EFL Teacher's Understanding on the Implementation of Project-Based learning

Mimar Alpiani¹, Karina Nurohmah², Vera Agustin Sudrajat³, Irsyad Nugraha⁴

English Education Program, Social Science, Language and Literature, Institut Pendidikan Indonesia^{1,2} mimaralpiani@gmail.com¹, nurohmahkarin8@gmail.com², avera6681@gmail.com³

Article Info	ABSTRACT
Article history:	The Merdeka Curriculum, the latest curriculum in Indonesia, adopts student-centered learning in the classroom context. Specifically, one
Received 22 06, 2023	of teaching approaches promoted in this curriculum is Project-Based
Revised 06 07, 2023	Learning (PBL). However, discussions regarding the extent to which
Accepted 15 08, 2023	teachers understand PBL have not been much studied. Therefore, this
	research aims to investigate the teachers' understanding on the PBL
Keywords:	implementation. To achieve this aim, qualitative in the form of case study design was employed, conducted in one of junior high schools
Project-Based Learning	in West Java, involving an English teacher as a research participant.
Student Centered Learning	The data in this study were obtained from semi-structured interviews
Teacher Understanding	completed by observation and documentation. These results confirmed that the teacher already understood the general notion, goals, and stages in implementing PBL; however, there was still a problem striming specifically in time management in which the teacher had difficulties in determining the time to implement PBL and P5 (Project penguatan profile pelajar Pancasila) in the same time.

Corresponding Author:

Mimar Alpiani, Karina Nurohmah, Vera Agustin Sudrajat

English Education Program, Social Science, Language and Literature, Institut Pendidikan Indonesia Email: <u>mimaralpiani@gmail.com</u>, <u>nurohmahkarin8@gmail.com</u>_avera6681@gnail.com²

INTRODUCTION

A classroom learning process that implements project-based learning guides the role of student activities in learning and enables students to learn how to address the challenges of a rapidly changing society with a knowledge base, as they learn English. According to Hong Kong's Curriculum Reform Proposal, project-based learning is a teaching strategy that enables students to combine knowledge, skills, values, and attitudes, and build knowledge through various learning experiences (Curriculum Development Council, 2001, p.87). (Barron et al., 1998; Beckett and Slater, 2005; Kokotsaki et al., 2016; Svihla & Reev, 2020) Project-based methodologies enable students to develop and improve language skills and accuracy. Specifically, project-based learning has four benefits. The first is self-confidence (Wolk, 1994), the second is problem-solving (Casner-Lotto & Barrington, 2006), the third is student decision-making, and the fourth is group collaboration (Ralph, 2015). Based on these four advantages, project-based learning provides a space for students to build quality and skills. Therefore, project-based learning can create a fun learning

environment in which students can be active while learning and during their learning projects, as they carry out fun projects and are involved in the process. (Dariant, 2014).

Despite the necessity of implementing project-based learning, challenges remain to be overcome. One of the most challenging tasks for any teacher is implementing projectbased learning, because it necessitates modifications to a number of crucial factors, including the curriculum, instructional techniques, and the roles of teachers and students in the learning process. The difference between guidance and further involvement should be clear to teachers (Edström and Kolmos, 2014). According to Marx et al. (1997), projects frequently take longer than anticipated., who noted other challenging issues. In particular, every instructor faces unique difficulties when practicing project-based learning. According to Cintang, Setyowati, and Handayani (2018), five teacher challenges can be observed in the project-based learning that has been adopted. 1) Challenges in completing the task. 2) Problems with Time Management. 3) Technical issues with the project's implementation; and 4) difficulties because the project's results are not optimal. 5) Differences in student aptitude. Even seasoned educators encounter these issues in their assignments. The findings of this study support Habók and Nagy's assertion that, although the project necessitates much organization and preparation, its advantages are indisputable. This conclusion is supported by Gillies and Boyle's analysis, which contends that, while teachers gained significant experience with project-based learning, they also faced several difficulties. To develop students' ability to think well, instructors must employ multidirectional strategies to find solutions to problems. The learner is not in charge of determining the solution, even though the teacher always provides the ideal solution (Fernandes et al., 2012).

