

Project-Based Learning Model in the Classroom Environment for Managing Hyperactive Children

Pebi Panca Lestari^{1*}, Risky Dwiprabowo¹, A. Rahim¹

¹Primary School Teacher Education (PGSD), STKIP Kusuma Negara Jakarta, Indonesia

*pebipancalestari@stkipkusumanegara.ac.id

Abstract

This research aims to determine the implementation of a project-based learning model in the classroom environment to manage hyperactive students at MI Nursyamsi, Depok. The study employs a qualitative descriptive method with data collection techniques including observation, interviews, field notes, and documentation. The research subjects consist of a fourth-grade teacher and three hyperactive students. The results indicate that the project-based learning model can be an effective strategy for managing the behavior of hyperactive students. With a supportive environment, appropriate guidance, and student-centered learning, hyperactive students can become more focused and engaged in their education, thereby enhancing the overall quality of education. The study concludes that the project-based learning model and appropriate classroom management have proven effective in improving the behavior and development of hyperactive students at MI Nursyamsi.

Keywords : Hyperactive Children, Project-Based Learning Model, Role of the Classroom Environment

1 INTRODUCTION

Education is a means to enhance the quality of human resources (HR). Through education, students will acquire a broad range of knowledge and the skills necessary for living in society, as well as for their nation and state. As stated in Law No. 20 of 2003 concerning the National Education System (SISDIKNAS), Article 1, Paragraph 1, it mentions: "Education is a conscious and planned effort to create a learning atmosphere and a learning process so that students actively develop their potential to possess spiritual strength, self-control, personality, intelligence, and noble character, as well as the skills required for themselves, society, the nation, and their state."

Education is one of the important aspects in character formation and child development. However, the challenges of managing a classroom, especially for students with high activity levels, such as hyperactive children, are a particular concern in the field of education. Hyperactive children, or those with ADHD (Attention Deficit Hyperactivity Disorder), experience a neurobiological disorder characterized by difficulties in maintaining attention, hyperactivity, and impulsivity. Individuals with this condition tend to act without thinking, experience excessive restlessness, are easily distracted, and often struggle academically (Rubia et al., 2021).

According to Elha Rimah Dani (2021), impulsive characteristics in ADHD can lead to uncontrolled behaviors, such as acting without thinking and difficulty in controlling emotions. This can affect a child's ability to interact with their environment and lead to challenges in their studies. MI Nursyamsi has actively implemented the Merdeka Curriculum in its teaching, which allows for the use of project-based learning models. This approach enables students to learn through direct experiences and projects relevant to real life, enhancing not only their understanding of academic concepts but also their analytical skills and teamwork. With a more flexible, student-centered learning

environment, MI Nursyamsi has successfully created a classroom atmosphere that supports creativity, active participation, and independence in learning, in line with the principles of the Merdeka Curriculum.

Based on initial data obtained through observations in class IVB at MI Nursyamsi during the second semester of the 2024/2025 academic year, there are students exhibiting levels of hyperactivity. Out of 21 students, 3 (14.29%) show signs of hyperactivity. Hyperactivity in children can have negative impacts on classroom learning. Difficulties in focusing, high levels of restlessness, and challenges in adhering to classroom rules are some of the issues that arise. Therefore, there is a need for effective learning strategies and efforts to address hyperactivity and create a conducive learning environment for the optimal development of each student.

Project-Based Learning (PJBL) can effectively address the challenges of educating hyperactive children due to its engaging and meaningful learning experiences that enhance understanding and skill development. Key characteristics of PJBL that contribute to its effectiveness include student autonomy, as it allows learners to make their own decisions within a defined framework, promoting exploration and ownership of their learning process. Additionally, the problem-solving approach encourages students to tackle real-world challenges that do not have a single correct answer, fostering critical thinking and problem-solving skills. PJBL also fosters collaboration and communication, as students work together to complete projects and share their ideas and findings in various forms. Moreover, students are responsible for managing the information they gather during the project, promoting research skills and information literacy. Lastly, ongoing assessment throughout the project enables students to reflect on their progress and make improvements (Yudha, 2019).

