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The Implementation of the Inquiry Method in Improving Student Learning Outcomes in the Social Science Subject in Elementary Schools: Classroom Action Research

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ABSTRAK

Penelitian ini bertujuan untuk meningkatkan hasil belajar siswa pada mata pelajaran IPS dengan menggunakan metode inkuiri di sekolah dasar. Dalam penelitian ini peneliti menggunakan Penelitian Tindakan Kelas (PTK) yang terdiri dari 3 siklus. Selanjutnya, setiap siklus memiliki empat tahapan yaitu perencanaan, pelaksanaan, observasi, dan refleksi. Subjek penelitian ini adalah siswa kelas IV yang berjumlah 27 orang yang terdiri dari 14 siswa laki-laki dan 13 siswa perempuan. Alat yang digunakan untuk mengumpulkan data adalah tes hasil belajar, perangkat dokumentasi, lembar observasi, dan catatan lapangan. Hasil penelitian ini menunjukkan sebagai berikut. Pada pertemuan I siklus I, hanya 5 siswa (18%) yang mendapat nilai di atas KKM. Pada pertemuan ke-2 terjadi peningkatan menjadi 7 siswa (25%). Karena tidak memenuhi kriteria ketuntasan, maka peneliti memutuskan untuk melanjutkan ke siklus II. Pada pertemuan I siklus ini, 9 siswa (33%) mendapat nilai di atas KKM. Selanjutnya pada pertemuan ke-2 terjadi peningkatan menjadi 10 siswa (37%). Hasil tersebut dinilai masih kurang. Oleh karena itu peneliti melanjutkan ke siklus III. Pada pertemuan I siklus ini, 18 siswa (66%) mendapat nilai di atas KKM. Apalagi pada pertemuan ke-2 meningkat menjadi 23 siswa (85%). Pada siklus III diperoleh hasil belajar yang sangat baik dan telah mencapai indikator keberhasilan yang telah ditetapkan sehingga ketuntasan belajar telah tercapai.

ABSTRACT

This tudy aims to improve student learning outcomes in the social science subject using the inquiry method in elementary schools. Because student learning outcomes for social studies subjects are still relatively low and can be said to have not reached the minimum score or have not succeeded. Therefore, teachers are required to make changes. In this study, the researchers employed Classroom Action Research (CAR) which consisted of 3 cycles. Furthermore, each cycle had four stages: planning, implementation, observation, and reflection. The subjects of this study were fourthgrade students, totaling 27 people consisting of 14 male students and 13 female students. The tools used to collect data were learning outcome tests, documentation devices, observation sheets, and field notes. The results of this study showed as follows. At the 1st meeting of cycle I, only 5 students (18%) got a score above the Minimum Completeness Criteria. At the 2nd meeting, there was an increase to 7 students (25%). Because it did not meet the criteria for completeness, the researchers then decided to continue to cycle II. At the 1st meeting of this cycle, 9 students (33%) got a score above the Minimum Completeness Criteria. Furthermore, at the 2nd meeting, there was an increase to 10 students (37%). These results were still considered insufficient. Therefore, the researchers continued to cycle III. At the 1st meeting of this cycle, 18 students (66%) got a score above the Minimum Completeness Criteria. Moreover, at the 2nd meeting, it increased to 23 students (85%). In cycle III, the obtained learning outcomes were very good and have reached indicators of success that have been set so that learning completeness has been achieved As a result of this research, learning with the inquiry learning method is a method that can improve Student Learning Outcomes. The application of the inquiry learning method makes the learning process more enjoyable because students can better understand the material clearly. In addition, it can also help students to be more confident and active in developing their potential to show their abilities.

