

---

## EFFORTS TO IMPROVE STUDENTS LEARNING OUTCOMES IN CLASS IV SCIENCE SUBJECT THROUGH THE INQUIRY LEARNING MODEL

Nurul alfiya<sup>1\*</sup>, Isna Ida Mardiyana<sup>2</sup>, Astien Dena Koesmini<sup>3</sup>, Rukmiati<sup>4</sup>

<sup>1,2</sup> Elementary School Teacher Education, Faculty of education, Universitas Trunojoyo Madura, East Java, Indonesia

correspondence e-mail: [190611100011@student.trunojoyo.ac.id](mailto:190611100011@student.trunojoyo.ac.id),  
[isnaida.mardiyana@trunojoyo.ac.id](mailto:isnaida.mardiyana@trunojoyo.ac.id), [astienkoesmini86@guru.sd.belajar.id](mailto:astienkoesmini86@guru.sd.belajar.id),  
[rukmiyatispd@gmail.com](mailto:rukmiyatispd@gmail.com)

---

### ABSTRACT

*The use of conventional learning models in science learning continuously makes students often feel bored so that in the end it has an impact on science learning outcomes that are not good. The purpose of this study is to improve student learning outcomes in science learning through the inquiry learning model. The inquiry model is very suitable for problems that occur in the field because this model is very compatible with the nature and characteristics of science learning. This research is a class action research with the subjects involved are fourth grade students of Mlajah 2 Bangkalan Elementary School. The results obtained were an increase in learning outcomes from each cycle, which in the implementation of the first cycle of learning outcomes of students who were able to achieve KKM as many as 18 students who could percentage 42% and who did not complete as many as 25 students the percentage was 48% with an average value, ie 59.62. Whereas for cycle II student learning outcomes increased by obtaining an average score of 79 for students who completed as many as 35 percentages 81% and those who did not complete as many as 8 students percentage 19%. This shows that learning with this inquiry model can improve science learning outcomes for fourth graders of Mlajah 2 Bangkalan Elementary School.*

---

### ARTICLE INFO

#### Article History:

Received	14
December 2022	
Revised	16
December 2022	
Accepted	28
December 2022	
Available online	04
January 2023	

#### Keywords:

*Inquiry Model,  
Science Subject,  
Learning Outcomes*



© 2022 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution ShareAlike (CC BY SA) license (<https://creativecommons.org/licenses/by-sa/4.0/>).

## **A. Introduction**

The inquiry model is a model that is usually applied to science lessons. This model is very suitable and efficient with materials that carry out experiments or practicum. The inquiry model is a process of learning activities that maximally involves students' abilities to investigate and search or conduct experiments logically, critically, and systematically so that they can formulate their findings by thinking for themselves (Damayanti, 2014: 2). In this case the inquiry model can give a positive impression for the growth of elementary school students' thinking by conducting experiments and finding answers to a problem.

Natural Science Lessons or better known as Natural Sciences is a subject that studies nature and its contents. Science learning has a very important role in the education process in the world of technology. Here also expect the learning process to be more interesting for students to learn about the nature around us. With science learning students can find out what is happening in the surrounding environment.

The fact that occurs in the field there are still some students who still do not master the lesson well. As a result, the scores for subjects, especially science, are still low because students have difficulty understanding the material presented by the teacher. The teacher only does the lecture method so students get bored and bored quickly. This affects the value of student learning outcomes which experience a decrease in learning outcomes. Therefore, an alternative to this problem is by applying this inquiry learning model, students are more enthusiastic and of course students will experience an increase in learning outcomes, especially in science lessons. The inquiry model is very suitable for problems that occur in the field because this model covers all aspects and can increase maximum student learning outcomes.

This study aims to provide knowledge to teachers or prospective teachers to get used to or use appropriate learning models so that students are more enthusiastic and active during the learning process. This idea is very necessary to improve student learning outcomes in order to obtain maximum grades. Therefore, based on the background above, the author made the title "Efforts to Improve Student Learning Outcomes in Class IV Science Subject Through the Inquiry Learning Model"

## **B. Method**

This type of research is classroom action research (CAR). CAR is a reflective research to improve and improve student learning outcomes through certain actions (Suharsimi, 2008). According to Wina Sanjaya (2016: 12) PTK is an activity designed systematically and empirically, a scientific activity to solve a problem in the learning process. The purpose of carrying out this CAR is to fix problems found in the field and improve learning outcomes to quality. This research design uses two cycles. In the first cycle, the researchers conducted observations and interviews. Then for the second cycle is done to improve from the previous cycle. This CAR uses a class action research design, namely the Kemmis and MC Taggarat models (Yuli, 2015:95)

