Learning Methods and Scientific Approaches on Integrated Thematic Learning

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Abstract: In the 2013 curriculum, elementary schools are carried out with integrated thematic learning. This study aims to analyze the integrated thematic learning activities of grade III. The research uses qualitative methods with a phenomenological approach. The research informant was one grade III teacher. The subjects in this study were 19 grade III students. Data was collected at SD Negeri 2 Soborejo using interviews, observations, and documentation. The data validity techniques used are the Credibility Test and the Confirmability Test. In researchers, a credibility test was carried out using increased persistence in research, triangulation techniques and member checks. The Confirmability Test is carried out using a journal to reflect on the data that has been collected. A scientific approach is applied in learning activities because the curriculum used is the 2013 Curriculum. Conclusion of the research, integrated thematic learning activities are carried out using several learning methods, according to the stage of the sequence of learning activities and learning principles Integrated thematic, then a scientific approach is applied in learning.

Keywords: Elementary school; Learning methods; Scientific approach; Thematic learning.

Introduction

Education is very important for humans because if people can get a good education, it can improve the quality of human life and advance the nation's life. Schools are formal educational institutions, so educational activities in schools must be carried out properly. In the implementation of education in schools, there is a Curriculum. A curriculum is a tool used as a reference to develop a process of implementing learning activities (Yolanda & Reinita, 2019). The curriculum is the core of education. The curriculum can be interpreted as a set of plans and arrangements regarding the objectives, content, learning materials, and methods used as guidelines for implementing learning activities to achieve certain educational goals (Safaruddin, 2020). In its application, the curriculum used in formal educational institutions in Indonesia has undergone several changes. Currently, the curriculum in formal education institutions in schools is Curriculum 2013.

Thematic learning is a theme-based learning model (Prastowo, 2019). Thematic learning is a teaching and learning approach that involves several subjects in one theme to provide meaningful experiences for students (Karli, 2016). Integrated learning is learning that begins with a certain subject or theme and then relates to another subject. A certain concept is related to another, carried out spontaneously or planned, both in one or more fields of study. With various learning experiences of the child, learning can become more meaningful (Akib et al., 2020). Integrated thematic learning can be interpreted as connecting various aspects between subjects (Handini et al., 2021). Learning in the 2013 Curriculum uses a scientific approach. A scientific approach is an approach that is designed in such a way as to make students active in constructing concepts, laws, or principles using a scientific approach. A scientific approach is a learning process designed so that students actively construct concepts, laws, or principles through observing (identifying/finding problems). It
was formulating problems, proposing or formulating hypotheses, collecting data with techniques, analyzing data, drawing conclusions, and communicating (Liana, 2020).

At SD Negeri 2 Soborejo, Temanggung Curriculum Regency, the curriculum used in the 2021/2022 school year is the 2013 Curriculum. In the 2013 Curriculum, learning is an integrated theme. At the beginning of the Covid-19 pandemic, learning was carried out online, but currently, learning activities have been carried out face-to-face, but are still limited. In implementing limited face-to-face learning, learning activities can run as before the Covid-19 pandemic. Limited face-to-face learning during this pandemic is carried out by limiting the number of teaching and learning activities and the number of students participating in learning. At SD Negeri 2 Soborejo, learning activities are carried out in a shorter time. At the beginning of the implementation of face-to-face learning, students were divided into entry schedules, but currently, all students have entered every day. The implementation of integrated thematic learning at SD Negeri 2 Soborejo has yet to run maximally. The learning methods used in learning still need to be varied, and the nature of the implementation of the scientific approach has not fully worked well. There are still obstacles, such as when students are told to try themselves, let alone asked, they are often still embarrassed not to dare to reveal what is known.

Based on the explanation above, researchers are interested in researching Integrated Thematic Learning Grade III SD Negeri 2 Soborejo, Temanggung Regency. In this study, the researcher wants to describe the learning methods used in implementing integrated thematic learning, how to implement integrated thematic learning and why the scientific approach is applied in implementing integrated thematic learning.

Method

This research is qualitative. A qualitative approach is a combination that produces descriptive data in the form of written or spoken words from people and behaviors that can be observed and carried out in a natural setting (Putri & Sukma, 2020). This study uses a phenomenological approach. Phenomenology is a study that uses a perspective based on what the researcher sees and obtains from the facts of the phenomenon under study, not based on the researcher’s perspective on a fact of existing phenomena. The researcher explains the facts in truth, as they are without regard to considerations according to what the researcher expects (Barnawi & Darojet, 2018).