The 2013 curriculum encourages students to incorporate project-based learning into their learning. This activity aims to provide students with opportunities to research and investigate information about daily life and the environment (Kemendikbud 2014). Students in a project-based learning environment take the initiative to develop and implement their learning objectives (Elivasni et al., 2019; Kokotsaki et al., 2016). According to previous research, project-based learning focuses on students' learning processes (Aldabbus 2018). Throughout the learning process, the teacher acts as a student advocate, prioritizing project completion over textbook study, giving students control over their education, and prioritizing project completion over textbook study (Beier et al. 2019; Mahasneh and Alwan 2018). Project-based learning emphasizes finishing tasks as a learning process and gives students the freedom to take charge of their education (Aksela et al. 2019; Ngereja et al. 2020). It has been demonstrated that project-based learning helps improve children's physical, emotional, and cognitive abilities. (Harmann et.al. 2011) state that project-based learning is an effective teaching technique that can be used in a variety of settings "including racial groups and underperforming people"; In contrast to traditional teaching methods where the teacher is considered the main source of information and occupies most of the class discussion time (Aldabbus, 2008), PBL allows students to formulate questions individually or in groups and then provides a valuable opportunity to set goals and participate in the implementation planning and design process project. With the help of their teachers, students can examine, assess, and create knowledge they have learned through a project according to the numerous definitions of project-based learning.

Seasoned educators are equipped with methods to overcome challenges so that project-based learning can continue. PBL is a method that motivates students to thoroughly research ideas that may or may not be included in the curriculum. Technical subjects, teamwork, and students' sense of purpose are all included in PBL (Cooper 2013). Students must be given challenges to solve, undertake research, and use their knowledge and skills in this student-centered approach to teaching and learning. PBL is a teaching and learning strategy that, according to Tandogan (2007), involves students in an interdisciplinary

curriculum through open-ended questions and cooperative group work. According to previous studies, when students actively engage in the learning process, they remember more information (Choi & Lee, 2015; Knaggs & Sondergeld, 2015). The remarkable advantages of PBL in inspiring and gratifying students to engage fully in the learning process are enumerated in (Markham 2003:4). This exemplifies the role of the instructor as a facilitator and mentor who gives students proper direction and criticism. Project-based learning is taught in classes. This exemplifies the role of the teacher as a facilitator and mentor who gives students proper direction and criticism. Students must actively participate in the learning process to succeed in project-based learning classrooms. In addition to observing the stages of students' cognitive growth, learning activities consider the range of students' learning styles and traits.

Many studies have discussed that implementing project-based learning in classrooms presents many challenges. Experienced teachers have strategies to overcome these obstacles from the many challenges of PBL, especially in English language teaching. From the above statement, teachers can evaluate the teaching and learning process facilitated by Project-Based Learning by gaining knowledge about their perceptions of its implementation. Therefore, this study aims to investigate the implementation of Project-Based Learning, particularly in English subjects at junior high schools.

METHOD

1. Research Design

This study was conducted to ascertain the teacher's perception of instructing EFL in a junior high school classroom. In form of case study research design was used in this study's qualitative methodology. According to Krathwohl (1993), qualitative research is a research that describes phenomena in words instead of numbers of measures (as cited in Wiersma, 1995, p. 12). It meant that the data would be presented in the form of description. The primary aimed of qualitative research was to provide a complete, detailed description of the research topic. As stated by Merriam (2009), the product of a qualitative inquiry is richly descriptive. Yin (2009, p. 18) states that case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. The phenomena is explained thoroughly and in the context of real-world events using the case study approach. Case studies could be used to investigate decisions, individuals, organizations, processes, programs, neighborhoods, institutions, and events (Yin, 2009). The study begins with the assumption that teachers are still failing to educate their students. Second, this study focuses on a relatively narrow topic: teachers' perceptions of project-based learning, its stages, benefits and drawbacks, and constituent parts when teaching EFL classes in junior high schools. The case study in this study was a type of real-life phenomenon in which teachers at a junior high school perceived the use of project-based learning in their teaching and learning activities.