By implementing the Project-Based Learning model, it is hoped that students in class IVB can actively engage in learning, enhance their involvement, and reduce levels of hyperactivity. Therefore, this study will discuss the implementation of the Project-Based Learning model in the classroom environment to manage hyperactive children among IVB students at MI Nursyamsi.

2 RESEARCH METHODS

The main objective of this study is to identify the challenges faced by hyperactive students in maintaining focus during learning activities. In a classroom with students who have attention disorders, the project-based learning model is expected to provide more engaging and relevant stimuli, helping them remain involved and focused on the tasks assigned. This research will further explore how hyperactive students respond to this approach and how teachers can play a role in facilitating their learning process.

The approach used in this research is qualitative descriptive, according to Rusandi (2023). Qualitative descriptive research is a type of qualitative study aimed at describing and interpreting a phenomenon or event using data in the form of words, images, and not numbers, as seen in quantitative research. This study provides a comprehensive overview of an event or phenomenon that occurs, without manipulating or applying other treatments to the data.

Data collection techniques used in this study include four methods: observation, interviews, documentation, and field notes. Observations were conducted through direct monitoring of the implementation of the project-based learning model in class IVB at MI Nursyamsi, where the researcher recorded events using field notes and observation sheets. Interviews were conducted with the IVB teacher and three hyperactive students, following a prepared guideline; however, the researcher also added anecdotal notes to gather broader information. The collected documentation included the school's profile, organizational structure, code of conduct, student grades, and other relevant documents obtained from administrative staff and the IVB teacher to support the findings from observations and interviews. Additionally, field notes were used to record detailed accounts

of various events during the research, particularly those related to the application of project-based learning and its impact on hyperactive students.

Data analysis in this study uses the Miles & Huberman model, which consists of three main steps. First, data reduction involves summarizing and selecting key elements while focusing on relevant data to identify important themes and patterns. Unnecessary data is discarded, while significant data is summarized and coded according to the research focus. Second, data presentation involves organizing the collected data into brief descriptions, graphs, or diagrams to illustrate relationships among categories. The data from observations, interviews, and documentation of the implementation of the project-based learning model are presented as concise descriptions and simple charts. Third, conclusion drawing/verification is the process of making conclusions by examining similarities, differences, and relationships among the data. Verification is conducted to ensure accuracy and objectivity, allowing the conclusions drawn to be credible (Sugiyono, 2019).

3 RESULT AND DISCUSSION

3.1 Sub Result

Based on the results of observations and interviews during the research in Class IVB at MI Nursyamsi regarding the implementation of the project-based learning model, general findings indicate that the learning process begins with the presentation of relevant problems, collaborative project planning, scheduling, project execution, assessment, and reflective evaluation. During the presentation stage, the teacher ensures that all students understand the goals and competencies to be achieved, which is effective for hyperactive students in reducing anxiety. In the planning phase, the teacher divides the students into groups, taking into account individual characteristics, especially hyperactive students, so they receive positive support and a conducive learning environment. Strategic classroom arrangements, such as spaced seating, also help minimize distractions. The teacher actively monitors the projects and provides special guidance to hyperactive students to ensure they remain engaged and focused.

Specific findings show that hyperactive students like AAR, MAS, and MFA face various challenges in maintaining focus and behavior in class. AAR is often distracted by activities such as drawing while the teacher is explaining and disturbing classmates by taking items without permission. MAS struggles to maintain attention, often talking to friends during lessons and impulsively moving around, disrupting other group learning processes. MFA finds it difficult to complete tasks within the allotted time due to playing with objects on the desk and being easily distracted by surrounding noises. These findings highlight the importance of the classroom environment and teaching strategies in managing hyperactive behavior, especially in project-based learning that requires high concentration and collaboration.