The research was conducted in grade III of SD Negeri 2 Soborejo, Temanggung Regency, and it has nineteen students, twelve male, and seven female students. The research time was carried out in April-May 2022. The data collection techniques used in this study were interviews, observations, and documentation. In this study, researchers used structured interviews, and the researcher first compiled an interview instrument before conducting an interview. Interviews were conducted with one grade III teacher at SD Negeri 2 Soborejo. Researchers use non-participation observation techniques and systematic observation. Researchers performed observation twice, which was carried out when integrated thematic learning took place in Grade III. In observation activities, researchers are not actively involved, researchers make observations using research instruments that have been compiled previously. The document in this study reinforces the data obtained from observations and interviews so that the results of interviews and observations can be more reliable. In this study, researchers used documents related to the implementation of integrated thematic learning in grade III and photo evidence of research when making observations and video interviews.

Data validity checks are carried out to ensure that the data analysis and interpretation results are reliable (Hamzah, 2019). In this study, researchers used the Credibility Test and Confirmability Test to check the validity of the data. Credibility tests are carried out with increased persistence in research, triangulation of techniques using interview, observation, and documentation techniques for data collection, and member checks. The Confirmability Test is carried out using a journal to reflect on the data that has been collected. In this study, the data analyst technique used was a data analysis technique, according to Miles & Huberman, which consisted of data reduction, data display (data presentation), and conclusion drawing/verification (Hamzah, 2019).

Result and Discussion

Based on the research that has been carried out, the following results are obtained:

Learning methods used in integrated thematic learning

The learning methods used in integrated thematic learning grade III SD Negeri 2 Soborejo are lecture methods, question and answer methods, discussion methods, drill methods, demonstration methods and experiments, tasking methods, and group work. In one day of learning activities, the teacher uses several learning methods.

The traditional lecture method is a teacher-centered learning strategy in which information is transferred by the teacher and passively recognized by learners (Hafeez, 2021). The presentation of the interactive lecture method can provide an overview of how the stages in this method and the interactions that occur in it can meet the indicators of learning activity in the form of...
During learning activities, teachers often give questions to students verbally. Around 30% of students can and dare to ask questions from the teacher, but there are still many students who have yet to participate answer questions. The teacher also allows students to ask questions. The question-and-answer method requires attention to the success that has been learned to know the students' progress in their learning before continuing the learning material (Luhirini, 2018). The question-and-answer method has significantly increased students' understanding of learning (Ahmad & Tambak, 2017). The advantage of the question-and-answer method is that questions can attract and focus students' attention, even if the student is busy, stimulating students to train and develop thinking power (Munasih & Nurjaman, 2018).

The implementation of the discussion method in grade III SD Negeri 2 Soborejo between teachers and students. Besides that, discussions were also carried out by students with their groups. In group discussion activities, only 40% of students are active in discussion activities. The discussion method draws the student's attention to his study material. This method allows students to learn actively and independently to develop knowledge, attitudes, and skills. With the discussion method, students collaborate to share information and opinions with each other to reach a common decision.

The drilling method is applied to integrated thematic learning in grade III SD Negeri 2 Soborejo. Teachers give practice questions to be done on the board, with their groups, or independently. The drilling method can better influence students to improve their abilities to become capable cognitive, affective, and psychomotor (Fahrurrozi et al., 2022). Practice Methods effectively improve students' abilities and understanding (Sakila, 2018). Practice methods are proven to improve student achievement (Pusparini, 2020).

Demonstrations and experiments method were once applied in integrated thematic learning grade III SD Negeri 2 Soborejo. However, demonstration and experiment methods were not applied to learning from observation activities one and two. Demonstration and experimental methods have been applied to material forms and substance changes. By using demonstration methods, student learning outcomes improve.

The method of giving assignments is a learning activity characterized by the presence of one or more tasks given by the teacher, where the tasks can be completed individually or in groups according to the orders of Moedjiono and Dimyati (Sutiah, 2019). The assignment is a method applied in teaching and learning by giving assignments to students after the teacher provides knowledge material (Asmedy, 2021). The method of assigning tasks is also applied in learning activities. There are individual tasks and group tasks. Because the time for face-to-face teaching and learning activities is limited, individual tasks are carried out by students. In assigning assignments, there are clear instructions. Before giving assignments, the teacher also explains them in advance. The method of assigning
Group work methods are learning methods that can make student-centered learning activities (Hung & Mai, 2020). In learning activities with group work methods in grade III SD Negeri 2 Soborejo, teachers strive to create student-centered learning activities. Group work is carried out almost the same as the discussion method. Groups are made for a short period and are based on certain categories where in each group, there are students who have good academic skills but still need to. All students are active in group work activities. Only about 40% of students actively participate in group work activities. Group work methods effectively improve students’ understanding of learning (Ulum, 2021). Giving assignments at home can train students to utilize time to study (Anthon, 2019).

