

Implementation of Learning Models Inquiry Guided To Ability Thinking *HOTS* Students in Science Lessons Care Environment in Grade IV of Masadian Public Elementary School Subdistrict Sombori Archipelago Regency Morowali

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ABSTRACT

Education is effort aware For develop source Power human resources (HR) through activity learning . As the learning process progresses , so does the learning process . Learning is essentially is provide environment that facilitates the learning process student with facilitate growth and development its potential . Formulation problem research what are the teacher 's steps in implementing learning models Inquiry Guided in class IV of Masadian State Elementary School , how Integrating Learning Models Inquiry Guided with Caring Science Lessons The environment in class IV of Masadian State Elementary School , how is it? implementation of learning models Inquiry Guided to ability *HOTS* thinking Students Class IV in Science Lessons Caring Environment in class IV of Masadian State Elementary School . Research purposes For Integrating Learning Models Inquiry Guided with ability think *HOTS* on Caring Science Lessons The environment of science in class IV of Masadian State Elementary School . The research method used by the researcher namely the qualitative descriptive research method . The results of the research on the learning model inquiry guided program carried out in class IV of Masadian State Elementary School is a learning model that focuses on the use of thinking critical and analytical For can find solution from problems faced . methods inquiry guided involving learning in situation child educate given equal opportunity For do experiment or test Alone in the situation that has prepared . Conclusion of the study The steps taken by teachers in Implementing Learning Models Inquiry Supervised in class IV of Masadian State Elementary School , Steps learning carried out by teachers in class that is do discussion given by the science and science subject teacher the discussion Using Learning Models Inquiry Guided with A learning model that invites student For find Alone knowledge through investigation , observation , or experiment , with guidance or directions from the teacher.

Keywords: *Inquiry Guided , Thinking HOTS Students , Care Environment*

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INTRODUCTION

Education is a process of change attitude and behavior a person or group of people in an effort to mature humans through teaching and training efforts, processes, methods and making educate . According to dictionary big Indonesian education is all business from parents to children with Meaning support progress his life (Atsilnaura , et al ., 2024 : 41) .

Education is effort aware For develop source Power human resources (HR) through activity learning . As the learning process progresses , so does the learning process (Pambudi , et al . , 2023: 67) . This is in accordance with Constitution Republic of Indonesia from 2003 to Constitution Number 20 about The National Education System states that education is effort conscious and planned For create atmosphere education and learning process so that participants educate can develop potential his/her religion effectively. Spirituality. Strength, noble morals, and the skills needed for society , nation and state, (Dongoran , et al . , 2022: 78) .

Education also helps people live meaningful lives so that they can find happiness in life individual and collective . As A method , training need structured and structured plan as well as clear goals for the desired direction easy achieved . Education is deliberate work , education is method For create jobs that have strong foundation and clear direction For taken (Priandini , et al . , 2024 : 89) . Meaningful learning is participant - centered learning didik (*Student Center*), which can make student active in the learning process . According to one of the condition Revolution Industry 4.0, participants educate expected can develop ability think critical (*Thinking deep and focused*) for solve problem . Social studies education is one of the focus potential knowledge knowledge and technology , two things the is existence revolution industry . Starting from skills cognitive until understanding appreciative , understanding sciences social will succeed develop skills level high . Considering the importance of social studies in development a generation , then student No may bored studying social studies (Sopiuloh , et al . , 2023: 123) .

Apply preferred learning participant educate , synchronous learning using the demands of the times, namely learning in today's era is learning differentiate in curriculum independence , learning differentiate is learning developed to respond need child educate on learning which able to varies , including readiness learning , interest , potential , or style study it .

