



THE IMPACT OF PROJECT-BASED LEARNING ON STUDENTS' ENGAGEMENT IN LEARNING REPORT TEXT

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Abstract:

A number of studies documented that project-based learning often improves student learning in many different ways. Nevertheless, no comprehensive studies examine how project-based learning affects student engagement, specifically in relation to the four areas of collaborative, strategic, responsible, and energized learning. Thus, this study examines how project-based learning affects students' engagement in studying report text at SMAN 2 Sidoarjo, especially in grade 10, through a survey study. The Data was collected from 160 10th-grade students through questionnaires. According to the research, students showed a thorough comprehension of the objectives of their projects. They also expressed a sense of responsibility and pride in their work. Their desire to do well on their assignments was influenced by a number of things. This concludes with a suggestion for teachers who want to implement project-based learning in classroom learning. Teachers can consider the assignments they will be given by adapting to what is trending at that time. Therefore, students can be enthusiastic about completing projects because, when implementing project-based learning, learning activities are student-centered. For the future researcher who wants to do research about project-based learning the use of qualitative methods can be considered in order to investigate more deeply the impact of project-based learning from the student's perspective.

Keywords: *Project Based Learning, Report Text, Student's Engagement*

1. INTRODUCTION

Project-based learning (PBL) is one of the various learner-centered teaching methods. Several experts have conceptualized what PBL is. According to Bell (2010), PBL is a student-driven teaching method wherein students, under the direction of teachers, engage in an authentic project, generate their own questions or inquiries, and construct a project to communicate with a specific target audience. Using a variety of tools and continuing inquiry-based learning exercises in the real world, Zhang and Ma (2023) stated that Project-Based Learning (PBL) is an innovative method of inquiry-based learning that concentrates on the ideas and concepts of a subject. The goal is to complete the project assignment and find solutions to multiple related issues in a set period of time. Parrado-Martínez and Sánchez-Andújar (2020) investigated The impact of project-based learning on the written skills of ninth-grade students and also discovered that found that collaboration was occurring inside the project's structure may have enhanced students' capacity for critical thought, communication, and teamwork, resulting in a notable improvement in middle school students' English writing abilities.

There are characteristics of project-based learning, namely curriculum-based, student-driven, constructive investigations, autonomy, and realism (Thomas, 2000). According to Dewey (1986), students can be significantly influenced by learning by doing. It is crucial to have both consistent and high-quality experiences. PBL is a useful strategy that adheres to the philosopher's beliefs, which many educators have adopted for richer learning. In addition, Handelsman et al. (2005) state that Teachers are able to



create lessons that will interest students more in several areas, enhancing their performance, engagement, and emotional intelligence.

Engagement has been characterized as a multifaceted phenomenon by many writers. A minimum of behavioral and affective components is included in most definitions. For example, Skinner and Belmont (1993) defined engagement as "children's initiative, perseverance, and effort in their academic work, along with their overall general emotions throughout lessons." Another definition comes from Handelsman et al. (2005) in *The Educational Research Journal* with the title *A Measure of College Student Course Engagement*. He stated that engagement is based on readers' and learners' cognitive and emotive systems. Another definition of Engagement comes from the result of an article in a journal titled "Mapping Research in Student Engagement and Educational Technology in Higher Education: A Systematic Evidence Map". The writers Bond et al. (2020) stated that Student engagement is the work and enthusiasm that learners put forth in the classroom give forth in their educational setting also measure it using a variety of behavioral, cognitive, or affective measures that fall along a spectrum. Numerous internal and structural elements, including the learning environment, the learning activities, and the complex linkages between them, shape it.

Martin and Bolliger (2018) stated that a key aspect of effective learning is student engagement, which entails building relationships between the teacher, the students, and the course itself. From the study conducted by Khalek (2012), The Northwest Regional Educational Laboratory states that four criteria can be used to determine student engagement: responsible learning, strategic learning, collaboration, and energized learning. Students who establish roles for and control their own studies are considered to be engaged in responsible learning. Pupils are in charge of tracking their progress toward learning objectives and are aware of their own goals and the standards and evaluation criteria. When students continue to hone their problem-solving techniques and learning process, they are engaging in strategic learning. Students who are actively engagement in the material can apply and transfer it to build knowledge and come up with original solutions to problems. Student engagement is characterized by the third factor, collaborative learning. Students who are actively involved should be able to function both alone and cooperatively in a group setting. In addition to being extrinsically motivated by grades and competition, students who are naturally driven by their own interest and satisfaction in learning receive their energy from the process of learning.

