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TRANSFORMING HISTORY EDUCATION: IMPLEMENTING PROJECT-BASED LEARNING UNDER THE MERDEKA CURRICULUM AT SMK YOS SUDARSO REMBANG

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ABSTRACT

This study addresses the ongoing problem of passive student engagement in history lessons caused by traditional teacher-centered methods at SMK Yos Sudarso Rembang. This study examines the implementation of Project-Based Learning (PBL) in history classes under the Merdeka Curriculum, aiming to enhance students' motivation, comprehension, and 21st-century skills by promoting active participation, collaboration, and critical thinking. Using a qualitative case study design, data were collected through structured interviews, observations, and document analysis over five months. The findings reveal that PBL enhances student engagement, motivation, and comprehension of historical material, supported by interactive group activities and project presentations. However, challenges such as aligning projects with diverse student needs, managing time effectively, and providing clear guidelines were identified. Teachers also faced difficulties adapting to facilitative roles and addressing the logistical demands of PBL. Despite these obstacles, PBL demonstrated significant potential in fostering essential 21st-century skills, aligned with the goals of the Merdeka Curriculum. This study concludes that strategic teacher training, improved resource allocation, and practical real-world applications can optimize PBL in history education and beyond. Future research should explore quantitative analyses and the long-term impact of PBL on educational outcomes across various subjects and contexts.

I. INTRODUCTION

Education plays a crucial role in individual and societal development, fostering knowledge, skills and socio-economic well being. In Indonesia, the education system is structured to empower individuals for active participation in societal and economic activities through its curriculum, infrastructure, educators and management systems. However, there remains a persistent problem in history lessons, where teacher-centered methods result in passive learning, limited student engagement and insufficient development of critical thinking skills (Mardiana & Amalia, 2022). This issue is exacerbated by students' perception of history as a collection of dates and events to be memorized, rather than a subject for analytical exploration. A key aspect of the Indonesian education system is its curriculum, which undergoes regular revisions to adapt to evolving societal needs. The latest revision, known as the Merdeka Curriculum, aims to address passive learning by emphasizing flexibility, student-centered approaches, and character building through methods like Project-Based Learning (PBL) (Damayanti & Muhroji, 2022).

Despite these advancements, several studies have noted the persistence of traditional lecture-based teaching methods in history education. Students often perceive the subject as monotonous, showing low motivation and superficial learning outcomes (Harfiani, 2023). Teachers, constrained by large class sizes and limited resources, struggle to implement innovative instructional strategies aligned with the Merdeka Curriculum's objectives of fostering independence, collaboration, critical thinking, and creativity. Previous research on PBL in science and mathematics contexts demonstrates enhanced collaboration and problem-solving skills, but few studies have extensively explored PBL's impact on history education at vocational schools (Mulabbiyah, 2024; Yi, 2024). Recognizing these gaps, this study focuses on SMK Yos Sudarso Rembang, a vocational institution where history is often undervalued compared to more technical subjects.

Project-Based Learning emerges as a viable solution to these challenges. Unlike teacher-centered methods, PBL promotes active and collaborative learning by allowing students to investigate real-world problems and develop hands-on projects (Tshewang & Wangdi, 2021; Wynn, 2022). This approach not only enhances motivation and engagement but also develops critical 21st-century skills and addressing the limitations of traditional teaching methods (Harfiani, 2023; Mulabbiyah, 2024). By aligning with the Merdeka Curriculum's emphasis on student-centered learning and character development, PBL has the potential to revitalize history classes through active participation, critical analysis of historical sources and creative presentations (Almulla, 2020; Sudjimat et al., 2021).

Nevertheless, existing research points to notable obstacles in implementing PBL, including misalignment between projects and learning objectives, diverse student needs and insufficient teacher training (Damayanti & Muhroji, 2022). While other studies have documented the effectiveness of PBL in enhancing generic skills such as collaboration, its specific impact on

historical analysis and the cognitive demands of interpreting historical contexts remain underexamined (Yi, 2024). This study addresses these research gaps by examining the practical application of PBL in a vocational setting, focusing on how PBL can be adapted to meet the unique demands of history education under the Merdeka Curriculum.