Integrated thematic learning integrates several learning materials combined in one theme where the theme contains concepts so that the learning becomes holistic, meaningful, and authentic (Hidayati, 2017). Integrated thematic learning can be interpreted as learning by linking and connecting various aspects between subjects (Handini et al., 2021). The teacher and students pray together in the first activity before the learning activities. Then the teacher conducts questions and answers to the students to dilute the atmosphere. The teacher asked about the student's news and the student's attendance. In the introductory activity, the teacher also conveyed the learning objectives. In the core activities, the teacher delivers the subject matter. When delivering material, teachers often set an example with the knowledge and experience of students. The contextual approach by which the teacher seeks to relate the material present in the book with the real experiences of the student's life is excellent to apply in learning so that learning objectives can be achieved and make meaningful learning for students (Asmara, 2019). In the closing activity, teachers and students conclude the material that has been studied orally and as little as possible to review it. At the end of the lesson, the teacher gives students assignments at home because the time for face-to-face learning activities at school is still limited.

There are principles in integrated thematic learning. The principle is student-centered, hands-on experience, the separation of subjects is unclear, the presentation of several subjects in one learning process flexible, meaningful as a whole, considering the time and availability of sources, the closest theme to the child and the achievement of basic competencies, not a theme (Kurniawan, 2019). In learning activities in grade III SD Negeri 2 Soborejo, teachers carry out learning activities based on the principles of integrated thematic learning.

Student-centered learning places students at the center of learning instead of teachers at the center of activity (Soon, 2020). In grade III, teachers have tried to carry out student-centered learning activities so students can think critically. Critical thinking skills are skills that a person has to solve a problem by analyzing an idea in a certain direction (Gandi et al., 2021). Critical thinking is very important for students. When students can think critically, students tend to be more competent than students who are less critical (Fong, Putra et al., 2018). In its implementation, student-centered learning activities in grade III have yet to be maximized. Students still tend to be passive but must be more active in learning activities.

In integrated thematic learning, teachers experience obstacles in carrying out student-centered learning activities because students are not yet independent and have difficulty finding the right learning method to achieve learning objectives (Daulay). In integrated thematic learning in grade III SD Negeri 2 Soborejo, student activity in learning activities still needs to be higher, so teachers’ efforts to create learning activities are centered on Students who still need to be doing better. It is because students have not been able to be independent. In addition, although teachers have applied several learning methods in learning activities, only about 40% of students are active in the learning process.

When learning, the teacher also tries to give a direct understanding to the students on the provision of direct experience. The students are invited to remember what is already known. The learning process is not only memorization; students can construct their knowledge by applying it to everyday reality. Students can get involved in Priansa's meaningful learning with contextual learning (The material studied is presented based on a certain theme according to the guidebook n, the content of the material of each subject has a correspondence with the theme, so the barriers between subjects are almost invisible.

In one day of learning activities, there were several subjects presented. The identity of each subject is almost invisible because it melts on the theme. In learning,
teachers try to apply flexible principles where teachers use several learning methods in one day of learning activities and several learning resources. However, learning is carried out only in the classroom only. It means the whole also tries to apply teachers in learning. Teachers often describe or relate the material that is easy for students to understand according to its nature. A whole can be interpreted as complete knowledge and skills to make learning more meaningful. Here meaningful gives meaning if, in learning, students can understand concepts learned through direct and real experience (Apriyani & Rusiyono, 2018).

Teachers also consider the timing and availability of learning resources. Planning time is important in learning activities because it is related to students' success in understanding the material (Persada et al., 2020). The teaching and learning activities of grade III students of SD Negeri 2 Soborejo have not returned to normal as when there was no pandemic, the time for face-to-face teaching and learning activities at school was shortened. With a limited time, allocation, teachers consider the time when giving explanations, discussion, and time to work on practice questions and assignments. The availability of learning resources is also quite considered by teachers. Teachers are trying to use existing learning resources to be used in learning.