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1. INTRODUCTION

Elementary school is the lowest level of education in Indonesia. One of the subjects taught at this level is social science subject (Indonesia: Ilmu Pengetahuan Social (IPS)). This subject focuses on a set of events, facts, concepts, and generalizations that may provide a great effect on students. The objectives of the social science subject at elementary schools are as follows introducing the concept of social life, instilling basic logical and critical thinking skills, curiosity, problem-solving skills, and social life skills, instilling a commitment and awareness of social and human values, and improving students' ability to communicate, cooperate, and compete in the society at local, national, and global levels (Muthohar, 2021; Syahrial et al., 2019). Character education is very beneficial for student development (Camellia et al., 2021). The social science subject develops the potential of students to be more sensitive to social problems that occur in society and fosters initiative, creativity, intellectual, and personal character. This subject is based on the idea that humans are social creatures that cannot be separated from human life (Retnasari et al., 2022). In the curriculum for the social science subject, the provided teaching materials must be integrated with daily problems that cover relationships between humans, between humans and their surroundings, and between institutions, groups, and nations (Fatmawati et al., 2019). For this reason, the social science subject is very much needed as a forum to advance the development of social science, in which this subject can provide conceptual knowledge for students for practical purposes in a new life that is in line with the times (Firman et al., 2019). Thus, the main purpose of the social science subject in elementary schools is to equip students with useful social knowledge, social skills, and intellectuals in fostering social awareness and concern as human resources responsible for realizing national and international goals.

The learning outcomes obtained by students then become indicators to determine their ability, mastery, and knowledge. Learning outcomes are everything that belongs to students as a result of the learning activities. Two factors may influence learning outcomes: (a) internal factors covering physical conditions (i.e., body health) and psychological conditions (e.g., intellectual, emotional, and social conditions which include the ability to socialize with the surroundings), and (b) external factors (e.g., place of study, climate, environmental atmosphere, and learning culture of the community where they live). Learning outcomes are the effect of an action in the learning process. It includes changes in students regarding cognitive, affective, and psychomotor aspects (Budiastra et al., 2019). In addition, learning outcomes are defined as student success in mastering the material, in which students get satisfactory or good grades or scores after the evaluation is carried out. In this case, evaluation is a way to get information on how effectively a program meets student needs (Haryati et al., 2021). These learning outcomes then become evaluation materials for teachers regarding how they may maximize their teaching process so that learning objectives can be achieved. Because teachers are very influential on student learning outcomes, a teacher must have special skills that can lead students to focus on the learning process so that students can master the material provided and get satisfactory or good grades, thereby creating a meaningful learning experience for them (Ahmadi et al., 2018).

Student learning outcomes for the social science subject are still considered low and can be said to have not reached the minimum point or have not been successful (Zubaidah et al., 2021). Therefore, teachers are required to make changes. These changes can be transformations in classroom conditions, selection of appropriate learning hours, appropriate teaching methods, the employed teaching-andlearning strategies, and interesting learning media so that students may easily understand the subject matter presented (Bednarz et al., 2006; Chandra et al., 2020). The purpose of the social science subject is to seek and find interactions between individuals and their surroundings. In other words, this subject does not only emphasize the accumulation of knowledge of the subject matter but also underlines the ability of students to acquire knowledge by themselves (self-regulated). The process of learning to think means that learning is not transferring knowledge from teachers to their students but activities that allow students to build their knowledge in their respective way (Wanzek et al., 2014). The presence of problems in the social science subject requires teachers to improve student learning outcomes by applying the social inquiry method. It is a modern method that is very effective to be applied in the classroom. During the learning process, some classes are silent or passive. However, this will not happen if the teachers employ the social inquiry method because the learning process using this method places students more in learning and discovering by themselves (Anjar et al., 2020). The concept of student development using this method aims to make students creative in solving problems that occur in their surroundings. In the social inquiry method, students act as learning subjects so that the nuances of learning direct students to think independently. Meanwhile, the role of the teacher in this method is to guide and facilitate students in the learning process (Nurhayati et al., 2020). To overcome these problems, the researchers conducted a study to improve the quality of the learning process and increase student learning outcomes through the inquiry method by taking into account some basic problems that occur and paying attention to the explanations of experts regarding the inquiry method. Therefore, this study entitled "The Implementation of the Inquiry Method in Improving Student Learning Outcomes in the Social Science Subject in Elementary Schools." The inquiry method was chosen to increase students' activeness in the learning process, considering that students' learning styles vary (Fatmawati et al., 2019; Yulianti et al., 2016). This method can provide an interesting learning experience for them and also make them easier to understand the material presented by the teachers while maintaining a pleasant learning atmosphere and creativity in solving problems (Chandra et al., 2020; Sari et al., 2020; Verawati et al., 2019).