Learning in essence is provide environment that facilitates the learning process student with facilitate growth and development its potential . “ Teaching is a system or planned process or designed in a way systematic , implemented and evaluated so that participants learner / participant educate can reach objective learning in a way effective and efficient ” (Ndruru , et al . , 2023: 65) . Learning is a process of interaction between students and teachers as well source Study in a environment Study (Widyaningrum , et al , 2024 : 67) . “ Teaching is a system or planned process or designed in a way systematic , implemented and evaluated so that participants learner / participant educate can reach objective learning in a way effective and efficient ” (Mulyanti , et al. 2023: 156) .

Learning Inquiry guided No only develop ability intellectual but all over the existing potential including Development emotional and skills think while . Inquiry Guided is a learning model Deep inquiry implementation, the teacher provides guidance or sufficient indication wide to students . (Agustina et al. , 2024: 115) . Learning inquiry guided need critical and creative thinking so that ability think *HOTS* required For determine quality thinking somebody in grow attitude positive in develop skills . If skills think Already Correct so can do making the right decision in solve problem environment so that can obtained

good solution in protect environment . stages in develop *HOTS* among them identify objective learning , developing technique ask what you can hone student in increase *HOTS* , do practice , repeat what has been studied and given bait back . With think critical so thinker critical examine the 4 thought processes of others to knowing the thought process used Already right , come in reason or No (Kurniawati , et al . , 2024 : 56) .

Skills think *HOTS* (*Higher Order Thinking Skills*) should be No drip focus on the exam end learning student or on the exam but shown to in the learning process that (Latifa et al., 2025:45) . Then done , training making question *HOTS* and UN questions in general gradually must reduce questions that use Power reason low . With thus For increase ability think critical student can done with use some learning models that will be make it easier every student in understand the material to be given . One of the learning models that can be done is an inquiry model , where this model can help student in think in a way independent However still guided from procedural learning model inquiry So that student will directed in finish a the given problem , then student will directed For more think Again about How a problem That can completed and in No direct increase reasoning they (Haryanti , et al . , 2023: 97) .

Based on results observation July 8 , 2024 in Class IV SDN Masadian initial data found in the form of teacher's inability to guide student in explore phenomenon , fact , student Not yet focus on the problem to be investigated , students Not yet capable compile procedure Work For observation , related with Topic material , students Not yet guided in bring up questions , guide student For going to indicators that must be achieved by students , and guide student get data through steps scientific , this seen from inability student explore phenomenon / fact , students Not yet focus on the problem you want investigated , students Not yet capable compile procedure Work For observation and not yet capable do observation , students also have not capable analyzing data and evidence a observation , not yet capable build knowledge new and communicate knowledge in Science Lessons Care Environment , candidate researcher find Still Lots students who get mark low . Low value obtained when they No capable understand question test at level difficulty high , good That form question choice double and also description at Masadian State Elementary School.

Writer interested do study namely the learning model inquiry guided very useful for teachers and students with using an interesting learning model applied in learning in grade 4 of Masadian State Elementary School Because in its implementation use investigation moreover Previously , besides that student Not yet capable analyze problem environment , not yet capable evaluate problem environment as well as Not yet own ability analyze think critical . Development of learning models inquiry guided at school especially in class 4 of Masadian Elementary School Not yet applied in a way significant because the subject teacher at school the Still Lots use use method learning conventional like discussion group normal .

Based on results observation on so need do study related with learning models inquiry guided in increase ability think *HOTS* student Grade IV of Masadian State Elementary School . Skills *HOTS* that is ability think tall through information processing with think critical , evaluating , and resolving existing problems . Improvement skills think critical in absorb

information, think with creative in finish problem , able give reason with logical , constructive construct explanation with good , and can determine decision in complicated conditions is objective main from skills *HOTS* so that achievement skills This must emphasized in achievement curriculum in the 21st century . Implementation curriculum moment This demand skills *HOTS* as aspect completion of achievement learning (CP) so that implementation of the learning process must referring to the guidelines implementation curriculum for participants educate capable to finish achievement desired learning .

