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INQUIRIES LEARNING MODEL TO INCREASE LEARNING OUTCOMES FOR PRIMARY SCHOOL CHILDREN

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Abstract
Background. Education is a crucial factor in human life because it can encourage and determine the progress of a nation. Therefore, education is focused on increasing human resources so thateducation can improve human quality in all aspects of life. Education, as one of the most critical sectors in national development, plays a crucial role in improving the quality of life for the Indonesian people.
Aims. This study aims to determine how to improve student learning outcomes through the e-inquiry learning model in PAUD children.
Methods. This research is a classroom action research (CAR) study, with kindergarten children as the subjects, totaling 30 participants. The data sources are obtained from test results, observations, and questionnaires.
Result. Based on the research results, the data obtained from the first cycle of teacher activity is 82%, and the data from student activity is 85%. Meanwhile, teacher activity in cycle II was 92% and student activity was 95%. And children's learning outcomes in the first cycle of 67% and in the second cycle increased by 90%. The child's response to the learning provided by the teacher is also quite good, with kindergarten children expressing pleasure in participating in this learning at a rate of 88%, and those who stated that they were not happy to participate in this learning at a rate of 12%.
Conclusion. Thus, it can be concluded that the application of the Inquiry learning model can improve the learning outcomes of kindergarten children in vocabulary development materials. The activities of teachers and kindergarten children have been going well and are receiving a good response from the students.

Keywords: Inquiry learning model, learning activities, learning outcomes.

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INTRODUCTION

Education is a deliberate effort to prepare students for their future by providing guidance, instruction, and training. It serves as a foundation for building and developing exceptional human resources, fostering individuals who are critical, rational, skilled, and creative. Specifically, early childhood education (ECE) is a developmental effort that provides educational stimulation to support children's physical and spiritual growth, equipping them with essential life skills for future academic levels.

ECE focuses on the child's holistic development, extending beyond academic ability. The effectiveness of education for children relies not only on the educator but also on the strategies, methods, materials, and media used, which should be both engaging and enjoyable. Therefore, educators play a crucial role in providing guidance that stimulates children's abilities. Children learn to explore and experiment with their environment, enabling them to understand the unknown and satisfy their curiosity. This approach aligns with Piaget's view (in Busthomi, 2012: 15), who stated:

"Children learn through interaction with their environment. They should be able to do their own experiments and research. Teachers can guide children by providing the right materials, but most importantly, for a child to understand something, he must build that understanding himself, and he must find it himself."

Based on observations, several factors contribute to a child's lack of vocabulary understanding, particularly in recognizing vowel letters. These include an unsuitable learning approach, a lack of student response and attention, and minimal direct involvement in the learning process. These issues often arise from conventional teaching methods, such as the lecture method, where the teacher is the primary actor, delivering materials, encouraging memorization, and assigning exercises. Consequently, teachers are more active than students, whose activities are limited to listening and taking notes.

This learning implementation results in an unsatisfactory response from the children, as evidenced by their lack of interest in the material. This indicates that the children are not motivated to discover knowledge on their own. The learning outcomes reflect this, with only 40% of students

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demonstrating mastery of the material. The remaining 60% have not achieved completeness in recognizing vowels, falling short of the school's Minimum Completion Criteria (KKM) of ≥65.

The main issue facing these kindergarten children is the low level of teacher engagement, which fails to actively involve them in the learning process. As a result, student activity is also very low, negatively impacting their responses and ultimately leading to low learning outcomes. This is because conventional methods cause students to become bored and passive. The children's task is merely to sit, listen, and play. One effective alternative for improving learning outcomes is to use more practical teaching techniques, such as the inquiry learning model, which can be an appropriate solution.

Based on the issues described, this study investigates how to improve learning outcomes for kindergarten children in recognizing vowel vocabulary through the inquiry learning model. The specific objectives of this research are:

1. To determine whether the inquiry learning model can improve the learning activities of kindergarten children.
2. To investigate whether the inquiry learning model can enhance the learning outcomes of kindergarten children in recognizing vowels.
3. To understand the child's response to the inquiry learning model on the subject of recognizing vowels.

LITERATURE REVIEW

Learning Outcomes

Learning outcomes, or student abilities upon completing a learning experience, are a central focus in educational research. According to Sudjana (2006:22), they represent the knowledge, skills, and attitudes students acquire after instruction. Dimyati and Mujiono (2009:3-4) further define learning outcomes as the product of the interaction between teaching and learning activities. For teachers, outcomes signal the end of the teaching phase and the beginning of evaluation. For students, they mark the culmination of the learning process.

