Improving Civics Learning Outcomes Through the Problem Based Learning Model for Elementary School Students

Meri Hartati[1], Dong Anh Chi Hong[2]
[1]Elementary School 208 Palembang, Sumatera Selatan, Indonesia
[2]Faculty of Fundamental Science, Ho Chi Minh City University of Transport, Ho Chi Minh, Vietnam

Article Info

ABSTRACT

Purpose of the Study: This study aims to enhance student learning outcomes by applying the Problem-Based Learning (PBL) model in Civics lessons for class VI.A at elementary school 208 Palembang. Specifically, the research explores how PBL fosters critical thinking, problem-solving, and active student engagement in a subject often perceived as theoretical.

Methodology: The study employs Classroom Action Research (CAR), utilizing a cyclical model consisting of four stages: Planning, Implementation, Observation, and Reflection. Data collection methods, including observation, documentation, and tests, are conducted across pre-cycle, cycle I, and cycle II phases, allowing for a comprehensive understanding of PBL's impact on learning outcomes.

Main Findings: The results reveal a significant improvement in students' Civics learning outcomes after implementing PBL. The findings indicate growth in individual and collective performance, including increased student engagement, higher minimum and maximum scores, and a notable rise in average scores. These outcomes suggest that PBL effectively nurtures deeper understanding and retention of Civics concepts by encouraging student participation and collaborative problem-solving.

Novelty/Originality of this Study: This research's uniqueness lies in its contextual application of PBL in the elementary school setting, specifically within Civics education in Palembang. While PBL has been widely studied in other disciplines, its integration into Civics a subject traditionally taught through rote learning offers fresh insights into how inquiry-based learning models can reshape elementary education. This study demonstrates the potential of PBL to create a more dynamic and interactive learning environment, contributing to pedagogical theory and practice.

Corresponding Author:
Meri Hartati,
Elementary School 208 Palembang, Sumatera Selatan, Indonesia
Email: merihatiti@gmail.com

1. INTRODUCTION

Civic Education plays a crucial role in shaping the character and identity of students, preparing them to become active, ethical, and responsible citizens in their communities. It is not merely a collection of conceptual knowledge but also a platform for fostering attitudes, values, and critical thinking skills essential for active participation in national and societal life. The ultimate goal of Civic Education is to holistically develop students' cognitive, affective, and psychomotor abilities, making them not only informed citizens but also engaged participants in democratic processes [1]-[5]. However, challenges persist in the effective delivery of Civic Education within classroom settings. Many educators still adopt traditional approaches that emphasize rote

memorization, which hinders the development of critical, creative, and analytical thinking skills among students. This challenge is compounded by the dense curriculum and rigid instructional methods that prioritize content coverage over skill development [6]-[9]. As a result, students often become passive recipients of knowledge, with limited opportunities to engage in meaningful discourse, problem-solving, or decision-making processes.

Initial observations of Civic Education learning activities in class VI A of elementary school 208 Palembang revealed several shortcomings in the teaching and learning process. The lessons were predominantly teacher-centered, with students passively listening to explanations and completing worksheets. This lack of student engagement and interaction suggests that the current approach does not effectively tap into students' learning potential [10]-[12]. Consequently, a more interactive and student-centered approach is necessary to optimize learning outcomes in Civic Education.

These observations are further supported by the learning outcomes of class VI.A students, where the achievement of the Minimum Competency Criteria (KKM) for Civics, set at 75, has not been met by the majority of students. Pre-cycle data revealed that 12 out of 20 students failed to reach the KKM, highlighting the ineffectiveness of the current instructional methods. This underperformance points to a need for a more participatory and dynamic approach that encourages student engagement and active learning in Civics [13]-[15]. While Civic Education is widely recognized as an essential component of student development, there is a noticeable gap between its intended outcomes and the actual practices observed in many classrooms. Much of the existing research on Civic Education focuses on the transmission of knowledge and the promotion of civic values. However, few studies have examined the role of instructional models that foster higher-order thinking skills and active participation in the learning process. This gap is evident in the persistent reliance on teacher-dominated instruction, which limits students' ability to engage critically with the content and apply their knowledge in real-life contexts. Furthermore, while the importance of participatory learning models is well-established, their practical implementation in the context of Civic Education remains underexplored. Many teachers struggle to incorporate student-centered approaches, such as problem-solving or inquiry-based learning, into their lessons, largely due to constraints in curriculum structure and lack of professional development in innovative pedagogical methods.

