

Improving Students' Role in Group Work Through Problem-Based Learning in English Language Learning for Grade X at SMA Negeri 3 Bogor

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Abstract: The current classroom action research aims to enhance the active participation of the students in group tasks through the application of Problem-Based Learning (PBL) approaches in the context of English language learning for Grade X students of SMA Negeri 3 Bogor. This study addresses the problem of the lack of student participation and contribution in group tasks, which has negatively affected the effectiveness of collective learning results. The research was conducted in two cycles, with planning, action, observation, and reflection in each cycle. The data were obtained from observation, students' test scores to assess their grammar mastery, and from reflective journals to gain insight into their learning experiences and engagement with the instructional methods. The results showed that PBL approach, particularly after integrating game-based learning elements in the second cycle, was effective in increasing students' engagement during group work by encouraging better communication, cooperation, and responsibility among members. Students became more confident in sharing ideas, showed greater enthusiasm, and demonstrated improved understanding of gerunds and to-infinitives, which was also reflected

in the increase of their average test scores from 41,08 to 66,27. This indicates that when PBL is applied in a structured and interactive way, it can significantly enhance student participation and improve grammar learning outcomes.

Keywords: Problem-Based Learning, English Language Learning, Group Work

Introduction

In recent years, student-centered learning has become a prominent pedagogical approach in educational settings worldwide. This approach emphasizes the active involvement of learners in the learning process, positioning students as active constructors of knowledge rather than passive recipients (Dewi et al., 2021). As part of this paradigm shift, educators are encouraged to design learning experiences that promote autonomy, collaboration, and critical thinking. One of the most widely implemented strategies within student-centered learning is group work, which allows students to engage in meaningful interactions, negotiate meaning, and collaboratively solve problems.

However, group work in practice often presents several challenges. Despite its potential to enhance social and academic outcomes, many teachers report that student participation in group tasks tends to be uneven. Some students dominate discussions while others remain passive, contributing minimally to the group outcome. This imbalance undermines the collaborative nature of the activity and can lead to frustration among both students and teachers (Napitupulu & Siregar, 2021). The problem is especially evident in the context of English language learning, where active engagement is crucial for language development. Group tasks, when conducted effectively, can provide authentic contexts for students to practice speaking, listening, reading, and writing skills. However, when student participation is limited or uneven, the benefits of collaborative learning diminish significantly.

In senior high school, English learning should not only focus on language skills but also encourage students to be active, engaged, and cooperative during lessons. From initial observations in Grade X at SMA Negeri 3 Bogor, especially in group activities, not all students had clear roles or tasks. Some students were passive, depending on others and not participating fully in discussions or task completion. This condition makes group work less effective as a collaborative learning method that emphasize active participation as a key factor for successful English learning. According to Khatri (2024), encouraging active roles in groups can help students practice language skills better in real-life situation and improve communication and teamwork skills, which are very important in language learning.

To address these challenges, teachers have been exploring innovative instructional models that can foster greater engagement and accountability among students during group activities. One such model is Problem-Based Learning (PBL). PBL is a student-centered approach in which learners work collaboratively to solve real-world problems that are complex and open-ended. In this process, students take ownership of their learning, conduct inquiry, and apply their knowledge to develop solutions (Aulia & Sutomo, 2023). In the context of English language education, PBL not only provides opportunities for meaningful language use but also encourages all group members to contribute actively to the learning process.

The present classroom action research was conducted to investigate the implementation of PBL to improve students' active roles in group work during English lessons in Grade X-6 at SMA Negeri 3 Bogor. This research addresses the persistent issue of unequal participation in group tasks, aiming to enhance the quality of collaborative learning and students' language acquisition through the structured application of the PBL approach.

In light of the background and identified gap, this study aims to 1) examine how the implementation of Problem-Based Learning (PBL) can improve grade X students' understanding and use of gerunds and to-infinitives in English language learning at SMA

Negeri 3 Bogor; 2) evaluate the impact of modifying the PBL strategy particularly by integrating game-based learning on student engagement and grammar learning outcomes in English language learning for grade X students at SMA Negeri 3 Bogor; and 3) identify the challenges students' face during grammar learning through PBL and how the implemented strategy addresses those challenges.

Methodology

This research was conducted at SMA N 3 Bogor in the second semester of the 2025/2026 academic year. The object of the research is students' role in group work and students' learning outcomes on the topic of Gerund and to-infinitive. The subject of this research is students of class X-6 at SMA N 3 Bogor, consisting of 35 students 16 male and 20 female and collaborated with the grade X English teacher. Based on the issue addressed by the researcher, which concerns improving students' role in group work that affected on learning outcomes in English language learning, specifically on the topic of Gerund & to-infinitive, the type of research used is Classroom Action Research (CAR).

