JOURNAL OF PRAGMATICS RESEARCH – Vol xx, No xx (20xx), pp. xx-xx
DOI: http://dx.doi.org/10.18326/jopr.vxxixx.xx-xx
e-ISSN: 2656-8020

Improving Speaking Skills Using the Snakes and Ladders Game Media and Understanding Various Forms of Energy (Science) Through the Experimental Method Among Fifth-Grade Students of SDN 3 Jurit in the 2010 Academic Year

Rias Septiyaningrum,[1*]
English Literature, Faculty of Humanity and Education, University of Muhammadiyah Semarang, Semarang, Indonesia[1]

*) Corresponding Author
Email: Riasningrum1922@gmail.com

DOI: 10.18326/jopr.vxxix.xx-xx

Submission Track:
Received: xx-xx-20xx
Final Revision: xx-xx-20xx
Available Online: xx-xx-20xx

Abstract

This study is a classroom action research aimed at improving the quality of Indonesian Language and Science learning. The snake and ladder game strategy was applied to improve mastery of Indonesian Language material, while the experimental method was used to improve students' understanding of Science subjects. This study was conducted in several stages, starting from preparation, implementation of learning activities, to the implementation of the action itself. The results of the observation showed that after two cycles of action, most students achieved good to very good mastery of the material and understanding. Of the 19 students, 18 (90.47%) obtained high scores for both subjects, exceeding the minimum success indicator of 75%. These findings prove that the application of the snake and ladder game and experiment strategies is effective in improving students' learning abilities, conceptual understanding, and engagement in the learning process.

In addition to providing significant results for students, this study also benefits teachers by developing more effective learning procedures and selecting topics

that are relevant, interesting, and challenge students' creativity. This approach also encourages students to be more active, brave enough to perform in front of the class, creative in reasoning, and avoid boredom during learning. Overall, this study shows that combining the snake and ladder game strategy with the experimental method can be an effective method for creating interactive, enjoyable learning that improves overall mastery and understanding of the material.

Keywords: *indonesian language, natural sciences, learning sctivity*

INTRODUCTION

In order to succeed and advance education in Indonesia, teachers play a very important role in the process. The duty of a teacher is not only to impart knowledge to students but also to take part in shaping the moral character of students so that they become individuals who contribute to development in accordance with the principles of Pancasila and the 1945 Constitution.

Competency-based national education is education that emphasizes the abilities that graduates of a particular level of education must possess. The competencies of graduates of a particular level of education, in accordance with the objectives of national education, include knowledge, skills, abilities, independence, creativity, health, morals, piety, and citizenship.

In an effort to achieve the expected national goals, the Ministry of National Education established a policy to refine the 1994 Curriculum into the 2004 Curriculum, known as the Competency-Based Curriculum (KBK). Since the 2004/2005 academic year, elementary schools (SD) have implemented the 2004 Curriculum (KBK). In accordance with the objectives of the KBK curriculum, schools and teachers must develop the curriculum so that its objectives can be achieved in an effective and efficient manner. One of the most important components of curriculum development is the establishment of teaching strategies that are appropriate and in line with the curriculum requirements and

learning objectives in each subject area.

The learning strategy that is considered most appropriate for the 2004 curriculum for Indonesian language is the cooperative learning system. In its application, various teaching methods can be used, but they must still involve sharing tasks and results for the common good. These methods are the snake and ladder game and experiment learning methods. Learning requires not only strategies but also teaching media that are appropriate for the learning material. In this case, the author conducted classroom action research in learning by applying the snake and ladder game and experiment learning strategies.

The task of a teacher is to educate, teach, and train students so that they are able to carry out these tasks effectively. A teacher must master strategies and various teaching skills. One aspect of this development involves the implementation of the snakes and ladders game and experimental learning methods.

According to the 1945 Constitution regarding the National Education System, Article 4 emphasizes that national education aims to enlighten the nation's life and to develop Indonesian humans as a whole individuals who are faithful and devoted to God Almighty, possess noble character, knowledge and skills, physical and spiritual health, a strong personality, and a sense of social and national responsibility. In addition, Government Regulation No. 28 of 1990, Article 3 states that "basic education aims to provide students with fundamental abilities to develop their lives as individuals, citizens, and human beings, and to prepare them for secondary education."

