Implementation of Project-Based Learning in English Classroom of Merdeka Curriculum: Student and Teacher Perception

Implementasi Pembelajaran Berbasis Proyek dalam Kelas Bahasa Inggris Kurikulum Merdeka: Persepsi Siswa dan Guru

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Abstract

This research aims to investigate the implementation of project-based learning in English classrooms on two schools selected as "Sekolah Penggerak" who hold Merdeka Curriculum as primary curriculum supervised by government; one is a private school, meanwhile the other one is a public school. Both are the first and pioneer schools who chose to implement the curriculum. Project-based learning is a fundamental approach which underlie the basis of the curriculum; thus, projects are being heavily imposed. This research puts emphasis on project-based learning implementation inside English classroom under newest curriculum in terms of students and teachers' perception. Mixed-method case study is used; as the instruments such as online questionnaire and interviews are heavily used. The data were collected from 142 participants (140 students and 2 teachers) then were analyzed quantitatively and qualitatively. Findings stated that project-based learning is used based on its own context and characteristics of schools. Students possessed positive views on both the implementation and their teachers implementing project-based learning in English classroom of Merdeka Curriculum. Students are motivated, active and possess critical thinking on their projects. Teachers, in the other side, actively and eagerly to get involved as facilitator to facilitate steps on project-based learning implementation. This research contributes on giving samples and development of project-based learning in English Classroom under newest Merdeka Curriculum in Indonesia.

Keywords: *project-based learning; english classrooms; merdeka curriculum; students' perception; teachers' perception*

Abstrak

Penelitian ini bertujuan untuk menginvestigasi penerapan pembelajaran berbasis proyek dalam kelas bahasa Inggris di dua sekolah yang terpilih sebagai "Sekolah Penggerak". Kedua sekolah mengimplementasikan Kurikulum Merdeka sebagai kurikulum utamanya yang diawasi oleh pemerintah. Sekolah tempat dilaksanakannya penelitian adalah satu sekolah swasta dan satu sekolah negeri. Kedua sekolah ini

merupakan Sekolah Penggerak Angkatan Pertama dan merupakan pelopor dalam penerapan kurikulum ini. Pendekatan pembelajaran berbasis proyek didaulat menjadi dasar dari kurikulum ini; oleh karena itu, pelaksanaan proyek-proyek diterapkan secara masif. Penelitian ini menitikberatkan pada implementasi pembelajaran berbasis proyek dalam kelas bahasa Inggris di bawah kurikulum terbaru, khususnya pada persepsi siswa dan guru. Metode studi kasus campuran digunakan dengan instrumen kuesioner daring dan wawancara. Data dikumpulkan dari 142 peserta (140 siswa dan 2 guru) lalu dianalisis secara kuantitatif dan kualitatif. Temuan menunjukkan bahwa penerapan pembelajaran berbasis proyek bervariasi sesuai dengan konteks dan karakteristik masing-masing sekolah. Siswa memberikan respon positif terhadap implementasi pembelajaran berbasis proyek dalam kelas bahasa Inggris di bawah Kurikulum Merdeka, baik dari segi pelaksaannya maupun peran guru dalam menerapkannya. Siswa merasa tergerak, aktif, dan memiliki kemampuan berpikir kritis dalam mengerjakan proyek. Di sisi lain, guru juga aktif dan antusias untuk terlibat sebagai fasilitator dalam memandu langkah-langkah implementasi pembelajaran berbasis proyek. Penelitian ini adalah contoh pengembangan terkait pembelajaran berbasis proyek dalam kelas bahasa Inggris pada Kurikulum Merdeka sebagai kurikulum terbaru di Indonesia.

Kata kunci: *pembelajaran berbasis proyek; kelas bahasa inggris; kurikulum merdeka; persepsi siswa; persepsi guru*

INTRODUCTION

In February 2021, Indonesian Ministry of Education, Culture, Research, and Technology imposed a policy on curriculum named Merdeka Curriculum to mitigate learning loss during pandemic. The Merdeka Curriculum (previously referred to as the prototype curriculum) is developed as a more flexible curriculum framework, while also focusing on essential content and the development of students' character and competencies (Kemdikbud, 2021). Several underlying principles in this curriculum are; a) development of soft skills and characters trough Penguatan Profil Pelajar Pancasila project (P-4); b) focusing on essential, relevant, and in-depth content to allow sufficient time for students to cultivate creativity and innovation in achieving fundamental competencies such as literacy and numeracy and c) flexible learning, in which teacher was given freedom to execute their teaching based on individual progress and development of each student then to adapt the learning process to the local context and content.