Based on Nurmawati et al. (2024), Classroom Action Research is a collaborative and action research conducted by teachers in order to investigate and enhance their teaching and students' learning in a recursive and systematic way. This kind of research transforms teachers into reflective practitioners who observe the effectiveness of their teaching and take measures to enhance it through the utilization of classroom evidence.

Adopting the model suggested by Kemmis and McTaggart (and as adhered to and continued to be experimented with in the latest CAR research), the research was carried out in two complete cycles, each comprising four essential and interconnected phrases: planning, action, observation, and reflection Wati, Nurwahyuni, & Fatayan (2023). These phrases are explained as below:

1. Planning stage: In this stage, the researcher and the English teacher collectively determined major students' learning problem in acquiring Gerund and to-infinitive structures. Pre-tests and informal interviews were administered in order to determine the ultimate causes of students' low performance. According to the result, the team developed a teaching scheme comprising contextualized grammar activities, student-centered teaching methods, lesson timetables, worksheets, and formative evaluations. Emphasis was placed on employing relevant and engaging materials that were appropriate to the learners' levels of ability.
2. Action stage: The action stage comprised the application of the designed instructional strategies within the classroom. In this stage, the English instructor taught through interactive and student-centered methods like pair discussion, task-based grammar practice, and instant feedback strategies. These activities were designed to facilitate

students' active participation, understanding, and daily application of grammar rules concerning Gerund and to-infinitive in real contexts. The researcher played the role of observer and co-facilitator in the execution of this phase.

3. Observation: This phase systematic observations were conducted to oversee the delivery of the teaching strategies and determine their efficacy. Field notes, observation, and student work samples served to collect qualitative and quantitative data. These data gave insight into students' engagement levels challenges faced, peer interaction, and classroom climate overall during the intervention.
4. Reflection Phase: At this stage, the researcher reviewed the data collected during the observation process and compared it with the initial learning objectives. The main goal was to determine whether there had been any improvement in students' understanding of Gerund and to-infinitive. This stage served as an important opportunity to reflect on how well the learning model or Problem-Based Learning (PBL) through group work was able to support students' learning progress.

The reflection also helped identify both the strength and the areas that still needed improvement in the teaching strategy. Some positive developments were seen, such as students becoming more active in discussions and more willing to participate. However, challenges also appeared, including unequal participation in group tasks or the need for clearer guidance in certain activities.

To support this reflection, a comparative analysis of student performance was carried out by reviewing the results from the cycle I and cycle II. This approach made it possible to observe learning improvements more systematically. Several instruments were used to gather the data, such as observation sheets, students' assignments, achievement tests, and documentation.

As stated by Choirudin, Lubis, and Masuwd (2025), this reflective process is one of the key benefits of Classroom Action Research (CAR), as it encourages teachers to evaluate and improve their practices while also contributing to their professional growth. In this study, the reflection phase helped the researcher made informed adjustments for the next cycle, with the purpose of making the learning experience more effective and meaningful for the students.

Results and Discussion

Results

This classroom action research was carried out over two cycles in a 10th-grade English class to improve students’ understanding and how they use of gerunds and to-infinitives. Both cycles used the same learning method: Problem-Based Learning (PBL) yet have some modifications to meet students’ need in the second cycle. The main sources of data were students’ test scores and their reflective journals submitted through Padlet.

A. Quantitative Data

Table 1. Descriptive Statistics of Student Scores

Cycle	N	Min	Max	Mean	Median	Mode
Cycle 1 (GBA)	22	6	88	41.08	40	16
Cycle 2 (PBL)	29	18	100	66.27	66	60

From the total of 36 students, there were only 22 students available in first cycle due to some reasons and 29 students in second cycle. The data shows a significant improvement in the students’ performance from the first to the second cycle. The average score rose from 41.08 to 66.27, the lowest score increased from 6 to 18, and the highest score reached 100 in the second Cycle up from 88 in the first Cycle. These improvements show that changing the teaching approach helped students to make progress.