2. Research Site and Participants

One of the junior high school teachers in Garut who was interviewed has been using project-based learning for a considerable amount of time and has participated in numerous project-based learning trainings and seminars. As a result, this teacher is representative rather typical. Based on their understanding of and experience with using project-based learning in the classroom, the English teachers were chosen. An EFL teacher from a junior high school in Garut participated in this study to learn more about their perspectives of using PBL in an EFL setting. Participants in this study were EFL teachers who used the project-based learning approach to instruction. Because it is accompanied by an RPP (Learning Plan) that uses the PBL methodology, this teacher was selected. This teacher has used the PBL technique multiple times in two batches with various classes to teach English, specifically in the EFL class. Also, this school was picked because it essentially has the necessary resources to facilitate project learning and because it has integrated project-based learning into its academic curricula. The selection of a teacher at a Garut school is justified by the fact that the instructor satisfies the conditions necessary for learning, namely that the teacher has employed the PBL approach and has the school's approval. While most other teachers rarely employ this strategy because it is regarded difficult and they do not comprehend the PBL process. As a result, it creates the foundation for the teacher to participate based on all the aforementioned factors. Teachers who participate in this study do so voluntarily, which is related to the learning code of ethics.

3. Research Instrument

In order to collect data for this study, the researcher used observation and interviews as data collection methods. The first tool was observation. According to Ary, Jacobs, and Sorensen (2010), observation is a fundamental method for gathering data in qualitative research that is more than "hanging out." The researcher used an observation checklist to conduct the research in this case. According to Wallace (1998), an observation checklist is one type of observation in the learning process. to seek additional information and clarifications based on the responses of the interview participants. The second is A semi-structured interview was used by the researcher. According to Ary, Jacobs, and Sorensen (2010), a semi-structured interview is one in which the topic of interest is chosen and questions are developed, but the interviewer may change the format or questions during the interview. The purpose of the observation and interview was to determine whether or not the project-based learning method could be good implemented based on teachers' perceptions and teaching practice experience. And to see if there were any obstacles that could arise during the implementation process.

4. Research Procedures

The research procedure was obtained through interviews with several steps which can be described as follows: first, the researcher prepared interview questions in the form of plenary observation with questions used to obtain information about teacher perceptions of Project-Based Learning in Middle Schools. second, researchers conduct interviews; In this section the researcher interviewed the participants directly. third, the recorded interview results are transcribed into written form; The results of the interviews were transcribed or converted into written form. fourth, Showing the results of the interviews; Transcripts were given back to the respondents to check whether they were reflective to provide data for analysis. fifth, Conclusion; Conclusions will be drawn continuously throughout this research.

4. Data Analysis

This study used data reduction, data display, and conclusion drawing to examine the interview results. As a result, inductive analysis is typically used to assess the data in this study (see lodico, Spaulding, and voegtle, 2006) Also, the interview By listening to recordings and putting down observations about the teacher's perception of project-based learning in EFL classes, data were examined. As a last phase, the data are categorized, combined, and interpreted.

FINDINGS AND DISCUSSION

This section contains the findings of the study in which the results and discussion are not done separation. The hope in this discussion the author examines the findings and cross-references with the study of theoretical and empirical studies.

1. Findings

In general, PJBL is carried out through Three Stages it is the Planning stage, the Implementing stage, and the Presentation stage.

