



AN ANALYSIS OF CLASSROOM MANAGEMENT AND STUDENT PERFORMANCE DURING PROJECT-BASED LEARNING

Abidatus Sholiha¹, Sigit Pramono Jati², Hindun³

^{1,2}UIN Sunan Ampel Surabaya, ³MTsN 4 Jombang

¹sabidatus31@gmail.com

Abstract:

This research aims to explore the implementation of project-based learning focusing on classroom management and student performance. In this study, the researcher used a qualitative design, and the data collection techniques were observation, interview, and project results. The supporting data includes photos and videos taken during the teacher's instruction in the classroom and when the students are doing the project. The subjects are seventh-grade students at MTsN 4 Jombang academic year 2023/2024, which consists of 27 students. The results show that classroom management during the implementation of PjBL can increase the class activeness of fellow students, and the teacher also takes action in the implementation process, such as grouping students, arranging circular seating to support collaboration, adequate time management, and classroom order to remain conducive. The project results produced by the students showed interesting creativity with its own appeal with creativity. The organization and ideas of the students also showed creative thinking skills and high engagement.

Keywords: *Classroom Management, Project-Based Learning, Student Performance*

1. INTRODUCTION

In recent times, educators have been exploring diverse instructional approaches to enhance the efficacy of teaching and learning. Several approaches, including flipped learning, Project-based Learning (PjBL), Problem-based Learning (PBL), and cooperative learning, have gained considerable traction, largely due to their emphasis on the current paradigm shift, which is moving away from teacher-centered instruction and now changing toward student-centered learning. In the student-centered approach, students' motivation plays a significant role in their performance.

PjBL is a structured instructional approach that prioritizes learning through project-based activities. Project-based learning enables students to independently identify practical and challenging issues, devise solutions, and engage in collaborative learning to address these problems (Lee & Choi, 2015). This involves students learning through project activities to identify problems, which encourages active and collaborative learning whether the activities are carried out individually or in groups. PjBL encourages cooperation among students and emphasizes the recognition that as a team member, each individual has obligations toward the other members (Mahasneh & Alwan, 2018). Therefore, the support of each member of the group is essential in order to work together and achieve common goals. The study from Mahasneh and Alwan aimed to examine the effect of PjBL on student teachers' self-efficacy and achievement, with the main finding that this approach facilitated planning, collaboration in pairs, planning learnings easily, and timely project completion. On the other hand, during the students doing the process of their project feedback from the teacher is needed to help students reflect on their learning, make necessary adjustments, and improve their performance. Besides, teachers play a crucial role in this process by offering guidance and support, helping students navigate challenges, and ensuring that they stay on track



to achieve their learning goals (Nicol & Macfarlane, 2006). In this case, the teacher doesn't completely let the students do the PjBL activities on their own. This means both the teacher and the students are still helping each other and asking for help during the learning process.

According to Bell (2010), in a PjBL environment, the teacher assigns a topic for either individual or group exploration, which students then develop through research or project-based activities under the guidance and supervision of the teachers. The active engagement of students in constructive thinking plays a crucial role in knowledge development, offering students a self-motivated learning phase during their practical experience journey (Glaserfeld, E. Von., 1995). In summary, because PjBL requires collaboration among students to accomplish shared objectives, it fosters the development of strong interpersonal and communication skills.

There are several studies discussing PjBL. One is from Syahril et al. (2021). The results show that PjBL aligning with students' regional potential effectively boosts motivation, interest, and soft skills. Another study by Fadhil et al. (2021) showed that the PjBL could improve creative thinking skills and student learning outcomes and also have a positive impact that makes it easier for students to understand the material. A study by Hanif et al. (2019) stated that the results of PjBL have a good impact on students. The projects that had been developed were in the category of creativity dimensions which are resolution, elaboration, and novelty dimension. In another study presented by Astawa et al. (2017) which is the result of the analysis showed a significant effect of PjBL on students' English productive skills, and also PjBL can enhance students learning quality in terms of enthusiasm, confidence, creativity, self-directed and collaborative learning activities, while from the teachers' perspective, PjBL can promote motivation and satisfaction in teaching. The last study by Rahardjanto et al. (2019) discussed hybrid-PjBL on college students, and the result showed that hybrid-PjBL had the potential to increase students' learning motivation and had a significant influence on the achievement of learning outcomes and creative thinking skills.