Report text is a significant component of the English curriculum, particularly for high school students (SMA) in Indonesia. This genre of writing focuses on presenting factual information about specific phenomena or subjects. The emphasis on report text is not limited to high school; it is also commonly encountered at various educational levels, from elementary to junior high school. According to Gerot and Wignell (1995), a report is writing that serves to explain the current situation in relation to a variety of natural, artificial, and social phenomena in our surroundings, and they also highlight the importance of mastering report text for academic communication. The justification behind selecting report text as the research subject stems from its wide adoption in



classrooms and its capacity to encourage students' literacy development. Experts claim that teaching students how to create report texts gives them the tools they need to organize and present material in a clear, objective manner, which is essential for academic achievement. Additionally, by motivating students to investigate and present material systematically, report texts support the development of students' analytical and critical thinking abilities. Because students frequently use scientific concepts and data in their reports, this writing format also aids in the development of scientific literacy. In general, the incorporation of report text into the curriculum enhances students' linguistic proficiency and equips them for future academic endeavors and responsible citizenship.

Project-Based Learning (PBL) has garnered a lot of attention lately as a successful pedagogical strategy for maximizing student engagement as well as goals. However, investigation into the impact of project-based learning on student engagement is still limited. Chang et al.'s (2024) study demonstrates how real contexts in PBL encourage student engagement by finding that students who concentrate on actual projects have greater levels of behavioral, cognitive, and emotional engagement compared to those who work on non-authentic projects. The findings show that incorporating real-world scenarios into PBL significantly improves student engagement and comprehension of the subject matter; more particularly, Zhang and Ma's (2023) results of their meta-analysis evaluate PBL's effectiveness and its relationship to student engagement, demonstrating that PBL improves academic achievement and student engagement across a range of subjects. The research provides a comprehensive overview of the ways in which PBL approaches might raise student engagement with the learning process. The next previous study comes from Balleisen et al. (2024). This study looks into how PBL affects a range of student development outcomes, such as engagement. According to this, PBL can significantly increase students' academic happiness and engagement by promoting a collaborative learning environment that rewards active participation.

Despite the reality that the research described previously emphasizes how project-based learning affects students' engagement, there aren't any deep studies looking into how project-based learning improves Senior High School student engagement in learning report text, especially in these four criteria that can be used to determine student engagement. Therefore, the primary objective of this study is to improve senior high school students' engagement with report text learning. The main goal of this study is to determine how learning through projects might be used to increase student's engagement in learning report texts. This study intends to answer the following research questions: How does project-based learning affect students' engagement in the aspects of responsible learning, strategic learning, collaborative learning, and energization by learning?

2. METHOD

This study uses quantitative research methods. Data was collected in 4 classes consisting of 40 students through focus groups and filling out questionnaires. Data collection sources are used in this research to provide data triangulation. The first day



of the project briefing represents the beginning of the research stage, which is then followed by a consultation meeting and questionnaire filling.

In this research, the focus is only on grade 10 students who are studying report text. The researcher conducted the study while serving as a pre-service teacher at SMA Negeri 2 Sidoarjo and had the opportunity to teach English to 10th-grade students, specifically on the topic of report text. In collecting data, researchers only involved 4 classes of 10th-grade students, where these students applied the project-based learning model. Therefore, the research results cannot be generalized to other age groups or educational classes.

These research participants comprised 160 grade 10 students of SMAN 2 Sidoarjo. Students are divided into several groups, after which they are assigned to create a report text according to their chosen title. After that, they were asked to design an infographic poster based on the report text they had created.

In this research, students are divided into several groups, after which they are assigned to create a report text according to the title they have chosen. To collect information, researchers created an online survey via Google Forms and then distributed it during class via a QR code that was accessed by all participants. All students were given a questionnaire consisting of 14 statements to answer. Each statement has been translated into Indonesian. The questionnaire is designed using a 4-point Likert class, with the respondents' choices as follows: (1) strongly agree, (2) agree, (3) disagree, (4) strongly disagree. Analysis is carried out by determining the frequency and percentage of each answer.