1.1 Planning



Picture of getting started

This point picture about Project Planning or Getting started, This theme focuses on orienting students, encouraging them to consider the project before they begin, giving them a rubric that specifically outlines what they are expected to look for and try to do, and jointly deciding on grading criteria before the project even begins. The "getting started" motif encourages careful early project work in selecting a relevant research subject and a research plan, all while instilling a sense of purpose. Teachers have a role in project planning as mentors and facilitators, assisting students in developing their skills by giving them guidance and enabling them to understand the theme. Beginning teacher introduce and define the theme, Teacher said "Hari ini kita akan belajar tentang Short message ...". Teacher drove the question to get a sense of the theme that is anchored in a real-world problem and ideally uses multiple content areas. Teacher said "Apa itu Short Message, apa fungsionalnya, apa saja isi short message ...". Teacher make a goal setting from the material. Teacher said "jadi tujuan pembelajaran hari ini adalah agar kalian bisa membuat short message sendiri...".

Supported by the results of teacher interviews as facilitators must master or have more understanding what is PBL to facilitate teachers in implementing. Techer Said "Ya jadi terbentuknya project learning yang bagus atau ideal tergantung dari pemahaman guru terhadap karakter anak juga ya pemahaman terhadap karakteristik tiap anak....". Schools as implementing assistants provide the required learning media facilities and also help provide PBL understanding of teachers. Teacher said "Iyah tentu dikasih tau pemahaman terlebih dulu, ini project based learning begini, caranya begini dan yang diperlukannya apa saja biasanya seperti GBMP atau pelatihan...., Sekolah itu paling jika memang ada yang perlu dibantu membantu, tapi untuk iniasiatipnya dari guru kalau misalnya ada yang dibutuhkan dari sekolah yang sulit misalnya pake infokus..."



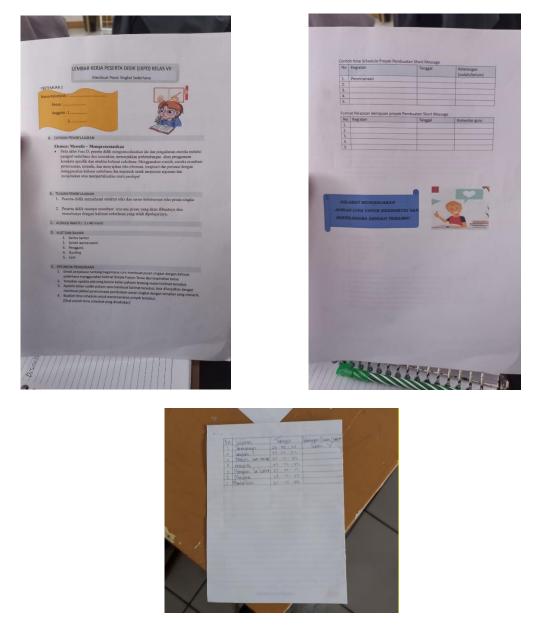
Picture of Collaboration

Collaboration or managing student organizations, The focus is on choosing the right grouping strategy, encouraging active engagement, and monitoring and documenting evidence of improvement to track each group's growth. Collaboration between students, Teacher, and other community students enables the "learning community"'s members to share and distribute knowledge. The teacher said "Nanti kalian akan bekerja kelompok, kelompoknya berdua saja dengan temen sebangku...." And the teacher also asks students to discuss the project theme that will be used in making short messages "silahkan kalian diskusikan ingin mengambil tema apa untuk isi short message kalian....". Also mentioned the result of interview, Teacher Said "proyek itu ya jadi yang diininya bagaimana anak menyelesaikan masalah caranya mereka bagaimana cara bekerja sama gitu ya cara memecahkan masalah gitu apakah oleh satu orang atau apakah bareng bareng...".



