

Learning is a change in behavior or appearance, with a series of activities for example by observing and accepting activities. In the process of teaching and learning, the teacher has a benchmark to know some of the success of the subject matter can be accepted by students. Internal factors are all factors that come from within students such as health, interests, talents and so on. While external factors are factors that come from outside the students such as educators, learning facilities, parents' motivation. While Edutainment comes from the word education and entertainment. Education means education, while entertainment means entertainment. So, in terms of language, edutainment is an entertaining or enjoyable education. Meanwhile, in terms of terminology, edutainment is a learning process that is designed in such a way that the content of education and entertainment can be combined harmoniously to create enjoyable learning. In this case, fun learning is usually done with humor, games, role plays, and demonstrations. Learning can also be done by way of learning, provided students can go through the learning process with pleasure.



Chandra Anugrah Putra

Interactive Edutainment Learning Methods

When you are ready to maximize the educational media for learning



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Table of Contents

CHAPTER I: PRELIMINARY	3
a. Introduction	3
b. Identification of Problems.....	6
c. Limitation of Problems.....	6
d. Problem of Formulation	7
e. Research Objectives	7
f. Research Benefits	7
CHAPTER II: STUDY OF THEORY AND HYPOTHESES	9
a. Theoretical Study	9
b. Thinking Framework.....	22
c. Action Hypothesis	22
CHAPTER III: RESEARCH METHODS	23
a. Time and Site Location	23
b. Type of Research	23
c. Presence and Role of Researchers.....	24
d. Research Subjects	24
e. Research Design.....	25

f. Data Collection Techniques.....	28
g. Data Analysis Techniques.....	29
h. Indicators of Research Success	35
CHAPTER IV: DATA DESCRIPTION AND DISCUSSION	36
a. Data Description.....	36
b. Discussion of Research Results.....	46
CHAPTER V: CONCLUSION.....	51
REFERENCE.....	52

CHAPTER I

PRELIMINARY

A. Introduce

The teaching and learning process is an interaction between the teacher and students which are two different things but form one unit. If interpreted one by one learning is an activity carried out by students. In more detail, Slameto (2010: 2) said that learning is one of the business processes carried out by a person to obtain a new behavior change as a whole, as a result of his own experience in interaction with his environment. While teaching is an activity carried out by the teacher. This is as stated by Salam (2008: 28) saying teaching is a complex process not only to convey information from the teacher to students many activities or actions that must be said, especially if desired learning outcomes are better.

Djamarah (2006: 39) says teaching is essentially a process that is the process of organizing, organizing the environment around students, so that it can foster and encourage students to do the learning process. Based on these explanations, so that the implementation of teaching runs efficiently and effectively, it is necessary to plan systematically with the learning process that is more meaningful and designed in a clear scenario.

Hardjanto (2010: 23) said that in the planning process the teaching and learning process must be considered by several elements, namely learning

objectives, learning content or material, learning methods, learning media, and evaluation. Each of these elements constitutes an inseparable unity. The teaching and learning process begins with formulating goals as the direction or purpose of the research is carried out then proceed with setting the content or learning material, establishing learning methods that are in accordance with the learning material and conducting an evaluation of the teaching and learning process that has been carried out to see student learning achievement.

According Djamarah (2000: 45) learning outcomes are the achievements of an activity that has been done, created, both individually and in groups. Results will never be produced as long as people don't do something. To produce an achievement, it takes a very big struggle and sacrifice. Only with tenacity, sincerity, high will and a sense of optimism can he achieve it.

One form of learning outcomes that will be achieved in learning in school is the result of learning natural science subjects. According to H.W. Fowler et al. IPA is formulated, which is connected with the symptoms of truth and based primarily on observation and induction. Whereas According to Nokes IPA (Natural Sciences) is theoretical knowledge obtained by special methods.

Learning Natural Science is an activity that aims to instill curiosity and positive attitudes towards science, technology and society, develop process skills to investigate the environment, solve problems and make decisions,

develop natural phenomena, so students can think critically and objectively.

Based on the results of observations on fourth grade students at SDN 1 Penda Katapi, it was known that out of 29 students, only 10 students or 32.14% of students were active in learning. A total of 19 students or 67.86% of students still have difficulties in the learning process. There are still students who do not understand in learning. And there are students who do not like learning science. So that the learning outcomes of science are still low and have not been achieved with the criteria for teaching completeness that is set.

In connection with this problem a research is needed and researchers are interested in improving it. This study seeks to determine the level of activity and learning outcomes of students in the application of interactive learning edutainment methods with science learning outcomes. So the researcher was interested in doing research with the title "Efforts to Increase Learning Activity and Results by Using Edutainmnet Method Interactive Learning on Grade IV Students at Penda Katapi Elementary School 2016/2017 Academic Year".

This researcher is important to be carried out because this science learning uses interactive learning edutainment method and to be applied in this interactive learning edutainment method students and are motivated and no longer feel difficulties and confusion in the teaching and learning process. With this edutainment method, interactive learning will make it

easier for students to receive and understand the learning provided by the teacher in the classroom. It is expected that the results of this study can motivate schools by using the method of using interactive learning edutainment in natural science learning.

B. Identification of Problems

Based on the background, the problem of this research is:

1. Students feel difficulties
2. Students do not understand learning.
3. Students do not like learning science.
4. Science learning outcomes are still low.

C. Limitation of Problems

To avoid expanding the problem under study, the researcher gives the following problem constraints:

1. Researchers conducted at SDN 1 Penda Katapi.
2. Research subjects in class IV SDN 1 Penda Katapi.
3. Science learning outcomes referred to from competency standards understand the relationship between the structure of plant parts and their functions.
4. Science learning outcomes referred to from basic competencies explain the relationship between plant root structure and function.

D. Problem Formulation

Based on the background, problem identification, and limitation of the problems stated above, the problems in this research can be formulated as follows:

1. What is the learning activity of students in science learning using the Interactive Edutainment Learning Method?
2. Is there an increase in student learning outcomes in natural science subjects using the Edutainment Method Interactive Learning for students in grade IV SDN 1 Penda Katap 2015/2016 Academic Year?

E. Research Objectives

Based on the formulation of the problem above, the purpose of this study is:

1. To describe the science learning activities of Grade IV students of SDN-1 Penda Katapi, it is enhanced by the Interactive Learning Edutainment Method.
2. To improve the science learning outcomes of Grade IV students of SDN-1 Penda Katapi, it is enhanced by the Interactive Learning Edutainment Method.

F. Research Benefits

The results of this study are expected to provide the following benefits:

1. The theoretical benefits,
 - a. Benefits for further researchers, this research can be the basis for further research to be better.

b. For scientific developers, research provides a theoretical contribution to the material "style influences the motion of objects" using the Edutainment Interactive Learning Method.

