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The Use of the Explicit Instructions Model to Improve Learning Outcomes of the Solar System Material for Sixth Grade Students at SD Negeri 1 Sidoluhur Lawang

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Abstract : *Poniatin, 2025. The Use of the Explicit Instructions Model to Improve Learning Outcomes of the Solar System Material for Sixth Grade Students at SD Negeri 1 Sidoluhur Lawang**.** Classroom Action Research, Teacher at SD Negeri 1 Sidoluhur, Lawang District. The problem of this research is the low ability of sixth-grade students at SDN Sidoluhur 01, Lawang District, in the solar system material.To address this issue, a classroom action research was conducted using the explicit instruction learning model on the 6th-grade students of SD Negeri 1 Sidoluhur, totaling 39 students.The type of research used is classroom action research (CAR).The research design uses the Kemmis and McTaggart design, which consists of 4 steps: planning, implementation, observation, and reflection.The subjects of this research are all the sixth-grade students of SD Negeri 1 Sidoluhur, Lawang District. The research results show that in the implementation of learning in cycle I, it reached 64.10%, increasing in cycle II to 92.31%.Thus, it can be concluded that the use of the Explicit Instructions learning model can improve students' learning outcomes on the solar system material in the sixth grade at SD Negeri 1 Sidoluhur, Lawang District.*

Keywords*: Explicit Instructions Model, Solar System, Learning Outcomes*

INTRODUCTION

Background of the Problem

Based on the results of the observation, the test scores of the sixth-grade students at SD Negeri 1 Sidoluhur are still very low in their ability to understand the material on the solar system, as out of 39 students, only 18 students reached the determined Minimum Completeness Criteria (KKM) of 70.This means that the classical completeness achieved by the students is only 46.15%, which is still far from the expected 80%.

Problem Formulation

Based on that analysis, the problem formulation in this research is, "How Does the Use of the Explicit Instructions Model Improve the Learning Outcomes of the Solar System Material for Sixth Grade Students at SD Negeri 1 Sidoluhur Lawang?"

Research Objective

According to the problem formulation above, the purpose of conducting this classroom action research is that the use of the Explicit Instructions Model can improve the learning outcomes of the Solar System material for sixth-grade students at SD Negeri 1 Sidoluhur Lawang.

Research Hypothesis

If in the IPAS learning of the Solar System Material using the Explicit Instructions learning model, the learning outcomes of the 6th-grade students of SD Negeri 1 Sidoluhur can improve.

Research Title

The Use of the Explicit Instructions Model to Improve Learning Outcomes of the Solar System Material for Sixth Grade Students at SD Negeri 1 Sidoluhur Lawang.

Literature Review Understanding Learning

According to Zainal Aqib (2010:42), learning is a form of growth or change within an individual expressed in new ways of behavior thanks to experience and training.According to Surya (2003:73), learning is defined as a process of effort undertaken by an individual to achieve a comprehensive change in behavior as a result of the individual's own experiences in interaction with their environment.Definition of Learning OutcomesAccording to Agus Suprijono (2012:5), learning outcomes are patterns of behavior, values, understandings, attitudes, appreciation, and skills.Referring to Gagne's thinking, learning outcomes include:1. Verbal information is the capability to express knowledge in the form of language.2. Intellectual skills are the ability to present concepts and symbols.3. Cognitive strategies refer to the ability to channel and direct one's own cognitive activities.4. Motor skills are the ability to perform a series of physical movements in terms of coordination, resulting in the automatism of physical movements.5. Attitude is the ability to accept or reject an object based on an evaluation of that object.

Understanding the Explicit Instructions Learning

Model The Explicit Instructions learning model is a direct teaching model specifically designed to develop students' learning about procedural knowledge and declarative knowledge that can be taught in a step-by-step manner (Rosenshine & Stevens, 1986: 3).According to Archer and Hughes, as cited by Miftahul Huda (2013: 186), the Explicit Instructions learning model is one of the teaching approaches specifically designed to support the student learning process.This strategy is related to declarative knowledge and procedural knowledge that is structured and can be taught with a step-by-step activity pattern.This strategy is often known as the Direct Instruction Model.

Objectives and Characteristics of Explicit Instructions

According to Aris Shoimin (2009: 41-42), there are several characteristics of the Explicit Instructions model (direct instruction), which are as follows.