Picture of Making decision

Making decisions or creating a culture that emphasizes student selfmanagement Here, responsibility is transferred from the teacher to the students, who take part in project design, make their own decisions, and are urged to develop selfdirected learning skills. Teacher said "Sebelum membuat short message kita akan membuat perencanaan terlebih dahulu...". the teacher as a mentor provides direction for making plans that will be carried out and discusses them with students. Teacher said "ibu sudah membagikan lembar kerja peserta didik silahkan kalian baca terlebih dahulu dan kita akan diskusikan mengenai apa yang ada dalam kertas LKPD tersebut..."



Picture of Time management

Time Management This theme relates to scheduling projects effectively by coordinating project schedules between Student goups and teacher. Teacher as fasilator help student group to make a scheduling step by step what they are do in in the project based learning. And when do students have to complete each step so that learning can be more effective and project based learning objectives can be obtained according to the targeted time. And Teacher Said "dihalaman 2 terdapat contoh time scheduling, kalian akan membuat tabel proyek seperti itu....". students discuss what should be done every day with the target time planned and supplemented with information on whether or not the planning target has been carried out to find out what problems occur in the work process later. Teacher said "silahkan kalian diskusikan terlebih dahulu untuk apa yang dikerjakan beserta waktu beresnya harus kapan dan jika ada yang ditanyakan boleh atau ibu nanti cek ketiap bangku dan berdiskusi dengan kalian"

Supported by the results of teacher interviews, Timeline or time management is really needed to get the essence of PBL according to what is desired and the targeted

time in implementing PBL. Teacher Said "Biasanya secara ini aja diskusi konsultasi gitu jadi kayak ada ada time line nya kan ada time schedule nya mereka Minggu ini harus selesai anu nyampe nggak target itu kenapa enggak kenapa belum nyampai kalau belum udah selesai ya gimana caranya kamu menyelesaikan gitu?..". and also one of the difficult challenges when implementing project based learning is that PBL takes a long time to implement. Teacher said "Dicombine jadi tidak selalu project based leaning karna apa project based learning itu satu membutuhkan waktu yang lama yang kedua butuh material bahan dan juga alat kemudian yang ketiga itukan kerja group yah jadi kita kadang sulit untuk menilai anak seacra individu karna itu yang kerja kelompok....".

1.2. Implementing

The second stages is implementing. The teacher oversees the groups while also assisting the students in gaining the skills they will need in the workplace. The teacher requires the students to organize the presentations and engage in discussion on the lesson plans. Students look for answers to their questions. They also arrange the data, combine the results, and summarize them.



Picture of Implementing

Students are in charge of data collection, The process used by students in project-based learning activities, where they are collaborate with one another and each have a specific role to play in order to solve a problem or complete a task, more closely resembles the workplace. Student work together to get data that will be needed to create a short message. Teacher Said "hari ini kalian sudah membawa alat yang sudah kita rencakan kemarin...". Then students are asked to work on step by step short messages that are in accordance with the material that has been discussed with a predetermined theme. Teacher said "Hari ini kalian akan membuat terlebih dahulu satu kalimat short message yang akan dibuat dengan tema masing masing...".





Picture of Student Analyze

analyze their writing on the theme made in the short message whether it is appropriate or not. Student said " bu udah beres te ngaggo alamat da nya bu..." And teacher as facilitator and also motivator help student to get a good sentence the short message. Teacher Said "iyah tidak menggunakan alamat cuman dalam penulisan short message ini ada yang salah tapi lumayan sae pemulaannya...". In this stage Student goup and teacher also have collaboration or discussed to anylize in writing the Short message. Teacher Said" dikarenakan kita tidak mempunyai banyak waktu silahkan kalian buat step perencanaan selanjutnya dan diluar jam kelas ibu kalian bisa berdiskusi datang kemeja ibu untuk membicarakan progres pembuatan project kalian....".



Picture of interpretation

In point Interpretation throughout this implementation stage, Students create project materials. The members' group decides on how to deliver the project after defining the key themes of their presentation. Additionally, they create a project preparation strategy and decide on the project's essential ideas and concepts. Teacher said "untuk tahap selanjutnya silahkan kalian salin tulisan yang sudah dibuat kedalam karton dan hias sebaik mungkin dengan ide kreatif kalian..."