2. Practical benefits,

a. For Principals

1. Improving the quality of education, especially science lessons in schools.

2. Provide input in planning future science learning.

b. For the teacher

1. Helping teachers in overcoming the lack of student response by paying attention to and understanding the factors that influence student learning both internal and external factors.

2. As input for the use of learning methods so as to overcome students' lack of response in learning science and learning outcomes increase.

3. Instill creativity in efforts to improve science learning.

c. For student

1. Students can be entertained and enjoy learning science so that they can eliminate boredom in following the learning process.

2. Students can be more motivated and respond more in participating in lessons.

CHAPTER II

STUDY OF THEORY AND HYPOTHESES

A. Theoretical Study

Learning is a change in behavior or appearance, with a series of activities for example by observing and accepting activities. In the process of teaching and learning, the teacher has a benchmark to know some of the success of the subject matter can be accepted by students.

According Djamarah (2000: 45) learning outcomes are the achievements of an activity that has been done, created, both individually and in groups. Results will never be produced as long as people don't do something. To produce an achievement, it takes a very big struggle and sacrifice. Only with tenacity, sincerity, high will and a sense of optimism can he achieve it.

1. Factors Affecting Learning Outcomes

Factors affecting learning outcomes according to Ngalim Purwanto (2007: 107) there are two types, namely:

a. Internal factors, namely factors derived from within students include physiological and psychological factors. Physiological factors are how the physical condition, the five senses, and so on. Whereas

concerning psychological factors are interest, level of intelligence, talent, motivation, cognitive abilities, and so on.

b. External factors, namely factors originating from outside the student include environmental factors and instruments. Environmental factors include natural and social. While the instrument covers curriculum / lesson material, teacher / instructor, facilities and facilities and administration / management.

Sugihartono (2007: 76), mentions the factors that influence learning outcomes as follows:

a. Internal factors are factors that exist in individuals who are learning. Internal factors include: physical factors and psychological factors.

b. External factors are factors that exist outside the individual. External factors include: family factors, school factors, and community factors.

Based on the expert opinion above it can be concluded that the factors that influence learning outcomes are internal factors and external factors. Internal factors are all factors that come from within students such as health, interests, talents and so on. While external factors are factors that come from outside the students such as educators, learning facilities, parents' motivation.

2. Learning materials

a. Root

Roots are part of seed plants that are in the soil, white, and often tapered to make it easier to penetrate the soil. Roots have a duty to strengthen the establishment of plants, absorb water and nutrients which dissolve in them from the soil, and sometimes as a place to store food.

The root consists of several parts, including root hair (root hair) and root cap. Root hair is a way to enter water and nutrients from soil to plants. Root hood serves to protect the roots when penetrating the soil.

There are two types of roots, namely fiber roots and taproots.

1. The root of the fibers is shaped like a fiber. The tip and base of the root are almost as large. All parts of the root come out from the base of the stem. the root fibers also branch out. However, the size of the branching is not too different. The fiber of the fiber is owned by the seeds of one plant (monocot), for example corn, rice, and sugar cane.

2. Taproot has a root root. Pkok roots branch into smaller roots. The size difference between root roots and branch roots is very real. The taproot is owned by plants in two pieces (dicots), such as mangoes, oranges and nuts.

The root fibers and taproots have similarities. Both types of roots can branch. The purpose of branching is to expand the absorption area in the soil. Root branching also strengthens the establishment of the stem.

In plant parts there are also special roots. Here are the roots that have special characteristics and tasks.

1. Hanging roots

This root grows from the stem of the plant above the ground. The root hangs in the air and grows toward the ground, for example the hanging root of a banyan tree.

2. Sticky roots

This root grows along the stem. The root is useful for sticking to wood, other plants, or walls. Adhesives are owned by plants that climb, such as the roots of pepper and betel plants.

3. Supportive roots

This root grows from the bottom of the root in all directions. The root seems to support the stem so as not to fall, for example the roots of mangroves and pandanus.

4. Breath root

The breath root grows perpendicular to the top so that it appears from the surface of the soil or water. There is a breath that has land plants (growing on the ground) and there is a water plant. The root of the breath is the root branches. The breath root has many gaps for air entry, for example the roots of a log fire tree.

3. Understanding the Edutainment Method

Sumiati (2008: 7) says "the method comes from the Greek language Methodos which means way or way". Definitively Fatkhurrohman (2009: 15) explains "the method is a method used to achieve a predetermined goal". In line with this opinion, Amir (2009: 19) said "the method means a system of working in a system to facilitate the implementation of an activity to achieve the specified goals". While Djaramah (2006: 46) says the method is a method used to achieve the stated goals.

It can be concluded that the method is the steps or ways that someone takes to achieve a certain goal. The method of arranging everything that

must be planned, prepared and how to carry out activities so as to achieve maximum results.

While Edutainment comes from the word education and entertainment. Education means education, while entertainment means entertainment. So, in terms of language, edutainment is an entertaining or enjoyable education. Meanwhile, in terms of terminology, edutainment is a learning process that is designed in such a way that the content of education and entertainment can be combined harmoniously to create enjoyable learning. In this case, fun learning is usually done with humor, games, role plays, and demonstrations. Learning can also be done by way of learning, provided students can go through the learning process with pleasure.

According to the New World Encyclopedia, edutainment comes from the word educational entertainment or entertainment education, which means an entertainment designed to educate and entertain. Basically, edutainment strives to teach or facilitate social interaction with students by including various lessons in the form of entertainment that they are familiar with, such as television shows, games that are computerized or video games, movies, music, media devices, and so on. Besides that, edutainment can also be in the form of education in the wild, which is able to entertain and learn about animal life and its habitat.

Edutainment strives to teach one or more specific subjects or attempt to change behavior by giving birth to certain socio-cultural behaviors.

Edutainment can be said to be successful in plain view, if there is the fact that learning is fun and the teacher can educate his students in a fun way.

Those are some of the sources that are the first reference to the existence of the word edutainment, which is then drawn into the realm of education. Thus it can be concluded that edutainment is a way to make the process of education and teaching can be so enjoyable, so that students can easily grasp the essence of learning itself, without feeling that spelling is learning.

Edutainment is more pressing on the level of methods, strategies and tactics. Strategy is usually related to tactics, while the tactics themselves are all ways and power to deal with certain goals and conditions, in order to obtain maximum expected results. However, in the education process, what is commonly used is not tactics, but methods and techniques.

Edutainment-based learning is designed with entertainment applications in the teaching and learning process both in the classroom or outside the classroom. Use fun learning methods, such as discussion, quiz, and others. Hamid (2011: 8) said that the purpose of entertainment in the implementation of learning is to make learning enjoyable, so that students feel comfortable, safe, enjoy, relax, and the class is not tense, frightening, uncomfortable, threatened, depressed, etc. .