Classroom management plays a very significant role in the teaching and learning process. According to Scrivener (2012), classroom management is the process and strategies an educator employs to maintain an environment conducive to student learning and success. It involves actions taken by the teacher to create an atmosphere that supports and facilitates instructional, academic, social, and emotional learning. In addition, good communication can also determine the effectiveness of learning. Communication is the process of sending and receiving by two or more people. Effective communication in learning is the process of giving messages in the form of knowledge from educators to students, where students can understand and understand the meaning of the message in accordance with predetermined learning objectives so that it will add to the scientific repertoire of students. Harmer (2007) states that the roles of the teacher can be implemented in the process of teaching, such as facilitator, resources, controller, motivator, participant, tutor, organizer, and assessor. Teacher as facilitator is also defined by Hartnell-Young (2000) through Siregar et al. (2022) as teacher as facilitator acts in practice, which requires mutual willingness and supportive



leadership. This is the role of the teacher as a learning community where the teacher and students are mutually committed to being involved in the learning process. In addition, the teacher can also provide support and motivation for students and help with student difficulties so that the atmosphere of the learning process is positive. The study conducted by Rahmawati and Sholeh (2021) discussed the implementation of classroom management by the teacher with a class atmosphere comfortable and safe, student arrangement starting from checking students' attendance lists, picket class cleanliness, and appreciating students. The results show that classroom management depends on teachers keeping students disciplined and offering clear guidance. Besides, supporting learning with appropriate facilities improves the teaching process. Therefore, the learning environment is related to the people and facilities. It requires adequate facilities for students and collaboration between teachers. The aim of arranging classroom facilities to secure accessibility, affordability, and convenience for teachers and students to utilize learning tools and resources, building teacher-student or student-student interaction, and moving from one side to the other (Zainuddin & Hardiansyah, 2023). This study discussed analyzing the teachers' skills to manage a classroom and describing their implementation in the learning process. The findings show that teachers can manage their classes well with a positive attitude and discipline, focus on creating a positive learning environment, and good communication.

According to Hattie (2008), student performance is significantly influenced by a variety of factors, including the quality of teaching, feedback, and the student's own expectations and motivations. Hattie emphasizes that visible learning and teaching strategies, where learning is explicitly clear to both the teacher and the student, are critical in enhancing student performance. Darling-Hammond (2010) argues that access to high-quality teaching, comprehensive assessment systems, and supportive learning environments are critical in closing the achievement gap and enhancing student performance across diverse populations. The study conducted by Iwamoto et al. (2016) focused on analyzing the effectiveness of PjBL on student performance. The study found that students who took responsibility for their peers' learning scored higher on exams. No significant improvement was seen in the group that did not feel responsible. High self-efficacy, perceived control, and a growth mindset are key to better academic performance.

This research explores classroom management and student performance in a project-based learning environment, highlighting the importance of a well-managed classroom in facilitating student success. Hence, this research will explore the following questions:

1. How does the teacher manage the classroom during PjBL?
2. How are students' project results during PjBL?



2. METHOD

In this study, the researcher used qualitative research as an instrument to collect the data. The subjects of this study are students at MTsN 4 Jombang in the 2023/2024 academic year, and the focus is on seventh grade. The data collection techniques are observation, field notes, project results, and interviews. The observations were made to find the actions the teacher took while managing the class during teaching and learning activities, as well as field notes that told the process of the activities. The students' project results to determine student performance during the implementation of PjBL and interviews for data support to students related to the implementation of the PjBL process. The additional supporting data includes photos and videos taken during the teacher's instruction in the classroom and when the students are doing the project.

3. FINDING AND DISCUSSION

The implementation of project-based learning is related to the material of Asking and Giving Directions. The project assigned to the students is to create a "City Maps" on Manila paper, which they will work on as a group. During the project, students follow the teacher's rules: they are asked to be actively involved in the group, enhancing teamwork and encouraging creativity.

