IMPROVING ACTIVITY AND LEARNING OUTCOMES OF SCIENCES USING THE "PETER PAN" MODEL IN ELEMENTARY SCHOOL STUDENTS

Try Ajeng Prasetyarini[1], Aslamiah[2], Celia Cinantya[3], Maimunah[4], Wahdah Refia Refianti[5],
[1,2,3,4,5]Elementary School Teacher Education Study Program, University of Lambung Mangkurat, Banjarmasin, Indonesia
Email: [1]aslamiah@ulm.ac.id, [2]celia.cinantya@ulm.ac.id, [3]maimunah@ulm.ac.id, [4]wahdah.rafianti@ulm.ac.id

Abstract

The backgrounds of this research are the low activity and learning outcomes in the science learning content of the fifth grade elementary school students. The solution used to overcome this problem is to use the "PETER PAN" learning model which is a combination of power point media, learning models, guided inquiry, and team game matches.The purpose of this research are to analyze the increase in activity and student learning outcomes by using the "PETER PAN" combination model. This research used Classroom Action Research (CAR), which was conducted in 4 meetings. The subjects of this study were the fifth grade students of SDN 2 Hikun, Tabalong, totaling 15 students. The types of data used are qualitative and quantitative data. Data collection techniques with observations on student activities, learning motivation questionnaires and evaluation tests of learning outcomes. The data analysis technique used is qualitative data analysis in tabular form and data interpretation in the form of category percentages. From the results of the study, it was found that there was an increase in student activity classically by 60% increased to 93% at 4th meeting. The classical completeness of student learning outcomes at the first meeting was 47% increased to 100% at the 4th meeting. So, it can be concluded that the "PETER PAN" learning model can increase activity and learning outcomes in science learning content for fifth grade elementary school students.

Keywords: Activity, Learning Outcomes, Peter Pan, Elementary School

1. INTRODUCTION

In the era of the industrial revolution 4.0, Indonesia is required to continue to develop the potential, skills, and knowledge of its human resources. This can present opportunities as well as challenges in creating superior and characterized human resources. Efforts are being made to implement education, because education is one of the important sectors in the development of civilization in Indonesia. Education is the main pillar in efforts to develop the potential of human resources in a nation. Education can seek to develop and empower the potential of an individual to become a quality human resource. This is in line with the opinion according to Tilaar (2002) in Hariandi, et al. (2019) which states that the resilience of a nation and society is determined by three elements, namely its natural resources, quality human resources, and cultural resources and welfare. The quality of human resources produced is never separated from the level of the education unit that he lived during his life. Daryanto (2013) also explained that learning activities are an important part of the learning process, both teacher activities and student activities. Students who are active in participating in class learning certainly have high motivation in themselves. High student learning motivation in participating in classroom learning will affect the increase in learning outcomes, on the contrary if student motivation is low it will weaken learning activities and result in low quality learning outcomes, meaning that learning objectives will not be achieved as they should. This is in line with the opinion of Khodijah (2014) explaining that learning motivation is a driving force that changes the energy within a person into real activities to achieve certain goals. Motivation is not only important because it is a factor that causes learning, but also facilitates learning and learning outcomes (Catharina, 2006). According to Suriansyah, et al. (2014) improving

learning activities is the key to getting good results as well. Teacher activities in teaching will affect learning activities and student learning outcomes. This is in line with the opinion of Suriansyah, et al. (2014) which states that the success of the learning process depends on how the teacher carries out learning. The more qualified the teacher in teaching information in the classroom, the higher the quality of the learning process and results shown. Another demand for a professional teacher in elementary schools is to be able to transfer basic knowledge in elementary schools well and skillfully, one of which is in the subject of science. Science learning in elementary school is essentially a learning based on a process that can foster students' scientific attitude towards science concepts. Science learning in elementary schools requires students to be able to seek and find in-depth information in the surrounding environment, solve problems faced and make conclusions. This is in line with the opinion (Uno & Mohammad, 2014) which explains that science learning is a human effort in understanding observations that are right on target, and using procedures and explained by reasoning so as to get a conclusion. The important role of learning science in elementary schools is to equip students with the knowledge, skills, and scientific attitudes needed to continue their education to the next level, as well as to adapt to the changes that occur around them.