3.2 Sub Discussion

The discussion on the implementation of the project-based learning model in the role of the classroom environment for managing hyperactive children in Class IVB at MI Nursyamsi highlights several key points related to managing hyperactive children's behavior. Based on the findings, hyperactive children often face challenges in maintaining focus, working in groups, and behaving according to classroom rules. Therefore, the role of the classroom environment and the selected learning model greatly influences the success of managing students with special needs, such as hyperactive children.

In this study, hyperactive students like AAR, MAS, and MFA exhibited typical behaviors of hyperactive children. They were often involved in disruptive activities, unable to stay still, and easily distracted. However, the implementation of the project-based learning model offers a flexible solution for handling hyperactive children through more structured yet creative learning activities. The theory of hyperactive children explains that children

with hyperactivity often struggle with maintaining attention, controlling impulses, and behaving according to environmental expectations (Mustika, 2023).

The project-based learning model, as applied in Class IVB, facilitates active and contextual learning. In the problem presentation phase, the teacher introduces problems relevant to everyday life, such as the importance of maintaining environmental cleanliness. This helps students, including hyperactive ones, understand the learning context and improve their focus. According to Elitsa (2021), project-based learning encourages children to engage directly in solving problems through collaborative and creative projects, providing hyperactive students with opportunities to channel their energy into more meaningful activities.

The theory of the classroom environment's role in managing hyperactive children's behavior was also evident in this study. Jacob Kounin, with his theory on classroom management, emphasizes that the physical and social arrangement of the classroom is crucial for maintaining student engagement. The teacher in Class IVB used strategies such as spaced desk arrangements and a conducive classroom setup to minimize distractions. This helped hyperactive children, like AAR and MAS, stay focused and reduce distractions from outside the classroom, such as open windows or doors. This strategy demonstrates that a well-structured classroom environment can help hyperactive children better manage their behavior.

During the project planning phase, the teacher collaborates with students to determine the activities to be carried out. This student-involved planning gives them a sense of ownership over the project, which, according to ADHD theory, can help increase motivation and engagement in hyperactive children. Hyperactive children, who tend to get bored or lose focus quickly, can become more engaged when they feel they have control over what they are working on. Additionally, strategic group divisions, where hyperactive children are placed with patient and supportive peers, show that the social arrangement in the classroom is also important for helping hyperactive children learn.

The project scheduling phase provides a clear structure for hyperactive children. The teacher creates a schedule together with the students, which helps the hyperactive children understand deadlines and their responsibilities. A clear structure and appropriate time allocation help them stay focused on tasks. This also reduces the frustration often experienced by hyperactive children when they feel they lack clear direction in project work.

During the project creation process, the teacher's role as a facilitator is crucial in monitoring the engagement of hyperactive children. The teacher provides specific guidance to hyperactive students, such as assigning specific tasks to them, ensuring they stay focused and involved in the project creation process. This shows that teachers need to give hyperactive children greater attention in the form of clear and specific guidance, especially when they start to lose focus or are unsure of what to do.

In the assessment phase, project presentations provide hyperactive students the opportunity to express their work results in front of their peers. Recognition from classmates and teachers through appreciation, such as applause, helps boost the self-confidence of hyperactive students. This praise creates a supportive social environment, which is crucial in managing hyperactive children's behavior in the classroom.

The evaluation conducted at the end of the learning process also highlights the importance of reflection for hyperactive students. This process allows them to review what they have accomplished and correct their mistakes. With the teacher's guidance during this reflection, hyperactive students can better understand what they have learned and how they contributed to the group project.

Specific findings regarding the behavior of hyperactive students like AAR, MAS, and MFA show the challenges they face in maintaining focus and managing their behavior during project-based learning. For example, AAR struggled to follow instructions and was often distracted by other activities like drawing, while MAS frequently left his seat and disrupted other groups. This indicates that hyperactive children need a structured learning environment and special attention from the teacher to help them stay focused.

A well-organized classroom environment, as emphasized by Kounin, is a key factor in managing hyperactive children's behavior. The spaced desk arrangement, placing hyperactive students away from distractions like windows or doors, and positioning them within supportive groups all contribute to creating a more conducive environment for hyperactive children. By minimizing external distractions and providing peer support, hyperactive children can be more focused and engaged in learning tasks.