METHOD

Research methods used by researchers namely Qualitative descriptive research method . Descriptive method is a method in researching the status of a group of people, an object, a set of conditions, a system of thought or a class of events in the present (Sugiyono: 2019: 22). Mentioning that the purpose of this qualitative descriptive research is to obtain a picture, a description of a phenomenon being studied so that accurate conclusions can be drawn. This research is carried out directly with interaction in the place to be observed. Researchers make observations, search, record and also explore sources related to the research to be carried out in the school environment in order to obtain results and a research method can be needed whose truth the researcher can be held accountable for.

FINDING AND DISCUSSION

RESEARCH RESULT

Teacher's steps in implementing learning models inquiry guided in class IV of Masadian State Elementary School , learning must own a core competencies in skills to students in a learning process in class . Learning This must has two core competencies in skills , namely : skills student in think critical and skills student in think creative . Learning that contains skills think creative in learning caring science material environment . Function education is for humans can trained with believe self , innovative , creative , and capable see truth as well as can take decision themselves . Teachers must capable make the students as much as possible Possible get used to self in think scientific whatever learning , including its application in life everyday so that students No own thought that learning science That difficult.

Learning model innovative and interactive is very important applied in the learning process teach because of the learning model is factor Supporter quality and results Study students . Students will tend active involved in learning if the model or The methods used by teachers vary . Learning models innovative and interactive push student For participate active , not only as listener passive . Every student Certain own Variety style learning differently . With use various innovative learning models like discussions , projects , and technology as well as inquiry , this model can fulfil need all student in Study .

Planning is a design process the steps to be taken done For reach objective certain . In the context of education , planning learning effort systematically carried out by teachers to compile objectives , materials , methods , media, time and assessment learning before the learning process teach ongoing . Planning is the process of designing activity learn how

to teach in a way systematic For reach objective learning that has been set . Planning in study is stage a very important beginning For ensure fluency , accuracy , and success implementation research . At the stage this , researcher to design in a way systematic the steps to be taken taken in the research process , starting from determination problem until reporting results .

Integrating the guided inquiry learning model is applied in grade IV associated with the environmental care science material that is very suitable for the model. Natural and social sciences are a collection of disciplines that study various aspects of human behavior, nature, and the environment. The science learning process in elementary schools (SD) must prioritize direct learning experiences so that children can increase their capacity to understand their environment. Students must be accustomed to problem solving, independence, and intellectual struggle. However, in practice, science teachers in elementary schools still provide abstract information. Science education has the main goal of preparing Indonesian people to become good citizens in their own country. Strong science education, rather than concentrating only on informational components, aims to improve students' understanding of society and the environment around them. To be successful, strong science education must include a variety of attitudes into the learning process from the start.

In carrying out the teaching and learning process in the classroom, sometimes teachers miss this point. Teachers often give assignments that only focus on basic science competencies, not core competencies. Indeed, basic competencies can help students develop greater sensitivity and concern for the environment in which they live, but core competencies are also very important to develop. It is in the hands of teachers that students develop their characteristics and personalities. Therefore, a teacher is needed who is responsible and competent in carrying out his/her responsibilities as a professional educator. Thus, teachers must also be role models for instilling social values and developing a healthy self-image in students. So that they can be role models for children and instill in them a constant attitude of concern for the environment.

Rubbish organic that is originate from remainder creature life that can experience decay can also experience weathering , and waste organic can managed with good to stay friendly in environment . While rubbish Inorganic that is results disposal activity humans (plastic and glass) who need long time to explain it . In addition , participants education is also given education about the 3R concept (*Reduce, Reuse, Recycle*), namely *Reduce* is (Reduction) means as attitude everyday that will cause existence subtraction trash . *Reuse* is (Reuse) using return goods used without process it first . *Recycle* is (Recycling Repeat) processing rubbish become other more materials useful . Students must also know the definition of waste, how to manage several types of waste. Where waste is one of the important things that must be considered seriously. Waste is a residual material produced from several human activities as well as natural activity processes that do not yet have economic value.