The importance of the role of science learning is in fact not supported by the facts that occur in the field. Based on the results of observations and interviews at SDN 2 Hikun, Tabalong Regency with class V teachers, it was found that there were problems with low activity, motivation and learning outcomes shown by students in the science content learning process, namely: Students were less actively involved and less enthusiastic when participating in science learning in the classroom. Based on the daily test scores for learning science content in fifth grade students of SDN 2 Hikun, Tabalong Regency in the 2020-2021 academic year, out of 15 students in the class, there were 11 students or classically (73%) students still scored below the KKM (Minimum Completeness Criteria) 70, while 4 students others scored above the KKM. This is because the learning activities carried out are one-way and meaningless, science learning in class is abstract because it is rarely interspersed with the use of balanced learning resources and media, such as the provision of experiments and scientific discoveries by going directly to the field, as well as the application of media. Other supporting learning media. According to the teacher's explanation, the low learning motivation shown by students is the impact of distance learning (online) for a long time so that the development of potential in students has not been given too much attention.

If the problem is left alone, this will have an impact on the students themselves where the potential for the development of scientific attitudes that exist in them cannot develop optimally because students are less enthusiastic and lazy to be actively involved in the science learning process, this will also affect their learning outcomes. Students will only get used to waiting and receiving information from the teacher, and in the end students are not trained in solving any problems they encounter in everyday life, students will also have difficulty adapting to their environment and are reluctant to think critically (scientific) in trying connect, and apply the science concepts that have been learned into their daily lives. In fact, according to Iskandar (1997) in (Sukaesih, 2015) explaining the reasons for the importance of studying science subjects can be useful for the life or work of children in the future, part of the nation's culture, train children to think critically, and have educational values that have the potential to shape the child as a whole. If the problem is left alone, this will have an impact on the students themselves where the potential for the development of scientific attitudes that exist in them cannot develop optimally because students are less enthusiastic and lazy to be actively involved in the science learning process, this will also affect their learning outcomes.

Students will only get used to waiting and receiving information from the teacher, and in the end students are not trained in solving any problems they encounter in everyday life, students will also have difficulty adapting to their environment and are reluctant to think critically (scientific) in trying connect, and apply the science concepts that have been learned into their daily lives. In fact, according to Iskandar (1997) in (Sukaesih, 2015) explaining the reasons for the importance of studying science subjects can be useful for the life or work of children in the future, part of the nation's culture, train children to think critically, and have educational values that have the potential to be able to In overcoming these problems, namely the combination of model integration (Guided Inquiry), Team Games Tournament and interactive learning media (Power Point) as supporting media in learning activities. The combination of this model is called "PETER PAN" which is taken from the initials of the name of each model and the learning media used are Power Point media, guided inquiry, and team

game competition. The advantage of this learning model is that it is able to provide the widest opportunity for students to develop scientific problem solving skills to be able to think critically, analytically according to their needs with an active and fun learning atmosphere, able to increase student interest and enthusiasm both in solving problems. learning science in class, conducting scientific experiments and finding information on their own. This is in accordance with the opinion of Shoimin (2014) that the inquiry model is a series of learning activities that emphasize the activeness of students to have a learning experience by finding material concepts based on the problems given. Furthermore, Afandi, et al. (2013) stated that TGT (Team Games Tournament) is an academic tournament where students are divided into several groups, then they play games with other group members to get scores for their groups. Arsyar (2012) who explained that PowerPoint media is one of the software that is able to display interesting multimedia programs. The purpose of this combination model is to be able to complete any deficiencies found in each learning model, as well as further add to the advantages that exist in each learning model, so that the desired learning objectives can be carried out optimally and optimally. Based on this, the title of this research is Increasing activity, motivation, and learning outcomes in science content using the "Peter Pan" model for elementary school children. The purpose of this study was to analyze the increase in activity, motivation and learning outcomes in science learning content using the "Peterpan" model for elementary school students.