3. FINDING AND DISCUSSION

The questionnaire was filled in by all students in classes X8, X9, X10, X12. by using google forms

3.1 The Impact of PBL on Students' Responsibility in Learning

This subsection focuses on the impact of PBL on responsibility in learning. The data collected from filling out the questionnaire shows that PBL has quite a good impact on student engagement in aspects of responsibility during learning.

Table 1 An overview of the answers provided to the questions about responsible learning

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
S1. I am aware of my group project's goal	35 21,9%	117 73,1%	8 15%	0 0%
S2. I consulted with the teacher about the project's progression	24 14,4%	108 66,9%	28 18,1%	1 0,6%
S3. I am in charge of both the project's progression and finishing	55 34,4%	96 60%	9 5,6%	0 0%



S4. I am aware of the evaluation standards and requirements for this project	30	112	18	0
	18,8%	70%	11,2%	0%
S5. I am aware of this project's deadline	77	74	9	0
	48,1%	46,3%	5,6%	0%

Table 1.1 shows the impact of project-based learning on student engagement in terms of students' responsibility for learning. In the first statement, it can be seen that many students strongly agree and agree. 95% for the statement 1. A significant majority of students indicated that they were aware of their group project's goals. This suggests that the PBL approach effectively communicated the objectives of the project to the students. 81,3% for statement 2, while a majority of students reported consulting with the teacher about the project's progression. This shows that there is potential for improving the direction and communication between teachers and students during the PBL process, 94,4% for statement 3. A significant portion of students felt in charge of both the project's progression and finishing. This indicates that students felt empowered to take to embrace responsibility for what they learn and actively contribute to the project's success, 88,8% for statement 4. A large of students expressed awareness of the evaluation standards and requirements for the project. This suggests that the PBL approach effectively communicated the expectations for student performance. 94,4% for statement 5 While a majority of students (94.4%) were aware of the project's deadline, a small percentage (5.6%) indicated that they were not. This emphasizes how crucial it is to communicate clearly and consistently regarding deadlines to ensure timely project assignment completion. Students understood that they had to talk to the teacher about the project and that doing so would be beneficial. In general, it can be claimed that the students understood their roles in this project. However, nearly 19% of students did not consult with teachers, indicating a need for better communication and guidance-seeking. Additionally, while most students understand the evaluation criteria, 11.2% lack clarity on assessment standards. Improving communication and understanding of evaluation criteria could enhance student engagement and lead to better project outcomes.

Apart from the results of the questionnaire above, which shows the impact of project-based Learning on student responsibility, researchers also found a theory supporting the impact of project-based Learning on student responsibility. Blumenfeld et al. (1991) stated that PBL encourages responsibility in students by giving them real-world assignments that call for organization, planning, and teamwork. This improves their innate drive and sense of responsibility for finishing tasks

3.2 The Impact of PBL on Students' Strategic in Learning

The effect of PBL on students' strategic in learning is the main topic of this subsection. by the data that has been acquired by filling out the questionnaire it



reveals that PBL has quite a good impact on student engagement in areas of strategic during learning. The answers to the strategic learning questionnaire are compiled in Table 2.

Table 2 An overview of the answers provided to the questions about strategic learning

Statement	Strongly	Agree	Disagree	Strongly
	Agree			Disagree
S6. In order to complete projects, our group explored various types of information sources	65 40,6%	82 51,2%	11 6,9%	2 1,3%
S7. Only relevant and accurate information was selected by my group to be adopted in our report text	49 30,6%	97 60,6%	13 8,1%	1 0,7%
S8. My group used our own styles and creative input to convey the information into the report text	43 26,9%	104 65%	12 7,5%	1 0,6%

Regarding the assertions about strategic learning, the majority of students "strongly agreed" and "agreed." 91,8% for statement 6, a significant majority of students indicated that all members of their group collaborated to finish the project. This suggests that the PBL approach effectively fostered a collaborative learning environment. 91,2% for statement 7 a majority of students reported that roles and tasks were clearly defined in their group, and a small minority (8.8%) disagreed. This indicates that there is room for improvement in ensuring clear communication and division of labor within groups, 91,9% with the statement 8 large majority of students shared their ideas and expertise to the project's planning, implementation, and group evaluation. This suggests that PBL effectively encouraged the students to contribute their knowledge and skills towards. The research findings indicate that most students strongly agreed or agreed with statements about strategic learning. The results show that most students demonstrated strong strategic learning skills in their group projects, actively exploring diverse and credible information sources and selecting only relevant data, which reflects good research practices and critical thinking. Their creative presentation of information further suggests effective communication skills. However, a small minority of students were less engaged or clear in their approach, indicating a need for targeted support to ensure consistent learning strategies across all groups.