The purpose of the first research question was to determine how project-based learning affects classroom management. According to Jim Scrivener, classroom management is the way that the teacher can manage students' learning by organizing and controlling what happens in the classroom. Moreover, the teacher gives several rules for managing the classroom throughout the project:

1. Student Grouping

Observations showed that for project assignments, the teacher divided the students into groups rather than assigning projects to individuals. The teacher grouped the students based on the rows of desks from front to back. Additionally, the teacher provided clear instructions for the group assignments.

2. Classroom Layout

The way the classroom is arranged has a direct impact on what students can do and how the students and teacher do. The teacher changed the seating arrangement to make it easier for students to work on the project in the group. The Technique that the teacher used in seating arrangement is a zone circle, which means each group makes a circle in their group, different areas in each section of one row of desks in the classroom, and during the project, students can be able to move from zone to zone to know the progress and can make interaction with other students of the group.

3. Time Management

The time required to complete the project assignments was not short; it required a considerable amount of time. The project assignments given by the teacher took 4JP, or 160 minutes, over two sessions or two meetings. This was because the assignments were projects that required students to be as creative as possible according to the directions and material provided. The project was quite time-

consuming, partly due to the determination and pooling of creative ideas among the students in each group. In addition, with limited resources to produce a good project, there were time delays.

In the students grouping section, the teacher decides to group students to distribute the project, which is for a number of reasons. As students working in groups need to learn to communicate with peers in groups, share ideas, and manage responsibilities, this can lead to the development of collaborative working skills to complete assignments in groups. In addition, another perspective is that groups can encourage creativity in project outcomes and can help each other if they do not understand the context that has been given.

The arrangement of classroom layout plays an important role in the continuity of the PjBL assignment process, which is carried out in groups. This allows students to interact with each other, which can foster teamwork. Seating arrangement also fosters student concertation in the process of working on projects in their groups. Besides that, students also easily monitor if they want to know the progress of other groups' work, which can foster a sense of student motivation in terms of working on assignments at the right time that has been determined. Moreover, the teacher can also easily monitor students directly during the project process.

The teacher's role during the project work process is facilitator. The teacher helps students with every difficulty they face, helps the learning atmosphere or classroom remain calm and organized, and helps process unserved needs or resources. Additionally, during the project, the classroom was very active, where students showed enthusiasm and were active with each other.

To answer the second research question, the data was obtained from the results of projects developed by the students. The project results were measured based on creativity and appropriateness. The project results can be seen in the following picture.



Figure 1 The result of the project by Group 1

The image shows that students can create the project creatively, which can generate interest in other groups with the results that have been developed. The tidy arrangement is one of the good additional scores.



Figure 2 The result of the project by Group 2

The image above shows that the students can make the project creatively, with the addition of other objects outside of the available directions that aim to fill in blank space on the worksheet, which raises the student's level of creative thinking and interest.



Figure 3 The result of the project by Group 3

The image shows that the students were able to create the project creatively, adding objects such as trees, parks, traffic lights, and street lights, all of which they had drawn directly. This shows the students' good and skillful level of creativity.

The project from group 1 showed a creative arrangement, which caught the attention of the other students, with neat details and an easy-to-understand layout. Similarly, groups 2 and 3 also added additional elements by drawing with stationery. However, group 3 showed more creative additions. Each group showed their creativity by adding objects from their own ideas to fill the empty spaces on their worksheets, which enhanced their creative thinking and engagement. For example, the addition of hand-drawn elements such as trees, parks, traffic lights, and street lamps showed their ability to think outside the box. These creative additions not only highlight students' artistic talents but also show their innovative spirit, which reinforces PjBL's ability to encourage creativity and collaboration among students.

Additional interviews with students revealed that it was easier for them to connect and understand the project they were working on with the theory or material that had



been taught. In addition, the students were actively involved and contributed positively to their groups, sharing ideas that helped the project. The projects also motivated students to participate and work well in groups.