1.3 Presentation



Picture of represent student

Represents students' growing attitudes, knowledge, and make prepare to present about their project. Teacher Said "Karena kita kekurangan waktu untuk penugasan dalam karton, Short message yang sudah dibuat salin ke kertas lipat dan hias mini poster kalian, tiap kelompok maju kedepan presentasikan mini foster yang sudah dibuat tentang apa".



Picture of group performance

Group Performance, Student present their understanding about the topic under inquiry and display using mini foster. Teacher Said "Sok tiap kelompok maju kedepan terus jelasin tentang tema short message atau mini foster kalian....".



Ficture of Evaluating Project

Evaluating Project, Students Present their project with their peers provide feedback. Students discuss their project's overall project feedback. The projects are shared by the teacher and the students with everyone. Teacher Said "Udah Bagus dapet nilai ples lagi karna dihias, Sae te hiasana? Menurut kalian apa nilai ples sama kekurangan dalam Short message mini foster ini…". Supported by the results of teacher interviews, Teacher said "saya biasanya presentasi dulu masing masing kelompok. Setelah itu silahkan kalian bandingkan menurut kelompok satu kelompok 2 3, 4, nilainya berapa nilai ini hasilnya misalnya bikin short message atau surat undangan atau apalah gitu ya kan kalian lihat nih yang menurut kamu nilai ini berdasarkan kita kan standar nilainya...Jadi mereka menilai sendiri, iya ya ternyata harusnya begini kan mereka jadi begitu jadi merefleksi diri..dari sana mereka belajar kesalahan apa yang melakukan apa yang kurang dari kelompok yang lainnya gitu, nah setelah itu baru kita jelasin..".

2. Discussion

2.1 Planning

This section discusses the date finding. Research how the implemented of project based learning. According to Essien (2018), project-based learning is divided into three stages: preparation, implementation, and presentation. There are several activities in each step. Through project-based learning, students are exposed to a wide range of skills and competences such as project planning, cooperation, decision making, and time management during the planning stages (Blank, 1997). Students acquire self-reliance via goal-setting, planning, and organization; they build cooperation skills through social learning; and they become intrinsically driven by being encouraged to exercise choice while studying at their own level (Bell, 2010). According Yangotsky (1978) asserts in his Theory states that continual engagement with teachers and peers can improve student learningStructured conversations can also assist students toward effective relationships and ensure that group members ca. n reach common goals (Lam, 2019; Mendo-Lazaro, 2018; and Tibi, 2015). High-quality group processes (defined as group members demonstrating positive interdependence, individual accountability, equal involvement, and social skills) have been found to be critical to the success of project-based learning cooperation (Cheng, Lam, & Chan, 2008). Project-based learning, as opposed to a rigid lesson plan that steers a learner down a predefined path of learning outcomes or objectives, provides for in-depth exploration of a topic worth knowing more about (Erdem, 2002; Harris & Katz, 2001). Monitoring and reviewing group work should be done on a frequent basis by both group members and teachers. This is done to eliminate collaboration roadblocks created by participants' inefficiency in carrying out collaborative tasks (Le et al, 2018). This study's findings support from Johnson & Johnson's (2005) claim that enhanced efficiency in problem solving and decision making, as well as motivation for tasks, can be acquired through a planned procedure in collaborative activities.