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A widely-cited framework for categorizing learning outcomes is Bloom's Taxonomy, which divides learning into three domains:

- Cognitive: Focuses on intellectual and thinking processes.
- Affective: Relates to attitudes, values, and emotions.
- Psychomotor: Deals with physical skills and the ability to act.

Bloom's cognitive domain, in particular, is structured hierarchically with six levels of increasing complexity (in Sudijono, 2007:49-51):

1. Knowledge (C1): Recalling information.
2. Comprehension (C2): Understanding the meaning of information.
3. Application (C3): Using knowledge in new situations.
4. Analysis (C4): Breaking down information into its components.
5. Synthesis (C5): Combining elements to create a new whole.
6. Evaluation (C6): Making judgments about the value of ideas or materials.

In summary, learning outcomes encompass the comprehensive set of skills, knowledge, and attitudes that students develop from an educational experience, spanning cognitive, affective, and psychomotor dimensions. These outcomes can be assessed through formal evaluations to gauge the extent to which learning objectives have been met.

The Inquiry Learning Model

The inquiry learning model is a student-centered approach that emphasizes active, critical, and analytical thinking. As Trianto (2009) describes, it is a process of seeking and discovering answers to problems, typically facilitated through teacher-student dialogue. This method is rooted in the Greek word *heuriskein*, meaning "to find," highlighting its exploratory nature.

The core principle of inquiry learning is the belief that humans possess an innate desire to discover knowledge. This inherent curiosity drives individuals, from a young age, to explore their world through their senses. Key characteristics of this model (Hamalik, 2003:63) include:

1. Student-Centeredness: It maximizes student activity, positioning students as active participants in their learning journey rather than passive recipients of information.

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2. Facilitator Role of the Teacher: The teacher's role shifts from a primary source of knowledge to that of a facilitator and motivator. Their job is to guide students in their self-directed search for answers, fostering a sense of confidence and independence.
3. Development of Higher-Order Thinking Skills: The main goal is to cultivate students' intellectual skills, such as systematic, logical, and critical thinking. The focus is not just on mastering content but on developing the mental processes needed to apply and understand that content.

Ultimately, the inquiry model aims to help students build intellectual discipline by encouraging them to ask questions and find answers based on their own curiosity.

Stages of the Inquiry Learning Model

Sanjaya (2008) outlines a general process for implementing inquiry-based learning:

1. Orientation: The teacher introduces a problem or topic to stimulate student thinking.
2. Problem Formulation: Students, with guidance, formulate a specific problem to investigate. The problem should be solvable and have an element of discovery.
3. Hypothesis Formulation: Students propose a temporary, testable answer to their problem.
4. Data Collection: Students actively gather data and information. This phase requires persistence and the application of intellectual skills.
5. Hypothesis Testing: Students analyze the collected data to determine the validity of their initial hypothesis.
6. Conclusion Formulation: Based on the results of the hypothesis test, students draw and articulate a final, verifiable conclusion.

The Role of Student Activity

A fundamental principle of learning is that behavior change occurs through action. Consequently, the presence and quality of learning are directly linked to the level of student activity. Differences in this activity level—from low to high—correlate with the effectiveness of the learning process. The inquiry model, by its very design, promotes high levels of student activity, which is crucial for achieving meaningful learning outcomes.

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METHODS

This research employs a Classroom Action Research (CAR) design, a qualitative approach focused on improving teaching and learning practices. The primary goal of CAR is to contribute to a teacher's professional development by providing insights into their own and their students' behavior. We adopted a qualitative approach, as defined by Bogdan and Biklen (1998), to deeply understand the learning process and investigate how specific interventions can enhance motivation, engagement, and academic achievement.

The nature of this CAR is participatory and collaborative, meaning it was conducted through a partnership between the researcher and the classroom teacher.

Subjects and Object of the Study

The subjects of this study were students from a Catholic Kindergarten during the odd semester. The object of the research was to examine the effectiveness of the inquiry learning method in improving students' learning activities and outcomes, specifically in the area of recognizing vowels.

Data Collection

Data were collected using two main techniques: tests and observations.

Tests

Tests were used to measure the cognitive aspects of students' learning outcomes. This included a pretest administered before the intervention and a posttest after it. The written tests consisted of multiple-choice questions with four options (a, b, c, and d). A correct answer was given a score of 1, while an incorrect answer received a score of 0.

