

Inquiry Learning Model to Improve Student Learning Outcomes

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Abstract: This study aims to find out how to improve student learning outcomes through inquiry learning models in PAUD children. This research is a classroom action research (CAR), with the subjects in this study were kindergarten children totaling 30 people. Sources of data obtained from the results of tests, observations and questionnaires. Based on the results of research that has been done, the data obtained in the first cycle of teacher activity by 82% and 85% student activity. Whereas teacher activity in cycle II was 92% and student activity was 95%. And children's learning outcomes in the first cycle of 67% and in the second cycle increased by 90%. The response of children to learning that has been given by the teacher is also quite good, where kindergarten children who expressed pleasure in participating in this learning were 88% and those who stated they were not happy to take part in this learning were 12%. Thus, it can be concluded that the application of the Inquiry learning model can improve the learning outcomes of kindergarten children on vocabulary development materials, activities of teachers and kindergarten children have been going well and get good responses from early childhood students.

Keywords: inquiry learning models, learning activities, learning outcomes

I. INTRODUCTION

Early childhood education is not only seen in terms of academic abilities but also in terms of overall development aspects. Education in children does not depend on an educator, but also through strategies, methods, materials, media that educators will provide to children, all of which must be interesting and fun. Therefore, educators play an important role in providing a stimulus in the form of guidance to develop children's abilities. Children learn to do an exploration or experiment through the environment so that children learn to understand something that children do not know and answer all the children's curiosity themselves. As stated by Piaget (in Busthomi, 2012) follows.

Children learn through interaction with their environment. Children should be able to do their own experiments and research. The teacher can guide the children by providing the right materials, but the most important thing is that the child can understand something, he must develop the understanding itself, and he must find it himself.

Teachers need the ability to create a pleasant and conducive atmosphere so that children are stimulated to want to develop more imagination in themselves. Every child has the potential to be creative, so that through a play that is fun can build the quality of the child according to the age of the child, the way of development is also according to the age of the child so that in development in different ways but the same goals and objectives, together develop abilities in the child.

Based on the results of observations as for the factors that cause a lack of understanding of children to vocabulary through the development and introduction of vowels, namely the learning approach set by the teacher is not appropriate to the material being taught, the lack of response and attention to the material being taught and the child is not directly involved in the learning process. This is due to the learning process and the teacher's activities in teaching using the lecture method, that is, the

teacher actively teaches such as giving material, memorizing and giving exercises, so that the teacher is more active than the child, while the children's activities only listen and take notes, Because the implementation of such learning causes an unsatisfactory response from the child, it can be seen from the child's lack of interest in the learning presented by the teacher so that the child is not motivated to discover the knowledge he is learning.

This fact raises the learning outcomes shown through unsatisfactory child development where (40%) of the number of children in the class can understand and master the learning material learned, while the other 60% is incomplete on the material recognition of vowels, this is in accordance with the Minimum Mastery Criteria (KKM) determined by the school that children are said to be complete in learning if they get a value ≥ 65 .

The problem faced by kindergarten children is the activity shown by the teacher in the implementation of learning is still low, where the teacher does not actively involve the child in the implementation of learning, the activities carried out by the child are also very low which affects the response shown by the child in the class during the learning process so as to cause low level of completeness of children's learning outcomes. The low response of students is because in teaching and learning activities teachers still use conventional methods so that students get bored easily when following the teaching and learning process because they cannot play an active role in learning.

The child's job is just to sit still, play and listen to the explanation of the material provided by the teacher. One alternative that can be used to improve learning outcomes is to apply appropriate teaching techniques. But in terms of the selection of learning models must be in accordance with things that can affect student learning outcomes. One of them is the inquiry model. Based on the description above, the researchers conducted research on how to improve learning outcomes through inquiry

learning models on the material to recognize vocabulary of vowels in kindergarten children.

II. METHOD

This type of research is Classroom Action Research. aims to make a real contribution to increasing teacher professionalism, preparing knowledge, understanding and insight about the behavior of teaching teachers and student learning. The approach taken is a qualitative approach, because in taking action on research subjects, the priority is to uncover the meaning of the meaning and learning process as an effort to increase motivation, excitement and learning achievement through actions taken as stated by Bogdan and Bikien (1998).

The nature of CAR that is carried out is participatory collaborative, namely collaboration between researchers and practitioners in the field. This research was carried out through collaborative work between teachers and researchers. In the Classroom Action Research process consists of several cycles and each cycle consists of several stages or components carried out

Subjects were kindergarten semester students in Catholic kindergarten, while the object in this study was an inquiry method to improve learning activities and learning outcomes on the subject of recognizing vowels. Data collection techniques in this study were tests and observations. The test is a data collection instrument to measure children's knowledge on cognitive aspects of the material / subject. In this study the instrument used was a written test in the form of pretest and posttest. Written tests are expressed in multiple choice with alternatives a, b, c, and d with true scores of 1 and false values of 0.