Overall, this study shows that the implementation of a project-based learning model in the classroom environment can be an effective tool in managing hyperactive children. However, the success of its application depends largely on how well teachers are able to design a supportive physical and social environment, as well as provide appropriate guidance to hyperactive students. With good management, hyperactive children can positively contribute to the learning process and achieve optimal results.

The implementation of this learning model not only has a positive impact on hyperactive children but also on all students in Class IVB. Active, collaborative, and contextual learning can increase overall student engagement, as they feel more involved in the teaching and learning process. Although hyperactive children require more attention, they can also benefit from the clear structure and social support provided throughout the project.

The application of this model also helps students develop social skills, such as teamwork, effective communication, and critical thinking (Rizkah, 2021). Hyperactive children, who typically struggle to collaborate in groups, can learn to work together and manage their energy through project-based learning in more purposeful activities.

From a classroom management perspective, this model also facilitates teachers in managing the diverse behaviors in the classroom. By providing engaging and meaningful projects, teachers can reduce disruptive behaviors often seen in the classroom, especially from hyperactive children. Activities focused on solving real-world problems can redirect hyperactive students' energy from undesirable behaviors to productive activities.

Time management in project-based learning is also an important factor. Hyperactive children often struggle with time management and completing tasks on time. Through a clear project structure and planned task division, students can learn to be more disciplined and manage their time better. Teachers can also assist hyperactive students by providing step-by-step guidance, making it easier for them to follow the learning process without feeling overwhelmed.

Reflection and evaluation are essential parts of project-based learning. Students not only learn from their own experiences but also from feedback provided by teachers and peers. This reflection process helps hyperactive students better understand their strengths and weaknesses, as well as how they can improve their learning and social skills in the future.

4 CONCLUSION

The results of this study indicate that education, particularly in the context of classrooms with hyperactive students, requires effective approaches to support the learning process. Through the implementation of project-based learning at MI Nursyamsi, it was found that this approach provides solutions for hyperactive students by creating a more interactive and meaningful learning environment. The project-based learning model allows students to engage directly in their learning, which not only enhances their understanding of the material but also reduces hyperactive behavior through active involvement in projects.

In the implementation process of the project-based learning model, initial stages such as problem presentation have proven to help students, including hyperactive students, understand the learning objectives more clearly. The teacher in class IVB at MI Nursyamsi ensures that students grasp the context of the project they will work on, in line with constructivist learning principles. Good explanations at this stage reduce anxiety among hyperactive students and enhance their motivation to engage in the project, contributing to improved focus and student involvement.

The project planning stage, conducted collaboratively between teachers and students, also has a positive impact. The teacher organizes groups by considering the characteristics of the students, especially for hyperactive students, by placing them in groups with more patient peers. This group arrangement provides the social support that hyperactive students need to maintain their focus during learning and the project, thereby creating a more conducive classroom atmosphere.

Furthermore, classroom management plays a crucial role in addressing hyperactive behavior. Arranging desks at a distance between groups helps minimize external distractions that often affect the concentration of hyperactive students. With a calmer and more organized classroom environment, students can focus better on assigned tasks, and hyperactive behavior can be effectively minimized.

Teacher monitoring of projects, including providing special attention to hyperactive students during the project-making process, has proven to help them stay engaged in their tasks. With clearer instructions and direct guidance, hyperactive students are able to complete tasks more effectively, thereby increasing their involvement in the learning process.

Assessment through project presentations also provides hyperactive students with the opportunity to showcase their work, boosting their confidence. This process helps students engage more socially and intellectually, reinforcing their understanding of the material and reducing disruptions during learning.

Overall, the results of this study indicate that the project-based learning model can be an effective strategy for managing hyperactive student behavior. With a supportive environment, appropriate guidance, and student-centered learning, hyperactive students can be more focused and engaged in their education, thereby enhancing the overall quality of education.

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