The curriculum is implemented by 2.500 selected schools located in 34 provinces in Indonesia. The first and pioneers selected implementing schools named "Sekolah Penggerak" consists of both public and private institutions. These implementing schools also initiated the development and adaptation of curriculum content by entrusting teachers as curriculum owners and creators (sekolah.penggerak.kemdikbud.go.id, 2021). The curriculum also puts emphasis on project-based learning approach, not to change the current use of project-based learning inside classroom, but to extends it to create projects beyond classroom and between subjects.

Project-based learning (PjBL, hereinafter) is a learning method focusing on projects as a medium. The method promotes student-centered activities by conducting in-depth investigations into a particular topic. Students also constructively learn and delve into their learning process based on research and give substantial, real, and relevant questions to solve problems or issues (Puslapdik.kemdikbud.go.id, 2021).

PjBL has its roots in constructivism (Grossman et al, 2018), which initiated by John Dewey (1916), who advocates the idea of learning by doing (Fernandes, 2014). Dewey believed that schools and classrooms should mirror real-life situations, enabling children to engage in learning activities interchangeably and flexibly within various social contexts (Dewey, 1938; Gutek, 2014 in Kwietniewski, 2017).

Project-based learning shifts the fundamental approach to learning from teacher-centered to student-centered, with its basis on three constructivist principles: a) learning is context-specific, b) learners are involved actively in the learning process and c) they achieve their goals through social interactions and the sharing of knowledge and understanding (Cocco, 2006 in Kokotsaki et al, 2016). Project-based learning significantly alter classroom experience of both teachers and students (Maros et al, 2021). It changes the way teachers teach, how students learn, and how both interacts inside classroom. Project-based learning also changes how students respond to the general learning process (Choi et al, 2019).

Moreover, developing projects in PjBL can be executed through four stages. First, the speculation phase in which a suitable topic is identified following discussion among the group members. Second, activities are designed and roles are assigned as well as identifying where information and resources will be sourced from and a structure is devised for the tasks in the project. In stage 3, the project activities are completed according to the plan devised during the previous phase and learners collaborate to collect relevant information. Lastly, learners synthesize and analyze the information before finally evaluating and assessing the information (Kriwas, 1999 in Thomas, 2017). Numerous PjBL studies focused on student and teacher perception on developing projects have been done such as; Li et al (2015); Gomez-Pablos et al (2017); Choi et al (2019); Maros et al (2021); Sartika et al (2022); Hidayati et al (2023).

Li et al (2015) investigated students' perception on PjBL implementation inside Business Translation course in China, as the result mentioned positive and encouraging response related to students experience when they acquired and created new knowledge on their research topics and became independent in their investigations, so students were able to make sense of their learning in the field of translation. Maros et al (2021) also found student's opinion on the implementation of project-based learning in Slovakia can be very interesting and considered as something new, different from traditional teaching. PjBL is also considered boosting students results on speaking activities using video projects (Hidayati et al, 2023).

From teacher's point of view, Gomez-Pablos et al (2017) portrayed a positive evaluation on implementing PjBL through digital technologies in terms of learning processes and the results. It offers teachers opportunities for training and the development of technological, pedagogical and social skills, and also to promote their involvement in learning communities and a change in schools' culture. More than that, Choi et al (2019) found the use of PjBL also improved teacher self-efficacy. Positive perceptions of teachers and more engagement in class through sharing ideas are likely to lead to mastery experiences that improve teacher self-efficacy in PjBL classroom. Similarly, positive perception on teachers in implementing PjBL also found in English classroom (Peterson & Nassaji, 2016; Sartika et al, 2022).