The theme used in integrated thematic learning in grade III SD Negeri 2 Soborejo is a theme that is close to children. The theme is already in the guidebook. The theme in thematic learning has become a point because the theme has a function to combine several subjects (Daulay & Daulay, 2021). In one day of learning activities, several subjects are presented, and competencies from various subjects are integrated into a theme. In class III the content of science and social studies lessons melts into other subjects. The teacher prepares a lesson implementation plan for the learning process. Integrating thematic learning improves student outcomes

Application of Scientific Approach in Integrated Thematic Learning

The application of the scientific approach is the Change in Sta and Process in the 2013 Curriculum. The scientific approach includes observing, questioning, collecting information, reasoning, and communicating in learning activities. The scientific approach terms of science are very important to be implemented to improve the quality of students in the realm of knowledge and skills (The scientific approach greatly affects student learning outcomes in low-grade subjects (Putri, 2020). Therefore, grade III teachers apply a scientific approach in integrated thematic learning because currently, the curriculum used is the 2013 curriculum. The scientific approach has student-oriented characteristics, develops student potential, increases student motivation, develops student attitudes and character, and improves abilities to communicate student learning outcomes (Lestari, 2020).

In learning activities, teachers try to create student-oriented learning activities but have yet to be able to run well because the response from students is still passive. Teachers in learning also strive to develop students' potential, such as skill competencies, seeking information, expressing opinions, and speaking. However, because students' characteristics vary, they achieve level also varies. In learning, teachers seek to increase student motivation. If students' learning motivation increases, it is hoped that student learning outcomes can also be maximized (Hermawan & Rahayu, 2020).

Teachers also strive to develop the attitude and character of students. The integration of character values is not only the responsibility of religious education and civic education, but all fields of study have the same responsibility (Sudarmika et al., 2020). A scientific approach based on character education is one of the solutions so that scientific approaches and character education can be applied well in the learning process (Asmaranti et al., 2018). In learning to develop the attitude and character of the teacher, insert character values in the process of learning activities. Religious values are associated with religious life, nationalist values are associated with the nation's struggle. Teachers also strive to instill good social character and attitude in students when learning, such as: ethics, speaking, and expressing opinions. In improving the ability to communicate learning outcomes, teachers apply it to the steps of a scientific approach to communicating.

The scientific approach differs from the learning approach used in the previous curriculum because there are steps for learning activities (Erita et al., 2020). The number of scientific learning in the 2013 curriculum, namely observing, questioning, collecting information, associating / processing information/reasoning, and communicating (Lestari, 2020). In learning activities using a scientific approach, teachers strive to apply the steps of a scientific approach in learning. One of the steps in the scientific approach is to observe. Observing activities can be done by reading books, hearing the bell ringing, listening to the teacher's explanation, looking at pictures, watching documentaries, fingering fine fabrics, tasting sugar flavors, and so on (Sibuea & Sukma, 2021).

In observing the grade III teacher, the teacher invites students to read the reading text, listen to the teacher's explanation and look at pictures. By applying the steps of a scientific approach, observing teachers has the aim of being able to increase student curiosity because the stages of observing can make students motivated and increase their curiosity

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In questioning activities, teachers provide opportunities for students to create and ask questions related to what has been done in observing activities. Questions can be asked to find out what is not understood or to obtain additional information (Sibuea & Sukma, 2021). In questioning activities, the class III teacher provides opportunities for students to ask questions related to material or things that students do not understand. However, the activeness of students in asking questions still needs to improve. Only about 40% of students dare to ask the teacher.

Information-gathering activities can be carried out together, exchanging ideas and experiences (Hadromi et al., 2021). In collecting information, grade III students of the SD Negeri 2 Soborejo study should be able to collect information from various ways and sources. Students carry out activities to collect information about the material presented by the teacher, discuss with their friends, read the material, and from their experiences. When collecting information by discussing, students learn to appreciate the opinions of their friends.

In reasoning activities, teachers can ask students to provide reasoning according to what they know about the teaching materials given (Suswandari et al., 2020). In associating/processing information/reasoning, grade III teachers invite students to process information from what has been obtained. Then the results of the information are communicated by students in oral and written form. Communicating activities can train students to convey their learning outcomes using the good and correct language.

Conclusion
Based on the results of research and discussion, it can be concluded as follows the learning methods used by teachers in integrated thematic learning. Integrated thematic is the lecture method, question, and answer method, discussion method, exercise method, demonstration and experiment method, assignment method, and group work method. Integrated thematic learning activities are carried out with three stages of implementing the learning sequence: preliminary, core, and closing. In learning activities, teachers strive to carry out learning activities using integrated thematic learning principles. The scientific approach is applied in learning activities because the curriculum used is Curriculum 2013. The steps of the scientific approach applied in learning are observing, questioning, collecting information, associating/processing information/reasoning, and communicating.

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