The focus of this study was to investigate classroom research, which is how the teacher managed the classroom during the PjBL process and how the students project results. This study's findings show that classroom management has an important role in PjBL-based learning, which can foster skills in collaborative work, manage time well, and have a sense of responsibility for the assignment. Similarly, Mahasneh & Alwan (2018) underline that the results of their study show that PjBL-based learning can improve skills in collaboration, cooperation, and responsibility, solve problems in overcoming challenges, and manage time effectively. In addition, a study by Rahmawati and Sholeh (2021) aligns with this study in showing the importance of classroom management, including the use of techniques such as grouping and communication with students, which helps maintain a conducive learning environment in the classroom. It is also stated by Scrivener (2012) that classroom management is the process and tactics teachers employ to keep a setting that supports students' learning and achievement. It includes educators' steps to establish an environment that encourages and supports academic, social, emotional, and instructional learning.

The study by Syahril et al. (2021) also states that students experience increased motivation in completing projects and developing skills such as cooperation, communication, and interpersonal skills through student collaboration in groups. Besides, active involvement in conducting peer projects enhances the learning experience with novelty and positive impact. Based on the findings, this study also found that PjBL can encourage a joint performance with the group where collaboration is also needed so that communication is always established to achieve project goals. Active engagement during the PjBL process was also seen from the students, which showed that it generated a sense of interest in the students. The results of the projects that students have done can lead to unique and interesting skill creativity, with the addition of several elements to the project, which students also say makes it easy to understand the material.

Fadhil et al. (2021) emphasized that implementing PjBL significantly enhanced students' creative thinking skills and led to higher academic performance; similar to the study from Hanif et al. (2019), project-based learning, or PjBL, can increase creativity in a collaborative and practical learning environment. A study by Astawa et al. (2017) also highlighted that PjBL showed an increase in students' enthusiasm and motivation towards learning, and students can enjoy the collaborative nature of projects, where they could work together and express their creativity. Besides, PjBL also fosters soft skills such as confidence, creativity, and collaborative learning abilities. There are differences with a study by Rahardjanto et al. (2019), which is where the PjBL carried out is hybrid. Still, the results found several similarities, namely having a positive influence on students' creative thinking skills and encouraging students to engage in problem-solving activities, which are essential for developing creativity. Collaborative activities also enhanced their learning experience and knowledge absorption.



The role of the teacher in this study is as a facilitator, where the teacher helps students when there are difficulties and directs them. In addition, the teacher also plays a role in organizing the classroom so that it remains conducive even though it is active between students and students. Harmer's (2007) statement that a teacher functions as a facilitator, resource, controller, motivator, participant, tutor, organizer, and assessor can all be used during the teaching process. Additionally, teachers play the role of a learning community in which both students and teachers are dedicated to participating in the learning process (Siregar et al., 2022). Therefore, as a teacher, it is necessary to encourage and assist students in their struggles to create a positive learning environment. The study by Iwamoto et al. (2016) stated that the key indicators of success identify three main indicators that focus on higher academic performance: a developed mindset, high self-efficacy, and a high level of perceived coping control. It is important to foster a positive learning environment and encourage students to take responsibility for learning. There are some differences between my study and previous studies. Previous studies have examined the effectiveness of PjBL in affecting student academics. In contrast, this research examines how the teacher manages the classroom during PjBL and student performance based on project results. On the other hand, previous studies did not highlight classroom management related to seating arrangements, and not many of the previous studies examined the effect of PjBL on time management.

4. CONCLUSION

The implementation of PjBL on Asking and Giving Directions had a positive impact on classroom management and students' project results. The teacher used effective techniques, such as circular seating arrangement, to enhance group interaction and the time spent during the project process was two sessions, which made it long but productive. As a result, students produced creative projects, adding supporting elements to their projects, which showcased their artistic skills and critical thinking. This method not only improved classroom dynamics but also encouraged active participation, collaboration, and creativity among the students, which means they can take responsibility for their partner in the group and exchange ideas with each other.

Further research could explore the implementation of PjBL for different grade levels, such as comparing its impact on lower and higher grades. In addition, future research could focus on developing more quantitative assessments in PjBL, allowing for a more structured evaluation of student progress.

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