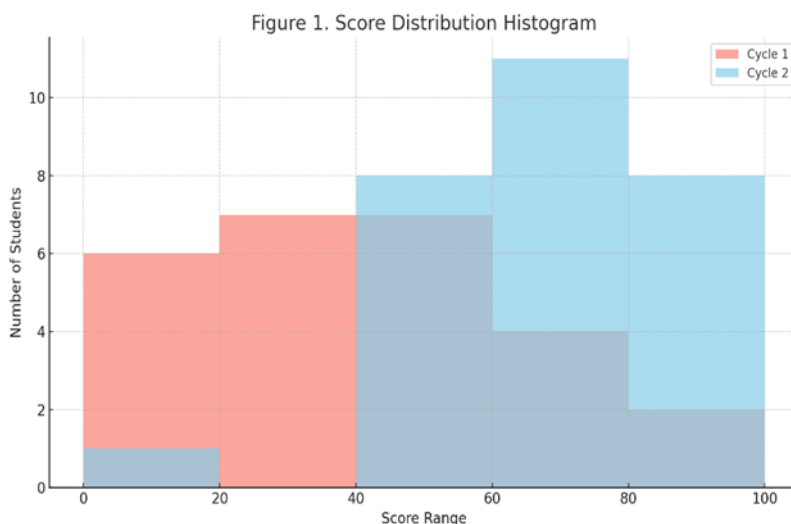


Figure 1. Score Distribution Histogram – Cycle 1 vs Cycle 2

In the first cycle, most students having lower scores which is (0–50), showing they were still struggling with the material. But in the second cycle, there was a clear improvement, with students scoring between 60 and 100, which suggests they understood the lessons much better.

B. Qualitative Data

To gain deeper insight into the students' experiences, reflections were collected at the end of each cycle through Padlet. These reflections provided valuable feedback on how students perceived the different teaching approaches and how these influenced their understanding and motivation.

Cycle 1:

The Problem-Based Learning (PBL) model was implemented through collaborative group work where students attempted to solve context-based grammatical problems related to Gerunds and To-infinitives. However, the performance data showed that students struggled with the material and demonstrated low engagement. The average score in this cycle was 40.3, with only 4 students scoring above 70, indicating a low level of understanding. Several students did not participate equally in group discussions, leading to unbalanced contributions and incomplete comprehension.

Qualitative data from students' reflective journals on Padlet confirmed these findings. Common themes included difficulty in distinguishing between Gerunds and To-infinitives and frustration with the lack of clarity during group work.

Some representative student comments include:

- a. *"I found it hard to grasp the concept of gerunds and to-infinitives through the texts we read."*
- b. *"The lessons felt monotonous, and I struggled to stay focused."*

This feedback indicated that the PBL approach required modification to support more active engagement and structured competition.

Also based on the classroom observation result in cycle 1, it was clear that many students found it difficult to understand the different between gerunds & to-infinitives. During the teacher's explanation, most of them looked confused and less engaged, possibly because there was too much material introduced all at once. Only a few students responded or seemed to follow the lesson actively.

However, there was a noticeable shift during the group work activity. Although several students continued to struggle with the task and asked the model teacher for further clarification, they generally looked more at ease compared to when they were working individually. The group setting allowed them to interact more freely and gave them the opportunity to share ideas with their peers, even though not all members participated equally. In some groups, certain students were more dominant, while others tended to rely on them.

This is showed that through group work, students became more willing to ask questions and discuss difficulties, which they were less likely to do during whole-class teaching. Even though their understanding remained limited, this collaborative atmosphere encouraged more active engagement and a sense of shared learning responsibility.

The students' challenges were also reflected in the post-test results, where the average score was 40,3 and only four students scored above 70. This indicates that while group work provided a more supportive environment, it was not yet sufficient to help students develop a solid understanding of the topic. The activity seemed to lack structured guidance that could help students apply the grammar rules more confidently.

In conclusion, although students appeared more comfortable during collaborative tasks, the learning process in Cycle 1 still needed further refinement. More explicit instruction, clearer examples, and gradual scaffolding may be needed to support students in better understanding and using gerund and to-infinitives correctly.

Cycle 2:

In the second cycle, the instructional approach was modified by integrating competitive game-based learning into the PBL framework. Students competed in groups to complete gap-filling texts with correct Gerund or To-infinitive forms based on real-life scenarios. This change was positively received, as it fostered collaboration, motivation, and individual accountability.

Student reflections highlight this shift:

- a. *"Working on real-life problems helped me understand how to use gerunds and to-infinitives."*
- b. *"Collaborating with classmates made learning more enjoyable and effective."*

These comments reflect a significant change not only in understanding but also in motivation. Students appreciated being part of a more dynamic and cooperative learning environment where they could actively construct knowledge rather than passively absorb it. The chance to apply grammar rules in meaningful contexts helped them internalize the concepts more effectively, while peer and group interaction provided support and boosted confidence.

