso & Sarosa (2021), Syukri & Marhalisa (2022), Haniah & Ngadiso (2021)
Some members were not cooperative in doing the project	1	Ngadiso & Sarosa (2021)
The Teacher struggled in grading the students' participation fairly.	1	Ngadiso & Sarosa (2021)
Making students bored	1	Kartika (2020)

DISCUSSION

The key conclusions and patterns from 15 publications pulled from Google Scholar and Garuda on the web were examined in this study. Based on our research, it can be said that project-based learning is very beneficial for teachers in the process of teaching

English to young students. The data reveals that in 2022, there was a sharp increase in the number of articles about project-based English learning for young learners after experiencing ups and downs. And one of the factors contributing to the rise in studies may be the perceived advantages associated with utilizing this approach. There is a lot of interest in this subject, especially in 2021, which indicates that it will gain popularity in the years to come. Due to the pandemic condition, this may be the project-based English learning approach that is simple to apply in the teaching-learning process. In previous studies, PjBL methods were mostly performed in offline learning environments and little is known about PjBL in online learning environments. The outbreak of the COVID-19 pandemic in 2020 has suddenly made it necessary for all educational institutions to conduct teaching and learning activities from home. Indonesian schools and universities had a difficult school year in 2019-2020. The suspension of face-to-face classes in Indonesia began in mid-March 2020 due to the spread of the coronavirus. Due to the hiatus, schools and colleges have agreed that classes should go entirely online at first and then for the next semester. Because the course was structured for face-to-face teaching, educators had to adapt the course for online learning (Moorhouse, 2020). Based on previous research, we found no research on implementing project-based online learning in teaching before 2020.

The most common sample groups in the studies investigated were college, high school, and junior high school students using project-based English learning. Finally, a review of the literature indicates that research in educational technology favors project-based learning as taught by teachers to young students. They prefer young learners. Because it's easier to strengthen their knowledge by solving problems with a project approach.

This systematic review presents various studies on project-based learning for young students, which focus on studies conducted in Indonesia.

Based on the articles reviewed in this study, critical thinking, writing skill, and communication skill are most commonly discussed. The lowest language skill is grammar. However, studies on these language skills are still fairly rare in the literature. Future studies may provide greater insight into the effective use of project-based learning methods for young learners by reporting improvements in language proficiency, especially in writing skills.

This article lists the various benefits that project-based learning provides in the field of learning and teaching English. The most frequent benefits are collaboration combined with digital technology which brings new concepts into the context of language learning (Lubis & Asnarni: 2020)

Politeness, responsibility, honesty, self-control, confidence, responsibility, cooperation, tolerance, curiosity, and respect for others are among the ten character qualities that Artini & Made (2018) found to be improving while students collaborated on a project. From the observations made in the classroom, it was concluded that the extension of those character qualities was made possible by participation in project-based learning, though the students may not be aware of this.

Regarding Andanty (2022), there were additional benefits to employing project-based learning when ESP courses were taught and learned, including 1. Project-based learning can inspire students to develop English resources for specialized or individual learners and academic subjects. 2. Project-based learning can encourage students to make choices as they work to complete their projects. 3. Students may practice creating a meaningful project that is still closely related to the course topics by employing project-based learning, and the goods can be used by themselves or others.

In the reviewed studies, according to Artini & Made (2018), the researcher found that project-based learning models have been around for quite a long time. They continue to be used because of positive empirical support for their impact on learning outcomes in the classroom. Therefore, the challenges encountered are students struggling in managing the time to do the project. The members have their activities, so deciding the time and finishing the project in the expected period is quite challenging. Another issue was that certain team members didn't contribute to getting the project done. They were a little unsure about what they were supposed to be doing. While the others worked on their projects, they simply sat around doing nothing. They admitted that it made the group less motivated to complete the job. (Ngadiso & Sarosa: 2021). and according to Kartika (2020), her research demonstrates that pupils work hard and get bored with the same weekly activities. As a result, rather than learning from the process of carrying out the reading project, the majority of students concentrated primarily on finishing the project. The research's conclusions also imply that PjBL shouldn't be used in every class because not all subjects lend themselves to the PjBL learning idea. Moreover, it is recommended that PBL be taught in conjunction with other educational theories, such as task-based learning, problem-based learning, etc.

