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# Application of the Backward Design Approach in Enhancing Student Thematic Learning Outcomes

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**Abstract**

This research is motivated by the low quality of the learning process and learning outcomes, the solution to solving this problem is the use of power point media in the learning process. The aim of this research is to describe improving the quality of the learning process and learning outcomes. This type of research is Classroom Action Research (PTK). The research subjects were class III students at SDN 08 Batang Lolo, Koto Parik Gadang Diateh District, South Solok Regency in semester 1 of the 2023/2024 academic year. This research was conducted over two cycles, each cycle having two meetings. This research succeeded in improving student learning outcomes in thematic learning. The increase in learning outcomes is marked by an increase in learning completeness and class average scores. In the first cycle, the success indicators were 60% Indonesian Language completion, 67% Mathematics and 60% SBDP, then increased in the second cycle, Indonesian Language 80%, Mathematics 87% and SBDP 87%. Meanwhile, the increase in the average class score in cycle I for Indonesian was 75, Mathematics was 77, and SBDP was 77. Then, in cycle II Indonesian was 90, Mathematics 85, and SBDP 81. Based on the results of this research, it can be concluded that Power points media can improve the process and learning outcomes of thematic learning in class III of SDN 08 Batang Lolo, Koto Parik Gadang Diateh District, South Solok Regency.

**Keywords**: Indonesian language learning outcomes, mathematics, power point media, thematic learning.

## INTRODUCTION

Elementary education serves as the foundation for building students' core competencies (Indrayogi et al., 2025) and achieving national educational goals (Khan, 2025). In Indonesia, the national curriculum mandates thematic learning as an integrated model that connects multiple subjects through a central theme (Isnaini et al., 2024), aiming to make instruction more meaningful and contextually relevant (Yuliana et al., 2025). This model is one of the recommended approaches (Wardani et al., 2020) and expected to foster holistic understanding and twenty-first-century skills, including critical thinking and collaboration (Maulani et al., 2025; Tulus et al., 2024). Nevertheless, evidence from classroom observations and several district-level evaluations suggests that thematic learning in Indonesian primary schools often remains teacher-centered (Sari et al., 2018; Setyowati, 2014). Under such conditions, students tend to exhibit passive learning behaviors, low engagement, and, consequently, suboptimal learning outcomes.

The Backward Design framework, introduced by Wiggins & McTigh (2005), offers a potential alternative. Unlike conventional lesson planning that starts with activities, Backward Design begins by identifying desired learning results, then determining acceptable evidence of understanding, and only finally designing learning experiences and instruction (Jensen et al., 2017). This approach prioritizes deep conceptual understanding and higher-order thinking over content coverage (Gombu et al., 2022; Mousa, 2025). Prior studies in elementary contexts have reported that Backward Design improves student engagement and participation (Mousa, 2025), strengthens alignment between objectives–assessment–instruction (Mousa, 2025), and enhances learning outcomes (Nadrun et al., 2026). However, almost all of those studies were conducted in Western educational settings (Armes, 2020; Clark et al., 2024; Liao & Ringler, 2023) or in middle east (Mousa, 2025). Several researchers conducted their studies at the university level rather than at the elementary school level (Cline et al., 2023; Liao & Ringler, 2023; Zhang et al., 2021). To date, only very limited published classroom action research has examined the application of Backward Design in thematic instruction of Indonesian Language among fifth-grade students in rural Indonesian settings, including districts like Kerinci.

Empirical evidence from our preliminary observation, conducted on July 27, 2022, at SDN 14/III Punai Merindu, Kerinci Regency, confirmed the existence of the problem. Using an unstructured observation protocol focused on student activity and teacher–student interaction, we observed that thematic instruction in Indonesian Language for Grade V was heavily dominated by teacher talk. Students rarely asked spontaneous questions, participated minimally in peer discussions, and many engaged in off-task behaviors (e.g., drawing, staring blankly). The learning atmosphere felt monotonous. Quantitatively, from a total of 28 students, only 14 (approximately 50%) achieved the Minimum Competency Criterion (Kriteria Ketuntasan Minimal, KKM) of 70, with a class average of 62.4 on the most recent formative assessment. This pattern reflects a broader difficulty faced by teachers in designing thematic lessons that are genuinely student-centered and oriented toward conceptual mastery. It is important to acknowledge that Backward Design is not without challenges. In the Indonesian primary context, teachers are typically trained to write lesson plans (Rencana Pelaksanaan Pembelajaran, RPP) sequentially from objectives to activities, without the reverse mapping of evidence first.

Therefore, implementing Backward Design may initially require more preparation time and may create confusion in formulating measurable desired results and appropriate assessment evidence.