2. METHODOLOGY

This study used Classroom Action Research (CAR), which was carried out 4 times in learning meetings. This classroom action research procedure has 4 stages in it, namely as follows: (1) Action Planning (Planning), namely the teacher makes implementation plans and learning scenarios, prepares instruments that support research, creates and prepares learning media, and designs evaluation tools; (2) Action Implementation, namely the teacher implements or applies the design content; (3) Observation, namely observing or collecting data on research activities; (4) Reflection, namely analyzing the results of observations so that improvements can be made Arikunto (2014). This study uses a combination of "PETER PAN" learning models and media consisting of Power Point learning media, Guided Inquiry learning models, and Team Games Tournament with the following steps: a) The teacher conveys the theme and learning objectives, b) The teacher explains the main learning material using interactive power point media, c) The teacher organizes students into 4-5 people in a heterogeneous group, d) The teacher prepares experimental media with a scramble round game according to the teacher's command, e) Teachers guide students to formulate questions and hypotheses of the problems studied, f) Teachers guide students to conduct experiments, collect data, carry out investigations, and process information, g) Teachers ask students to explain their findings, and other students are given the opportunity to respond and share perceptions , h) The teacher provides reinforcement for students' answers and corrects misconceptions psi that is deemed inappropriate, i) The teacher guides students to make conclusions together and conduct evaluations.

This classroom action research activity was carried out at SDN 2 Hikun, Tabalong Regency, for the 2020/2021 even semester. The subjects studied were class V students, totaling 15 people consisting of 9 male students and 6 female students. The types of data studied in this study include qualitative data and quantitative data. Qualitative data obtained from observations (observations) on teacher and student activities by implementing the combination steps of the "PETER PAN" model in science content learning Theme 7 Events in Life in class V SDN 2 Hikun Tabalong Regency. The assessment instrument used was the observation sheet for the teacher's activity rubric and the observation sheet for the student activity rubric that had been made during planning. Meanwhile, quantitative data were obtained from the results of the assessment of the motivation questionnaire sheet on the student motivation scale and evaluation (written test) which was carried out at the end of each learning meeting to determine the increase in learning motivation and learning outcomes shown by students in participating in learning the content of Science Theme 7 in class V SDN 2 Hikun Tabalong Regency. The indicator of the success of teacher activities is declared successful if the teacher can carry out learning activities in accordance with the steps that have been planned with the acquisition of scores or scores reaching 28 points with the criteria of "Very Good". Completeness of student activities is declared successful if students get a value or score of 15 points with classical completeness 80% of students are on the "Active" and "Very Active" criteria. Students' learning motivation in all aspects of motivation is categorized as successful if students are able to achieve a value or score of 61 points with classical completeness criteria 80% of

students are in the "Highly Motivated" category. Individual mastery seen from student learning outcomes is said to be successful if students can achieve the KKM score of 70 with classical completeness of 80% and can achieve the KKM value.

3. RESULTS AND DISCUSSION

Based on the results of research on aspects of student activity when learning science using the "Peter Pan" model, data were obtained as shown in the table below:

Table 1. Student Activity Results

Meeting	% Student Activity (Classical)	Category
1	60%	Quite Active
2	80%	Active
3	93%	Active
4	93%	Very Active

Based on the table above, it is known that there is an increase in student activity in each meeting. At the first meeting, the results of classical student activity observations obtained 60% in the "quite active" category, until at the fourth meeting the classical student activities increased by 93% in the "Very Active" category. This shows that the use of the "Peter Pan" model is able to increase student activity in science learning.

The "Peter Pan" model is a learning model that combines the advantages of the guided inquiry model and the Team Games Tournament (TGT). The guided inquiry model has the advantage of providing opportunities for students to find solutions independently. The teacher only acts as a guide, while students are given the freedom to find their own answers or solutions to problems. Thus, students become active in maximizing their abilities to be able to formulate their findings. This is in accordance with the opinion of Trianto (2010), inquiry is a core part of contextual-based learning activities. The knowledge and skills acquired by students are expected not to be the result of remembering a set of facts, but the result of finding out for themselves. Meanwhile, according to Hanafiah & Suhana (2009) in (Nurdyansyah & Fahyuni, 2016) stated that inquiry is a series of learning activities that involve maximally all students' abilities to search and investigate systematically, critically, and logically so that they can find their own knowledge, attitude and attitude. and skills as a form of behavior change. So that learning with inquiry is a learning activity that involves maximally all students' abilities to search for and investigate something (objects, people or events) systematically, critically, logically, analytically so that they can formulate their findings confidently.