In Indonesia, as the Merdeka curriculum is imposed, there were still less research on students' and teachers' perception on PjBL implementation. Both of schools involved in this research as Sekolah Penggerak are considered as school pioneers, thus learning and teaching process executed by teachers are considered as a pioneer action, and to be taken consideration as an example within Sekolah

Penggerak communities. Both English teachers involved in this project are also actively involved within English Teacher's community on the region, as the PjBL implementation inside English Classroom became one of current issues discussed by teachers in the community. The ongoing discussion happened within teacher's community is widely encouraged by the Ministry as one of the factors influencing the development of Merdeka Curriculum. Therefore, this study aims to fill the existing gap on how PjBL as an approach underlying Merdeka curriculum aligned with its practical implementation inside English classroom of Sekolah Penggerak.

RESEARCH METHOD

This study employs a mixed-methods case study approach (Onwuegbuzie et al, 2007), which combines quantitative and qualitative data analysis. Collective case studies from two "Sekolah Penggerak" (Cresswell, 2017) are used to illustrate PjBL implementation in classroom, one is a private and the other one is a public school. Research data were collected through two techniques, online survey (questionnaire) and semi-structured interview. 5-point Likert scale questionnaire was adopted from Peter & Nassaji (2016). The questionnaire has been built with in-depth investigation as the items are piloted, revised, reworded, and added into a complex questionnaire as it expressed the important components and strategies generally linked with project-based learning based on related literature (e.g., Hedge, 1993; Legutke & Thomas, 1991; Thomas, 2000 inside Peterson & Nassaji, 2016). Thus, this study adopted similar questions with similar research aims to investigate. Online questionnaire was then administered through Google Form to 70 students in both schools (n=140). Semi-structured interviews were also conducted to two teachers from each school who implemented PjBL in their classrooms to depict teacher perception. The interview covers topics on PjBL in Merdeka Curriculum, its learning process, and challenges as it is also a nearly identical questions as Peterson & Nassaji used in their study with different context. The interview aims to further explore teacher's perception about project-based learning and to provide them opportunities to offer beyond what was gathered in the questionnaire. The interviews were video-recorded and transcribed for analysis. Data questionnaire is analyzed descriptively using IBM SPSS statistics, meanwhile interview data analyzed qualitatively using Creswell's Framework (2017), that is the researcher must make "sense" out of what was just uncovered and compile the data into sections or groups of information, also known as themes or codes.

RESULTS AND DISCUSSION
Results
Students' Perception on PjBL implementation

Questionnaire covers two primary issues: student's perception on PjBL implementation inside classroom and student's perception towards teacher implementing PjBL. Before the analyses, the overall reliability of the questionnaire items was calculated and the reliability estimates (Cronbach alpha) in both schools were 0,938 and 0,947 respectively which considered satisfactory.

Table 1. Student's perception on PjBL implementation inside classroom

Question	Private school (n=70)		Public school (n=70)	
	M	**SD**	**M**	**SD**
Q1	3,73	0,80	3,54	0,79
Q2	3,64	1,04	3,67	0,77

Q3	3,77	1,00	3,87	0,76
Q4	3,94	0,90	4,07	0,82
Q5	3,91	0,97	3,93	0,86
Q6	3,69	0,93	3,84	0,90
Q7	3,47	0,96	3,56	0,81
Q8	3,83	1,08	4,03	0,76
Q9	3,46	1,05	3,43	0,96
Q10	3,37	1,01	3,51	0,88

As table 1 indicates, the means of teachers' and students' responses for questions 1,2,3,4,5,6, and 8 were overall positive and similar both in private and public schools. Means ranged from 3,64 to 4,07 (i.e., partly agree to strongly agree). The questionnaire items explored on getting students to choose the topics for their projects (Question 1), exploring projects in the class (Question 2), working on group projects (Question 3), going beyond textbooks (Question 4), getting students to experience real-life activities that involve going outside the classroom (Question 5), focusing on themes rather than individual linguistic items or skills (Question 6), and opinion towards teacher's roles (Question 8).

Meanwhile on questions 7, private and public school differed slightly. Private school partly agreed to work on final product in classroom (m = 3.47, rounded to 3, partly agree) meanwhile public one (m=3.56, rounded to 4, agree) clearly prefers to work on final product of analytical exposition text such as a recording persuasive speech in classroom. Both schools also possessed similar views on Q9 & Q10, students partly agreed on their assigned roles in the class (Question 9), as well as working on a project for more than one subject (Question 10).