Observation is a data collection technique by observing each ongoing event and recording it with an observation tool about the things to be studied. The observations in this study are aimed at assessing the child's performance and the level of activity of the child during the learning process with the inquiry learning model. Observations on students are conducted to observe teaching and learning activities, while the format of the assessment is a rating scale made in the form of a checklist.

So, in filling out student work assessment, the observer only gives a checklist (√) in the appropriate column during the learning process. The data obtained were analyzed descriptively qualitatively by presenting data in the form of a description and discussion based on the results of the study. Test score data both pretest and posttest are used to measure the learning outcomes of cognitive aspects, then an analysis of the items / teacher's observation is done.

III. RESULTS

Based on the results of research conducted by researchers using inquiry learning models can improve student learning outcomes, seen in the first cycle which is 67% or 20 students and students who are incomplete by 33% or 10 students. While the learning outcomes of students in the second cycle were 90% or 27 students and 10% or 3 students were incomplete. This provides evidence that by applying inquiry learning models can improve student learning outcomes in the vowel

recognition material. Improved student learning outcomes from cycle I to cycle II by 23%.

Teacher Activity Analysis

Analysis of the results of observations of the activities of the teacher during the activity was analyzed using percentages, an increase in teacher activity during the teaching and learning process took place on the material introduction of vowels. Teacher activity in the first cycle I action obtained a percentage of 75% and included in the category enough and the second action obtained a percentage of 82% including the good category. This shows an increase of 7%. While the teacher activity in the first cycle II action obtained a percentage of 87% and included in the very good category and the second action obtained a percentage of 92% including the very good category. Increased teacher activity in the first cycle to the second cycle by 10%.

Analysis of Student Activities

Analysis of the results of observations of student activities during the activity was analyzed using percentages, seen an increase in student activity during the teaching and learning process took place on the material recognition of vowels. Student activities in the first cycle I action obtained a percentage of 72% and included in the category enough and the second action obtained a percentage of 85% including the good category. This shows an increase of 13%. Whereas student activity in action I cycle II obtained a percentage of 88% and included in the very good category and action II obtained a percentage of 95% including the very good category. Increased student activity in cycle I to cycle II by 10%.

Based on the analysis of student questionnaire responses during the teaching and learning process, it can be concluded that 88% of students answered happy with the learning activities that researchers applied in learning the material using inquiry learning models, while 12% answered not happy with the learning activities component that researchers applied in learn the material using the inquiry learning model.

IV. DISCUSSION

The results of the end of the first cycle obtained by students have not reached the established criteria, namely only 67% or 20 students who scored score 65. Because at the end of the first cycle many students were unable to answer the questions given and the percentage had not yet reached the specified criteria. The factors that cause students to not complete learning in the first cycle because students when the teacher submits the material students do not understand and pay less attention to the material, therefore student learning outcomes are incomplete.

Then increase and meet the criteria in the second cycle that is equal to 90% or 27 students have scored \geq 65. This is inseparable from the role of the successful teacher in delivering material in the form of guidance and students who have noticed when the teacher delivers the material and the results students are able understand and understand the learning conveyed by the teacher. From these results it can be concluded that student learning outcomes have increased from cycle I to cycle II.

Learning outcomes obtained by students in cycle I and cycle II are different, this is caused by several factors, both teacher factors and student factors. One of the factors that causes the learning outcomes of cycle I are different from the results of learning cycle II is the teaching and learning process in cycle I the teacher has not implemented it to the maximum because there are still many students who cannot understand the material taught by the teacher so that the learning outcomes they get are still in under the standards set at school.

So to correct these weaknesses the researchers continued in the second cycle, in the teaching and learning process in the second cycle the teacher had implemented the learning to the maximum and students were also able to understand the material taught by the teacher well and the learning outcomes obtained in the second cycle also met the Completeness Criteria The minimum (KKM) specified in the school is 70%.

This is also supported by the results of research conducted by Yusnidar (2012) entitled "Efforts to Improve Student Learning Outcomes on the Concept of Interdependence Between Living Things and Their Environment Through Inquiry Models in Class I Elementary School". As well as from the results of Juliana's research, the Open University students in 2009 with the title "Improving Learning Achievement with Inquiry Models" obtained the results that the ability of students to understand the material in using inquiry models was satisfactory with the achievement reaching 90%.

The results of his research also showed an increase in student learning outcomes and student activities in learning were very satisfying. The researcher concludes that the application of inquiry models can improve student learning outcomes in discussions when learning takes place and provide positive responses from students to the learning activities they do.

The results of observer observations obtained from the activities carried out by the teacher in the first cycle were 82% then increased in the second cycle by 92%. From these results it can be concluded that teacher activity increased from cycle I to cycle II. The increase in activities undertaken by the teacher in the first cycle has increased in the second cycle, this is because in the second cycle the learning process carried out by the teacher is better than in the first cycle it is inseparable from the efforts made by the teacher in applying the learning model Inquires especially on vowel recognition vocabulary material.