2.2 Implementing

This section discussion about implementing project based learning. Students are in control of data collection, analysis, and interpretation throughout this

implementation stage, according to (Simpson, 2011). The implementation process is a sequence of learning processes designed to meet the teacher's goals. "Learning is a process by which a person's environment is intentionally managed to enable him to participate in certain behaviors under special conditions or produce responses to certain situations," writes Corey (in priatna, 2012). The process that students go through in project-based learning experiences, where they work together with each having a specific role to play in order to solve a problem or complete a task, is more similar to the real-world workplace (David, 2008). Teachers explains the material using audio and video learning media in implementing PBL to make learning more interesting and clear, making students not easily bored during the learning process. As stated by Wiroatmodjo and Saonoharjo (in Komalasari. 2011, p. 52) Learning media is important for clarifying message presentation so that it is not overly verbose and causes motivation and desire for learning. Dewey emphasizes the importance of comparable reconstruction of gained information and experience in other circumstances and eras, as well as its use in understanding and analyzing different cases (Dewey, 2013). To achieve student learning success in completing the project, Teachers as facilitators need to provide services to facilitate students in the learning process activities. As explained by Mulyasa (2013) Teachers as facilitators must have a good attitude, understanding of students, and competence in addressing individual differences to facilitate student learning success. The teacher's job is not only to teach, but also to guide students to improve understanding, both guidance outside the classroom and personal guidance. However, when implementing PBL, teachers do not guide students in completing projects or in the learning process during group presentations.

2.3 Presentation

This section discussion about presentation. The development of the end output, the 'physical product' (Helle et al., 2006), which gives students with new insights, knowledge, and attitudes about what they are learning, is what distinguishes project-based learning. Express ideas with video. Photographs are shown. Sketches, reports, models, and other artifacts gathered (Holubova, 2008). In line with this research, Whether the English presentation skills of students taught using whiteboard animation in PJBL differed significantly across levels of creativity and discovered an interaction between the use of whiteboard animation and the level of creativity of students' English presentation skills (Suhroh, F., Cahyono, B.Y., & Astuti, U.P. (2020)). Project-based education, which is supported by other research, emphasizes the role of students and teachers in appropriate structures and contributes to the development of numerous abilities (Isik & Gücüm, 2013). The presentations are intended to draw students' attention to the project that is being addressed in the classroom during teaching and learning (Blumenfeld et al., 1991: Goodman & Stivers, 2010). According to Suherman (2003: 162), evaluation of presentations to students and teachers is necessary so that teachers can teach their pupils how to deliver something genuine and effective. Students who are given responsibility for assigned tasks must be able to think scientifically and rationally, access, use, and share information, communicate, use technology effectively and efficiently, renew themselves, adopt common human values, be creative, productive, and willing to work and study. Teachers must be able to assure student engagement in each final presentation of student work, as well as structure learning experiences in such a way that it is taken seriously (Yilmaz, 2009). However, the teacher simply gave guidance about the results of student work throughout the presentation.

CONCLUSION

This study aims to examine teachers' understanding of implementing PBL. The result from this investigation the teacher generally understands the general concept and stages of implementing PBL but in practice the teacher still has challenges regarding the time management of PBL implementation. Therefore, maybe the teacher can be more involved in socialization or attending relevant training on PBL and then policy makers must consider that PBL is not a simple learning method to do because it is very complex in its implementation. In Addition, PBL is a teaching style in which students actively participate in real-world and personally meaningful projects to learn. Also the PBL approach allows for the development of additional desirable abilities and qualities in addition to problem solving with a defined solution.

REFERENCES

Tasci, (2015), Project Based Learning from Elementary School to College, Tool: Architecture, 770-775