As a key component of the school, teachers must possess adequate professional competence to achieve the goals of national education. A teacher cannot be effective without the presence of students, as the primary focus of

development is the student. Professional competence, along with the breadth and depth of knowledge, serves as the foundation for decision-making. Teachers must be rich in creative innovation when selecting teaching strategies and methods. Improvement reports serve as one tool to assist teachers in enhancing their ability to conduct classroom action research.

Based on the components outlined above, one of the issues addressed in this classroom action research is the subjects of Indonesian Language and Natural Sciences. These subjects are very important in preparing students to continue their education to higher levels. Observations of learning in both subjects indicate a very low level of student mastery, as evidenced by student scores from several evaluations.

This situation cannot be left unresolved. In this context, teachers, as educators, have the responsibility to ensure that students are able to master the subject matter and develop skills that support the learning objectives. One approach to improving learning, of course, returns to the teacher's role through classroom action research.

The main goal of this classroom action research is to improve learning, particularly in Indonesian Language and Natural Sciences at SDN 8 Jurit. Based on initial observations, several problems were found affecting the learning process and outcomes. Students showed low enthusiasm for learning, indicated by their lack of attention to teacher explanations. This condition was reflected in low participation and initiative in classroom activities. In addition, most students lacked the confidence to express their opinions, either by raising their hands or presenting in front of the class.

On the other hand, the use of learning media and strategies by the teacher had not been maximized or varied, making learning less engaging for students.

Therefore, teachers need learning strategies that can increase student enthusiasm in Indonesian Language and Natural Sciences, while also improving their speaking abilities and mastery of the material. The main problem to address is how to enhance student activity and mastery of the material to create positive interaction in learning and improve learning outcomes through the application of the snakes and ladders game strategy and experimental methods.

The application of the experimental method allows students to actively engage in discovering knowledge by conducting their own experiments. Students observe, record, and analyze the results of their experiments, then present their findings to the class for discussion and evaluation. This approach helps students develop scientific thinking skills, encourages curiosity, and fosters independent problem-solving. Similarly, the snakes and ladders game strategy provides an interactive and engaging way for students to practice material, enhancing both cognitive understanding and social interaction among peers.

In addition, these methods align with the goals of national education, which aim to develop students who are knowledgeable, skilled, morally sound, and capable of critical and creative thinking. By combining experimental learning and interactive games, teachers can create a dynamic learning environment that motivates students, reduces boredom, and encourages active participation. Moreover, in an era of rapid technological and scientific development, such innovative teaching strategies are necessary to prepare students with the skills and mindset required to adapt to future challenges. Through these approaches, students not only gain mastery of the material but also learn to think critically, communicate effectively, and engage collaboratively, which are essential competencies in the 21st-century learning landscape.

JOURNAL OF PRAGMATICS RESEARCH – Vol xx, No xx (20xx), pp. xx-xx
DOI: http://dx.doi.org/10.18326/jopr.vxxixx.xx-xx
e-ISSN: 2656-8020

RESEARCH METHOD

This classroom action research was conducted in the second grade, first semester, at Sekolah Dasar Negeri 3 Jurit, involving 19 students as research subjects. The study aimed to improve students' mastery and understanding of Indonesian Language and Natural Sciences through the application of the snakes and ladders game strategy and the experimental method. The research was carried out over two cycles from September 6 to October 12, 2010, each cycle consisting of planning, action, observation, and reflection.

Observations were conducted using a checklist instrument that contained items related to both student and teacher activities during the teaching and learning process. The checklist included aspects such as students' attention, active participation, willingness to ask questions, speaking skills, as well as the teacher's guidance and motivation. This instrument facilitated systematic recording of observed behaviors and allowed for the calculation of activity percentages. In addition to observation, material mastery tests were administered to assess students' abilities before and after the intervention, providing empirical data to support analysis and reflection.

During the planning stage, the researcher collaborated with the co-teacher to analyze the existing teaching methods and identify obstacles that affected student participation, engagement, and learning outcomes. Based on this analysis, alternative learning actions were formulated to increase students' comprehension, promote positive interaction, and foster creative thinking. The teaching plan incorporated the snakes and ladders game strategy to enhance mastery of Indonesian Language materials and the experimental method to improve understanding in Natural Sciences. Materials were selected to match students' interests and needs, learning strategies were designed to be effective and creative, and the classroom layout was organized to provide a comfortable and conducive

learning environment.