Despite the potential benefits of PBL, there remains a gap in research exploring its effectiveness in the context of elementary Civic Education in Indonesia [16]-[20]. Previous studies have largely focused on the application of PBL in science and mathematics, leaving a significant gap in its use for fostering civic understanding and character development. Additionally, while there is growing recognition of the need for more interactive and student-centered approaches in Civic Education, few studies have investigated how PBL can specifically address the challenges of low student engagement and poor learning outcomes in this subject. This study seeks to fill this gap by exploring the implementation of the PBL model in Civic Education at elementary school 208 Palembang. By focusing on a specific context where traditional teaching methods have proven ineffective, this research aims to demonstrate how PBL can enhance student engagement, critical thinking, and mastery of civic concepts. The novelty of this study lies in its application of PBL to a subject that has historically been taught through didactic methods, offering new insights into how participatory learning can transform Civic Education.

The primary objective of this study is to improve the learning outcomes of class VI A students in Civic Education through the implementation of the PBL model. Specifically, this research aims to: 1. Investigate the effectiveness of the PBL model in enhancing student engagement and participation in Civic Education. 2. Examine the impact of PBL on students' critical thinking and problem-solving abilities within the context of Civic Education. 3. Analyze the role of PBL in fostering students' understanding of civic values and their ability to apply these values in real-world situations.

2. RESEARCH METHOD

This study employed Classroom Action Research (CAR), conducted at elementary school 208 Palembang with 20 students from class VI A as the subjects. The research followed the Kurt Lewin model of action research, which consists of a cyclical process with four stages: planning, implementation, observation, and reflection [21]-[24]. Each of these stages is interconnected and forms a continuous cycle, designed to improve student learning outcomes in the Civic Education subject. The research was structured in multiple cycles, where the results from each cycle informed adjustments for subsequent cycles. The primary goal of this study was to enhance student learning outcomes by continuously evaluating the effectiveness of instructional strategies and interventions and refining them through iterative cycles. The participants of this research were 20 students from class VI A at elementary school 208 Palembang. These students were chosen as they represented the target group for improving learning outcomes in the Civic Education subject. The selection of the research subjects was determined based on the classroom setting and their readiness to participate in the action research.

The research followed Kurt Lewin's four-stage process for each cycle: 1. Planning, In this stage, the researcher identified the learning problems in Civic Education and designed an action plan to address them. This

included developing lesson plans, instructional materials, and assessment tools, with a specific focus on strategies to improve student engagement and comprehension. 2. Implementation, The planned interventions were then implemented in the classroom. The teacher applied the revised teaching methods, engaging students with more interactive and student-centered learning approaches to enhance their understanding of Civic Education concepts. 3. Observation, During the implementation, systematic observations were made to document the process and assess student participation, engagement, and understanding. Observation sheets were used to collect qualitative data on student behavior, interactions, and the effectiveness of the instructional strategies. 4. Reflection, After each cycle, the data collected through observation and assessments were analyzed. The researcher reflected on the successes and challenges of the implemented actions and determined whether the success indicators had been met. This reflection informed whether further cycles were necessary, and adjustments were made to the teaching strategies accordingly.

If the success indicators were achieved in the first cycle, the research would conclude. However, if the targets were not met, subsequent cycles would be carried out until the desired learning outcomes were reached. Data were collected through three primary techniques: 1. Observation, Observations were carried out during the implementation phase using structured observation sheets. These sheets were designed to record qualitative data on student engagement, participation, and the application of the instructional strategies in the classroom. 2. Documentation, Various documents were collected, including lesson plans, student work, and instructional materials used during the intervention. This documentation served as supplementary data to assess the planning and execution of the actions. 3. Tests, At the end of each action cycle, tests were administered to assess students' learning outcomes. These tests provided quantitative data on student performance and helped determine whether the learning objectives were achieved. The results of these tests were compared across cycles to evaluate improvements in student understanding and mastery of the subject matter.