Table 2. Student's perception on teacher implementing PjBL in classroom

Question	Private school (n=70)		Public school (n=70)	
	M	**SD**	**M**	**SD**
Q1	3,91	0,76	3,84	0,75
Q2	3,80	0,77	3,81	0,77
Q3	3,66	0,93	3,60	0,79
Q4	3,77	0,82	3,81	0,77
Q5	3,57	0,89	3,44	0,88
Q6	3,70	0,87	3,69	0,84
Q7	3,50	0,90	3,63	0,78
Q8	3,94	0,78	3,81	0,87
Q9	3,93	0,84	3,73	0,88
Q10	4,00	0,76	4,13	0,78
Q11	4,03	0,76	4,03	0,78
Q12	3,70	0,84	3,99	0,73
Q13	3,57	0,81	3,67	0,77
Q14	3,89	0,83	4,14	0,69

Table 2 covers items related to teachers implementing PjBL inside classroom, mainly the wording of the questionnaire starts with "My teacher…". Overall, students from both schools agreed that strategies associated with PjBL has been executed by teacher inside classroom. Means on Q1 to Q14 ranged from 3,57 to 4,03 (agree) in private school. Meanwhile, means varied from 3,44 to 4,14 in public school as only

Q5 about teacher sending students to collect information outside classroom (m=3,44, rounded to 3) resulted on partly agreed. Overall, students in both schools agreed that teacher use various aspect of teaching; giving freedom to choose topics (Q1), encouraging to speak ideas (Q2), supporting to work one project more than one session (Q3), using varied material resources (Q4), collecting information for homework after class (Q6), helping classmates project (Q7), completing activities in group work (Q9), conducting ongoing assessment (Q10), practicing on groups (Q11), using only short grammar course (Q12), investigating on real-world issues (Q13), researching using internet (Q14). One contradictive result on Q8 (m=3,94 & 3,81) also possesses a threat on PjBL, as students on both schools agreed that teacher also dominantly speaks inside classroom.

Teacher's Perception on PjBL implementation inside English Classroom

Questions asked for teachers mainly cover topics; significant changes on Merdeka Curriculum (Q1), reason why using PjBL in English classroom (Q2), steps in executing PjBL (Q3), challenges in PjBL implementation (Q4), teacher's roles (Q5) and suggestion on implementing PjBL in Merdeka Curriculum (Q6). As for the Q1, teacher in private school (T1) puts emphasis on time allocation changes from 2013 Curriculum (Kurtilas) as English previously held for 3 times in a week (each session consists of 45 minutes) meanwhile it becomes 2 times in a week inside classroom and 1 session for P-4 project outside classroom. Meanwhile teacher in public school (T2) defined philosophical changes on its name, Merdeka Curriculum, as "Merdeka" means freedom, in which teacher was given a freedom to choose learning outcomes in first or second semester of academic year, as the Curriculum do not limit the provision of standardized learning outcomes for the whole Semester as it is previously done in Kurtilas.

T1 and T2 shared similar views on why they used PjBL inside English Classroom (Q2). They believed PjBL allows them to trigger students to actively create and critically engaged on issues that students are familiar with. As shown in the following excerpts:

> "…I applied this (PjBL) because it helps students to explore material inside the class. They got used to only answer questions for finishing one material (in traditional learning), but PjBL allows students to critically relate what they got from their surroundings…" (T1)

> "…it (PjBL) focuses on student-centred, so it triggers student to be motivated enough to work on a product, in my case, video about (persuasive) speech. It is not limited to not only to know something, but triggers student to actively involved in learning process…" (T2)

Next, related to steps on implementing PjBL (Q3), each teacher has its own way to demonstrate the steps in executing projects. T1 highlighted the discussion of authentic material including steps in analyzing analytical exposition text; a) identifying generic structure of the text, b) highlighting thesis statement and arguments, c) comparing variety type of text, d) composing text and transform the content inside text to mini presentation called Pecha Kucha project. T1 deliberately executed Pecha Kucha project from text parts into exemplifying how to create a presentation video (T1 created one Pecha Kucha as a sample as well). Meanwhile T2 focused on dividing projects into scheduled timeline based on the final product,

persuasive speech video. T2 started with; a) informing the end goal of project, as T2 discussed the analytical exposition text, b) T2 gave students several choices of topics, but allowed them to explore topic outside given topics as T2 believed the learning process promotes freedom as mentioned in Merdeka Curriculum. Then, c) drafting outline is conducted, d) composing the text into final one, e) transforming the text into an oral content for video and f) recording the persuasive speech in school's studio. In the end, both also used peers feedback and asked students to give comment on student's performance, as T1 used YouTube platform, meanwhile T2 watched videos together inside classroom.