The findings of this study can help teachers and researchers develop ideas about reverse classroom practice in education. A ubiquitous project-based English learning system according to Ning (2017), PjBL enhanced students' learning processes by encouraging their creativity in the classroom. The students were tasked with working on a project that would help them develop higher-order thinking skills. For example, in the assignment of creating a family profile, students were urged to be as creative as possible while not losing sight of the basic value of a profile itself. Lubis & Asnarni (2020) found that Project-based Learning integrated with digital media; YouTube and Telegram significantly affect EFL students' critical thinking based on three indicators namely; analyzing, synthesis, and application. The project-based method in EFL, according to Artini & Made (2018), was found to promote active learning by enhancing student interest, motivation, participation, and excitement for learning. The strategy positively promoted collaboration and social contact. It promoted competent language use, higher-order thinking skills—particularly creative thinking—development, and collaborative learning. These results are in line with the objectives of Indonesia's new EFL school curriculum, which places a strong emphasis on student engagement. Other discoveries put forward by Andriyani & Anam (2022) adduced that more than 70% of learners perceived project-based learning in EFL classrooms. The results indicated that using

PjBL positively impacts EFL learners, improving learners' motivation, communication, collaboration, and problem-solving skills. Based on the statistical result of this research, it concluded that there is a strong correlation between PjBL and collaborative skills for EFL learners at University. According to Ngadiso & Sarosa (2021), the student's achievement, particularly in reasoning and creativity, improved after PjBL was implemented. It came about as a result of using such talents in PjBL implementation. There, the students worked on projects, shared them with their groups, and exchanged ideas. Through project creation and design, they exercised their creativity. In explaining their projects, the students also got a chance to develop their deductive reasoning. Each group presented their respective initiatives, to which the other groups provided questions in response. These outcomes demonstrate how effectively PjBL was used in EFL lessons. It was established that PjBL improved classroom settings and strengthened students' skills in ways that traditional teaching methods could not. In correlation with specific language skills, several things were found regarding the implementation of project-based learning. As stated by Sari & Yuyun (2001), students at the tertiary level of English as a Foreign Language (EFL) are expected to be able to write effectively for many academic purposes, such as creating an essay, article, or even writing a research report. As such, they must be independent enough to practice to improve their writing skill. Writing is a skill that can only be developed through practice. Peer editing can also turn into a way for students to help one another write better before they ask their professors for advice. They are free to employ any method, including PjBL or any other method they believe will improve their writing. Furthermore, Artini & Made (2018) argued that the implementation of project-based learning activities improved students' communication skills in English as a foreign language, particularly in productive skills of speaking (i.e., in monologue and dialogue), and also in writing.

Therefore, PjBL does not only affect students' learning positively but also affects teachers' teaching quality. There seems a strong cause-and-effect relationship between PjBL and student learning: active and participative students affect teachers' motivation and satisfaction, and vice versa. (Artini & Made: 2018)

CONCLUSION

Project-based learning (PjBL) is a learning model that makes students the subject or center of learning, emphasizing the learning process. Project-based learning has proven to be very helpful for teachers and students in learning activities as described in the discussion above. The data reveals that in 2022, there was a sharp increase in the number of articles about project-based English learning for young learners after experiencing ups and downs. And one of the factors contributing to the rise in studies may be the perceived advantages associated with utilizing this approach. Besides the advantages of using Project-based learning as a learning tool, it still has some disadvantages which need to be concerned. Project-based learning has challenges in implementation because there are several things such as; Students struggling in managing the time to do the project, some

members not cooperative in doing the project, and the teacher struggling in grading the students' participation fairly and making students bored.

The result of this study based on the articles reviewed, critical thinking, writing skills, and communication skill are most commonly discussed. The lowest language skill is grammar. However, studies on these language skills are still fairly rare in the literature. Future studies may provide greater insight into the effective use of project-based learning methods for young learners by reporting improvements in language proficiency, especially in writing skills.

Suggestions for future researchers might research to find solutions regarding the Challenges of Implementing Project-based English Learning.

Recommendations for future research

There needs to be more studies into the challenge of implementing Project-based English learning for junior high school, senior high school, and university.

Recommendations for practitioners

Educators not only focusing just for young students but also on all levels.