The data analysis was divided into qualitative and quantitative analysis. Qualitative Analysis, This involved descriptive analysis of the observational data. The researcher analyzed the observation sheets to understand student behavior, engagement levels, and the effectiveness of the teaching interventions in real-time classroom settings. Quantitative Analysis, Quantitative analysis was conducted on the test results at the end of each cycle. This analysis was also descriptive and focused on determining whether students' test scores improved after each cycle. The success of the interventions was measured by the percentage of students who met the Minimum Competency Criteria (KKM).

The main focus of this research was on evaluating the outcomes of each action cycle. The success of the intervention was measured against the following criteria: The success indicator was defined as 80% of the students achieving the classical learning completion benchmark. This means that at least 80% of the students must score at or above the KKM (Minimum Competency Criteria), which is set at 75 for elementary school 208 Palembang. If this success criterion was achieved in the first cycle, no further cycles were required. However, if the success indicator was not met in the first cycle, a second cycle was initiated, and so on, until the criteria were satisfied. The improvement in student learning outcomes was the key determinant of success, and the study's methodology was designed to adapt dynamically based on the results of each cycle. The formula for achieving student learning outcomes served as the primary tool for determining success in this research.

3. RESULTS AND DISCUSSION

This study began with observation, documentation and testing activities based on the learning process implemented by the homeroom teacher. This aims to determine the problems that occur in the learning process. In the initial stage, the researcher observed the learning process in the classroom carried out by the homeroom teacher VI A, then gave a test in the form of evaluation questions to determine the students' understanding. The learning outcomes obtained by class VI A students at elementary school 208 Palembang averaged 57.75% with the number of students who achieved KKM 8 students or 40% and students who had not achieved KKM totaling 12 students or 60%. Referring to the KKM (Minimum Completion Criteria) value in the initial conditions can be seen in the table 1.

Table 1. Percentage of Student Learning Outcomes Completion Pre-Cycle

No	Score	Before Action		Keterangan
		Total	Percentage (%)	
1.	≥ 75	8	40	Completed
2.	≤ 75	12	60	Not yet finished
Total		20	100	
Mean		57.75		
Max		80		
Min		35		

Based on the table above, the pre-cycle stage shows that 12 students in the Civics subject have not achieved the expected results. Therefore, the researcher will improve student learning outcomes by using the Problem-Based Learning (PBL) learning model, which is carried out in 2 cycles. The implementation of actions in cycles 1 and 2 using the Problem-Based Learning (PBL) learning model in the Civics subject is carried out in one meeting for each cycle. The following researchers will discuss the stages of implementing learning with the Problem-Based Learning (PBL) learning model, including the following:

Planning

In the planning activities carried out by the researcher, the initial step involves identifying problems in class VI. A in the Civics subject and finding appropriate solutions. Through collaboration with teachers and supervising lecturers, it was agreed that the Problem-Based Learning (PBL) learning model should be applied as a solution. The next step is to prepare a Learning Implementation Plan that adopts the PBL model, which is then consulted with the teacher for input. In addition, the researcher prepared all the necessary learning tools, such as activity sheets following PBL, teaching media, student worksheets, evaluation questions, assessment formats, and data instruments. All of these activities aim to create an effective learning environment following the PBL approach by integrating collaboration between researchers and teachers and providing tools that support the implementation of the model.

Implementation of Action (Action)

At the implementation stage of the action, the researcher applied the Problem-Based Learning (PBL) learning model by adapting the Learning Implementation Plan (RPP) that had been prepared. In implementing the Problem-based Learning method, the teacher's function focuses on being a facilitator and motivator to provide reinforcement. This follows Brammer's opinion (1979: 2), namely that a helpful relationship is a teacher's effort to create a conducive learning climate for problem-solving and student self-development. The implementation of learning is carried out in one meeting in each cycle, with a total duration of 4 x 35 minutes, and is carried out in class VI.A of elementary school 208 Palembang. In the first and second cycles, the researcher carried out learning activities for Civics. The activity begins with initial interaction between the teacher and students, including greetings, checking attendance, and praying together. Next, together, students and teachers sing the Garuda Pancasila song to foster a character of love for the homeland and nationalism. After that, the teacher provides apperception as an introduction to the learning that will be carried out.

The core activity in implementing the Problem-Based Learning (PBL) learning model begins with the teacher introducing the problem topic to students, which aims to stimulate their initial knowledge. Students are allowed to share answers according to their understanding of the subject. Next, students are invited to ask questions about the topic to be discussed, allowing students to be actively involved in the learning process. The teacher then divides students into four groups, directs students to sit in groups, and acts as a guide in directing the course of the group discussion.