As for the realization of the learning concept that is fun and entertaining, edutainment should be for teachers to pay attention to their student learning modalities, so that a teacher must have various methods

and strategies to represent the diversity of students' learning modalities as a whole. But basically, a learning process will take place well if it is in a good and pleasant condition. Rahman (2010: 4) says that the edutainment learning process is implemented by fulfilling the aspects of ease and joy, creating a conducive learning environment, attracting interest, presenting relevant material, involving positive emotions, involving all senses and thoughts, adjusting to students' level of ability, provide a successful experience, celebrate results.

Rahman (2010: 7) mentions the steps of learning using the edutainment method as follows:

1. The teacher prepares audio visual equipment to play films related to the material.
2. Classes are designed so well that students feel comfortable.
3. The teacher plays the film for students and gives an explanation of the film.
4. After finishing the film screening, students are divided into several groups to describe the film that has been aired.
5. The group name is made in accordance with the relevant material, for example the characters in the film that are shown.
6. Demonstration, students are invited to play for example with snowball throwing by way of each group preparing a question written on blank paper, then the paper is rolled into a colorful ball that is split and then covered with isolative. Each group gets the chance to throw

the ball goes to another group with the time determined by the teacher. Another group tries to catch the ball. The last student holding the ball gets the opportunity to answer the question of the ball. Or may also be carried out with other games such as Role Paly, Card Sort, heavy debates and more.

1. With the guidance of the teacher each group summarizes the material.

Based on the explanation, the edutainment method is a learning method with the help of learning media. The implementation technique can be done by varying various interactive learning methods that can increase activity, interest, attention and motivation. Students prioritize student involvement in learning with a happy and happy mood.

Strengths and Weaknesses of Edutainment Method Learning

The advantages and disadvantages of learning edutainment methods according to Rojak Arek Moker (2012: 10), as follows:

- a. Advantages of the Edutainment Method

1. Train students to be active and initiative.
2. Train students to understand something and try to do it.
3. Nurturing the talents of students who have good artistry through roles or games that are often done in this method.
4. Fostering better collaboration between friends.
5. Make students feel happy, because they can be entertained by the fragments of their friends.
6. Can be strong and durable in students' memories. Besides being a pleasant safeguard that is not to be forgotten.

7. Very interesting for students, allowing the class to be dynamic and enthusiastic.
8. Generating passion and enthusiasm for optimism in students and fostering a sense of togetherness and high social solidarity.
9. Able to live events that take place easily, and can pick up the points of wisdom contained in them by appreciating students themselves.
10. It is possible to improve students' professional abilities, and can grow / open opportunities for employment.

b. Lack of Edutainment Method

1. Generally active only those who play it.
2. It tends to be the dominant element of reaction rather than its work.
3. Requires sufficient space.
4. Often disturbs the class next to it.
5. Games or role playing require a relatively long time / lot.
6. Requires high creativity and creative power from the teacher and students. And this is not all teachers have it.
7. Most students who are designated as cast feel embarrassed to need a scene.
8. If the implementation of role playing fails, not only can you give the impression of not being good, but at the same time it means that the purpose of teaching is not achieved.
9. Not all subject matter can be presented through this method.
10. In religious studies, the problem of faith is difficult to present through this method.

Understanding interactive learning methods

According to Moh. Sholeh Hamid (2011: 8) the learning process is something that is important in the world of education that deserves attention, planned, and prepared by educators, because it includes planning goals, determining materials, choosing the right method, and how to evaluate the results of the learning . However, whatever goals are planned,

the ingredients determined, the methods chosen, and the assessment tools used, they will never be in vain. Because, we can be sure that everything will bring results that will be felt in the future.

The problem now is how long the results can be felt. It depends on the child's ability. Surely, the benefits that can be taken from all the choices made by the teacher will not be wasted, because indeed the results taken will come quickly and some will come for a long time.

In this case, the results that are felt in the near future are said to be direct effects (instructional effects), while the results perceived in a relatively long time are called the nurturant effect which is usually related to attitudes and values.

One component of learning is the method, so that on this occasion will be discussed about interactive learning methods. In essence, interactive methods are the elaboration of collaborative learning, which requires collaboration and interaction between students in discussing a subject matter together with the teacher in the classroom.

So the interactive learning method is a learning method that shows the interaction between the teacher and students that is fun and empowering. In this case, fun and empowering can be realized if the interaction can proceed by combining the principles of education and entertainment (edutainment), so that students feel entertained and can learn without realizing it. Because, basically, humans will be more focused and accept more quickly if given teaching that is fun, entertaining, and inspiring monks and students' desire to follow the learning well.

a. Various Learning Methods that are Interactive

There are various learning methods that are interactive, including the following:

1. Lecture method

The lecture method is a method that has existed since the existence of education, so this method is used more frequently in every learning and is known as a traditional method.

2. Project method

The project method is a way of teaching that provides opportunities for students to use the units of daily life as learning material. The purpose of this project method is for them to be interested in learning.

3. Experimental method

The experimental method is a method of giving opportunities to students, both individually and in groups, to be trained in a process or experiment. With this method, it is expected that he can be fully involved in planning and conducting experiments, finding facts, collecting data, controlling variables, and solving the problems he faces in real.

4. Method of assignment and reading

In this context, the assignment of assignments means that the teacher assigns a task to students and associates it with other tasks. For example, when the teacher assigns reading assignments to students, other tasks must be added in comparison, or told to observe the people in their environment after reading the book. Thus, assigning assignments is a work that must be completed by students without being tied to a place.

5. Discussion method

Discussion is the process of discussing a problem by involving many people, where the results of the discussion will be an alternative answer in solving the problem. In this connection, the people involved in it expressed their own views on the issues raised. Furthermore, the various views are analyzed and sought the most ideal and most representative views of all the views of the discussion participants. The results of the analysis are then the alternative answers.

6. Exercise method

Drills or drill methods, also commonly called training methods. This method is a method used by teachers to teach in an effort to instill certain habits or skills to students. That way, they will master new skills or habits. So that it can be used as a provision in their lives later.

a. Understanding Quantum Teaching Method

According to Moh. Sholeh Hamid (2011: 8) quantum teaching seeks to change the atmosphere of watching and boring learning into a lively and joyful learning atmosphere by combining physical, psychological, and emotional potential. Students become an integral whole. Quantum teaching contains the principles of an effective, efficient, and progressive teaching design system, along with the presentation method to get amazing learning results with little time.

In quantum teaching practice relies on the main principle "bring their world to our world, and bring our world to their world". Thus, learning is a full-contact which involves all aspects of the student's personality (thoughts of feelings and body language) in addition to knowledge, attitudes and prior beliefs, as well as future perceptions. All of this must be managed as well as possible, aligned to achieve harmony.