Therefore, the main objectives of this study are to evaluate the implementation of Project-Based Learning in history classes at SMK Yos Sudarso Rembang, assess its alignment with the Merdeka Curriculum and determine its effects on student engagement, motivation and academic performance. In doing so, we aim to: (1) offer insights into an innovative solution for revitalizing history education, (2) highlight the differences between this PBL-based method and traditional lecture-based approaches, and (3) contribute to the broader discourse on improving vocational education through active, student-centered pedagogies. By addressing these objectives, this research hopes to provide a more nuanced understanding of PBL's role in cultivating 21st-century skills and deep historical thinking, ultimately offering a practical model for educators seeking to transform their instructional practices.

II. METHODS

The study employed a qualitative methodology with a case study design, focusing on Grade XI students at SMK Yos Sudarso Rembang. Data collection instruments consisted of structured interview guidelines, observation checklists and document analysis sheets. Primary data included structured interviews with informants such as history teachers, the vice principal of curriculum and six students from Grade XI, chosen through purposive sampling. Secondary data encompassed teaching modules, student worksheets (LKPD), scholarly articles on Project-Based Learning (PBL) theory, books related to PBL methods and archival materials including the school profile and photographs documenting history lessons employing PBL.

To gather data systematically, a structured framework was employed. The research activities proceeded in four main stages: (1) Preparation, involving the design of instruments (interview questions, observation guidelines) and obtaining necessary permissions; (2) Data Collection, carried out through observations in history classes, passive participation techniques to minimize researcher influence, structured interviews with all informants using a predetermined list of questions, and comprehensive document analysis of student outputs and relevant teaching materials; (3) Data Organization and Reduction, where field notes, interview transcripts and documents were compiled, coded and categorized according to emerging themes; and (4) Data Display and Conclusion Drawing, following Miles and Huberman's interactive analysis steps. This iterative approach ensured that patterns related to PBL implementation could be identified, validated, and interpreted accurately.

Observations adhered to Spredley's theory, focusing on elements such as actors, locations and activities to capture authentic classroom interactions. To ensure consistent questioning across informants and facilitate the collection of detailed and relevant data on PBL implementation and its outcomes, structured interviews were conducted. Document analysis included reviewing student outputs and teaching resources to determine how PBL principles were integrated into lesson plans and course content.

The parameters measured in this study included student engagement, comprehension of historical content, and teacher effectiveness in applying PBL. Student engagement was assessed through observation checklists, emphasizing active participation, collaboration, and critical thinking during project activities. Comprehension was inferred from the quality of student-produced outputs and their ability to articulate historical concepts during presentations. Teacher effectiveness was evaluated based on their ability to facilitate PBL activities, as documented in teaching modules and observed in classroom practices.

To ensure validity and reliability, triangulation of data sources—observations, interviews and documents—was conducted. Data analysis was then performed iteratively, starting with data reduction, followed by data display and concluding with conclusion verification. This comprehensive process enabled an in-depth understanding of how PBL influenced teaching and learning in history classes at SMK Yos Sudarso Rembang, focusing on alignment with the Merdeka Curriculum and the development of critical 21st-century skills.

III. RESULT AND DISCUSSION

Implementation of the Project-Based Learning Method in History Teaching of the Merdeka Curriculum

The implementation of Project-Based Learning in history classes at SMK Yos Sudarso Rembang yielded notable outcomes in fostering student engagement and enhancing learning experiences. Observational data indicated that students actively participated in group discussions, utilized historical sources more frequently and demonstrated improved interpretation skills when examining past events. Teachers structured their lessons around PBL syntax, encompassing the identification of essential questions, project planning, scheduling, progress monitoring, results evaluation and experience reflection. These steps aligned with theoretical principles of PBL, ensuring an active and student-centered learning environment. Students exhibited increased motivation and participation during project activities, evidenced by their enthusiasm in responding to questions and collaborating on group tasks. The use of multimedia, such as videos and digital presentations, further engaged students and promoted critical thinking. Moreover, the incorporation of projects, like creating concept maps and interactive group presentations, allowed students to explore historical concepts in innovative and practical ways. Interview data further

revealed that most students enjoyed the autonomy and creative freedom afforded by PBL, leading to deeper engagement with historical content.