- Yang, Skelcher, & Gao, (2021), An investigation of teacher experiences in learning the project based learning approach, Journal of Education and Learning, 15(4), 490-504
- Tesalonika, Dwikurnaningsih, & Ismanto, (2022), A Training Module for Project-Based Learning with Google Workspace in the Merdeka Curriculum Management, Jurnal Pendidikan Indonesia, 11(4), 610-617
- Fitriyani, Sunaryati, & Surya, (2003), Implementation Of Project-Based Learning Oriented To The Merdeka Learning Curriculum In The Form Of A Pancasila Student Profile With Global Diversity, Buana Pendidikan, 19 (1), 115-124
- Yulianto, (2022), An Implementation of Learning Assessment Model on The Curriculum of Merdeka Belajar, 2(2), 22-34
- Safei, & Salmah (2021), Teacher's Perception on EFL Students' Engagement in Project-Based Learning, IAIN Kendari, 3(1), 10-13
- Novitasari, Wiyanarti, & Jupri, (2018), *The Implementation of Project Based Learning To Improve Students Responsibility in Social Studies Learning, Internasional Journal Pedagogy of Sosial Studied*, 3(2), 19-32
- Cintang, Setyowati, & Handayani, (2017), Perception of Primary School Teachers towards the Implementation of Project Based Learning, Journal of Primary Education, 6(2), 81-93
 - Kokotsaki, (2016), Project-based learning: a review of the literature, Durhan University, 19(3), 267-277
- Baharallah, Satriani, & Hidayah, (2022), IMPLEMENTATION OF THE MERDEKA BELAJAR CURRICULUM THROUGH THE APPLICATION OF PROJECT-BASED LEARNING MODELS TO IMPROVE STUDENT LEARNING OUTCOMES IN MATHEMATICS LEARNING, MaPan, 10(2), 334-347
- Susanti, (2019), Students' Perception Toward the Implementation of Project Based Learning for EFL Vocational High School, Atlantis Press SARL, 390, 115-119
- Lam, Cheng, & Choy, School support and teacher motivation to implement project-based learning, Running head: School support and teacher motivation, 1-20
- Saputro, Hima, & Farah, (2021), Benefits and challenges of doing task-based language teaching in Indonesia: Teachers' perception, KEMBARA : Jurnal Keilmuan, Bahasa, Sastra dan Pengajarannya, 7(1), 131-142
- Elmiati, Yelliza, & M, (2019), Teachers' Perception of Project Based Learning on English Textbook as the Implementation of Curriculum 2013 in Indonesia, ICLLE, 19-20
- Xue & Fang, (2007), An Analysis of Language Teaching Approaches and Methods —Effectiveness and Weakness, US- China education, 4(1), 69-7
- Canting, (2018), The Obstacles and Strategy of Project Based Learning Implementation in Elementary School, Journal of Education Learning, 12(1), 7-15
- Aginako, Garikano, & Garmendia, (2021), ENGINEERING INSTRUCTOR PERCEPTION OF PROBLEM-AND PROJECT- BASED LEARNING: LEARNING, SUCCESS FACTORS AND DIFFICULTIES, Omnia science, 11(2), 315-330
- Ibrahim& Rashid, (2022), Effect of Project-Based Learning Towards Collaboration among Students in the Design and Technology Subject, Sciedu Press, 12(3), 1-10
- Mihic & Zavrki, (2017), Professors' and Students' Perception of the Advantages and Disadvantages of Project Based Learning, Great Britain, 33(6), 1-14

Pasi, Shinde, & Chavan, (2019), Teacher's perception towards their role in Course Level Project-Based Learning environment, Journal of engineering education transportasion, 33, 91-94

.

Krajcik & Blumenfeld, (2004), Project- Based Learning, the cambridge hanbook of the learning science, 19 Aldabbus,(2018), PROJECT-BASED LEARNING: IMPLEMENTATION & CHALLENGES, European Centre for Research Training and Development UK, 6(3), 71-79

Coronado, Moyano, Romero, Ruiz, & Rodriguez, (2021), Student Long-Term Perception of Project-Based Learning in Civil Engineering Education: An 18-Year Ex-Post Assessment, sustainability, 13

Purkovic, (2020), Teachers' Perception of the Influence of the Teaching Context on Cognitive Achievements in General Technology Education, ijcrsee, 1-15

Cwynar, (2020), The Effects of Problem-Based Learning on the Academic Achievement of Elementar ement of Elementary Students and T y Students and Teacher P eacher Perception, walden university, 1-120