After the group discussion, students are asked to present the group discussion results while other groups provide questions or input related to the presentation. In the final stage of the core activity, students and the teacher conclude the learning outcomes achieved during the session, and the teacher reinforces the students' answers. This action strengthens students' understanding of the learning material. Furthermore, students face evaluation questions to assess their knowledge of the material that has been taught. Do not forget that after the core activities take place, the teacher reflects on the learning process that has taken place and communicates the learning activity plan for the next meeting. This activity aims to improve and enhance the implementation of learning in the future. The teacher ends the learning session by greeting and praying together, creating an atmosphere of respect and cooperation in the learning environment.

Observation

In the learning process, the Problem-based Learning (PBL) model was used in class VI A of elementary school 208 Palembang; observers observed and assessed student activities. The observation results show that implementing Problem-Based Learning (PBL) follows the learning plan documented in the Learning Plan (RPP). Tests are carried out at each learning cycle to measure the improvement in student learning outcomes, and reflection activities are carried out based on the established success indicators. If the reflection results conform with the success indicators, this study can be considered successful.

Reflection

Reflection activities in Problem-Based Learning (PBL) learning are essential in measuring student success during the learning process. Through reflection, students and teachers can understand the function of Problem-based Learning (PBL), which allows teachers to gain new knowledge and increase student involvement in learning. Problem-based learning (PBL) helps teachers become more effective in teaching. At the same time, students feel more interested and find it easier to understand the material because it relates to everyday life. In

addition, this model also encourages cooperation in groups, makes learning more interactive, and avoids student boredom. Thus, Problem-Based Learning (PBL) positively benefits teachers and students in achieving better learning goals.

Based on the study results obtained from applying the Problem-Based Learning (PBL) learning model to students in class VI A of elementary school 208 Palembang, it can be concluded that there has been a significant increase in learning outcomes. This can be seen from the increasing level of learning completion, the average value of students who have experienced positive growth, and the minimum value is higher than before. In addition, the maximum value achieved by students also shows good development in applying PBL. These results indicate that the Problem-Based Learning (PBL) learning model has succeeded in improving the learning achievement of students in class VI.A of elementary school 208 Palembang.

Table 2. Comparison of Student Learning Outcomes Based on Learning Completeness, Average, Minimum, and Maximum Values Pre-Cycle, Cycle 1 and Cycle 2

No	Score	Pre Cycle		Cycle 1		Cycle II	
		Total	Percetage	Total	Percetage	Total	Percetage
1.	Completed	8	40%	13	65%	17	85%
2.	Not yet finished	12	60%	7	35%	3	15%
Total		20	100%	20	100%	20	100%
Max		80		90		100	
Min		35		50		65	
Mean		57.75%		72,25%		85,5%	

From Table 2, it can be concluded that there is a significant increase in student learning outcomes over time and the implementation of the learning cycle. Learning completion, minimum value, maximum value, and average value all experienced consistent increases from pre-cycle, cycle 1, to cycle 2.
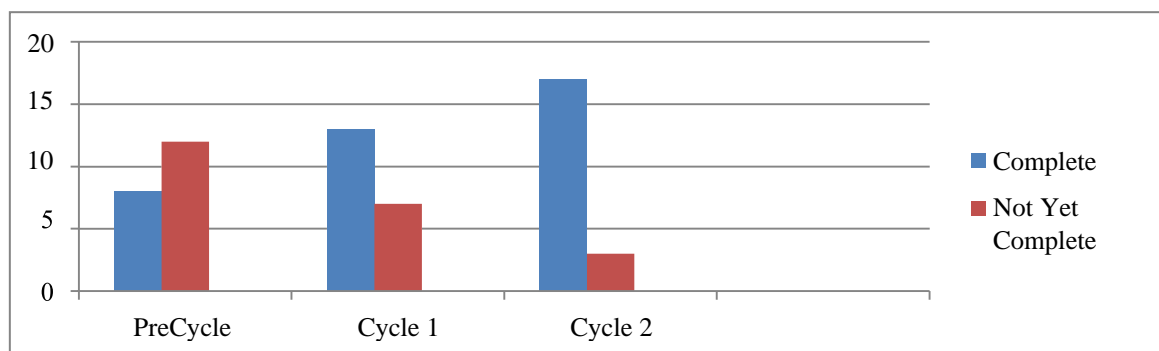