The use of the inquiry method in the learning process of the social science subject can lead students to think and express their ideas to find answers to the given problems (Firman et al., 2019; Purwanita et al., 2019; Ruli et al., 2019). In addition, this method can foster students' attitudes and social skills that refer to leadership in making decisions regarding the problems they may face (Retnasari et al., 2022). The inquiry method in the social science subject can be implemented by involving students in thinking and playing an active role in the learning process so that learning becomes more interesting and meaningful for them. To achieve educational goals as expected, it is necessary to prepare appropriate strategies, techniques, learning media, and methods (Mao & Chang, 1998; Syahrial et al., 2019). In the application of this social inquiry method, the teacher makes questions that may lead students to think critically.

Critical thinking in this case can make students more active so that learning objectives can be achieved. Along with the development of community life and the curriculum forcing reforms in education, this method – which emphasizes the activeness of students in the social science subject – may create concrete experiences and provides space for students to develop their skills, solve problems, and make decisions, thus enabling them to become students who have a high interest in learning (Fatmawati et al., 2019). In the application of the inquiry method in the social science subject in elementary schools, students' critical thinking skills are fostered in the following ways introducing students to concepts related to social lives and surrounding environments, instilling basic logical and critical thinking skills, curiosity, problem-solving skills, and social life skills, instilling a commitment and awareness of social and human values, and improving students' ability to communicate, cooperate, and compete in a pluralistic society at local, national, and global levels (Permatasari et al., 2019). This study aims to improve student learning outcomes in the social science subject using the inquiry method in elementary schools.

2. METHOD

In this study, the researchers applied the mixed method (i.e., qualitative and quantitative) with a classroom action approach using a spiral model from Kemmis and Taggart consisting of several cycles of action in the learning process based on the reflections on the results of the actions in the previous cycle (Zuraidah et al., 2020). Each cycle consisted of four important elements: planning, implementation, observation, and reflection (Sumarni et al., 2016). Data collection techniques were the most important points in this study because the main purpose of research is to obtain the desired data (Kunlasomboon et al., 2015). Without the appropriate data collection techniques, a study will not get data that meets the predetermined data standards. For this reason, the employed data collection techniques in this study were as follows. The first was the tests aiming at collecting information regarding student understanding of the social science subject with the implementation of the inquiry method. The provided pretest consisted of 20 multiple-choice questions. Then, in cycle II, the researchers administered 20 multiple-choice questions. Finally, in cycle III, there were 5 essay questions. The second was documentation to obtain data about the activities that occurred when the learning process took place. The results of the documentation were photos of activities during the learning process (Ghani et al., 2022). The third was the observation by monitoring students' ongoing activities (Khasinah, 2013). In this study, there were two types of observations, namely observing student activities and observing teacher activities in the application of the inquiry method (Vogelzang & Admiraal, 2017). During the observation, the researchers used student activity observation sheets (containing student activities in the learning process) and teacher activity observation sheets (used to see the teacher's ability to apply the inquiry method) (Fatayan, Hanafi, Sari, & Ghani, 2019).

Refleksi SIKLUS I Perencanaan Perencanaan Perencanaan Perencanaan Pengamatan Pengamatan Pengamatan Pengamatan Pengamatan Pengamatan Pengamatan Pengamatan

Figure 1. The Flow of Classroom Action Research

3. RESULT AND DISCUSSION

Result

The results of cycle I indicated that there was an increase in learning outcomes and student activities. In the first meeting of this cycle, the number of students who got a score above the Minimum Completeness Criteria in the social science subject with the given topic of "The Wealth of Energy Sources in Indonesia" was 5 students (18%). Furthermore, at the second meeting, 7 students (25%) got a score above the Minimum Completeness Criteria. Even though there was an increase in learning outcomes, the researchers continued this study to cycle II because the percentage of learning outcomes at the second meeting in cycle I had not yet reached the indicator of success. The results of cycle II indicated that there was an increase in learning outcomes and student activities. In the first meeting of this cycle, the number of students who got a score above the Minimum Completeness Criteria in the social science subject with the given topic of "Types of Natural Resources" was 9 students (33%). At the second meeting, 10 students (37%) got a score above the Minimum Completeness Criteria. However, the researchers continued to cycle III because the percentage of learning outcomes at the second meeting in this cycle had not yet reached the indicator of success.