In the implementation phase, the teacher carried out the planned activities while the researcher provided guidance, motivation, and stimulation throughout the process. The snakes and ladders strategy was applied to improve mastery of Indonesian Language, while the experimental method was used for Natural Sciences. Students actively participated in the activities, applying both strategies to reinforce their understanding. During the lessons, the researcher conducted comprehensive monitoring using the checklist instrument, recording student responses, challenges, and opportunities for improvement.

Data collected from each cycle were analyzed during the reflection phase. The researcher examined the implementation of actions, compared them to the original plan, and interpreted the observations to determine the effectiveness of the strategies. Student and teacher activities were quantified using percentages, calculated by dividing the frequency of observed behaviors by the total possible occurrences and multiplying by 100%. The results of this analysis informed adjustments for the subsequent cycle to ensure continuous improvement. Reflection also connected empirical findings to relevant learning theories, confirming that the application of the snakes and ladders game strategy and experimental method effectively enhanced students' mastery of materials, understanding of concepts, and overall engagement in learning activities.

The first cycle identified areas requiring improvement, such as students' initial low enthusiasm, lack of initiative, and limited willingness to express opinions. In response, modifications were made in the second cycle to further stimulate interaction, provide clearer instructions, and encourage group participation. By the end of the second cycle, most students showed substantial improvement. Based on test scores, 18 out of 19 students (90.47%) achieved high scores in both subjects, exceeding the minimal success indicator of 75%. These

results demonstrate that the applied strategies were effective in enhancing learning outcomes, supporting the iterative process of classroom action research, and providing evidence that active, game-based, and experimental approaches can significantly improve student understanding and engagement.

This research confirms that well-planned and systematically implemented action research, combined with innovative teaching strategies such as the snakes and ladders game and experimental activities, can create a dynamic and participatory learning environment. The process not only improves students' mastery and comprehension but also encourages critical thinking, creativity, and confidence in expressing ideas. The iterative cycles, observation, and reflection ensure that teaching adjustments are evidence-based, fostering continuous development of both students' learning and teachers' instructional practices.

RESULTS & DISCUSSION

Cycle I

In the first cycle, the action planning stage was carried out collaboratively by the researcher and a colleague, based on the existing learning conditions in Bahasa Indonesia and Natural Science subjects. Initial observations indicated that the teaching methods used by the teacher had not fully encouraged student active participation. Therefore, alternative actions were formulated during the planning stage with the aim of improving learning comprehension activities, positive interaction, and students' creative thinking. The snakes and ladders game strategy and the experimental method were selected as efforts to create a more engaging learning atmosphere and to promote greater student involvement.

The learning design for the first cycle was developed by considering the relevance of the learning topics to students' needs and interests. The selected topics were expected to attract students' attention, provide new insights, and

challenge students' creative thinking. In addition, the learning strategies were designed to be effective and efficient while still providing opportunities for students to interact and actively participate in the learning process. Classroom seating arrangements were also considered an important aspect of the planning stage, as a safe, comfortable, and relaxed learning environment was believed to support students in participating more freely during learning activities.

During the implementation stage, the researcher played a role in designing instructional interventions through communication and coordination with the teacher and in accompanying the teacher during the execution of the planned actions. Throughout the learning process, the researcher conducted comprehensive monitoring using the prepared data collection instruments. The monitoring results indicated that the implementation of learning had not yet met expectations. The teacher had not optimally used instructional media aligned with the planned strategies and provided limited learning motivation to students. This condition affected the level of student participation, which was not evenly distributed, resulting in the objectives of improving learning comprehension activities not being fully achieved.

The implementation of actions in the first cycle was conducted through two meetings, covering Bahasa Indonesia and Natural Science subjects. In the first meeting for Bahasa Indonesia, the teacher administered questions to obtain an initial overview of students' mastery of the subject matter. Observation results showed that students paid close attention to the lesson, followed the teacher's instructions, actively asked questions when encountering difficulties, and completed the assigned tasks with confidence. However, the initial evaluation results indicated that students' abilities varied, with most students categorized as having moderate to low achievement. This variation suggested that students'

understanding of Bahasa Indonesia material was not yet evenly developed and still required improvement in the subsequent stages.