1. The presence of learning objectives and the influence of the model on students, including assessment procedures.
2. The syntax or overall pattern and flow of learning activities and
3. The management system and learning environment model required for certain learning activities to be successfully conducted structured procedural and can be taught with a step-by-step activity pattern.This strategy is often known as the Direct Instruction Model.

In addition, explicit instructions (direct teaching) must also meet certain requirements, including (1) the presence of a too1 to be demonstrated, (2) adherence to teaching behavior (syntax).

The framework for explicit instruction includes the following:

1. Conveying objectives and preparing students
2. Demonstrating knowledge and skills
3. Guiding training
4. Checking understanding and providing feedback
5. Providing opportunities for further training and application.

According to Miftahul Huda (2013:187), the advantages of the Explicit Instructions model include:

1. The teacher can control the content of the material and the sequence of information received by the students, allowing the teacher to maintain focus on what the students need to achieve.
2. Can be effectively applied in both large and small classes.
3. It can be used to emphasize important points or perhaps the difficulties faced by students so that these issues can be expressed.
4. It can be an effective way to teach highly structured factual information and knowledge.
5. It is the most effective way to teach explicit concepts and skills to low-achieving students.
6. It can be a way to convey a large amount of information in a relatively short time and can be equally accessible to all students.
7. Allows teachers to convey personal interest in the subject (through enthusiastic presentations) that can stimulate students' interest and enthusiasm.

According to Miftahul Huda (2013:188), the weaknesses of the Explicit Instructions model include:

1. Too reliant on students' ability to assimilate information through listening, observing, and noting activities, while not all students possess skills in these areas, so teachers must teach them to the students.

2. Difficulty in addressing differences in terms of abilities, prior knowledge, learning and understanding levels, learning styles, or student interests.
3. Students' difficulty in developing good social and interpersonal skills.
4. The success of this strategy depends solely on the assessment and enthusiasm of the teacher in the classroom.

Definition of Science Learning in Elementary School

Natural Science (IPA) is defined as a collection of knowledge that is systematically organized.This is in line with the KTSP curriculum (Depdiknas, 2006) which states that "Science is related to the systematic way of seeking knowledge about nature, so it is not only about mastering a collection of knowledge in the form of facts, concepts, or principles, but also a process of discovery."In addition, science is also an empirical discipline that discusses facts and natural phenomena.Those facts and natural phenomena make science learning not only verbal but also factual.

Definition of the Solar System

According to Fiti Aamalia (2022-111)The solar system is a collection of celestial bodies consisting of a star called the sun and all objects that are bound by the star's gravitational force.The objects referred to are planets and other celestial bodies such as comets, meteors, and asteroids.In the solar system, all planets and other celestial bodies orbit the sun.Thus, the existence of the sun as the center of the solar system.Each planet that orbits the sun will be on a path that has an elliptical shape and is called an orbit.

The planets within the solar system are divided into 8 types, each with varying distances from the sun.The explanations for each planet are as follows.

1. Mercury is the smallest planet in the solar system and is the closest to the sun.This planet's shape appears to change due to the influence of Mercury's revolution.
2. Venus is the second planet closest to the sun.This planet has the hottest temperature compared to other planets.In addition, Venus is often referred to as the morning star.
3. Earth is the third planet closest to the sun.Earth is the only planet inhabited by living beings, because its atmosphere consists of nitrogen (82%), oxygen (O2), and the rest is made up of argon, carbon dioxide, ozone, and other gases.
4. Mars is the fourth planet closest to the sun.This planet is often called the red planet because it appears reddish.The atmosphere of Mars is thin and composed of carbon dioxide and nitrogen.
5. Jupiter is the fifth planet closest to the sun.Jupiter is the largest planet in the solar system, shaped like a giant ball and appearing very bright.
6. Saturn is the sixth planet closest to the sun.This planet has a special characteristic in the form of rings that encircle it, and these rings are composed of chunks of ice and pebbles coated with ice.
7. Uranus is the seventh planet closest to the sun and has a bluish-green color.The atmosphere of Uranus is composed of hydrogen, helium, and methane.
8. Neptune is the farthest planet from the sun and is often referred to as the twin of Uranus.The mention is because it has the same atmospheric composition as Uranus, consisting of hydrogen, helium, and methane.