REFERENCES

- Abaunza, G., & Rodríguez-Conde, M. J. (2016). Bibliographic Review on web applications used to learn a foreign language. Dalam Garcia-Penalvo F.J. (Ed.), *ACM Int. Conf. Proc. Ser.* (Vol. 02-04-November-2016, hlm. 229–234). Association for Computing Machinery; Scopus. <https://doi.org/10.1145/3012430.3012522>
- Aghabalaie, V., Nayeb, H., Mardani, S., Tabeshnia, M., & Baghdadi, M. (2023). Minimizing greenhouse gases emissions and energy consumption from wastewater treatment plants via rational design and engineering strategies: A case study in Mashhad, Iran. *Energy Reports*, 9, 2310–2320. <https://doi.org/10.1016/j.egy.2023.01.017>
- Aguilar, J. (2018). Exemplar variability facilitates retention of word learning by children with specific language impairment. *Language, Speech, and Hearing Services in Schools*, 49(1), 72–84. https://doi.org/10.1044/2017_LSHSS-17-0031
- Al-Ayyoub, M. (2018). Using deep learning for automatically determining correct application of basic quranic recitation rules. *International Arab Journal of Information Technology*, 15(3), 620–625.
- Ali, A. D. (2022). Effects of a Gamified MALL Application on Developing EFL Preparatory School Students' Speaking and Enjoyment and Reducing Speaking Anxiety. *CDELT Occasional Papers in the Development of English Education*, 78(1), 241–296. <https://doi.org/10.21608/opde.2022.249943>
- Alshahrani, A. F. M. (2022). Psychological and educational learning strategies and models during the COVID-19 pandemic: A comparative bibliometric analysis. *Frontiers in Psychology*, 13, 1029812. <https://doi.org/10.3389/fpsyg.2022.1029812>
- Chintalapudi, N., Battineni, G., Hossain, M. A., & Amenta, F. (2022). Cascaded Deep Learning Frameworks in Contribution to the Detection of Parkinson's Disease. *Bioengineering*, 9(3), 116. <https://doi.org/10.3390/bioengineering9030116>
- Cumming, S. P. (2018). Premier League academy soccer players' experiences of competing in a tournament bio-banded for biological maturation. *Journal of Sports Sciences*, 36(7), 757–765. <https://doi.org/10.1080/02640414.2017.1340656>
- Gan, P.-L., Huang, S., Pan, X., Xia, H.-F., Lü, M.-H., Zhou, X., & Tang, X.-W. (2022). The scientific progress and prospects of artificial intelligence in digestive endoscopy: A comprehensive bibliometric analysis. *Medicine*, 101(47), e31931. <https://doi.org/10.1097/md.00000000000031931>

- Alvionita, K. V., Widyaningrum, L., & Prayogo, A. (2022). EFL Learners' Reflection on Digitally Mediated Multimodal Project-Based Learning: Multimodal Enactment in a Listening-Speaking Class. *Language Circle: Journal of Language and Literature*, 17(1), 87-97. <https://doi.org/10.15294/lc.v17i1.36466>
- 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>
- Ferra Dian, A. (2020). The Implementation of Project-based Learning Method in Teaching ESP (English for Specific Purposes): Case Study. *Scope of English Language Teaching, Linguistics, and Literature*, 5(1), 77-84.
- Armelia, L. Optimizing EFL Learners' Communicative Competence through Short Movie Project.
- Artini, L. P., Ratminingsih, N. M., & Padmadewi, N. N. (2018). Project-based learning in EFL classes: Material development and impact of implementation. *Dutch Journal of Applied Linguistics*, 7(1), 26-44. <https://doi.org/10.1075/dujal.17014.art>
- Atikah, D., Syukri, S., Marhalisa, M., Halim, A., & Abidin, A. (2022). Perceptions of the Use of Project Based-Learning in the EFL Context. *KnE Social Sciences*, 180-189. <https://doi.org/10.18502/kss.v7i8.10736>
- 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>
- Buck Institute for Education. (n.d.). What is project-based learning? Retrieved from https://www.bie.org/about/what_pbl.
- Chai, C. S., & Wong, L. H. (2010). Project-based learning in an English as a foreign language context: A case study of a primary school in Singapore. *Educational Research for Policy and Practice*, 9(2), 121-133.
- 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>
- Firdausah, A., & Sari, D. M. M. (2020). Project based learning on EFL student's in essay writing. *Jurnal Ilmiah Wahana Pendidikan*, 6(4), 841-848. <https://doi.org/10.5281/zenodo.4305483>
- Gao, X., & Zhao, Y. (2013). A review of project-based learning in foreign language education. *Theory and Practice in Language Studies*, 3(3), 522-529.
- Grossman, P. L., Wilson, S. M., & Shulman, L. S. (2005). Teachers of Substance: Subject Matter Knowledge for Teaching. *Profesorado, Revista de Currículum y Formación del Profesorado*, 9(2), 1-25. <https://revistaseug.ugr.es/index.php/profesorado/article/view/19746>
- Gülbahar, Y., & Tinmaz, H. (2006). Implementing Project-Based Learning And E-Portfolio Assessment In an Undergraduate Course. *Journal of Research on Technology in Education*, 38(3), 309-327. <https://doi.org/10.1080/15391523.2006.10782462>
- Haniah, A. U., Ngadiso, N., & Setyaningsih, E. (2021). Students' Perception on the Implementation of Online Project-Based Learning in Teaching 4Cs. *IJELTAL (Indonesian Journal of English Language Teaching and Applied Linguistics)*, 6(1), 123-140. <http://dx.doi.org/10.21093/ijeltal.v6i1.895>
- Kartika, A. (2020). Indonesian Undergraduate Students' Perceptions of Project-Based Learning in Critical Reading Class. *ELT Worldwide: Journal of English Language Teaching*, 7(1), 10-23. <https://doi.org/10.26858/eltww.v7i1.11976>
- Krajcik, J., Blumenfeld, P. C., Marx, R. W., Bass, K. M., Fredricks, J., & Soloway, E. (1998). Inquiry in Project-Based Science Classrooms: Initial Attempts by Middle School