Figure 1. Comparison of Student Learning Outcomes Based on Learning Completeness, Average, Minimum and Maximum Values Pre-Cycle, Cycle 1 and Cycle 2

The results of this study reveal a significant improvement in student learning outcomes when using the Problem-Based Learning (PBL) method in class VI A at elementary school 208 Palembang. As shown in Figure 1, the number of students meeting the learning completion criteria (KKM ≥ 75) increased dramatically across the pre-cycle, cycle 1, and cycle 2 stages. Initially, only 8 students met the criteria in the pre-cycle stage, but this number rose to 13 in cycle 1 and further increased to 17 in cycle 2. This steady increase demonstrates the effectiveness of the PBL method in improving student performance, with 85% of students achieving learning completion in cycle 2, surpassing the target. In addition to the number of students meeting the KKM, there was a noticeable rise in the minimum, maximum, and average scores from pre-cycle to cycle 2, indicating a significant improvement in overall student understanding. The substantial increase in student completion percentage in cycle 2 serves as a clear indicator of the success of this study. The improvements obtained in this study were because the problem-based learning model could change passive learning conditions to active ones and require students to think logically about ideas for solving the problems given [25]-[32]. These findings corroborate the results of previous studies that highlight the effectiveness of the PBL approach in improving learning outcomes.

The novelty of this study lies in its application of the PBL method to the specific context of elementary school Civics education, particularly in class VI A at elementary school 208 Palembang. While previous research has demonstrated the benefits of PBL in other subjects and educational contexts [33], [34], this study adds value by focusing on Civics education in elementary school settings, a subject often taught using more conventional methods. By applying PBL in this context, the study not only shows the versatility of the PBL approach but also illustrates how it can be effectively implemented to encourage active student engagement and deeper understanding of real-life issues in Civics.

The findings of this study hold important implications for educators and policymakers. First, the consistent improvement in student performance through the PBL method suggests that this model can be an effective instructional strategy across various subjects and grade levels, particularly in subjects like Civics that require students to engage with real-world issues. The shift from passive to active learning environments, facilitated by PBL, helps students develop critical thinking, problem-solving, and collaborative skills, all of which are essential for 21st-century learning. Second, the study underscores the importance of integrating relevant learning media into the PBL approach. The use of real-life problems and scenarios, supported by appropriate learning materials, makes the learning experience more engaging and meaningful for students, which in turn improves learning outcomes. Schools may need to invest in developing or acquiring high-quality learning media that align with the PBL framework to optimize student engagement and achievement.

Despite the positive outcomes, this study is not without limitations. The research was conducted in a single classroom setting at elementary school 208 Palembang, which limits the generalizability of the findings. The results may not fully represent the broader student population in other schools or regions with different educational environments, resources, and student demographics. Additionally, the study focused exclusively on the PBL model in Civics education. While the results are promising, the effectiveness of the PBL method in other subjects and contexts remains to be further explored. Future studies could investigate how PBL impacts different subjects, age groups, and learning environments to determine whether the positive outcomes observed here can be replicated. Lastly, this study employed a relatively short implementation period (two cycles). A longer-term study might provide more robust data on the sustained effects of the PBL method on student learning and behavior over time. Moreover, it could explore the potential challenges teachers face when implementing PBL over extended periods and how to overcome them.

Building on these findings, several recommendations can be made for future research and practice: Wider Application of PBL, Schools and educators should consider integrating the PBL method across various subjects, not just in Civics education. This study shows that PBL can be effective in fostering active learning and improving student outcomes, and its application in other subject areas could yield similar benefits. Teacher Training, To ensure the successful implementation of the PBL model, schools should invest in professional development for teachers. Training programs that focus on the design and delivery of PBL lessons, including how to create and use real-life problems in the classroom, will better equip teachers to apply this method effectively. Development of Learning Media, Given the importance of relevant learning media in the PBL approach, schools should prioritize the creation or acquisition of instructional materials that support problem-solving activities. These materials can include case studies, simulations, and digital tools that enhance student engagement. Longitudinal Studies, Future research should explore the long-term impact of PBL on student learning outcomes, motivation, and skill development. Longitudinal studies would provide a deeper understanding of how PBL influences students over time and whether the positive effects observed in short-term studies are sustainable. Diverse Contexts and Subjects, Expanding research to include a more diverse range of schools, subjects, and grade levels would help determine the broader applicability of the PBL model. Understanding how PBL works in different educational settings can provide insights into how to tailor the approach to meet specific needs.