Also, based on the classroom observation result in cycle 2, the teacher adjusted the teaching method by adding games into the lessons, which helped students feel more comfortable and involved. For example, during the "guessing the word" game, students practiced deciding whether to use a gerund or a to-infinitive in sentences. Group work became more balanced, with all members actively participating and sharing ideas to complete the tasks. Students were less hesitant to ask questions when they faced difficulties and more willing to share their opinions.

Compared to Cycle 1, fewer students needed to ask for help, and many seemed to enjoy the learning process. This was clear when most students eagerly raised their hands to answer questions, motivated by the chance to earn rewards from the teacher.

This improvement was also seen in the post-test result, where a greater number of students scored higher than before, showing a clearer understanding of the grammar points.

The more engaging and interactive approach in Cycle 2 appeared to support students in learning the material better.

In conclusion, students showed more enthusiasm and confidence during lessons. Their active involvement, balanced participation in groups, and higher test scores suggest that the changes made in Cycle 2 had a positive impact on their learning experience.

Discussion

The findings from this classroom action research, conducted in two cycles, demonstrate a significant improvement in students' grammar mastery and engagement following the implementation of the Problem-Based Learning (PBL) approach enhanced with game-based elements. In Cycle 1, students struggled with low participation, lack of confidence, and difficulty in distinguishing between gerund and to-infinitives. These challenges were reflected in the low average score of 41,08. These findings aligned with the early reflections, where many students expressed that they were unsure and lacked interest in the grammar topic.

After teaching strategy was revised in Cycle 2 by incorporating interactive grammar games and more structured group activities, students began to engage more actively and collaboratively. This change not only increased their level of participation but also improved their conceptual understanding, as shown by the notable increase in their average score to 66,27. Students also reported from their reflection on Padlet that they were feeling more motivated and confident in using the grammar structures in class assignment. These findings support the study by Waluyo et al. (2023), who found that using game-based learning in grammar classes helped students become more involved and reduced their anxiety during learning. Other than that, Mauludi et al, (2023) also emphasized that gamified tasks supported better grammar retention and increased student interest.

Moreover, the contextualized grammar activities, where students were required to apply gerunds and to-infinitives in real-life problem-solving situations, provided a more relevant and engaging learning process. As supported by Larsen-Freeman & Anderson (2016), who emphasized contextual grammar teaching as key to long-term mastery. This also reflects the idea proposed by Supasa et al. (2024), who highlighted that gamification, when integrated into student-centered tasks, can foster deeper motivation, ownership of learning, and long-term retention of grammar rules.

Additionally, the noticeable improvement in students' attitudes toward working in groups highlights the emotional and social value of applying student-centered teaching. Learners who were previously less active started to show more involvement and took greater ownership of their learning process. This finding is in line with the study by Cavaletto & Miglietta (2024), which explains that the use of cooperative and competitive learning

approaches can significantly boost student motivation and engagement, especially during collaborative tasks.

In summary, the findings show that integrating Problem-Based Learning (PBL) with game-based learning helps improve students' academic performance while also fostering a more inclusive, interactive, and supportive classroom atmosphere. This aligns closely with the main goals of Classroom Action Research, which focuses on improving teaching practices based on real classroom challenges and reflective evidence.

Furthermore, the significant improvements observed in the second cycle reinforce the value of actively involving students in the learning process. By engaging students in solving contextual problems, collaborating in teams, and using grammar in authentic communication tasks, they not only improved their scores but also developed greater confidence and fluency. These results demonstrate that well-planned, student-focused approaches effectively support both learning outcomes and students' personal growth.

Conclusion

Based from the classroom action research carried out in two cycles, it can be concluded that the use of Problem-Based Learning (PBL), especially after being enhanced with game-based element, contributed positively to improving Grade X students' understanding and use and application of gerunds and to-infinitives. During cycle 1, students faced several difficulties, including low engagement in group activities, lack of confidence to ask questions, and confusion in distinguishing between the two grammar forms. These challenges were also evident in their low average score of 41,08.

In Cycle 2, the teaching strategy was revised by incorporating more structured and interactive tasks such as grammar games. As a result, students became more actively engaged in the learning process, participated more confidently in discussions, and collaborated better with their peers. These positive changes were also reflected in their improved average score of 66.27.

Overall, the findings indicate that when PBL model is carefully adjusted to meet students' learning needs by making lessons more relevant, interactive, and students-centered it can successfully address classroom challenges, promote active participation, and strengthen students' understanding of grammar in a more meaningful way.

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