In addition to the preceding questionnaire results, which demonstrate how project-based learning affects students' learning strategies, researchers discovered the theoretical basis for this effect. The belief that PBL encourages strategic learning by empowering students to control their learning processes is reinforced by Barry Zimmerman's self-regulated learning theory. To accomplish their learning



objectives in PBL contexts, students must plan their actions, keep track of their progress, and modify their approaches. Given that it makes intentional use of learning processes to optimize efficacy, this is consistent with strategic learning (Zimmerman, 2002).

3.3 The Impact of PBL on Students' Collaboration in Learning

The impact of PBL on collaborative learning in the classroom is the main topic of this part. According to the information gathered from questionnaire responses, PBL has a positive effect on students' participation in collaborative learning activities. The answers to the collaborative learning questionnaire are compiled in Table 3.

Table 3 An overview of the answers provided to the questions about collaborative learning

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
S9. All members of the group collaborated to finish the project	42 26,3%	91 56,9%	20 12,5%	7 4,3%
S10. Roles and tasks were clearly defined in my group	36 22,5%	108 67,5%	15 9,4%	1 0,6%
S11. I shared my ideas and expertise to the project's planning, implementation, and group evaluation	45 28,1%	103 64,4%	10 6,3%	2 0,9%

In the third aspect, it can be seen that many students strongly agree with collaborative learning. 83,2% for statement 9, a significant majority of students indicated that all members of their group collaborated to finish the project. This suggests that the PBL approach effectively fostered a collaborative learning environment. 90% of the statement 10 reported that roles and tasks were clearly defined in their group, and a small minority (10%) disagreed. This indicates that there is room for improvement in ensuring clear communication and division of labor within groups, and 92,5% for the statement 11 A large majority of students shared their ideas and expertise to the project's planning, implementation, and group evaluation. This suggests that PBL effectively encouraged students to contribute their knowledge and skills to the collaborative process. Finding everyone in the group to give their complete dedication was one of the difficulties in functioning as a group. The results show a high level of collaborative engagement among students in their group projects, with most reporting effective collaboration and clearly defined roles contributing to successful group dynamics and project quality. Most (92.5%) felt comfortable sharing ideas fostering a creative and inclusive environment. However, some students noted a lack of full collaboration and unclear roles, indicating a need for improved communication and



team-building to ensure consistent engagement and equitable participation across all groups.

Apart from the results of the questionnaire above, which shows the impact of project-based Learning on student responsibility, researchers also found a theory supporting the impact of project-based Learning on student responsibility. Hmelo-Silver (2004) highlights that PBL fosters student collaboration in the solution of real-world issues. Students split up assignments, share duties, and contribute their unique perspectives to the group in collaborative learning environments. In addition to improving learning objectives, this approach aids students in gaining vital collaboration abilities, including leadership, communication, and negotiation.

3.4 The Impact of PBL on Students' Energized in Learning

The effect of PBL on learning energization is the main topic of this subsection. According to the information gathered from questionnaire responses, PBL has a positive effect on students' engagement in learning-related activities. The answers to the questions on feeling energized by learning are compiled in Table 4.