- Students. *Journal of the Learning Sciences*, 7(3-4), 313-350. <https://doi.org/10.1080/10508406.1998.9672057>
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice-Hall.
- Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P. A., Clarke, M., Devereaux, P. J., Kleijnen, J., & Moher, D. (2009). The PRISMA Statement for Reporting Systematic Reviews and Meta-Analyses of Studies That Evaluate Health Care Interventions: Explanation and Elaboration. *Annals of Internal Medicine*, 151(4), W-65-W-94. <https://doi.org/10.7326/0003-4819-151-4-200908180-00136>
- Lisminingsih. (2010). Pembelajaran Berbasis Proyek: Alternatif Model Pendidikan Lingkungan Hidup untuk Meningkatkan Kecakapan Hidup. *Jurnal Paradigma Tahun XV*, Nomor 30, Juli – Desember 2010. IKIP Budi Utomo Malang.
- Nargis, N., & Armelia, L. (2018). Optimizing EFL learners' communicative competence through short movie project. *Asian EFL J*, 20, 201-208. <https://www.researchgate.net/publication/325903794>
- Ngadiso, N., Sarosa, T., Asrori, M., Draji, N. A., & Handayani, A. (2021). Project-based Learning (PBL) in EFL learning: Lesson from Indonesia. *AL-ISHLAH: Jurnal Pendidikan*, 13(2), 1114-1122. <https://doi.org/10.35445/alishlah.v13i2.558>
- Puspitasari, E. (2020). Project-based Learning Implementation to Cultivate Preservice English Teachers' 21st Century Skills. *Indonesian Journal of English Language Teaching and Applied Linguistics*, 5(1), 191. <http://dx.doi.org/10.21093/ijeltal.v5i1.638>
- Putri, N. L. P. N. S., Artini, L. P., & Nitiasih, P. K. (2017). Project-based learning activities and EFL students' productive skills in English. *Journal of Language Teaching and Research*, 8(6), 1147-1155. <http://dx.doi.org/10.17507/jltr.0806.16>
- Sari, F., Hendrey, Y., & Tridinanti, G. (2021). UTILIZING PROJECT BASED LEARNING TO IMPROVE WRITING SKILL AND READING COMPREHENSION ACHIEVEMENT OF THE EFL STUDENTS. *English Community Journal*, 5(2), 73-82. <https://doi.org/10.32502/ecj.v5i2.3478>
- Turgut, H. (2008). Prospective Science Teachers' Conceptualizations about Project Based Learning. *Online Submission*, 1(1), 61-79.
- Wuryantari Winasih, W., Cahyono, B., & Ananto Prayogo, J. (2019). Effect of project-based learning using E-poster on Indonesian EFL students' speaking ability across personality types. *Arab World English Journal (AWEJ) Volume*, 10. <https://dx.doi.org/10.24093/awej/vol10no1.7>

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