Answers on Q4 most likely are related on time-consuming activities. T1 stressed on how students in year 11 are particularly busy so they rarely present inside classroon, as the private school managed a lot of additional sleep-over activities for students in organization (i.e Students Council, MPK, Scouts, Islamic Youth Organization). Thus, project execution in terms of spending proportionate time to work on project is limited for students. Meanwhile, T2 focused on ways to keep the students committed towards the given timeline on doing the projects. As the tendency to finish the writing required a long time to go, students only had a limited time to execute the projects into a video in studio, in which they need to use the facility in turn.

Next, Q5 covers topic about teacher's roles in PjBL. Both teachers believed they acted out as facilitator inside classroom. T2, moreover, tried to be a partner to discuss something equally with students. Lastly, in regard to suggestion on implementing PjBL in Merdeka Curriculum (Q6), T1 took a note on carefully executing PjBL if there is more than one standardized learning outcome as instructed on Merdeka Curriculum during one academic year. T1 stated the needs to create a timeline map if she used PjBL all over again, but she did not hesitate to innovate in more interesting and complex projects in the future. Meanwhile, T2 suggested the use of technology to overcome limited discussion time inside classroom. As shown in the following excerpts:

> "...to implement PjBL in the future would be a challenge, of course, as it requires complex stages to deal with. If there are more than one learning outcome in Curriculum, it would be hard to execute. So I need to create a timeline, first. Next, I have a target to create project in the form of digital display, so it would be more interesting to do…" (T1)

> "...it (PjBL) requires patience to work on project from the beginning to the end, so we should be consistent in doing the stages. Because the time-constraint, I would suggest to strategically use the allocated time (inside classroom). We can use technology such as Gmeet or Zoom if it is needed, in my case, I used Whatsapp to let students to ask me outside classroom, so the learning process is not limited to what happened inside classroom…" (T2)

Based on these views, teachers in both schools possessed a positive view in understanding the implementation of PjBL and both tried to execute the learning process based on their own practices, shaped by school's standpoint as private or public "Sekolah Penggerak" in conducting Merdeka Curriculum.

Discussion

Based on the findings in this study, student's perception on PjBL implementation inside classroom resulted in positive responses on their learning

process because students believed they are given a chance and freedom to create or to compose a project based on real-world issues or activities they felt familiar with. This condition aligned with what PjBL promoted, that is, the use of student-centered learning in the class as student is able to construct investigation, to set a goal and acts as an autonomous learner within real-world practices (Kokotsaki et al, 2016). Similar studies confirmed that students believed teachers gave them freedom to choose and develop content inside their project in PjBL learning process (Sartika et al, 2022; Hidayati et al, 2023). Moreover, when student are given freedom to choose, students most likely shared that they appreciated the opportunity to research what they wanted (DeMink & Olofson, 2020).

Students also openly discussed topics with teachers as teachers allow them to collect information and to finish their project outside classroom or in more than one session. As teacher confirmed, implementing PjBL required them to let students to do step-by-step activities until students can finish their product. This included the activities outside classroom such as recording in studio provided by the school. This has been shown by Miller et al (2021) that PBL offers flexibility for teachers who adapted the PBL curriculum and features to be more reflective of the teacher's goals and the needs of their students, but in Miller's case put emphasis on PjBL implementation happened under post Covid-19 pandemic.

Students are also encouraged to use internet to discuss their project with teacher or giving peer feedback towards classmates. This finding is further confirmed by teachers through interview as teachers provided additional sessions to discuss and perform outside classroom, possibly done using technology such as Whatsapp and Youtube. Similar results also stated in Peterson & Nassaji (2016) that students are also able to learn from variety of materials, possessed willingness to finish a project both inside and outside classroom.