Given the identified gap and practical challenges, this study trying to prove the use of the Backward Design approach in improving thematic learning outcomes in Indonesian, especially among fifth grade elementary school students. t SDN 14/III Punai Merindu. Theoretically, this study contributes to the literature on instructional design by testing the transferability of Backward Design from Western to non-Western, thematic-based elementary classrooms. It also extends the framework's application to Indonesian Language as a specific subject—an area rarely explored in existing studies. Practically, the findings are intended to offer a concrete, evidence-informed guide for teachers at SDN 14/III Punai Merindu and similar schools to redesign their thematic lesson plans. Unlike generic recommendations, this research will document which specific stage of Backward Design produced observable improvements (or difficulties) in a real classroom, thereby helping teachers prioritize their planning efforts more effectively.

## METHOD

This study employed a classroom action research (CAR) design guided by John Elliott's model, chosen for its emphasis on continuous reflection and contextual responsiveness. The research was conducted over 8 weeks (2 cycles, each consisting of 3 meetings) at SDN 14/III Punai Merindu, involving 28 Grade V students (13 boys, 15 girls, aged 10–11 years) . Each cycle followed four stages: planning, acting, observing, and reflecting. The success criterion was set at 75% of students achieving the Minimum Competency Criterion (KKM $\geqslant$70). Ethical approval was obtained from the school principal, and informed consent was collected from parents.

Data were collected using three instruments: (1) a learning outcome test (10 multiple-choice and 5 essay questions aligned with each cycle's desired results), (2) a student engagement observation sheet (4-point Likert scale), and (3) field notes documented by a collaborating teacher. Quantitative data were analyzed using descriptive statistics (mean and percentage of students meeting the KKM) , while qualitative data from observation sheets and field notes were analyzed using thematic analysis to identify recurring patterns in student engagement and teacher reflection.

## RESULTS AND DISCUSSION

### Data Analysis

#### *Cycle 1*

This section presents the analysis of thematic learning outcomes of fifth-grade students at SDN 14/III Punai Merindu, Kerinci Regency, in Cycle I, covering Meetings 1, 2, and 3. The results obtained from Cycle I were analyzed to determine individual mastery levels. The analysis is presented in Table 1 below.

**Table 1. Analysis of Student Learning Outcomes Using the Backward Design Approach in Cycle I (Meetings 1, 2, and 3)**

| No | Student Code | Bahasa Indonesia (KKM 70) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Meeting 1 | | | Meeting 2 | | | Meeting 3 | | |
| | | Score | T | BT | Score | T | BT | Score | T | BT |
| 1. | BKW | 53 | - | √ | 57 | - | √ | 64 | - | √ |
| 2. | FP | 46 | - | √ | 70 | √ | - | 79 | √ | - |
| 3. | HF | 25 | - | √ | 57 | - | √ | 64 | - | √ |
| 4. | MI | 89 | √ | - | 92 | √ | - | 93 | √ | - |
| 5. | MIP | 42 | - | √ | 57 | - | √ | 57 | - | √ |
| 6. | MN | 57 | - | √ | 64 | - | √ | 71 | √ | - |
| 7. | NFA | 89 | √ | - | 90 | √ | - | 93 | √ | - |
| 8. | RT | 25 | - | √ | 42 | - | √ | 64 | - | √ |
| 9. | SS | 43 | - | √ | 57 | - | √ | 71 | √ | - |
| 10. | ZK | 64 | - | √ | 71 | √ | - | 64 | - | √ |
| **Total** | | 533 | 2 | 8 | 657 | 4 | 6 | 720 | - | - |
| **Perscentage** | | - | 20% | 80% | - | 40% | 60% | - | 50% | 50% |

*Note:*
KKM = Minimum Mastery Criteria
T = Achieved Mastery
BT = Not Yet Achieved Mastery
Percentage of mastery = (number of students achieving mastery / total number of students) × 100

Based on Table 1, the students' learning outcomes indicate that in Cycle I Meeting 1, only 2 students achieved mastery, while 8 students had not yet met the required criteria. In Meeting 2, the number of students achieving mastery increased to 4, while 6 students remained incomplete. In Meeting 3, 6 students achieved mastery, whereas 4 students still did not meet the minimum criteria.

The students who did not achieve mastery were primarily those who did not pay adequate attention during the learning process when the teacher delivered the instructional material. Consequently, the learning outcomes in Cycle I indicate that the instructional objectives had not yet met the established standards and did not align with the expected learning outcomes. Therefore, the research was continued to Cycle II with improvements in the instructional approach.

**Cycle 2**

This section presents the analysis of thematic learning outcomes of fifth-grade students at SDN 14/III Punai Merindu, Kerinci Regency, in Cycle II, covering Meetings 1, 2, and 3. The results obtained from Cycle II were analyzed to determine individual mastery levels. The analysis is presented in Table 2 below.