4. CONCLUSION

Based on the research and discussion, it can be concluded that the implementation of the Problem-Based Learning (PBL) model in Class VI A of Elementary School 208 Palembang has proven to be effective in improving student learning outcomes in Civics. Evaluation data indicates a significant improvement, with the percentage of students passing increasing from 40% in Cycle I to 85% in Cycle II. Additionally, the average student scores also increased from the pre-cycle phase to Cycle II. This demonstrates that PBL successfully creates a more engaging and contextual learning environment, leading to enhanced student understanding and achievement in Civics. These results provide strong evidence of PBL's potential to substantially improve learning outcomes in Class VI A of Elementary School 208 Palembang.

The findings of this study highlight the potential of the Problem-Based Learning model as an effective approach to enhancing student performance, not only in Civics but also potentially in other subjects. The improvement in passing rates and average scores suggests that PBL encourages active learning, critical thinking, and problem-solving skills, which are essential for deeper comprehension and application of knowledge. This model could serve as a valuable tool for educators seeking to shift from traditional, lecture-based methods to more student-centered learning environments. The success of PBL in this case indicates its broader applicability in other classes and subjects, especially those that require students to engage with real-life scenarios and develop practical solutions. Schools and educational policymakers should consider incorporating PBL into their curriculum to foster higher-order thinking skills and improve learning outcomes. Further research could explore the long-term effects of PBL on student achievement, as well as its application in diverse educational contexts.

Investigating the use of PBL in subjects beyond Civics may offer insights into its broader effectiveness and potential adaptations to suit various learning environments and student needs.

REFERENCES

[1] V. P. Sari, and S. Suryaningsi, "Education For Indonesian Citizens: From Good Citizens to Active Citizens," *Asian Journal of Social and Humanities*, vol. 1, no. 10, pp. 695-706, 2023, doi: 10.59888/ajosh.v1i10.73.

[2] T. Öztürk, "Project-based civics education: A case study of a university research center," *Participatory Educational Research*, vol. 9, no. 2, pp. 53-70, 2022, doi: 10.17275/per.22.28.9.2.

[3] D. B. Edwards Jr, M. Sustarsic, M. Chiba, M. McCormick, M. Goo, and S. Perriton, "Achieving and monitoring education for sustainable development and global citizenship: A systematic review of the literature," *Sustainability*, vol. 12, no. 4, pp. 1383, 2020, doi: 10.3390/su12041383.

[4] P. Nuangchalerm, V. Prachagool, A. Nuangchalerm, K. Chimphali, and R. A. Z. El Islami, "Framing citizen science and sustainable education development," *Multidisciplinary Reviews*, vol. 7, no. 2, pp. 2024028-2024028 2024, doi: 10.31893/multirev.2024028.

[5] R. K. Wuta, "Citizenship, Citizenship Education and Issues of Implementation in Zimbabwe," *Indiana Journal of Humanities and Social Sciences*, vol. 3, no. 10, pp. 39-46, 2022, doi: 10.5281/zenodo.7270620.

[6] S. Narvekar, B. Peng, M. Leonetti, J. Sinapov, M. E. Taylor, and P. Stone, "Curriculum learning for reinforcement learning domains: A framework and survey," *Journal of Machine Learning Research*, vol. 21, no. 181, pp. 1-50, 2020, doi: 10.48550/arXiv.2003.04960.

[7] M. M. Plack, W. E. Healey, K. Huhn, E. Costello, J. Maring, and M. J. Hilliard, "Navigating student challenges: From the lens of first-year doctor of physical therapy students," *Journal of Physical Therapy Education*, vol. 36, no. 1, pp. 76-86, 2022, doi: 10.1097/JTE.0000000000000212.