Implementation of the Guided Inquiry Learning Model on the *HOTS thinking skills* of fourth grade students in the Environmental Care Science Lesson students that inquiry

learning emphasizes all teachers to implement learning activities that emphasize the process of understanding the subject matter to students. This inquiry learning model directs students to be able to find their own problems and then be able to solve the problems found scientifically. While the teacher only acts as a facilitator and motivator with the hope that creativity and student learning outcomes in the subject can increase, so that the teaching and learning process will be more creative, varied and alive. Guided inquiry learning is formulating problems, making hypotheses, designing experiments, conducting experiments, collecting data and analyzing data, and making conclusions.

The implementation of the Guided Inquiry Learning Model on *HOTS thinking skills* of Class IV students who are creative is adjusted to the conditions and atmosphere of the students so that the learning process can be successful and achieve its goals. The learning model can be used as a choice pattern, meaning that teachers may choose a learning model that is appropriate and efficient to achieve their educational goals. Therefore, the model used by a teacher in the learning process will greatly determine the results of the learning process. The teacher is a very important factor in efforts to increase learning creativity so that the teaching and learning process can be more meaningful and can achieve optimal results. Learning will be very effective and meaningful if in the learning process students become more active so that they are easy to understand the learning. It is attempted that in learning students become happy and in learning can train students' creativity, and not easily bored which is ultimately expected to improve student learning outcomes.

DISCUSSION

Ability think level tall is ability connecting , manipulating , and transforming knowledge as well as experience that has been owned For think in a way critical and creative in effort determine decision and solve problem in the situation new . Ability think level high , can make a individual capable interpret , analyze or manipulate the information obtained . Ability think level tall can known from ability participant educate at the level analysis , evaluation , and creation . In addition , the ability think level tall No only need ability remember only , will but in in practice , it also requires ability think critical and creative . If participant educate own ability think creative and critical , then participant educate will capable develop self in make decision , assessment and completion problem with appropriate (Kurniawan, Kuswanto , and Syar 2025) .

Student sued For think level height , ability think critical is ability think level height which is one of the component in issue intelligence 21st century , future challenges demand learning must more develop ability think critical . Ability think is one of the capital that must be owned by students as supplies in face development knowledge knowledge and technology today this , ability somebody For succeed in his life determined by ability think about it Alone (Lami'ah 2025) .

The ability of science and science subject teachers in implementing learning models inquiry guided in For understand material or material . The process of understanding occurs because of the ability to describe a material or material into material. Someone who is able to understand something, among others, can explain narratives into numbers, can interpret

something through statements with their own sentences or with a summary. inquiry learning model in which students work (not just sitting, listening and then writing) to find answers to problems raised by the teacher under the guidance of the teacher's initiative. The teacher's job is more like luring students to do something. The teacher comes to class with a problem for students to solve, then they are guided to find the best way to solve the problem (Luluk Kamilia 2025) .

Guided Inquiry Learning Model, teachers and students play an important role in asking questions, developing answers and structuring materials and cases (Fahira and Puspitawati 2025) . The use of inquiry models is essential in the transition from teaching methods to other teaching methods that are less, and more clearly structured for alternative solutions. Guided inquiry activities help students to develop their respective responsibilities, cognitive methods, report making, problem solving and understanding skills (Aeti, Sumarno, and Dwijayanti 2025) .

Based on the results of the interview Implementing the Guided Inquiry Learning Model in Grade IV, the advantages of the inquiry model are that students will understand basic concepts and ideas better, help in using memory and transfer to new learning process situations, encourage students to think initiatively and formulate their own hypotheses. The advantages of the inquiry learning model are that the inquiry model provides superior transfer value when compared to other methods. An important advantage of the inquiry model is that various different competencies and student knowledge develop when students are involved in the guided inquiry process.

first step of the inquiry model guided step most important . Inquiry enables teachers to obtain profit from curiosity experience students and their desires For look for explanation on confusing situation . This process started when student accept and identify A problem that needs explanation , the more interesting situation the problem is , the more stimulate student For find the explanation (Uzma 2025) . After confusing situation presented , students start develop hypothesis . A potential hypothesis written Then analyzed and discussed , assessments are also made to which hypothesis seems need considered . Development hypothesis this can also happen in group scale small that gives chance done big for student For involved (Asra & Junaidi, 2024) .