**Table2. Analysis of Student Learning Outcomes Using the Backward Design Approach in Cycle II (Meetings 1, 2, and 3)**

| No | Student Code | Bahasa Indonesia (KKM 70) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Meeting 1 | | | Meeting 2 | | | Meeting 3 | | |
| | | Score | T | BT | Score | T | BT | Score | T | BT |
| 1. | BKW | 78 | √ | - | 79 | √ | - | 86 | √ | - |
| 2. | FP | 86 | √ | - | 93 | √ | - | 100 | √ | - |
| 3. | HF | 71 | √ | - | 79 | √ | - | 93 | √ | - |
| 4. | MI | 93 | √ | - | 100 | √ | - | 100 | √ | - |
| 5. | MIP | 64 | - | √ | 79 | √ | - | 86 | √ | - |
| 6. | MN | 79 | √ | - | 79 | √ | - | 93 | √ | - |
| 7. | NFA | 93 | √ | - | 100 | √ | - | 100 | √ | - |
| 8. | RT | 64 | - | √ | 69 | - | √ | 69 | - | √ |
| 9. | SS | 71 | √ | - | 79 | √ | - | 93 | √ | - |
| 10. | ZK | 64 | - | √ | 64 | - | √ | 86 | √ | - |
| **Total** | | 717 | 7 | 3 | 821 | 8 | 2 | 906 | 90 | 10 |
| **Perscentage** | | - | 70% | 30% | - | 80% | 20% | - | 90% | 10% |

*Note:*
KKM = Minimum Mastery Criteria
T = Achieved Mastery
BT = Not Yet Achieved Mastery
Percentage of mastery = (number of students achieving mastery / total number of students) × 100

Based on Table 2, the students' learning outcomes show a significant improvement compared to Cycle I. In Cycle II Meeting 1, 7 students achieved mastery, while 3 students had not yet met the required criteria. In Meeting 2, the number of students achieving mastery increased to 8, with only 2 students remaining incomplete. Furthermore, in Meeting 3, 9 students successfully achieved mastery, while only 1 student had not yet reached the minimum mastery criteria.

These results indicate a substantial increase in students' learning achievement in the Indonesian Language subject through the implementation of the Backward Design approach during Cycle II.

## Discussion

### *Cycle 1*

Based on the issues identified in the preliminary data, this classroom action research was conducted with the primary objective of improving the learning outcomes of fifth-grade students at SDN 14/III Punai Merindu, West Danau Kerinci District, Kerinci Regency. The study not only focused on enhancing students' academic achievement but also aimed to strengthen their conceptual understanding and active participation in the learning process. To achieve these objectives, the Backward Design approach was implemented as an instructional strategy that

emphasizes outcome-oriented planning, where learning objectives, instructional activities, and assessment are systematically aligned.

The adoption of the Backward Design approach is theoretically grounded in its capacity to promote meaningful and structured learning. By beginning with clearly defined learning outcomes, this approach encourages the design of instructional activities that actively engage students in higher-order thinking processes. Students are not merely positioned as passive recipients of information; rather, they are guided to construct understanding, analyze content, and apply knowledge in a more reflective manner. Such a framework is expected to increase students' motivation and facilitate deeper comprehension of the subject matter, particularly in the Indonesian Language component of thematic learning.

Nevertheless, the implementation of Cycle I revealed several pedagogical and managerial limitations that constrained the effectiveness of the learning process. Classroom management remained suboptimal, as some students exhibited disruptive behaviors, including disturbing peers and failing to maintain focus during instructional delivery. This situation contributed to a learning environment that was not fully conducive to achieving optimal outcomes. In addition, time management issues were evident, as the allocation of instructional time was insufficient relative to the scope of planned learning activities. As a result, certain stages of the learning process were not executed as effectively as intended.

Furthermore, student engagement levels varied considerably. A number of students demonstrated low levels of participation, as indicated by off-task behaviors such as engaging in unrelated conversations and showing limited attention to the teacher's explanations. From an instructional perspective, the application of the Backward Design approach had not yet been fully optimized, particularly in terms of facilitating active student involvement and ensuring the coherent alignment between objectives, activities, and assessment.

The analysis of learning outcomes in Cycle I confirms these observations. The proportion of students achieving the minimum mastery criteria in the Indonesian Language subject remained relatively low, with classical completeness reaching only around 40%. This percentage falls significantly below the predetermined standard of 75%, indicating that the learning objectives had not been adequately achieved. These findings suggest that both instructional design and classroom implementation require refinement. Consequently, the study was continued to Cycle II, with a focus on improving instructional strategies and addressing the identified weaknesses.