The quantum here is the interaction of changing energy into light. Quantum teaching thus, is the conversion of various things in and around learning moments. These interactions include elements for effective learning that affect student success. These interactions transform students' natural abilities and talents into light that will benefit themselves and others.

So quantum teaching is a learning change that reaches with all its nuances. And quantum teaching also includes all links, interactions and differences that maximize learning moments.

According to Moh. Sholeh Hamid (2011: 8) some syntax in learning quantum teaching, namely as follows:

1. Grow, meaning to foster student interest by satisfying it.
2. Natural, meaning to create or bring common experience that can be understood by all students.

3. Name, which means naming activities that will be carried out during the teaching and learning process by providing keywords, concepts, models, formulas, strategies, and input.
4. Demonstrate, the intention is to provide opportunities for students to show that they know something.
5. Repeat, that is to point out a few students to repeat the material and confirm that they know because they know something.
6. Celebrate, meaning celebrating the success that has been done by students in recognition of completion, participation, and acquisition of skills and knowledge.

b. Definition of Active Learning Methods

Active means active while learning is learning. So, active learning is active learning. According to Melvin I. Silberman, learning is an automatic consequence and information to students. Learning requires involvement and action as well as when learning is active, students do most of the learning work, they use their brains, learn ideas, solve problems and apply what they learn.

Active learning is a unified sum of comprehensive learning strategies. Active learning includes a variety of ways that build group work and in a short time can make them think about the subject matter. In active learning there are also techniques for leading learning for the whole class, for small groups, stimulating discussion and debate, practicing skills, encouraging questions even making students teach each other.

Learning is effective for anyone, experienced or beginner who teaches information on technical and non-technical concepts and skills.

According to Silberman, how to learn by listening will forget, but by the way and seeing will remember a little, by listening, seeing and discussing with other students will understand, by listening, seeing and discussing and doing will gain knowledge and skills, and ways to master the best lesson is to teach. So to be able to learn the maximum

must use all means by listening, seeing, discussing, doing, teaching. That way will create an active learning atmosphere.

B. Thinking Framework

In connection with the above, the method plays an important role in the teaching and learning process to improve science learning skills by using the interactive learning edutainment method. In science learning is one creative, expressive activity that is used to convey lessons to students. The use of this edutainment method can change the initial conditions in the form of low learning outcomes in natural science subjects to increase.

C. Action Hypothesis

Based on the expert opinion above, the researchers made a hypothesis in this study, namely:

1. Learning activities of students in science learning using the Edutainment Interactive Learning Method.
2. There is an increase in learning outcomes of students in science subjects using Edutainment Method Interactive Learning for students in grade IV A Penda Katapi Elementary School 2016/2017 Academic Year.

CHAPTER III

RESEARCH METHODS

A. Time and Site Location

Research Time

This research was conducted from July to September 2016/2017.

Research Sites

The study was conducted at SDN 1 Penda Katapi with the research subjects of the fourth grade students. The reason for conducting this research was at SDN 1 Penda Katapi because in this elementary school there were visible problems, namely students who saw difficulties and confusion and some did not understand science.

B. Type of Research

1. This type of research is classroom action research (CAR). According to Kemmis and Mc Taggart (in Ritawati, 2007: 11) "Classroom action research is a form of collective self-reflection that involves participants in a social situation to expand rationality and justification of educational practices, as they experience in everyday practice ". From the above opinion it can be concluded that the research conducted by the teacher on the problems encountered in the learning process in the classroom involves participants.
2. Classroom action research contains three elements, namely research, action and class. According to Arikunto (Badrujaman & Dede Rahmat Hidayat, 2010: 10) explains the three meanings, namely:

3. 1. Research is the activity of observing an object using certain method rules to obtain data or information.
4. 2. Action is a movement of activity that is intentionally carried out with a specific purpose.
5. 3. Class is a group of students who are at the same time receiving the same lessons from the teacher. In this case what needs to be considered is that the class does not refer to a physical space, in the form of classrooms, but to students as subjects of learning.

C. Presence and Role of Researchers

The presence of researchers in this CAR is researchers every day to school not only when researchers teach or conduct research but, during school activities take place from morning to afternoon, so the implementation requires the presence of researchers in the field. In this CAR, researchers work with teachers in the field of study.

The role of the researcher as the executor of the action. So that, in addition to observing, the researcher was also observed while carrying out actions in class and the researcher directly in planning actions, taking action, observing, reflecting, collecting data and analyzing data. The role of the teacher in this study was as an observer.

D. Research Subjects

The subjects in this study were all fourth grade students of SDN 1 Penda Katapi. The 2015/2016 school year totaling 25 students with the following details:

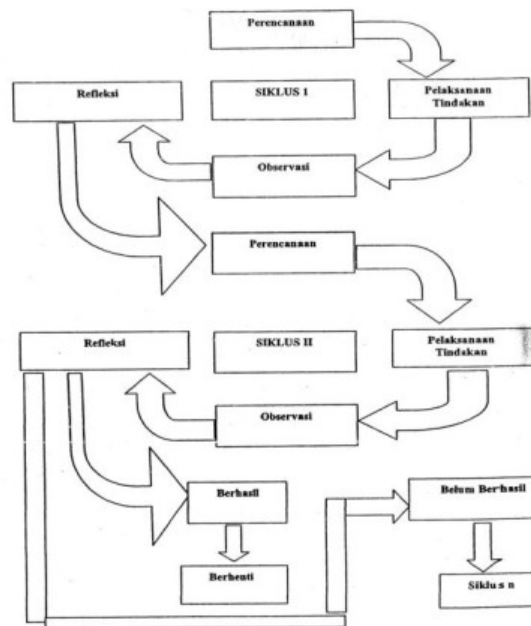
Table 1
Research Subjects

No	Class	Gender		Total
		Men	Woman	
1	IV	17	12	29

Source: Guardian of Grade 4 of SDN 1 Penda Katapi 2016/2017 Academic Year

E. Research Design

This research starts from the first cycle planning that is implemented in the action plan. The implementation of these actions is observed, the observations are reflected and interpreted. If the cycle 1 has reached the indicator of the success of the research, the researcher can be said to be successful. If the results of research in cycle 1 have not shown an indicator of success of the research, or even failed altogether, then the cycle 2 action plan is prepared and cycle 2 action is implemented if it is still not successful, then planning cycle 3 and so on.