The results of observations on student activities carried out by observers in the first cycle of 85% then increased in the second cycle that is equal to 95%. From these results it can be concluded that student activity increased from cycle I to cycle II. The increase in activities undertaken by students in the first cycle has increased in the second cycle, this is because in the second cycle the activities of students in following teaching and learning activities by applying inquiry models are better than in the first cycle because in the first cycle Learning has not succeeded in achieving its objectives which have been set. The mastery of the material and the courage of most students have not yet been seen. In the second cycle of learning students have

begun to understand the steps of inquiry learning and in conducting group discussion activities are also better than in the previous cycle.

Based on the results of students' responses to the inquiry learning model on material change in objects shows that about 88% of students enjoy learning by using the inquiry learning model on the vowel recognition vocabulary material. They really enjoy learning material with inquiry learning models so that they are more active and student learning outcomes can be improved.

From the description above it can be concluded that the students' responses to inquiry learning have changed. In accordance with the success criteria used in this study is as stated by Usman, et al (2008: 23) namely "if the observation has reached a score $\geq 80\%$. While the outcome criteria are if $\geq 80\%$ of students get ≥ 65 at the end of the cycle test. Then a learning is said to succeed.

Thus, the results obtained can be seen that the teaching and learning process that refers to inquiry learning can improve student learning outcomes both in terms of the process and in terms of results. This can be seen from the results obtained in cycle I which increased in cycle II. The second cycle is the most perfect cycle. Personal ability and courage are more real. This is proven by the results of the third cycle of student learning shows optimal results, the value of completeness is increasing. Learning by using the inquiry model can motivate students to learn where each activity of the inquiry learning model can provide opportunities for students to practice their knowledge and skills. This is because students have begun to order in conducting experiments. This agrees with Suparno (2006: 18) that learning is a process of students actively building their own knowledge. The reflection that is done is to condition the students to be more serious in conducting experiments.

V. CONCLUSION

Based on the results of research and discussion, it can be concluded as follows:

1. Student learning outcomes in the first cycle are 67% complete while student learning outcomes in the second cycle are complete by 90%. Improved student learning outcomes from cycle I to cycle II by 23%.
2. Teacher and student activities in learning to recognize vocabulary using inquiry learning models of each cycle have increased. Teacher activity in the first cycle was 82% and in the second cycle the percentage became 92%, so the increase was 10%. While student activity also increased from cycle I with a percentage of 85% to 95% in cycle II so that the increase was 10%.
3. Children's students' responses to the application of inquiry learning models on vocabulary recognition materials get responses with good criteria, i.e. 88% of students answered happy and only 12% responded unhappy with the learning activity component that researchers applied in learning to use inquiry learning models.

REFERENCES

- [1] Jihad. 2008. *Penilaian Hasil Proses Belajar Mengajar*. Bandung: PT Remaja Rosdakarya.

- [2] Oemar Hamalik. 2003. *Proses Belajar Mengajar*. Jakarta: Bumi Aksara.
- [3] Sanjaya, Wina. 2008. *Strategi Pembelajaran*. Jakarta: Kencana.
- [4] Sudijono, Anas. 2010. *Pengantar Statistik Pendidikan*. Jakarta: Rajawali Pers.
- [5] Sudjana, Nana. 2006. *Penilaian Hasil Proses Belajar Mengajar*. Bandung: PT Remaja Rosda Karya.
- [6] Sudjana, Nana. 2006. *Penilaian Hasil Proses Belajar Mengajar*. Bandung: PT Remaja Rosda Karya.
- [7] Sudjiono, 2007. *Kriteria Penilaian Hasil Belajar*. Kencana: Jakarta.
- [8] Sugiyono. 2012. *Metode Penelitian Pendidikan (pendekatan kualitatif, kuantitatif, dan R&B)*. Bandung: Alfabeta.
- [9] Suparno. 2006. *Artikel Penelitian tentang Model Pembelajaran Inquiri*. Jakarta: Rineka Cipta.
- [10] Suprijono, Agus. 2009. *Cooperatif Learning Teori dan Aplikasi PAIKEM*. Surabaya: Pustaka Pelajar.
- [11] Trianto. 2009. *Mendesain Model Pembelajaran Inovatif-Progresif*. Jakarta: Balai Pustaka.
- [12] Usman. 2008. *Penelitian Tindakan Kelas*. Darussalam: Universitas Syiah Kuala.
- [13] W. Gulo. 2008. *Strategi Belajar Mengajar*. Jakarta: Gramedia Widiasarana Indonesia.
- [14] Wardhani, I., & Kuswaya Wihardit, 2008. *Penelitian Tindakan Kelas*, Jakarta: Universitas Terbuka.
- [15] Yusnidar. 2012. *Upaya Meningkatkan Hasil Belajar Siswa pada Konsep Saling Ketergantungan Antara Makhluk Hidup dengan Lingkungannya Melalui Model inquiri di Kelas I SD Jangka*. Manado: Universitas Negeri Manado.
- [16] Yus, Anita. 2005. *Penilaian Perkembangan Belajar Anak Taman Kanak-Kanak*. Jakarta: Direktorat Pembinaan Pendidikan Tenaga Kependidikan dan Ketenagaan Perguruan Tinggi.