After hypothesis set , students collect data for test hypothesis Here the teacher makes important decision How far are the students? the expected find data for himself . Some educator to argue that must student given absolute accountability For to obtain all relevant data for himself themselves . They stated that improving data collection skills is one of the many benefits of this inquiry approach (Rosmawati, Wulandari, and Widowati 2025) .

Based on the Steps of the guided inquiry model implemented in grade IV After all the data has been collected and examined, the next stage is to distinguish between misleading explanations and suitable explanations. Based on the evidence they have obtained, students need to identify explanations that can be maintained. Here students must use thinking skills to analyze, synthesize, reject hypotheses or accept hypotheses that appear to be supported by strong evidence that they have observed. The overall inquiry process is

not considered complete if students have not interpreted and evaluated the information. This process involving student For interesting conclusion about project his inquiry .

Based on results interview in integrating learning models inquiry guided with caring science lessons environment student Class IV Election device learning become important For applied during the learning process in progress because of matter This influence level understanding and knowledge student in time term long . Inquiry guided is device learning that will involving student in build knowledge with apply procedure Study scientific based on stages inquiry that is investigation , search , define problem , formulate hypotheses , collecting and interpreting data, and drawing conclusions. conclusion . In order for it to happen improving the learning process inquiry guided , then required synergy with implementation learning use source Study environment For support activity learning by teachers with involving all over student in a way direct in activity learning (Rasyid 2025) .

Most of the a number of facts on the ground show there are still very limited teachers in utilise environment as source Study scientific for students . Teachers in process learning with utilise environment namely : a) limitations teacher's ability to organize learning in the field , b) there is difficulty in integrate the material contained in the book print with existing facts /information in the field . Then matter it also gives rise to impact for student that is low ability literacy scientific Because source learning that is not varied as well as lack of activity scientific during the learning process carried out by students during the learning process provided by the teacher (Nasution, Zuela , and Rafli 2020) .

Utilization source Study environment Can implemented with utilise potential local which is source riches area at a time potential For increase ability literacy scientific as well as experience Study in a way direct and real . Adjustment to teaching materials are also needed with review competencies that have been loaded in curriculum so that the assessment domain to attitude care environment appropriate target (Dhohirrobbi et al. 2024) . With thus learning with utilise source Study potential local will bring up character concern to environment . In line with Law No. 32 of 2009 concerning Protection and Management The environment then will customized with eye program needs lesson school For understanding and awareness guard sustainability environment (Khatimah et al. 2025) .

Implementation learning inquiry guided based on potential local in the learning process can used in increase attitude care environment on students Grade IV of Masadian State Elementary School . Experience learning that can felt in the learning process inquiry guided through activity exploration environment and integrate it to material learning give results significant to sensitivity student For guard environment . This is stimulate student act rational , scientific and precise with empower and preserve potential local . Influence others are also seen in the increase ability literacy scientific , ability act and think critical , problem solving on problems environment as well as collaboration active in group in exchange information and knowledge .

Activity inquiry guided in integration in class IV of Masadian State Elementary School concern the environment will also build cooperation and sense of responsibility answer in formulate solution based on knowledge that is built in a way structured during activity

learning . Improvement results Study will proven with ability student in give knowledge /information to do discussion , and communicating what to get through writing or oral . Based on a number of study study previously said , then study This aiming For know effectiveness implementation learning inquiry guided based on potential local so that the output or benefit from study This that is can increase results Study student to attitude care environment .