The results of cycle III presented that there was an increase in learning outcomes and student activities. In the first meeting of this cycle, the number of students who got a score above the Minimum Completeness Criteria in the social science subject with the given topic of "Non-Renewable Natural Resources and Their Benefits" was 18 students (66%). At the second meeting, 23 students (85%) got a score above the Minimum Completeness Criteria. Because the percentage of student learning outcomes at the second meeting of cycle III had reached the predetermined success indicators, the researchers ended the research cycle. In the implementation of the learning process, most teachers had run what have been set on lesson plans. At the first and second meetings of cycle III, all aspects had been carried out well. Therefore, in cycle III, the completeness of the learning process with the inquiry method reached 92.30%.

Table 1. The Percentage of the Completeness of Teacher Activities in Cycles I, II, and III

Number	of	The Percentage of the Completeness of Teacher Activities		
aspects observed		Cycle I	Cycle II	Cycle III
13		53.84%	69.23%	92.30%

From the table above, we can see an increase in the completeness of the learning process carried out by teachers. In cycle I, it is 53.84%. It then increases to 69.23% in cycle II. Furthermore, it increases again to 92.30% in cycle III, indicating that all stages in the inquiry learning method have been carried out in this cycle. For more details, the following is a diagram presenting the completeness of teacher activities in cycles I, II, and III.

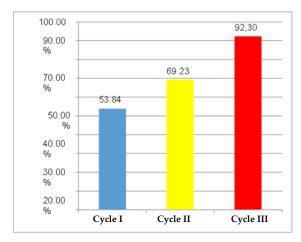


Figure 2. The Comparison of the Completeness of Teacher Activities in Cycles I, II, and III

The learning process began with prayer and the teacher prepared students to follow the learning process. After that, the teacher gave an apperception in the form of questions and songs to explore students' prior knowledge. The goal is that students can understand the given learning material and know what benefits they will get after studying the material.

Table 2. The Comparison of the Completeness of Student Activities

Total	Num	The Percentage of the Completeness of Students			
students	ber of	Activities			
	Indicators	Cycle I	Cycle II	Cycle III	
27	11	54.54%	63.63%	81.81%	

From the table above, we can see the percentage of the completeness of student activities in the learning process using the inquiry method. In cycle I, it is 54.54%. It then increases to 63.63% in cycle II. It means that there is a significant improvement from cycle I to cycle II. It then becomes better by the completeness reaching 81.81% in cycle III. With this increase, it can be concluded that student activities during the implementation of the inquiry method have improved from cycle I to cycle II and from cycle II to cycle III. For more details, the increase in student activities in the learning process with the inquiry method can be seen in the following diagram.

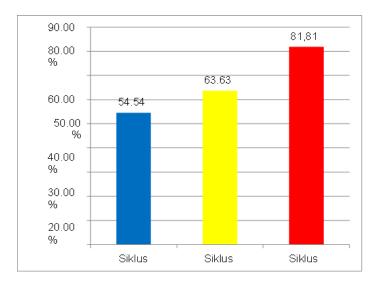


Figure 3. The Comparison of the Completeness of Student Activities

This condition proves that the implementation of the learning process using the inquiry method can improve student learning outcomes. The use of the inquiry method places students to understand deeply the material being taught through the search process that students do. The knowledge gained by students will be stronger and not only in the form of memorization. This is facilitated by the provision of

questions that are not only at the level of memorization so that students' abilities increase as evidenced by an increase in each indicator. During the learning process with the inquiry method, students are invited to actively find answers through the keywords given by the teacher. At the beginning of the learning process, the teacher always asks questions related to the learning material. The teacher gives questions accompanied by several possible answers so that students can think which one is correct. With the questions given by the teacher, students do not get justification from what the teacher says, but the correct answer is from what they get from their way of thinking.