Observations of teacher activities during the first meeting showed that the teacher had implemented the lesson in accordance with the lesson plan. The teacher opened the lesson appropriately, conveyed the learning objectives and materials, provided opportunities for students to ask questions, and closed the lesson with reinforcement of the material and a closing greeting. Nevertheless, although the instructional stages were carried out as planned, the evaluation results showed that the impact of the learning process on improving students' abilities was still limited. This finding indicates that the implementation of learning needs to be enhanced, particularly in maximizing the use of the planned strategies and methods.

In the second meeting for the Natural Science subject, the teacher again administered questions to identify students' initial abilities. The evaluation results showed that students' abilities varied, ranging from fairly good to low. This condition indicates that students had not yet fully mastered the Natural Science material being studied. After the implementation of the instructional actions, the teacher and students engaged in discussions as part of the learning process. These discussions focused on improving learning strategies, particularly in terms of clarity of explanations, providing opportunities for students to ask questions, and enhancing students' learning motivation.

Reflection on the first cycle was conducted by discussing the results of observations and evaluations of the implemented learning activities. Based on this reflection, it can be concluded that most learning activities were carried out according to the plan. However, several aspects still require improvement, including the clarity of the teacher's explanations, optimization of opportunities

for student questioning, and student grouping arrangements in accordance with the lesson plan. The findings from the first cycle serve as an important basis for refining and improving actions in the subsequent cycle

Cycle II

The implementation of actions in Cycle II was conducted as a follow-up to the reflection results from Cycle I. In this cycle, the actions focused on refining the learning strategies using the snakes and ladders game and the experimental method in Bahasa Indonesia and Natural Science learning. These refinements were aimed at improving students' learning activities, positive interactions, and learning outcomes.

During the planning stage of Cycle II, the researcher and a colleague collaboratively reviewed the learning techniques that had been applied in the previous cycle and identified obstacles that were still encountered during the learning process. Based on the reflection of Cycle I, more effective alternative actions were formulated to enhance students' learning comprehension activities, positive interaction, and creative thinking. The planning process included the preparation of lesson plans using the snakes and ladders game strategy and the experimental method. In addition, learning materials were selected in accordance with students' needs and interests, and classroom seating arrangements were designed to create a safe, comfortable, and conducive learning environment.

The implementation of actions in Cycle II was carried out according to the planned design. The teacher conducted learning activities by applying the snakes and ladders game strategy and the experimental method in both Bahasa Indonesia and Natural Science subjects. Throughout the learning process, the teacher provided guidance, motivation, and stimulus to encourage students to actively engage in all learning activities. Learning was conducted in groups to promote

cooperation among students, while the teacher continuously monitored the implementation of the actions using the prepared data collection instruments.

The monitoring results showed a noticeable improvement in student participation compared to the previous cycle. Students were more active, enthusiastic, and confident during the learning process. Observations of student activities indicated improvements across all observed aspects, including discipline, perseverance, concentration, creativity, and performance. Students paid close attention to the teacher's explanations, followed the instructions given, and were not hesitant to ask questions when they encountered difficulties. In addition, students appeared more confident in completing tasks and performing in front of the class. This improvement in student activity indicates that the implemented learning strategies were effective in creating an enjoyable learning atmosphere and encouraging active participation.

Observations of teacher activities showed that the teacher was able to implement the learning process in accordance with the prepared lesson plans. The teacher opened the lessons effectively, clearly conveyed learning objectives, used instructional media appropriately, and provided ample opportunities for students to actively participate in the learning process. At the end of the lessons, the teacher reinforced the learning material and closed the activities properly. The optimal implementation of teacher activities contributed positively to the success of the instructional actions and supported the improvement of student learning outcomes.

The evaluation results in Cycle II demonstrated a significant improvement in students' learning outcomes in both Bahasa Indonesia and Natural Science subjects. Most students achieved scores categorized as good and very good, and the percentage of students achieving learning mastery exceeded the

predetermined success indicator of at least 75%. This improvement indicates that the application of the snakes and ladders game strategy and the experimental method was effective in helping students understand the learning material and improve their mastery of concepts.