Picture 1. Classroom Action Research Cycle Diagram

Cycle I

a. Action Planning

Planning carried out by the researcher before carrying out the learning process is as follows:

- 1) Make a learning implementation plan (RPP) that is appropriate to the science learning and assessment methods in learning.
- 2) Preparing learning resources and media as well as teaching aids used in learning.
- 3) Compile data collection instruments in the form of tests and observation formats.
- 4) Informing and directing students about material styles that affect the motion of objects that will be applied in learning.

b. Implementation of actions

The actions taken by the researcher during the learning process in cycle I are as follows:

- 1) Say the opening greeting when entering the classroom.
- 2) Condition students so that the learning situation becomes conducive.
- 3) Invite students to pray together before learning.
- 4) The teacher prepares audio visual tools to play videos related to the material.
- 5) Classes are designed so well that students feel comfortable.
- 6) The teacher plays videos for students and provides an explanation of the video.

- 7) After finishing the video playback, students are divided into several groups to describe the video that has been aired.
- 8) Describes the force material that affects the motion of objects
- 9) The name of the group is made in accordance with the relevant material, for example the character in the video shown.
- 10) Demonstrations, students are invited to play with snowball throwing by way of each group preparing a question written on blank paper, then the paper is rolled into a colorful ball that is split and then covered with isolative.
- 11) each group has the opportunity to throw the ball into another group with the time specified by the teacher.
- 12) Another group tries to catch the ball. The last student holding the ball gets the opportunity to answer the question of the ball.
- 13) Students and teachers do questions and answers.
- 14) With the guidance of the teacher, each group summarizes the material.
- 15) Provide an evaluation of learning.
- 16) Reflecting learning outcomes by asking students the difficulties and conveniences in carrying out lessons concerning the force of movement of objects ..
- 17) End the lesson with greetings.

c. Observation (Observation)

1. Educators

- a) Observe the way educators deliver lessons.

- b) Observe how educators condition when learning.
- c) Observe the way educators use the interactive learning edutainment method.
- d) Observing the interaction between educators and students when learning takes place.

2. Learners

- a) Observing students' activities during the learning process.
- b) Observing the activeness of students towards the material presented.
- c) Observing students' interactions with educators as well as with other students.
- d) Observing the ability of students when demonstrating the results of their work, and observing students when working on evaluation questions.

d. Reflection

Perform data analysis obtained from the results of classroom action research, and design improvement processes that have been achieved and succeeded in the teaching and learning process.

F. Data Collection Techniques

In data collection conducted by researchers together with one friend and teacher of grade IV SDN 1 Penda Katapi as observers namely learning outcomes by using interactive learning Edutainment method.

To obtain the data needed in this study is to use techniques:

- a. Observation technique

According to Musfiqon (2012: 117) "observation is an activity of collecting data through observation of symptoms, phenomena and related empirical facts in research problems". This observation technique research goes directly to the field to observe the situation and conditions in the field, for example directly, especially the difficulties faced by teachers in teaching science subjects.

So it can be seen that observation is a series of activities to see, listen and record the symptoms that occur in the field based on the observations of researchers

b. Test

The test is a measuring tool in the form of questions, commands and instructions that are shown to students to measure the ability of students in understanding a material being taught.

According to Margono (2003: 66) the test is "a tool or procedure used in the framework of measurement and research when it is carried out or an event of ongoing measurement and research". According to Sudaryono (2013: 40) the test is "some data collection instruments are a series of questions or exercises used to measure the skills of knowledge, intelligence, ability or talent possessed by individuals or groups". Tests used to measure abilities. These tests are used to determine the ability of students in natural science subjects using Interactive Learning Edutainment methods.

G. Data Analysis Techniques

The method in this study uses Classroom Action Research (CAR) which provides an overview of the problems being experienced by a school. In this study

to analyze data was done in two ways, namely qualitative data analysis and quantitative data analysis

1. Qualitative

Qualitative data is obtained from the observation sheets of teachers and students in grade V SDN 6 Selat Hilir Kuala Kapuas which are intended to find out the advantages and disadvantages of the learning done.

Qualitative data obtained from activities towards researchers and activities towards students and students' responses during the teaching and learning process by analyzing learning outcomes seen in the teaching and learning process using scientific learning approaches.

To assess the activities of teachers and students in learning, the following categories are used:

Less good = 1-1.9

Good enough = 2-2,9

Good = 3- 3.9

Very good = 4

Quantitative

Quantitative data comes from the test results given at the end of each activity cycle. This is done to find out the improvement of student learning outcomes on the approach applied. The formula used in calculating quantitative data in this study is as follows:

a. Class average value (Mean)

$M =$

With: M = class average value

ΣX = Number of all student grades

n = Number of students

Source: Ady Suryanto (2012: 43).

Percentage of Learning Completeness

Calculate the percentage of students' mastery learning for classical completeness by using the formula:

$$TB = x \cdot 100\%$$

Information :

= Number of students who get more than

or equal to 60

n = Many students

100% = Fixed digger number

TB = Classical learning completeness (minimum 85%)

Source: Sukardi (in Dwindi 2014: 36).

Combining qualitative and quantitative

Qualitative Strategies

Approaches in certain qualitative studies already have complete and clear procedures. For example, Clandinin and Connelly (2000) have made a comprehensive description of what a narrative researcher must do. Moustakas (1994) has also discussed philosophical doctrines and procedures in the phenomenological method, while Strauss and Corbin (1990,1998) introduce procedures for grounded theory

researchers. Wolcott (1999) describes ethnographic procedures, and Stake (1995) recommends a number of processes that must be carried out in a case study.

In this book, we have presented illustrations based on the above strategies, while introducing approaches such as participatory research (Kemmis & Wilkinson, 1998), discourse analysis (Cheek, 2004), and other approaches that are not mentioned (see Creswell, 2007b) can also be adequate ways of conducting qualitative research:

a. Ethnography is one of the qualitative research strategies in which researchers investigate a cultural group in a natural environment in a long period of time in the collection of primary data, observation data, and interview data (Creswell, 2007b). The research process is flexible and usually develops according to conditions in response to the living realities encountered in the field (LeCompte & Schensul, 1999).

b. Grounded theory is a research strategy in which researchers "produce" general and abstract theories from a particular process, action, or interaction derived from the views of participants. This design requires researchers to undergo a number of stages of data collection and screening of categories for information obtained (Charmaz, 2006; Strauss and Corbin, 1990, 1998). This design has two main characteristics, namely: (1) a constant comparison between data and categories that arise and (2) theoretical sampling (teoretical

sampling) of different groups to maximize similarities and differences in information.

c. Case studies are research strategies in which researchers carefully scrutinize a program, event, activity, process, or group of individuals. Cases are limited by time and activity, and researchers collect information in full by using various data collection procedures based on a predetermined time (Stake, 1995).

d. Phenomenology is a research strategy in which researchers identify the nature of human experience about a particular phenomenon. Understanding the experiences of human life makes philosophy phenomenology as a method of research whose procedures require researchers to study a number of subjects by being involved directly and relatively long in it to develop patterns and meaning relations (Moustakas, 1994). In this process, the researcher puts aside his personal experiences so that he can understand the experiences of the participants he studied (Nieswiadomy, 1993).

e. Narrative is a research strategy in which researchers investigate the lives of individuals and ask one or a group of individuals to share their lives. This information is then retold by the researcher in narrative chronology. At the end of the research phase, the researcher must combine the narrative style of his views about the life of the participant with his views on the life of the researcher himself (Clandinin & Connelly, 2000).