The TGT model also has the advantage of providing opportunities for students to be actively involved in learning. In addition, it gives students the opportunity to collaborate with their group friends to discuss solving problems given by the teacher. So that the use of this model is able to train students' skills in teamwork and also make children more active in participating in learning. This is in accordance with the opinion of Situmorang (2013) which explains that the learning process with games designed with this type of cooperative TGT allows students to learn more relaxed and can foster a sense of responsibility, healthy competition, and active learning involvement. By way of discussion in groups, students will more easily find and understand difficult concepts, so that it will increase students' understanding of concepts.

The same opinion was expressed by Taniredja, et al. (2011), which states that the advantage of TGT is that students can learn the subject matter freely and actualize themselves with all the potential that exists within students, besides that collaboration between students as well as students and teachers will make learning interactions in the classroom lively and not boring.

The results of the research on other aspects, obtained information related to students' motivation in learning science using the "Peter Pan" model as shown in the following table:

Table 2. Students' Motivation Results

Meeting	Motivation	Category
1	33%	Few Students Are Motivated
2	73%	Most Students Are Motivated
3	87%	Almost All Students Are Motivated

4	87%	Almost All Students Are Motivated

Based on the table, it is known that there is an increase in student learning motivation at each meeting, namely at meeting 1 the results of classical student learning motivation only get 33% with the category "Few Students are motivated" until at meeting 3 and meeting 4, students' motivation classically increases rapidly. by 93% with the category "Almost All Student are motivated". This shows that the "Peter Pan" model is able to increase students' motivation in learning science. The increase in students' learning motivation is influenced by the use of the TGT model. The Games and Tournament components in the TGT model provide a fun and challenging feel. The tournament concept makes students compete with each other to collect points to become the winning team, so that a sense of wanting to compete and be the best arises. This will make students more enthusiastic and motivated in participating in learning. As stated by Taniredja, et al. (2011) the TGT model is able to increase students' learning motivation.This is in line with research conducted by Ignatius Sulistyo, who stated that the Team Games Tournament (TGT) model was able to provide an increase in learning motivation for class VIII A students of SMP Negeri 2 Bukit Kemuning, North Lampung (Sulistyo, 2016). Another study was conducted by (A'yuningsih, Suardana, & Suwenten, 2017), which stated that the TGT model was able to increase the motivation and learning outcomes of X MIA 2 students at SMA Negeri 3 Singaraja for the 2016/2017 academic year with an average percentage of learning motivation. increased from pre-study to cycle 2, namely 51.15% to 60.73% in cycle 1 and to 76.5% in cycle 2.

The next research aspect, namely the completeness of science content learning outcomes using the "Peter Pan" model

Based on the results of the study, the learning outcomes of science content were obtained using the "Peter Pan" model as shown in the following table:

Table 3. Learning Outcomes Results

Meeting	Learning result (Minimum Completeness Criteria >70)	Completeness of Student Learning Outcomes (Classical)
1	7	47%
2	13	87%
3	13	87%
4	15	100%

From the table above, it can be seen the increase in student learning outcomes at each meeting. At the first meeting, the students' complete learning outcomes were classically at the percentage of 47% of students who scored 70 (Minimum Completeness Criteria/ MCC), and at the second meeting, the students' completeness learning outcomes increased until they reached a percentage of 87% of students who scored 70 (MCC), then at meeting 3, student learning outcomes are able to be at the percentage of 87% students who get a score of 70 (MCC) and increase again to 100% at meeting 4. From the three aspects studied, the trend of the research results will be clearly visible in the following graphic image.