Based on results interview regarding learning models inquiry guided to ability thinking Hots students Class IV uses the inquiry model means a series activity learning that involves in a way maximum all over ability student For search and investigate in a way systematic , critical , logical , analytical , so that they can formulate Alone his discovery with full believe self . Inquiry is a common process carried out by humans to seek or understand information. In general, inquiry always involves thinking activities and scientific skills to build and develop knowledge. This inquiry model is very suitable to be applied in the classroom to train students to become inventors and not easily believe in things that have not been proven true. Investigation activities are also always involved in this inquiry process. Through the inquiry process, students learn to work systematically and always based on scientific methods to prove the truth of a fact (Kusuma and Luthfianto 2025) .

The guided inquiry model is a powerful way to teach content knowledge to fourth grade students. Students learn to ask questions and use evidence to answer them. Students learn to conduct investigations and collect evidence from various sources, describe data, communicate data, and defend their conclusions. This inquiry learning model provides real and active learning experiences to students. The main targets of inquiry learning activities are (1) maximum student involvement in the learning process, (2) logical and systematic direction of activities to learning objectives, and (3) developing an attitude of self-confidence in students about what is found in the inquiry process. So the inquiry learning model demands student activeness in learning. Students are no longer just waiting for information, but students who actively build their knowledge (Rofi'ah, 2024) .

critical thinking skills are supported by guided inquiry activities implemented in grade IV of SDN Masadian which include asking questions related to natural phenomena or materials, formulating problems, formulating hypotheses, conducting simple experiments to test hypotheses, analyzing data and drawing conclusions. Inquiry model learning is expected to have an impact on students to dare to think for themselves, design and gain new experiences. The inquiry learning model or inquiry learning model is a series of lesson activities that emphasize students analyzing and finding their own answers to the problems in question. More proactive in relation to the preparation of policy propositions, namely "what to do" (action-oriented). This learning can make students become skilled learners and can control their cognitive well. The inquiry model aims to provide a way for students to build intellectual skills related to the process of thinking about meaning (Rusmiyati, Artayasa, and Raksun 2024) .

HOTS -based learning involves a higher cognitive level of thinking compared to cognitive problem solving methods, taxonomy, assessment and teaching. *HOTS* is able to form critical thinking skills, creativity, problem solving, argumentation, and decision-making

skills (Papunggo et al., 2024) . Therefore, *HOTS-based learning* has the potential to improve the quality of learning in schools. *HOTS-based learning* has been consistently developed in Indonesia, but is less effective because it uses a learning model that is less appropriate to students' needs (Meriska and Sudiby 2025) . In addition, teachers tend to apply the lecture method, and do not provide pretests to students first, and do not involve students in application-based learning, so that students do not have life skills that can be applied in solving everyday life problems. On the other hand, the teaching materials used tend to be less effective, so that students are less able to understand the material well.

CONCLUSION

Teacher steps in implementing the Guided Inquiry Learning Model in grade IV of Masadian Public Elementary School, The learning steps carried out by the teacher in class are conducting discussions given by the Science subject teacher, the form of discussion uses the Guided Inquiry Learning Model with a learning model that invites students to find their own knowledge through investigation, observation, or experimentation, with guidance or direction from the teacher.

Integrating the Guided Inquiry Learning Model with Environmental Care Science Lessons in Grade IV of Masadian Public Elementary School, Based on the results of the questionnaire data above, students' environmental care greatly influences learning towards students' critical thinking and is associated with the guided inquiry learning model in grade IV. Protecting and maintaining environmental sustainability from damage is one of the efforts of an attitude of caring for the environment.

Implementation of the Guided Inquiry Learning Model on HOTS thinking skills of fourth grade students in the Environmental Care Science Lesson in fourth grade of Masadian Elementary School, Based on the results of interviews with the science teacher, the principal, and 7 fourth grade students, it is important to study students' conceptions of the environment with the aim of providing a basis for improving the quality of teaching and learning.

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