Quantitative Strategies

These strategies include real experiments, less rigid experiments which are often referred to as quasi-experiments and correlational research (Campbell & Stanley, 1963), and single-subject experiments (Cooper, Heron, & Heward, 1987 ; Neuman & McCormick, 1995).

Quantitative strategies have involved more complex experiments with all variables and treatments (such as factorial designs and repeated measure designs). Quantitative strategies also include slightly complex structural equation models, which usually include causality methods and the identification of the strength of multiple variables. In this book, I focus only on two quantitative research strategies, namely surveys and experiments.

- a. Survey research seeks to quantitatively describe trends, attitudes, or opinions of a particular population by examining a sample of the population. This study includes cross-sectional and longitudinal studies that use questionnaires or planned interviews in data collection, with the aim of generalizing populations based on predetermined sample (Babbie, 1990).
- b. Experimental research attempts to determine whether a treatment affects the results of a study. This influence is assessed by applying a particular treatment to one group (often called the treatment group, penj.) And not applying it to another group (often called the

control group, Penj.), And also determining how the two groups determine the final result. This research includes actual experiments with random assignments of treated subjects under certain conditions, and quasi-experiments with non-random procedures (Keepel 1991). Included in quasi-experiments are designs single-subject.

H. Indicators of Research Success

This research can be said to be successful if it meets all the components specified as indicators in this section in the form of qualitative indicators and quantitative indicators. To see the success rate of this study with the following indicators of research success:

- a. Learning activities of students individually can achieve good categories.
- b. Science learning outcomes of students achieving the Minimum Completeness Criteria (KKM) is 60.
- c. The level of achievement of the completeness of classical learning outcomes with the provisions of the school where the researcher conducted the study was 85%.
- d. Improved learning outcomes can reach the medium category.

CHAPTER IV

DATA DESCRIPTION AND DISCUSSION

A. Data Description

Initial description

Before the research activities were carried out, the meeting between the researcher and the principal of Penda Katapi Elementary School 1 and the fourth grade teacher on August 3, 2016, at the same time gave a permission letter to conduct observations and research to the principal of Penda Katapi 1 Elementary School, then the principal handed over fully to Class IV teachers coordinate with researchers to discuss future research plans.

The researcher and teacher of grade IV discussed the research plan to be carried out and the researcher also asked for a willingness to help the researcher to be an observer / observer in the learning process and the researcher also said that the researcher would begin carrying out learning activities on Wednesday 10th August 2016.

Before conducting the research, the researchers first tested the instrument in class IV of SDN 1 Penda Katapi with the number of 27 students held on August 10, 2016.

Natural Science Learning using interactive learning edutainment method by using media for initial data collection, while learning without using media is used as a benchmark to find out the improvement of student learning outcomes which includes several stages including planning, implementing, collecting research

results (observation and learning outcomes tests) and reflection. Therefore the results of the study are focused on the results of monitoring the implementation of actions.

Pre Action Data Description

- 1) Pre-action data consists of preliminary data, the results of which are obtained from the results of pre-action observers and pre-action tests. The results obtained from these two data will be used as a benchmark for the success of subsequent learning. Both data are presented as follows:
 - 2) a. Description of Pre-Action Observation Data
 - 3) Observations made by researchers when educators conduct learning activities with root material and root uses are as follows:
 - 4) 1) Students pay less attention to educator explanations.
 - 5) 2) Some students are not focused on learning.
 - 6) 3) There are still many students who are less active (shy) asking questions in the learning process.
 - 7) 4) Lack of motivation of students in learning
 - 8) 5) Science learning outcomes are still low.

b. Description of Pre-Action Test Data

The pre-action test aims to determine the level of student mastery of the subject matter as a learning topic before the classroom action research is carried out.

The activity starts with the researcher doing the learning process first using the interactive learning edutainment method and showing the media. Then the researcher divides the LKPD (Student Worksheet) to test students' abilities about the material being taught. The researcher provides an explanation of how to work on the LKPD and the researcher walks around the classroom to supervise students while working on the questions given. When finished, educators ask students to collect their work.

The following is a list of values from the ability to answer pre-action questions:

Table 7
Class IV Pre-Action Test Results for SDN 1 penda
before the Class Action Research

No	Student	Pre-Point	Result	
			≥ 60 T	≤ 60 TT
1.	Arbain	30		√
2.	Aprilia	30		√
3.	A. Ridwan	40		√
4.	A. Maulana	60	√	
5.	A. Sulman	50		√
6.	Abdul Latif	30		√
7.	Benie	40		√
8.	Cici Rahmawati	40		√
9.	Desty Aulia Putrid	40		√
10.	Elia Nopa Handayanie	30		√
11.	Githa Safira	30		√
12.	Ilham Pratomo	30		√
13.	Ipan	30		√
14.	M. Muliadi	40		√
15.	M. Fahmi	50		√
16.	M. Arifin	70	√	

17.	M. Risky	60	√	
18.	M. Hafis	40		√
19.	M. Nuraini	50		√
20.	Nita R.S	30		√
21.	Normilawaty	60	√	
22.	Nurainah	60	√	
23.	Siti Jahrah	80	√	
24.	Syalamah	50		√
25.	Taufik Hidayat	60	√	
26.	Wulan	60	√	
27.	Irpandi	40		√
Sum		1230		
Average		45,55		
Presentage		29,26%		

1. Information :
2. T = Completed
3. TT = Not Completed
4. How to find the average value (mean) and percentage of completeness in the initial ability, namely:
 5. 1) Calculate the average value (mean), to determine the achievement of the minimum completeness value of students by dividing the total value of all students by dividing the total number of students, with the following formula:
 6. $M = \frac{\sum x}{n}$
 7. n
 - 8.
 9. $M = \frac{1230}{27} = 45.55$
 10. 27

11. Based on the results of calculating the average value, it can be seen the average value of students in grade IV SDN 1 Penda Katapi is 45.55.
12. 2) Calculate the completeness of students' learning classically, where a predetermined learning completeness indicator is 60, 85% classical learning completeness.
13. $TB = \Sigma s \geq 60 \times 100\%$
14. n
15. = 8 x 100%
16. 27
17. = 29.62%
18. Based on table 7 the value of the pre-action test above that the number of values reached 1230 with a grade average value of 45.55 and classical completeness of 29.62% included in the criteria very poorly achieved.
19. So it can be seen that the level of achievement of learning success has not met the classical completeness requirements. The description of the value acquisition in the pre-action is as follows:
20. 1. Of the 27 students, there were no students who received a score of 90-100.
21. 2. Out of 27 students, there is one student who gets a score of 80.
22. 3. Of the 27 students, there is 1 student who scores 70.
23. 4. Of the 27 students, there were 6 students who scored 60.