The findings from SMK Yos Sudarso Rembang align with global applications of PBL in education. For example, the use of structured mentorship in Kenya's bioinformatics program underscores the importance of guided learning and its impact on student outcomes (Nanjala et al., 2023). Similarly, the integration of technology in electrical engineering education during the pandemic demonstrated the potential of PBL to enhance critical thinking and problem-solving skills, even under challenging circumstances (Khandakar, 2022). Additionally, the incorporation of Active Fun Technology (AFT) elements, as seen in systems analysis and design courses, mirrors the use of multimedia and interactive projects at SMK Yos Sudarso Rembang. Both approaches have been shown to nurture knowledge while promoting teamwork, communication, and critical thinking (Mohamad Hsbollah & Hassan, 2022). These parallels indicate that the PBL framework can be adapted across varied disciplines to encourage contextual learning, a key focus of the Merdeka Curriculum.

The implementation of PBL at SMK Yos Sudarso Rembang demonstrates its potential to transform traditional history classes into dynamic, interactive learning environments. By encouraging student engagement and critical thinking, PBL addresses longstanding challenges of passivity and disengagement in history education, aligning with the objectives of the Merdeka Curriculum, which emphasizes character building and active learning. The findings suggest that PBL fosters essential skills such as collaboration, creativity and communication, preparing students for real-world applications. However, challenges such as aligning projects with learning objectives and managing diverse student needs indicate areas for improvement. For instance, teachers noted difficulty in designing projects that seamlessly integrate specific historical competencies, highlighting the importance of careful instructional planning. These results underscore the importance of teacher training and institutional support in optimizing PBL practices. Integrating digital tools and technologies, as suggested in other studies, could further enhance the implementation and outcomes of PBL in history education.

The Problem of Implementing the Project-Based Learning Method in History Teaching

The implementation of Project-Based Learning in history classes at SMK Yos Sudarso Rembang highlighted several challenges encountered by both teachers and students. Teachers faced difficulties in designing projects that aligned with the diverse abilities and interests of students, resulting in varied levels of engagement and comprehension. Students struggled with unclear project guidelines, often leading to confusion about expectations and inconsistent learning outcomes. Additionally, group dynamics posed challenges, as differences in creativity, communication skills, and initiative within teams hindered collaborative efforts. Dominant group members frequently overshadowed less confident peers, impacting group cohesion and overall

project quality. Time constraints further compounded these issues, with students and teachers citing insufficient time to plan, execute, and refine projects effectively, often leading to incomplete or substandard project outputs. Moreover, interview transcripts revealed that some students felt overwhelmed by the open-ended nature of PBL tasks, indicating a need for more structured guidance and scaffolding. Presentation-related anxiety, particularly among students with limited confidence in public speaking, emerged as another critical obstacle.

The challenges observed at SMK Yos Sudarso Rembang resonate with findings in broader educational contexts. For instance, Sirotkina et al. (2024) noted similar difficulties in Russian higher education, where traditional teaching methods leave students ill-equipped for the demands of PBL. Teachers worldwide, including those in China and Indonesia, face hurdles in designing PBL activities that integrate seamlessly into existing curricula and are feasible within resource limitations (Syahdia et al., 2024; Zhao, 2024). Effective time management and group collaboration are common barriers across PBL implementations. Lestari et al. (2024) highlighted how STEM education students struggle with applying scientific methods under tight timelines, while Zhao (2024) emphasized the necessity of professional development for educators transitioning to PBL roles. The resource constraints and logistical challenges at SMK Yos Sudarso Rembang mirror issues in engineering education, where establishing industry collaborations is critical but difficult to achieve (Alarfaj et al., 2024). These comparisons underline the global relevance of the challenges faced in implementing PBL at SMK Yos Sudarso Rembang. In addition, the shortage of teaching aids and limited funding for project materials remained a significant concern, constraining the potential scope and quality of student projects.

The challenges encountered in implementing PBL at SMK Yos Sudarso Rembang underscore the need for strategic interventions to optimize this educational approach. Addressing the lack of clarity in project guidelines and ensuring consistent expectations can help students navigate their tasks with confidence, minimizing confusion and improving learning outcomes. Providing targeted training for teachers, as suggested by Zhao (2024) and Kamaruddin et al. (2024), would equip them with the skills to design effective PBL activities and manage diverse classrooms. Furthermore, fostering communication and collaboration skills among students is crucial for addressing group dynamic issues. Introducing activities that build these competencies prior to project execution could reduce disparities within teams, ensuring equitable participation. Time management remains a critical area requiring structured timelines and milestones, which can alleviate pressures on both teachers and students (Lestari et al., 2024). While the challenges are significant, the potential benefits of PBL in improving student engagement, critical thinking and real-world application make it a valuable pedagogical tool. Addressing these obstacles through resource allocation, curriculum integration and industry partnerships could enhance the effectiveness and sustainability of PBL at SMK Yos Sudarso Rembang and beyond (Belmekki,

2024; Hu, 2024). Establishing collaboration with local historical societies or archives could also provide students with authentic sources and experiences, further enriching their learning journey.