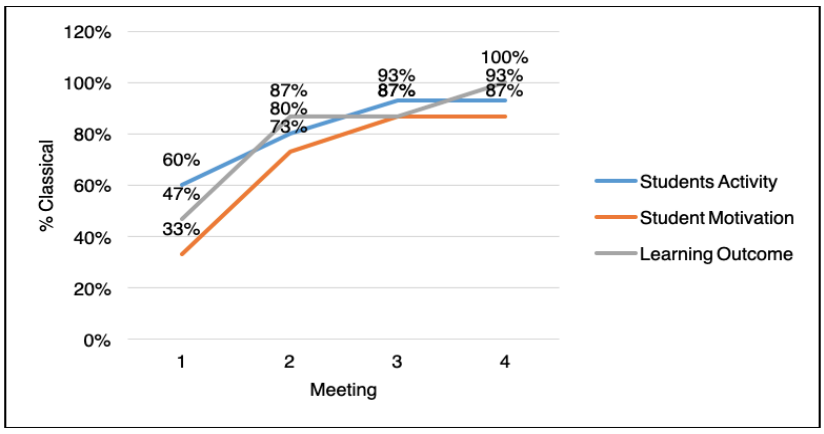

Figure 1. Trends of All Aspects Researched

Based on the graph above, it can be seen that all aspects studied, starting from teacher activities, student activities, learning motivation and learning outcomes tend to increase at each meeting. This proves that the use of the "Peter Pan" learning model is able to increase the activity, motivation and learning outcomes of fifth grade students in science lessons. The combination of using innovative learning models and appropriate learning media will provide reinforcement to students in receiving learning materials. The use of a combination of Guided Inquiry and TGT models is able to provide opportunities for students to maximize their ability to understand the material, find solutions and conclude. So that students will more easily understand the learning material and affect the improvement of learning outcomes. This is in accordance with research conducted by (Amijaya, Ramdani, & Merta, 2018) which states that the guided inquiry learning model has a significant positive effect on learning outcomes and critical thinking skills of class X students on the subject of biodiversity and classification of living things at SMAN 1 Narmada for the 2017/2018 school year. Another study stated that the Guided Inquiry model was able to improve the learning outcomes of second grade students at SDN Keper Krembung (Wulandari, 2016). Relevant research conducted by (Maretasari, Subali, & Hartono, 2012), states that the laboratory-based guided inquiry model has a significant influence on student learning outcomes and scientific attitudes.

In addition, with the combination of the TGT model, learning becomes fun and results in increasing students' enthusiasm and motivation in learning. Increased activity and motivation to learn will affect the improvement of student learning outcomes. This is in accordance with research from Unengan, Ainy, & Mursyidah (2020) which states that the mathematics learning outcomes of class VII-C students of SMP Muhammadiyah 5 Surabaya can be improved by implementing the Teams Games Tournament model using Ludo Math media on rectangular material. Other relevant research conducted by Lestari, Hariani, & Rahayu (2018) shows that the percentage of students who complete mathematics learning outcomes increases from 63.6% of students who complete the first cycle to 83.3% of students who complete the second cycle. Thus, the increase in student learning outcomes is 19.7%, so it is evident that the Teams Games Tournament learning model is able to improve students' mathematics learning outcomes. The same opinion was expressed by Sugiata (2020), namely data analysis obtained that the percentage of affective learning outcomes in the first cycle was 58.94% and in the second cycle it increased to 90.06%. This indicates that the application of the TGT learning model to the reaction rate material can be carried out well.

The improvement of fifth grade students' learning outcomes in science lessons is the effect of the use of innovative learning models and interesting learning media. Learning media is a very useful tool for students and educators in the learning and teaching process (Indriana, 2011). Meanwhile, according to Yusufhadi Miarso, learning media are everything that is used to channel messages and can stimulate the thoughts, feelings, attention, and willingness of the learner so that it can encourage a deliberate, purposeful, and controlled learning process (Miarso, 2011). So, it can be concluded that learning media is a teacher's tool in delivering material to students so that learning objectives are achieved properly. The learning media used in this research is power point. The use of these media has an effect on increasing student learning outcomes. This is because power point media allows to include content in the form of images, animations, audio and video so that it will make the media more interesting and interactive. Agree with Puspita, Puspitaningsih, & Diana (2020) in their research which concludes that interactive powerpoint media is effectively used to improve student learning outcomes and there are significant differences before and after the use of interactive powerpoint learning media. Another opinion states that there is a positive and significant influence between learning creativity, the use of power point learning media, and the family environment of learning motivation; there is a direct and indirect influence between learning creativity, the use of power point learning media, and the family environment on learning outcomes (Tirtiana, 2013).

4. CONCLUSION

Based on the results of research and discussion, it can be concluded that: (1) There was an increase in student activity in learning science content using the "PETER PAN" learning model in class V SDN 2 Hikun Tabalong Regency, (2) There was an increase in learning motivation in learning science content by using the "PETER PAN" learning model for fifth grade students of SDN 2 Hikun Tabalong Regency and (3) There was an increase in learning outcomes in science content using the "PETER

PAN" learning model for fifth grade students of SDN 2 Hikun Tabalong Regency in order to obtain complete learning classic by 100%.

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