Research Methodology

Research Methodology Type of ResearchThe type of research in this study is classroom action research (CAR) with a qualitative approach.Classroom action research is a form of research conducted by teachers to solve problems encountered in carrying out their main task, which is managing the implementation of teaching and learning activities.Implementation of the Research

The implementation of this classroom action research follows a cyclical research model.Each cycle is carried out in several stages, namely: 1. Action planning 2. Action implementation3. Observation 4. Reflection Research SubjectsThis research was conducted at SD Negeri 1 Sidoluhur Lawang.The subjects of the research are sixth-grade students, totaling 39 students, in the 2024-2025 academic year.

Data and Data Sourcesa.

Type of DataThe type of data obtained in this study is:1) Qualitative data, which includes data from observing teacher activities and data from observing student activities during the learning process.2) Quantitative data is data obtained from student learning tests.Research InstrumentsResearch instruments consist of:1. Written testWritten test to determine the improvement in learning outcomes2. ObservationObservation is conducted by an observer or peer during the learning activities.3. DocumentationDocumentation in this research is used to determine the initial data on students' abilities and the evaluation results conducted at each meeting in the learning process.

Research instruments consist of: 1. Written testWritten test to determine the improvement in learning outcomes2. ObservationObservation is conducted by an observer or a peer during the learning activities.3. DocumentationDocumentation in this research is used to determine the initial data on students' abilities and the evaluation results conducted in each meeting during the learning process.4. InterviewInterviews are one form of data collection conducted verbally in individual face-to-face meetings.instruksi eksplisit5. Field NotesField notes are written records of what is heard, seen, experienced, and thought in order to collect data and reflect on the data in qualitative research.Field notes in this research consist of teacher notes during the learning process whenever there are occurrences that arise during the teaching.These notes are used to strengthen the data and serve as input for the teacher's reflection.

Research instruments consist of: 1. Written testWritten test to determine the improvement in learning outcomes 2. Observation Data Analysis1. Quantitative Data AnalysisThe data analysis technique used in analyzing quantitative data obtained from student learning outcome tests is the use of individual mastery equations and classical mastery percentages. 2. Qualitative Data AnalysisQualitative data analysis in this study is conducted after data collection.The stages of qualitative data analysis activities according to Miles and Hilberman in Iskandar (2009) are 1) data reduction, 2) data presentation, and 3) data verification/Conclusion.

Research Results

Cycle 1

ResultsBased on the results of the students' learning test in cycle I, the average learning outcome and learning completeness reached 64.10%, meaning that 25 out of 39 students have completed their learning.The results indicate that in the first cycle, students have not yet fully learned in a classical sense, as only 64.10% of students scored ≥70, which is lower than the desired completeness percentage of 80%.This is because the students still feel new to using the explicit instruction learning model.

Cycle 2

ResultsBased on the students' learning outcomes, the percentage is 75.41%, and the classical completeness of student learning reaches 92.31%, meaning 36 out of 39 students have completed their learning.These results indicate that in this second cycle, the classical learning completeness has improved compared to the first cycle.The improvement in student learning outcomes is because after the teacher informed that there would always be a test at the end of each lesson, students were more motivated to study in the following sessions.In addition, students have also begun to understand what the teacher means and wants by using the explicit instruction model in learning.

RECAPITULATION

of Student Learning Outcomes Based on the data above, it is known that the improvement in student learning achievement can be seen from the initial test at 46.15%, increasing in cycle I to 64.10%, and in cycle II to 92.31%.

CONCLUSION

Learning using the explicit instruction model on the topic of solar system very well.This is evidenced by the improvement in student learning achievements, which can be seen from the initial test score of 46.15%, increasing to 64.10% in Cycle I and 92.31% in Cycle II.

SUGGESTIONS

Based on the implementation of the explicit instruction learning model, the researcher proposes several suggestions that need to be considered as follows:

1. Students

   It is hoped that with the use of the explicit instruction learning model, students will become more enthusiastic about learning, resulting in improved learning outcomes. This is because using the enjoyable explicit instruction learning model encourages students to be more active in the learning process.

2. Elementary School Teachers

   Teachers (especially researchers) should enhance their knowledge and understanding of using teaching strategies as an effort to improve the quality of education, particularly in increasing student learning outcomes through the use of the explicit instruction learning model.

3. Further Research

   Classroom action research using the explicit instruction learning model still has gaps that can be further investigated by other researchers, as the researcher only focused on improving learning outcomes.Therefore, the results of this action research are expected to serve as a reference for other researchers conducting studies within the context of research related to the use of the explicit instruction learning model.

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