***Cycle 2***

In Cycle II, substantial improvements were made to overcome the limitations observed in the previous cycle. Instructional practices were refined through more intensive teacher guidance and closer interaction with students, allowing for a more responsive and supportive learning environment. The teacher adopted a more proactive role in facilitating student understanding by providing clearer explanations, offering individualized support, and ensuring that all students were actively engaged in the learning process.

Collaborative learning strategies were also strengthened in this cycle. Students were encouraged to work more cohesively in groups, fostering peer interaction and collective problem-

solving. This approach not only enhanced students' understanding of the material but also promoted social learning and accountability within groups. In addition, students were guided to articulate their understanding by collaboratively formulating conclusions at the end of each learning session. This reflective activity served to reinforce key concepts and ensure that learning objectives were internalized before proceeding to evaluation.

To further support learning retention, dedicated time was allocated for students to review the instructional material prior to assessment. This strategy allowed students to consolidate their understanding and address any remaining gaps in comprehension. The integration of these improvements reflects a more effective and comprehensive implementation of the Backward Design approach, with a stronger emphasis on alignment between objectives, instructional activities, and assessment practices.

The results of Cycle II demonstrate a significant and consistent improvement in student learning outcomes. The level of classical mastery increased markedly, reaching approximately 90%, which exceeds the minimum standard of 75%. This substantial improvement indicates that the instructional modifications were effective in enhancing students' comprehension and performance. Moreover, students demonstrated an increased ability to analyze learning content and solve problems encountered during the instructional process, reflecting the development of higher-order thinking skills.

A comparative analysis between Cycle I and Cycle II further highlights a clear upward trend in student achievement across all instructional meetings. The overall average level of mastery improved significantly, confirming the positive impact of the refined instructional approach. In addition to improvements in cognitive outcomes, there was also a notable enhancement in students' learning activities. Students became more active, engaged, and participative, indicating a shift toward a more student-centered learning environment.

Teacher performance also showed considerable improvement in Cycle II. The teacher demonstrated better classroom management, more efficient time allocation, and a more systematic application of the Backward Design approach. These improvements contributed to a more structured and conducive learning environment, which in turn supported students' academic success.

Overall, the findings of this study provide strong evidence that the Backward Design approach is highly effective in improving thematic learning outcomes among fifth-grade students. This finding aligns with and extends previous studies, such as those by McTighe and Thomas (2003), Reynolds & Kearns (2017), and Mousa (2025) which demonstrated that Backward Design enhances goal clarity and instructional coherence across various educational contexts. Its effectiveness lies in its systematic structure, which ensures the alignment of learning objectives, instructional strategies, and assessment, as well as its emphasis on connecting learning content to students' real-life experiences.

In contrast to more traditional, activity-focused approaches commonly documented in earlier classroom action research, the Backward Design model prioritizes desired results first (Kantorski et al., 2019), thereby reducing the risk of misalignment between teaching activities and learning

goals. This alignment not only facilitates deeper understanding but also fosters critical thinking, active engagement, and meaningful learning. These results corroborate the findings of Kantorski et al. (2019), who argued that backward design promotes transfer of learning. The positive impact observed in both student outcomes and learning processes justifies the conclusion of the research at Cycle II, as the established criteria for instructional success had been satisfactorily achieved. Thus, the present study contributes to the limited body of knowledge on the application of Backward Design in rural Indonesian upper-primary thematic learning, specifically for the subject of Indonesian Language.

## CONCLUSION

The findings of this classroom action research demonstrate that the implementation of the Backward Design approach in the Indonesian Language component of thematic learning effectively improves students' learning outcomes, particularly in terms of cognitive abilities, analytical skills, and active participation. This improvement is evidenced by the increase in the percentage of students achieving mastery, from 37% in Cycle I to 80% in Cycle II. In addition, observational data indicate notable enhancements in both teacher performance and student engagement, with teacher-related aspects improving from 77% to 91% and student activity from 75% to 85%. These results confirm that the structured and outcome-oriented nature of the Backward Design approach contributes significantly to creating a more effective and meaningful learning process, thereby leading to improved academic achievement among fifth-grade students at SDN 14/III Punai Merindu, Kerinci Regency.

Based on these findings, it is recommended that teachers adopt and consistently apply the Backward Design approach as an alternative instructional strategy to enhance the quality of thematic learning. Future implementations should emphasize optimal classroom management, effective time allocation, and the integration of collaborative and reflective learning activities to maximize student engagement. Additionally, further research is encouraged to explore the application of this approach across different subjects and educational levels to validate its broader effectiveness. Continuous professional development for teachers in designing outcome-based instruction is also essential to ensure the sustainability and effectiveness of this approach in improving student learning outcomes.

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