24. 5. Of the 27 students, there were 19 students who received a score of 30-50

Description of Action Data Cycle I

In the implementation of the action cycle I which consists of 1 meeting which in the first cycle action educators use interactive learning edutainment method by showing one example of audio visual media to improve science learning outcomes of students in grade IV SDN 1 Penda Katapi especially on root material and root use .

a. Action Planning Cycle I

In this study, it is necessary to have a plan that is arranged in such a way that this research runs smoothly in accordance with the path that has been set beforehand in the cycle. The planning actions taken by the researcher before carrying out the learning process are as follows:

At this planning stage the researcher compiles a cycle I learning plan which includes competency standards, basic competencies, indicators and learning objectives of the material and prepares Post Test and LKPD for students using interactive learning edutainment method. For more details can be explained as follows:

1. The teacher determines the topics to be taught.
2. The teacher designs the implementation of learning (RPP).
3. Preparing the media to be used or used in learning on the root material.
4. Designing group formation to observe audio visual media.

b. Implementation of actions

The implementation of the first cycle class action is carried out on Monday August 15 2016 at 10.25 - 11.35 WIB. The actions in cycle I are described in detail as follows:

1. Introduction

- a) Educators say hello.
- b) Educators invite students to pray before starting learning.
- c) Educators check attendance lists of students.

2. Core Activities

a) Educators prepare audio visual tools to play videos related to the material.

b) Educators display videos for students and provide an explanation of the video.

c) Educators divide students into several groups.

d) Educators explain root material and root use.

e) Educators guide and guide students in playing games.

f) Educators do questions and answers to students.

g) Educators guide students to conclude the material.

3. Closing Activities

a) Provide an evaluation of learning.

b) Give conclusions.

4. Closing

a) Educators end learning.

b) Educators say hello.

c. Observation

Observation is an effort to observe the action of the research. As for the results of research in cycle I of 2 (two) observers, namely the teacher and students recorded in the observation sheet of the activities of teachers and students at the time the science learning took place with the observation sheet made. The data are presented as follows:

1) Data on the situation of teaching and learning activities

Situation data of teaching and learning activities include the activities of educators (researchers) and students as well as the use of interactive learning edutainment methods in teaching and learning activities. The data is obtained from the observation sheets, each filled by the first observer (class IV guardian) and second observer (teacher).

Description of Cycle II Action Data

a. Planning

In this study, it is necessary to have a plan that is arranged in such a way so that this research runs smoothly according to the path that has been set previously in cycle I. The planning of actions carried out by the researcher before carrying out the learning process are as follows:

1. The teacher designs the implementation of learning (RPP).

2. Prepare the media that will be used as learning

In the first activity the teacher determines to make a learning implementation plan (RPP) which contains steps in learning and various

activities carried out during the learning process. In the RPP there are three types of activities that will be applied by researchers, namely preliminary activities, core activities and final activities.

The second plan in the second cycle is to prepare teaching materials from natural science subjects about the roots and uses of the roots and prepare some real objects that are used as learning media in the form of grass, chili trees, ramnutan trees which will be used as observable objects then describe in front of the class from the results observed.

b. Implementation of actions

The implementation of the second cycle class action is carried out on Monday Monday, September 5 2016 at 10.25 - 11.35 WIB. The actions in cycle II are described in detail as follows:

1. Introduction

- a. Educators say hello.
- b. Educators invite students to pray before starting learning.
- c. Educators check attendance lists of students.
- d. Educators condition the class.

2. Initial activities.

- a. Educators read out learning goals or learning paths.
- b. Educators ask who likes to plant plants through question and answer

(as apperception)

3. Core Activities

- a. Educators explain the steps in drawing the types of roots.

- b. Educators explain the use of roots.
- c. Educators provide material explanations about the roots and uses of roots using interactive learning edutainment methods.
- d. Educators show one example of roots around the class.
- e. Educators invite students to jointly describe the roots that have been shown.
- f. Educators ask one of the students to move forward showing the results based on the roots observed.
- g. Educators give students the opportunity to ask questions
- h. Educators provide reinforcement or resolve problems related to root and root uses.
- i. Educators give assignments.

4. Closing Activities

- a. Educators and students conclude the material learned.
- b. Educators give motivation and praise for learning well.

5. Cover

- a. Educators end learning.
- b. Educators say hello
- c. Observation

Observation is an effort to observe the action of the study. As for the results of research in cycle II on 2 (two) observers, the homeroom teacher and the teacher who were recorded in the observation sheet of the activities

of the teacher and students during the science learning took place with the observation sheet made. The data are presented as follows:

1. Data on the situation of teaching and learning activities

Situation data of teaching and learning activities include the activities of educators (researchers) and students as well as the use of interactive learning edutainment methods in teaching and learning activities. The data obtained from the observation sheets are each filled by the first observer (class IV guardian) and second observer (teacher).

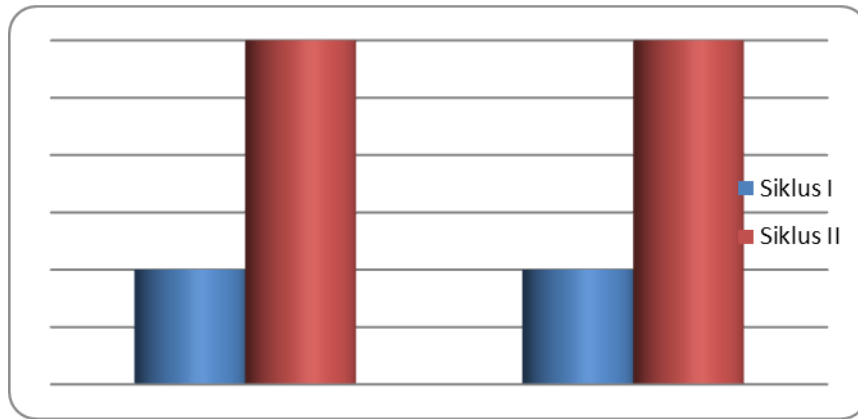
B. Discussion of Research Results

Discussion of the results of research in managing data from observations of teacher and student activities. The results of observations on the activities of educators and students in natural science learning in the root material and the use of roots recorded by two observers are illustrated in the following table:

Recapitulation of Observation Data on Activities of Educators and Students in Class IV Teaching and Learning Activities at Penda Katapi 1 Elementary School

No	Activity	Average value	
		Cycle I	Cycle II
1.	Teacher Activity	2,9	3,3
2.	Student Activity	2,9	3,3

Chart Recapitulation of Observation Data on Activities of Educators and Students in Class IV Teaching and Learning Activities at Penda Katapi 1 Elementary School



Based on the table and diagram diagram above, through the improvement of science learning using interactive learning edutainment method on the root material and the usefulness of the roots carried out at SDN 1 Penda Katapi shows that the activities of teachers and students experience good development.