Discussion

Based on the results of this study, we can see what improvements are needed to improve student learning outcomes based on the outcomes of the evaluation of cycle I. In the introduction of this paper, several problems arise in class IV of elementary schools regarding the social science subject, namely as follows. The learning method used by the teacher is still teacher-centered so that students' activities are only listening and taking notes. The students' thinking ability is low. When the teacher asks questions, the students are less able to give reasons for the answers given. This is because the material that students know is only based on memorization. Students' curiosity about science is very low. Students make the teacher the only source of learning so that they do not try to find other learning resources and are fixated on the information provided by the teacher. The questions given by the teacher cannot train students' thinking skills because the level of the questions is at the stages of remembering and understanding. For these reasons, the researchers apply the inquiry learning method so that students can understand the social science subject in depth and students' cognitive abilities can develop through the search process. Based on the results of observations, students' abilities improved at the end of this study. This study only refers to five characteristics that are adapted to the ability of elementary school students, namely using facts correctly and honestly, organizing thoughts and expressing them clearly, logically, or reasonably, distinguishing conclusions based on valid logic and those based on invalid logic, denying an irrelevant argument and presenting a relevant argument, and questioning a point of view and its implications.

The use of the inquiry method in the social science subject in elementary schools is proven effective to improve student learning outcomes. This is evidenced by the increase in the percentage of students having learning outcomes above the Minimum Completeness Criteria (Indonesian: *Kriteria Ketuntasan Minimal* (KKM)) in each meeting from cycle I to cycle III. As described in the discussion above, after being given a treatment using the inquiry method, student learning outcomes increased as evidenced by the learning outcomes in the social science subject. In addition to increasing learning outcomes, students' self-confidence also tends to be better because, during the learning process using the inquiry method, students are asked to find answers by themselves to the questions given from the learning materials that have been presented. In this activity, students are required to be responsible and defend what they believe based on what they know. Furthermore, other students may respond to the answer, if they have different solutions. In addition, student activities also tend to increase because they are actively involved in each stage of the learning process. From the discussion above, it can be concluded that the implementation of the inquiry method can improve student learning outcomes in the social science subject in elementary schools.

Therefore, the suggestion put forward by the researchers is that teachers are expected to use the inquiry method in the teaching and learning process because this method requires students to be more active to find and build their knowledge. In addition, the inquiry method may educate students to connect the acquired knowledge with the real world. Thus, the learning process can run well and students may obtain learning outcomes in line with what has been expected by the teachers. The inquiry method is not limited to one lesson but can have a wider scope because this method is a series of learning processes that aim to activate students and improve the quality of students learning process. Based on the results of this study, the teachers in applying the inquiry method are expected to familiarize students with learning from the surroundings so that students' critical thinking skills may develop. In addition, teachers in doing apperception at the beginning of the learning process with the inquiry method are expected to maximize things that are closely related to students so that they may better understand the material to be taught. Moreover, teachers are expected to provide questions that can train students' critical thinking skills. In applying the inquiry method, teachers need to pay attention to class management, such as students' sitting positions, so that the learning process can run in a conducive way. Furthermore, teachers in applying the inquiry method should be more skilled in the ability to ask questions so that they can create more pleasant situations and provoke students to think and argue.

4. CONCLUSION

The results of this study showed that the learning process with the inquiry method can improve student learning outcomes. The inquiry method must be carried out in line with the learning material techniques. The implementation of the inquiry method makes the learning process more enjoyable because students can understand the material more clearly. In addition, it can also help students to be more confident and active in developing their potential to show their abilities. The implementation of the inquiry method can improve student learning outcomes in the social science subject. The results of cycle I indeed still indicated student learning outcomes that needed to be improved. Then, after improvements were made for cycle II, the achievement of student learning outcomes reached a good category. After being continued to cycle III, the category achieved was very good. The situation met the criteria for the success set in this study. Therefore, teachers and researchers felt no need to continue to the next cycle. The inquiry method can improve the quality of the learning process in the social science subject by asking questions, formulating problems, formulating simple hypotheses, analyzing data, and concluding. In this study, the researchers made improvements in four stages of the inquiry model, namely the stage of asking questions related to the material, the stage of formulating a hypothesis, the stage of analyzing the data, and the stage of concluding. At the stage of asking questions related to the material given, the improvement made was that the teachers were asked to foster a more responsive atmosphere and improve their questioning skills in doing apperception so that students were provoked to think and ask.

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