Observations

Observations were conducted to assess student performance and activity levels during the learning process with the inquiry model. We used a rating scale in the form of a checklist to systematically record key behaviors. The observer simply checked the appropriate box to document student actions and engagement throughout the learning session.

Data Analysis

The collected data were analyzed descriptively, with the results presented through detailed descriptions and discussions based on our research findings. Both the pretest and posttest scores were used to measure cognitive learning outcomes. Additionally, we analyzed the observational

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data from the checklists to gain a comprehensive understanding of the impact of the inquiry method on student activities.

DISCUSSION

This study found that implementing the inquiry learning model significantly improved student learning outcomes in recognizing vowels. The data from our action research cycles clearly support this conclusion. In Cycle I, only 67% (20 out of 30) of students achieved the passing grade, with 33% (10 students) not meeting the criteria. This was attributed to initial challenges where students were not fully engaged with the material. After adjusting the teaching approach, Cycle II showed a remarkable improvement, with 90% (27 students) achieving mastery. This 23% increase from Cycle I demonstrates the effectiveness of the inquiry model in enhancing student understanding and retention.

Teacher and Student Activity Analysis

The success of the intervention is also reflected in the increased levels of both teacher and student activity.

- Teacher Activity: In Cycle I, teacher activity was rated at 82% (good), but it rose to 92% (outstanding) in Cycle II, marking a 10% increase. This improvement indicates that the teacher became more proficient in guiding the inquiry process, which directly contributed to better student outcomes.
- Student Activity: Similarly, student activity showed a positive trend, increasing from 85% in Cycle I to 95% in Cycle II. This 10% gain highlights that students became more active and engaged participants in the learning process. The inquiry model, by its nature, encourages students to take ownership of their learning, leading to a more dynamic and effective classroom environment.

Student Response Analysis

A survey of student responses further confirms the positive impact of the inquiry model. An overwhelming 88% of students reported enjoying the learning activities, while only 12% expressed dissatisfaction. This positive response suggests that the inquiry model, which encourages active exploration, is not only effective but also highly appealing to young learners.

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The high level of student satisfaction likely contributed to their increased engagement and, ultimately, their improved learning outcomes.

These findings align with previous research. For example, Yusnidar's (2012) study on an inquiry model for elementary school students and Juliana's (2009) research on improving learning achievement both found that the inquiry approach led to a significant increase in student understanding and activity. The results of our study, where 90% of students achieved mastery, are consistent with Juliana's findings, which also reported a 90% achievement rate.

The Role of the Inquiry Model

This research confirms that the inquiry learning model is a powerful tool for fostering cognitive development and improving learning outcomes in young children. As Gulo (2008: 202) suggests, inquiry learning goes beyond intellectual development to cultivate a range of skills, including emotional and critical thinking abilities. It is a dynamic process that aligns with the philosophy that learning is an active, constructive process in which students build their own knowledge, as proposed by Suparno (2006: 18).

The success of this study can be attributed to the structured, cyclical nature of the action research, which allowed for continuous improvement. By identifying and correcting weaknesses from Cycle I, we were able to optimize the learning process in Cycle II, leading to the desired results. This reinforces the idea that learning is a dynamic process where positive, permanent behavioral changes occur at every level—cognitive, affective, and psychomotor. Ultimately, the use of the inquiry learning model in this study proved to be a successful strategy for enhancing the academic achievement and overall development of kindergarten students.

CONCLUSION

Based on the research findings and discussion, the following conclusions can be drawn:

1. Improved Learning Outcomes: The implementation of the inquiry learning model significantly improved student learning outcomes. The completion rate rose from 67% in Cycle I to 90% in Cycle II, demonstrating a notable 23% increase in student mastery of the material.
2. Increased Activity and Engagement: Both teacher and student engagement increased across the cycles. Teacher activity improved from 82% in Cycle I to 92%

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in Cycle II. Likewise, student activity saw a 10% increase, rising from 85% to 95%. This indicates that the inquiry model was effective in fostering a more dynamic and interactive learning environment.

3. Positive Student Response: The majority of students responded positively to the new learning approach. An overwhelming 88% of students expressed satisfaction with the inquiry model, suggesting that it is not only effective but also enjoyable for young learners. Only 12% of students were not satisfied, further reinforcing the model's overall success.

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