Students' Responses to the Project-Based Learning Method in History Lessons of the Merdeka Curriculum

The adoption of Project-Based Learning in history classes at SMK Yos Sudarso Rembang has effectively transformed traditional teacher-centered instruction into a more interactive and collaborative learning environment. Students displayed increased enthusiasm particularly when actively participating in group discussions and collaborative projects. The integration of PBL not only encouraged students to express their creativity and critical thinking but also enhanced their understanding of historical events, such as the Proclamation of Indonesia's Independence. Teachers facilitated the process by transitioning to roles as mentors and facilitators, empowering students to take ownership of their learning. Observations showed that students who initially appeared disengaged became more active when assigned specific responsibilities within their groups, emphasizing the importance of well-designed task distribution. Students reported that working in groups helped them develop communication and problem-solving skills, which were further reinforced during project presentations. These activities enabled students to articulate their understanding, address peer inquiries and engage in reflective discussions. Furthermore, the structured nature of PBL activities ensured that students adhered to timelines, fostering discipline and time management. The outcomes underscore the positive impact of PBL on student motivation and engagement as well as their academic performance in history.

The findings align with global research on PBL's effectiveness in enhancing student engagement and collaborative learning. For instance, studies on engineering education highlight that collaboration, communication and workload management significantly enhance student interest and active participation (Gunawan et al., 2022). Similarly, Uotila, Keskiniva, Junnonen, and Saari (2024) emphasized that teamwork and consultative approaches are crucial in advancing both generic and professional skills in students, resonating with the observed benefits at SMK Yos Sudarso Rembang. Moreover, the influence of social and emotional engagement, as noted by Lixia et al. (2024), parallels the improvements in student interaction and group dynamics reported in this study. In contexts like musical acoustics and 3D design courses, PBL fosters practical skill development and self efficacy (Mou, 2020; Rennoll et al., 2022), mirroring the skill acquisition and confidence-building observed among students at SMK Yos Sudarso Rembang. These results also support the broader pedagogical view that hands-on, collaborative tasks can enhance cognitive presence and foster deeper comprehension of complex topics (Stahl et al., 2022).

The study's findings have significant implications for educational practices and policy within the context of the Merdeka Curriculum. By fostering self-regulated learning (SRL) behaviors, as suggested by Wu (2024), PBL creates a sustainable learning environment where students can independently manage and direct their educational journeys. The ability to engage deeply with

historical topics, coupled with the development of communication and teamwork skills, prepares students for both academic and real world challenges. The implementation of PBL at SMK Yos Sudarso Rembang exemplifies how pedagogical innovations can revitalize subjects traditionally perceived as monotonous. Encouraging collaboration, creativity and critical thinking aligns with broader educational objectives to equip students with 21st-century skills. However, to maximize its effectiveness, educators should incorporate scaffolding strategies and integrate real-world applications, as demonstrated in software engineering and STEM education (Mou, 2020; Stahl et al., 2022). These enhancements can address existing challenges and further enrich the educational outcomes associated with PBL. Future initiatives might involve structured peer assessments and mentoring sessions, guiding students to refine their analytical skills and enhance peer-to-peer feedback.

IV. CONCLUSION

This study confirms that Project-Based Learning (PBL) successfully transitions history education from a teacher-centered approach to an interactive, student-centered model at SMK Yos Sudarso Rembang. By promoting active participation, collaboration and critical thinking, PBL increased student motivation, deepened comprehension of historical content and enhanced communication skills, aligning with the Merdeka Curriculum's goals of cultivating 21st-century skills. Despite these positive outcomes, challenges emerged and difficulties in aligning projects with diverse student abilities, time management issues and insufficient clarity in project guidelines. Addressing these barriers through comprehensive teacher training, strategic resource allocation and scaffolded instructional approaches can optimize PBL's implementation. Based on these findings, the study recommends stronger institutional support and integration of real-world applications to further enrich students' learning experiences. Future research should include quantitative assessments of learning outcomes and an examination of the long-term impact of PBL on student achievement across various subjects and educational settings.

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