[8] C. E. Sanders, A. R. Byrd, K. E. Gibson, A. Golson, K. W. Lamm, and A. J. Lamm, "Teaching systems-thinking concepts with hypothetical case scenarios: An exploration in food-systems science education," *Foods*, vol. 12, no. 14, pp. 2663, 2023, doi: 10.1080/02671522.2020.1767184.

[9] C. A. Bertram, C. C. N. Mthiyane, and J. Naidoo, "The tension between curriculum coverage and quality learning: The experiences of South African teachers," *International Journal of Educational Development*, vol. 81, pp. 102353, 2021, doi: 10.1016/j.ijedudev.2021.102353.

[10] Z. V. Zhang, and K. Hyland, "Fostering student engagement with feedback: An integrated approach," *Assessing Writing*, vol. 51, pp. 100586, 2022, doi: 10.1016/j.asw.2021.100586.

[11] M. Cents-Boonstra, A. Lichtwarck-Aschoff, E. Denessen, N. Aelterman, and L. Haerens, "Fostering student engagement with motivating teaching: An observation study of teacher and student behaviours," *Research Papers in Education*, vol. 36, no. 6, pp. 754-779, 2021, doi: 10.1080/02671522.2020.1767184.

[12] C. H. H. Tsay, A. K. Kofinas, S. K. Trivedi, and Y. Yang, "Overcoming the novelty effect in online gamified learning systems: An empirical evaluation of student engagement and performance," *Journal of Computer Assisted Learning*, vol. 36, no. 2, pp. 128-146, 2020, doi: 10.1111/jcal.12385.

[13] S. Shanks, and J. J. Zhang, "Disentangling perception and performance: A natural experiment on student engagement and learning in simulations," *Journal of Political Science Education*, vol. 20, no. 2, pp. 292-317, 2024.

[14] E. A. Enright, W. Toledo, S. Drum, and S. Brown, "Collaborative elementary civics curriculum development to support teacher learning to enact culturally sustaining practices," *The Journal of Social Studies Research*, vol. 46, no. 1, pp. 69-83, 2022, doi: 10.1016/j.jssr.2021.11.007.

[15] K. L. Dobbs, L. M. Hsu, S. Garrone-Shufran, N. Barber, F. Kourouma, Y. Perez-Castillo, and S. Rich, "Centering Youth Voices: An Interdisciplinary and Transdisciplinary Approach to Civic Engagement," *Issues in Interdisciplinary Studies*, vol. 40, no. 2, pp. 11-38, 2022.

[16] D. Oktavianti, "Analysis of the Citizenship Education Curriculum in Elementary Schools: Challenges and Opportunities," *International Journal of Students Education*, vol. 2, no 1, pp. 58-69, 2024, doi: 10.62966/ijose.v2i1.609.

[17] S. Sucipto, W. Setiawan, and A. Hatip, "The effectiveness of collaborative learning on civic education problem-solving abilities based on cognitive styles," *Research and Development in Education (RaDEn)*, vol. 4, no. 1, pp. 149-161, 2024, doi: 10.22219/raden.v4i1.32253.

[18] H. M. Fahimah, T. Martono, and K. B. Sangka, "A Systematic Literature Review of Edmodo's Best Practice Implementation for Problem-Based Learning in the Education Sector," *International Journal of Multicultural and Multireligious Understanding*, vol. 9, no. 6, pp. 418-435, 2022, doi: 10.18415/ijmmu.v9i6.3802.

[19] S. Suharsiwi, U. Usmiyatun, and M. Siddique, "Current Social Studies Learning: Technology-Based Learning Media for Character Education," *Edutechnium Journal of Educational Technology*, vol. 2, no. 1, pp. 25-42, 2024, doi: 10.51773/ajst.v3i2.243.

[20] Z. Ngiu, N. Q. Laila, A. H. Panai, R. Yunus, and C. Cuga, "Strengthening Civic Education in a Multicultural School: A Local Wisdom Approach," *Eurasian Journal of Educational Research*, vol. 108, pp. 213-228, 2023, doi: 10.14689/ejer.2023.108.012.

[21] B. Burnes, "The origins of Lewin's three-step model of change," *The Journal of Applied Behavioral Science*, vol. 56, no. 1, pp. 32-59, 2020, doi: 10.1177/0021886319892685.