## **C. Result and Discussion**

This research was conducted on fourth grade students at Mlajah 2 Elementary School who became the object of the research which consisted of 2 cycles, namely cycle I and cycle II. So that the results obtained show an increase in changes in learning outcomes using the inquiry learning model in science lessons. Science lessons are one of the subjects that are very often related to the surrounding environment. This science lesson is one of the subjects that requires students to conduct experiments or practicum. Science learning has a very important role in the education process in the world of technology. Here also expect the learning process to be more interesting for students to learn about the nature around us. With science learning students can find out what is happening in the surrounding environment

Basically science learning requires a process of experimentation, analysis, discovery, and so on. Therefore, the inquiry learning model itself is expected to provide a new atmosphere and experience for elementary school students. With this, the inquiry model will provide new experiences and when learning will be centered on students so that the learning process will be more active (Damayati, in Jundu et al, 104: 2020).

With this inquiry model, of course, it will improve student learning outcomes because this model has an influence on the learning process. Students who prefer to remember when doing experiments or practicing them, the inquiry model will be successful in improving student learning outcomes. Basically science learning requires a process of experimentation, analysis, discovery, and so on. With this,

---

the inquiry model will provide new experiences and when learning will be centered on students so that the learning process will be more active (Damayati, in Jundu et al, 104: 2020).

In the research conducted on fourth grade students at Mlajah 2 Elementary School, data on the implementation of the process per cycle were obtained. The data can be seen in the recapitulation table below:

**Table 1.** Recapitulation of Student Learning Outcomes Cycle I and Cycle II

No	Stage	Learning Outcomes			
		Average	Category	Total	Percentage
1.	Cycle I	59,62	Complete	18	42%
			Not Complete	25	48%
2.	Cycle II	79	Complete	35	81%
			Not Complete	8	19%

Table 1 above can prove that there was an increase in student learning outcomes after conducting research in cycle I and cycle II. Improved learning outcomes after researchers carried out inquiry learning models in science lessons. Therefore, these students are able to achieve the KKM criteria that have been set. Based on student learning outcomes data obtained in cycle I, there were 25 (48%) students who did not complete, while 18 (42%) completed, with an average value of 59.62. it can be seen that students still cannot reach the KKM criteria. Therefore, researchers made improvements and improvements in cycle II at different times in the same material.

In cycle II, based on the data obtained, it showed that there were 35 students (81%) who were complete in learning while there were 8 (19%) students who did not complete. The average value obtained is 79%. Thus, the learning results prove that in cycle I and cycle II there was an increase of 79%.

#### **D. Conclusion**

Based on the results of research that has been done on fourth grade students at Mlajah 2 Elementary School, it can be concluded that using the inquiry learning model can improve student learning outcomes and can provide enthusiasm for student learning. This can be seen from the results of the class action research process which starts from cycle I and cycle II. In the implementation of the first cycle, the learning outcomes of students who were able to achieve the KKM were 18 students who were able to present 42% and those who did not complete were 25 students, the percentage was 48% with an average score of 59.62. Whereas for cycle II student learning outcomes increased by obtaining an average score of

79 for students who completed as many as 35 percentages 81% and those who did not complete as many as 8 students percentage 19%. From these results it can be proven that students' KKM scores are close to perfect scores or increasing, starting from cycle I and cycle II which can achieve the specified KKM score criteria.

## References

- Ardiawan, I. K. N. (2020, June). Implementasi pendekatan Inkuiri Terbimbing dalam upaya meningkatkan hasil belajar IPA pada siswa Sekolah Dasar. *In Prosiding Seminar Nasional Dharma Acarya* (Vol. 1, No. 2).
- Jundu, R., Tuwa, P. H., & Seliman, R. (2020). Hasil belajar IPA Siswa SD di Daerah Tertinggal dengan penerapan model pembelajaran inkuiri terbimbing. *Scholaria: Jurnal Pendidikan Dan Kebudayaan*, 10(2), 103-111.
- Meo, L., Weu, G., & Nono, Y. (2021). Penerapan Model Pembelajaran Inkuiri Dalam Meningkatkan Hasil Belajar IPA Pada Siswa Sekolah Dasar. *Jurnal Ilmiah Pendidikan Citra Bakti*, 8(1), 38-52.
- Parnawi, A. (2020). *Penelitian tindakan kelas (classroom action research)*. Sleman: Deepublish.
- Suwandi, Y. (2015). Peningkatan Hasil Belajar IPA Tentang Ekosistem Melalui Metode Problem Based Learning Pada Siswa Kelas V Sekolah Dasar Kabupaten Tana Tidung. *Jurnal Pendidikan Dasar*, 6(1), 93-102.



© 2022 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution ShareAlike (CC BY SA) license (<https://creativecommons.org/licenses/by-sa/4.0/>).