Students also responded positively towards their teachers implementing PjBL. Students believed teachers gave them freedom to choose and develop content inside their project (Sartika et al, 2022; Hidayati et al, 2023). Students also show tendency to agree on how teacher used varied material resources and internet in researching and finishing projects. This mean teacher showed innovative ways that technology tools can be used to support PjBL features in ways that align with more equitable pedagogies (Miller et al, 2021).

The interview data further affirmed the above findings and gave additional insights into the implementation of PjBL in terms of teachers' standpoint. Several key areas related to PjBL were highlighted in interview result such as, a) PjBL creates opportunities for students to be actively motivated and consistent to explore and finish on projects as similar result found in Li et al (2015) that students pursue some topics of their interest in addition to what has been informed inside the course.

Then, b) PjBL promotes critical and active learning in the process compared to traditional teaching as Maros et al, (2021) and Moghaddas & Khoshsaligheh (2019) found that PjBL strengthen the possibility to foster such higher learning skills as critical thinking. Furthermore, c) PjBL also let students to communicate something relevant on their surroundings (Peterson & Nassaji, 2016); Moreover, teacher confirmed that d) PjBL focuses on student-centered learning as it is deliberately mentioned in Cocco (2006) in Kokotsaki et al (2016). Last, e) PjBL also has positive impacts when it is integrated with technology (Gomez-Pablos et al, 2017), in this case, Whatsapp and Youtube which are favorably and widely used by students and teachers. This only happened when students from private and public schools have privilege to use online tools to support communication and feedback in PjBL. Almost

alike to this, Chanpet & Murphy (2018) also suggested PjBL might rely on a blended use of social media combined with LMS and e-portfolio as well as face-to-face sessions.

Teachers also discussed several factors contributed to their challenges in implementing PjBL such as students' presence, time, and consistency in working on final products. Teachers felt the need for sufficient time and resources (studio recording capacity) to make the end-product feasibly finished based on their timeline. Similar problems found in Revelle (2019) which teachers discussed the need for sufficient resources (e.g., books, funding for field trips, technology) to plan, enact, and manage a project-based approach in high-poverty schools. Different to this, this research found that teachers in both public and private school similarly put emphasis more on time management, claiming that it is necessary to set up timeline critically if they want to use PjBL again in the future.

Moreover, the implementation of PjBL is aligned with what teachers think about changes proposed in Merdeka Curriculum. Teachers highlighted freedom to explore topics and students-centered learning as main principles on conducting what Curriculum required them to do, as Merdeka Curriculum stated in official release that teachers' roles as curriculum owners and creators (sekolah.penggerak.kemdikbud.go.id, 2021). Even though teacher came from different school status, one is public and the other one is private, teachers can rely on their own expertise to scaffold productive and equitable interactions among students from different backgrounds in Merdeka Curriculum. This finding also shown in Miller & Krajcik (2019) that teachers are able to scaffold learning inside PjBL implementation.

CONCLUSION

Implementing PjBL in classroom under Merdeka curriculum provides a new opportunity as well as a challenge as it requires a lot to prepare and execute. This study shows examples from Indonesian teachers teaching English that PjBL is possibly to be conducted under newest curriculum. It also promotes positive trend towards students learning process and teachers' professional development inside classroom. This study also portrays teachers understanding towards Merdeka Curriculum and to share their experience on implementing PjBL to other English teachers in local community, as Merdeka Curriculum is implemented widely in Indonesia.

Although present study yielded several important findings, several issues need to be considered when interpreting the results. First, for portraying teacher's role as the data shows that students agreed teachers still has tendency to talk dominantly inside the classroom, even though the teachers believed they had positioned themselves only as facilitator. Teachers understood students should actively get involved in the classroom as PjBL promotes student-centered learning. This is an interesting finding, but further research is needed to separate what distinguishes teacher's understanding towards PjBL theoretically and teacher's implementation on PjBL technically. Second, the school's standpoint based on public or private status also gave a different sense on how teachers perceive and understand their student's capacity on working the projects. Teacher in private school tends to consider students could not ultimately finish final project because of their background of organizational workload meanwhile teacher in public school emphasized on less students' commitment working on project because of their understanding towards material. Thus, further study is needed to explore such area.

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