Table 4 An overview of the answers provided to the questions about energized learning

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
S12. My goal to get a good grade on the project motivates me to finish it	70 43,8%	82 51,2%	8 5%	0 0%
S13. I want my project to rank as the top assignments for the class	60 37,5%	84 52,5%	15 9,4%	1 0,6%
S14. I am proud of the work I've done	75 46,9%	81 50,6%	4 2,5%	0 0%

Regarding the assertions about Energized by Learning, the majority of students "strongly agreed" and "agreed." 95% for statement 12, a significant majority of students indicated that their goal to get a good grade on the project motivated them to finish it. This suggests that external rewards can play a significant role in driving student engagement in PBL. In 90% of statement 13, a substantial portion of students expressed a desire for their project to rank as the top assignment for the class. This indicates that competition and a desire for recognition can be motivating factors for some students. 97,5% for statement 14, a majority of students reported feeling proud of the work they had done, and a small minority (2.5%) disagreed. This suggests that intrinsic motivation, such as a sense of accomplishment and pride, can also be a factor in student engagement. This highlights a strong focus on academic performance, with students driven by both grades and a sense of accomplishment. While this competitive environment fosters engagement and



high-quality work, balancing competition with collaboration and intrinsic motivation is essential to avoid stress and ensure a positive learning experience.

Researchers discovered a theory that supports the effects of project-based learning on students' energized learning, in addition to the results of the questionnaire mentioned above, which demonstrate this effect. The Self-Determination Theory (SDT) developed by Deci & Ryan (1985) states that pupils are most motivated when they feel competent, related, and autonomous. PBL satisfies these psychological demands by providing students with project autonomy, chances to show off their skills in practical settings, and peer collaboration. As a result, students feel more inspired and energized to learn.

Given that all of the earlier research highlights the beneficial effects of Project-Based Learning (PBL) on student involvement, this study substantially resembles the findings of Chang et al. (2024), Zhang & Ma (2023), and Balleisen et al. (2024). Chang et al. (2024) showed that PBL's real-world contexts greatly improve behavioral, cognitive, and emotional involvement. This finding is consistent with this study's finding that PBL helps students become more motivated and responsible. Similar to my results, which showed that PBL improves engagement through responsible, strategic, and collaborative learning, Zhang & Ma (2023) emphasized the wider academic benefits of PBL across a variety of courses. This study demonstrated that students at SMAN 2 Sidoarjo experienced enhanced collaboration and teamwork, is consistent with Balleisen et al.'s (2024) focus on PBL's impact on student happiness and engagement via encouraging collaboration. This research highlights areas for development, such as the need for more precise role descriptions and systematic guidance to maintain consistent involvement across all student groups, which is less stressed in the prior studies, even if all studies acknowledge the benefits of PBL.

4. CONCLUSION

The research on the impact of Project-Based Learning (PBL) on students' engagement in learning report texts, specifically at SMAN 2 Sidoarjo, demonstrates that PBL fosters a highly engaging learning environment for students. The data collected from the 160 Grade 10 students showed that the majority of students felt a strong sense of responsibility, collaboration, and motivation while working on their projects. The research reveals four key areas where PBL enhances engagement: responsible learning, strategic learning, collaborative learning, and energized learning. The data reveals that students have a good understanding of their project goals, feel a sense of pride and responsibility, and are motivated to perform well. While most students consult their teachers and collaborate effectively, there are opportunities to enhance these areas for a more uniform experience across all groups. This can be achieved through structured guidance and clearer role definitions in group settings.

The research results pertaining to "The Impact of Project-Based Learning on Students' Engagement in Learning Report Text" indicate significant consequences for teachers who aim to improve student engagement via PBL. To create a more engaging



and student-centered learning environment, teachers should think about incorporating project-based learning methodologies into their curricula. Teachers also can consider the assignments they will be given by adapting to what is trending at that time. So that students can be enthusiastic about completing projects because in implementing project-based learning, learning activities are student-centered. Teachers can promote increased accountability, teamwork, and intrinsic motivation in their students by letting them take ownership of their projects. This will increase student engagement and promote deeper learning. Furthermore, the results underline the need for clearly defined objectives, regular feedback, and chances for reflection.

For researchers interested in conducting studies on Project Based Learning (PBL), it is recommended to explore a variety of educational settings and student demographics to increase the generalizability of the findings. Future research could investigate the long-term impact of PBL on student engagement and learning outcomes by implementing longitudinal studies that track students over time. In addition, researchers can also consider using a mixed methods approach to capture quantitative and qualitative data, which usually uses interview or focus group methods so as to gain a more comprehensive understanding of students' experiences and perceptions of PBL. Lastly, investigating the influence of different PBL frameworks on engagement levels can contribute to developing PBL strategies tailored to specific student needs and learning environments.

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