[22] D. Messikh, "A systematic review of the outcomes of using action research in education," *Arab World English Journal (AWEJ)*, vol. 11, no. 1, 2020, doi: 10.24093/awej/vol11no1.32.

[23] A. B. Eder, and D. Dignath, "Associations do not energize behavior: on the forgotten legacy of Kurt Lewin," *Psychological Research*, vol. 86, no. 8, pp. 2341-2351, 2022, doi: 10.1007/s00426-021-01631-1.

[24] A. N. Bhayangkara, W. H. Ahmadi, D. B. Firdaus, D. Prestiadi, and R. B. Sumarsono, "The role of instructional leadership through Kurt Lewin model in improving the teacher capability," In *2nd Early Childhood and Primary Childhood Education (ECPE 2020)* (pp. 307-317). Atlantis Press. 2020, November, doi: 10.2991/assehr.k.201112.054.

[25] S. M. D. Meilasari, and U. Yelianti, "Kajian model pembelajaran problem based leraning (pbl) dalam pembelajaran di sekolah [Study of problem based learning (PBL) learning models in school learning]," *Jurnal Pendidikan Biologi dan Sains*, vol. 3, no. 2, pp. 195-207, 2020, doi: 10.31539/bioedusains.v3i2.1849.

[26] B. R. Belland, D. M. Weiss, and N.J. Kim, "High school students' agentic responses to modeling during problem-based learning," *The Journal of Educational Research*, vol. 113, no. 5, pp. 374-383, 2020, doi: 10.1080/00220671.2020.1838407.

[27] C. C. Cheng, and Y. T. Y. Yang, "Impact of smart classrooms combined with student-centered pedagogies on rural students' learning outcomes: Pedagogy and duration as moderator variables," *Computers & Education*, vol. 207, 104911, 2023, doi: 10.1016/j.compedu.2023.104911.

[28] M. M. Chusni, S. Saputro, and S. B. Rahardjo, "Student's critical thinking skills through discovery learning model using e-learning on environmental change subject matter," *European Journal of Educational Research*, *10*(3), 1123-1135, 2021, doi: 10.12973/eu-jer.10.3.1123.

[29] V. Sukackė, A. O. P. D. C. Guerra, D. Ellinger, V. Carlos, S. Petronienė, L. Gaižiūnienė,... and A. Brose, "Towards active evidence-based learning in engineering education: A systematic literature review of PBL, PjBL, and CBL," *Sustainability*, vol. 14, no. 21, pp. 13955, 2022, doi: 10.3390/su142113955.

[30] S. M. Loyens, J. E. Van Meerten, L. Schaap, and L. Wijnia, "Situating higher-order, critical, and critical-analytic thinking in problem-and project-based learning environments: A systematic review," *Educational Psychology Review*, vol. 35, no. 2, pp. 39, 2023, doi: 10.1007/s10648-023-09757-x.

[31] Vodovozov, V., Raud, Z., & Petlenkov, E. (2021). Challenges of active learning in a view of integrated engineering education. *Education Sciences*, *11*(2), 43, 2021, doi: 10.3390/educsci11020043.

[32] A. Uzun, A. Onur, and S. Alabay, "Students' views on database management systems course designed according to problem-based learning," *International journal of evaluation and research in education*, vol. 9, no. 1, pp. 177-187, 2020, doi: 10.11591/ijere.v9i1.20501.

[33] A. Mahmudah, "Peningkatan hasil belajar pkn melalui model pembelajaran problem based learning (pbl) pada siswa kelas v mi manba'ul ulum Buntaran Kecamatan Rejotangan Kabupaten Tulungagung [Improving civics learning outcomes through the problem based learning (PBL) learning model for class V students of MI Manba'ul Ulum Buntaran, Rejotangan District, Tulungagung Regency]," *Jurnal Pembelajaran dan Riset Pendidikan (JPRP)*, vol. 2, no. 2, pp. 118-134, 2022, doi: 10.28926/jprp.v2i2.365.

[34] Anggraeni, A., & Muhammadi, M. (2023). Peningkatan Hasil Belajar PPKn Menggunakan Model Problem Based Learning dalam Nuansa Kurikulum Merdeka di Sekolah Dasar. *e-Jurnal Inovasi Pembelajaran Sekolah Dasar*, *11*(1), 135-147, 2023, doi: 10.24036/e-jipsd.v11i1.