Based on the results of observations and evaluations, it can be concluded that the implementation of actions in Cycle II was successful and achieved the expected objectives. The shortcomings identified in Cycle I were addressed and improved in Cycle II, indicating that further action in subsequent cycles was not necessary. Overall, the findings show that a collaborative learning approach through the snakes and ladders game and the experimental method was able to enhance students' learning activities, confidence, and learning outcomes in Bahasa Indonesia and Natural Science learning

CONCLUSION

The conclusion of this study indicates that the implementation of the snakes and ladders game strategy combined with the experimental method in Bahasa Indonesia and Natural Science learning was able to significantly improve students' mastery and understanding. The actions implemented through two cycles demonstrate that instructional improvements based on reflective evaluation can lead to positive changes in both the learning process and learning outcomes. Learning strategies that are systematically designed and consistently implemented were shown to encourage greater student engagement during classroom activities.

Observation results revealed that after the implementation of actions across two cycles, most students achieved good to very good levels of mastery and understanding. Based on the data, 18 out of 19 students (90.47%) obtained average scores of 7–8 in Bahasa Indonesia and 8–10 in Natural Science, exceeding

the predetermined success indicator of a minimum of 75%. This improvement indicates that students experienced not only quantitative gains in learning outcomes but also a better conceptual understanding throughout the learning process.

The findings of this study confirm that the use of game-based learning strategies and experimental methods can create a more engaging, interactive, and meaningful learning environment for students. Therefore, the integration of the snakes and ladders game and experimental methods can be considered an effective alternative instructional strategy to enhance learning activities, conceptual understanding, and overall learning quality.

AI Declaration

The authors declare that Artificial Intelligence (AI) tools were used only as assistive instruments during the preparation of this manuscript. Specifically, [name of AI tool, e.g., ChatGPT, Grammarly, Quillbot] was used to support language clarity, grammar, and formatting. The AI tool did not generate, fabricate, or manipulate research data, analysis, interpretations, or references. All AI-generated outputs were carefully reviewed, verified, and edited by the authors, who take full responsibility for the content of the manuscript. This use of AI complies with the Publication Ethics and Malpractice Statement of the ***Journal of Pragmatics Research.***

Acknowledgments

The researchers would like to gratefully acknowledge the Rector of …and Prof …for their support and grant given in finishing this research.

JOURNAL OF PRAGMATICS RESEARCH uses ***APA 7th referencing style***. The references should be in alphabetical order; use Cambria (12), 1,5 spaced. **The minimum requirement of the number of references is between 30-60**

references and 40-80 % taken from reputable international journals. It is preferable to have academic journals as the references published in the last 5-10 years except for main references of particular theories. It is suggested to apply reference software like ***Mendeley, Zotero*** or ***Endnote.***

REFERENCES (*The example of APA 7***)**

Depdikbud. 1993. *Tatabahasa Baku Bahasa Indonesia*. Jakarta : Depdikbud 1995. *Kamus Besar Bahasa Indonesia*. Jakarta :Depdikbud

Elang, Kusnadi. 2002. *Materi Pokok Pembelajaran Ilmu Pengetahuan Alam*. Jakarta : Universitas Terbuka.

Jehan, W. George 1997. *Teknik Berbicara yang Meyakinkan dan Efektif*. Jakarta : Gunung Jati

N.K., Roetiyah. 2001. *Strategi Belajar Mengajar*. Jakarta : Rinneka Cipta

Nurhadi dan Gerrad Senduk. 2003. *Pembelajaran Kontekstual dan Penerapannya dalam KBK.* Malang : Universitas Malang

Sibarani, R. 1992. *Hakikat Bahasa*. Bandung : PT. Aditya Bakti

Taufik, Agus. 2002. *Teori-teori Belajar dan Implikasi dalam Pembelajaran*. Jakarta : Universitas Terbuka.

Wardani, I.G.K. dkk. 2004. *Materi Pokok Pemantapan Kemampuan Profesional*. Jakarta : Universitas Terbuka 2005 *Materi Pokok Penelitian Tindakan Kelas*. Jakarta : Universitas Terbuka