1. Discussion of research results based on management of student learning outcomes. Based on the results of observations conducted there are three stages, (a) Pre-action, (b) Cycle I, (c) Cycle II with the results of the following details:

a. Pre-Action Stages

In the pre-action stage it proves that the students' low ability in learning outcomes. This is seen from students not paying attention to educative explanations, ashamed to ask in the learning process in natural science learning with root material and root use. In addition, teaching and learning activities have not used the interactive learning edutainment method as a tool for students in natural science learning in the root material and root uses so that the test results

obtained at the pre-action stage are still very low and have not yet reached completeness.

b. Phase Cycle I

At the first cycle stage students are seen at this meeting more increased slightly compared to the pre-action stages. By using the edutainment method interactive learning makes it easy for students to learn. Students look active when the teaching and learning process takes place with the help of interactive learning edutainment method in the form of one of the objects in the classroom and real objects in the form of mango, grass and chili trees that educators have provided.

However, in the first cycle phase, there were still students who received grades under completeness, namely 60. Learning outcomes of students in learning in accordance with the real objects that had been observed in the first cycle still did not reach classical completeness, this was because students still lacked pay attention to and listen to the teacher's explanation, so as not to focus on paying attention to explanations which resulted in students' difficulties in learning the interactive learning edutainment method observed in the form of evaluation.

c. Phase II cycle

In the second cycle the test results of students have also reached completeness. This means that there is a noticeable increase in the ability of students to learn with real objects that have been shown.

Based on the discussion above, it is known that the percentage of students who are complete and get good grades compared to cycle I this states that in cycle II there is a very satisfying improvement compared to cycle I.

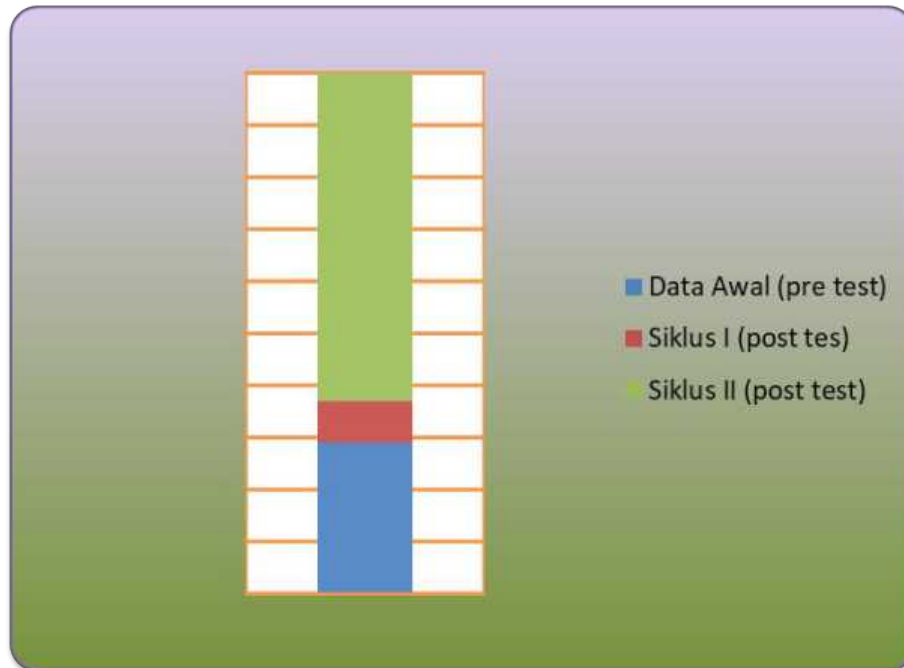
Learning outcomes obtained based on the results of tests on students in grade IV SDN 1 Penda Katapi using interactive learning edutainment method.

Recapulation of learning outcomes can be seen in the following table:

**Recapitulation of Learning Outcomes in Learning Activities and Outcomes
by Using Interactive Edutainment Learning Methods on
The fourth grade students of SDN 1 are interested**

No	Student Initial	Value		
		Pre-Action	Cycle I	Cycle II
1.	AR	30	50	60
2.	AP	30	40	70
3.	A.R	40	50	70
4.	A.M	60	50	70
5.	A.S	50	60	70
6.	AL	30	50	60
7.	BN	40	40	60
8.	CR	40	40	70
9.	DAP	40	50	80
10.	ENH	30	40	70
11.	GS	30	70	70
12.	IP	30	50	60
13.	IP	30	40	60
14.	M.M	40	50	60
15.	M.F	50	40	60
16.	M.A	70	80	80
17.	M.R	60	50	70
18.	M.H	40	40	70
19.	M.N	50	60	70
20.	N.R	30	30	60
21.	NO	60	50	60
22.	NU	60	40	70
23.	S.J	80	90	90
24.	SY	50	70	80
25.	T.H	60	40	70
26.	WU	40	60	70
27.	IR	40	40	60
	Sum	1230	1410	1840
	Average	45,55	52,22	68,14
	Percentage	29,62%	37,04%	100%

Graph of Recapitulation of Learning Outcomes in Activity and Learning Outcomes by Using Edutainment Method Interactive Learning on Class IV Students of SDN 1 penda Katapi



Based on the table and diagram above it can be seen that in the initial data the average value of students only got a value of 45.55 this value is still below the specified completeness criteria which is 60. The results of completeness of students also only gained 29.62%. This value is very far from the specified classical completeness criteria that is 85%. Then in the first cycle the average value of students increased to 52.22 this value still did not reach the minimum required completion criteria. The results of the classical learning completeness of students also increased, namely obtaining a value of 37.04%. This value almost reached the criteria of the classical completeness specified. So that we have to optimize the learning process again in cycle II which has an average score of 68.14. This value has increased from the previous action and the classical completeness to 100%.

CHAPTER V

CONCLUSION

1. Berdasarkan hasil penelitian yang telah dibahas maka dapat disimpulkan:
2. 1. Aktivitas belajar peserta didik dalam pembelajaran IPA dengan menggunakan Metode Edutainment Pembelajaran Interaktif lebih aktif pada peserta didik kelas IV SDN 1 Penda Katapi Tahun Pelajaran 2016/2017.
3. 2. Ada peningkatan hasil belajar peserta didik pada mata pelajaran IPA dengan menggunakan Metode Edutainment Pembelajaran Interaktif pada peserta didik kelas IV SDN 1 Penda Katapi Tahun Pelajaran 2016/2017.

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