INCREASE PARTICIPANT ACTIVITIES AND LEARNING OUTCOMES EDUCATE THROUGH THE TALKING STICK LEARNING MODEL IN SCIENCE SUBJECTS IN CLASS VIII SMP NEGERI 8 GORONTALO

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Abstract

The fact shows that science learning in Class VIII at SMP Negeri 8 Gorontalo has a problem, namely the low learning outcomes of students, this is caused by the lack of interest of students in learning science. Learning is more centered on the teacher. Students take more notes and memorize the material in the textbook. The method used is less attractive to students. Lack of use of media in learning. The teacher lacks apperception that can provoke students to ask questions, this causes boredom in students because students are only directed to the ability to memorize and write material which results in activities and learning outcomes of students not achieving completeness, while what is expected in science learning in elementary schools so that students are able to know and understand the various organs of the body and diseases in humans. In addition, teaching science in elementary schools aims to foster students' understanding of human relations with life and understand the condition of the universe around them, so that they are able to adapt to the environment according to their age level, circumstances and abilities. However, the problem that occurs in the implementation of education is the low quality of education which results in student learning outcomes below the KKM .

Keywords: Learning, Talking Stick.

INTRODUCTION

Based on the results of observations in Class VIII at SMP Negeri 8 Gorontalo that the activities and learning outcomes of students, especially in science subjects, indicate that student learning outcomes are low, students are less active in implementing learning, students are unable to communicate new ideas or ideas due to lack of understanding of the material presented, discussions and learning processes are only dominated by certain students. Of the 30 students, 14 students achieved a score percentage above 75%. or 43.3% and those who have not reached the percentage of scores above 75 or low learning outcomes are 1.6 people with a percentage of 56.7%. The acquisition of low learning outcomes is caused by the implementation of the learning process that has not been effective. Therefore teachers need to use learning models to overcome teacher difficulties in teaching and students' difficulties in learning, as expressed by (Sagala 2013: 175), that in order to overcome various problems in learning, teaching models are seen as capable . overcoming the difficulties of teachers carrying out teaching assignments and also learning difficulties of students. The model is defined as a conceptual framework that is used as a guide in carrying out activities. The talking stick learning model is expected to be able to motivate students in learning and can increase student activity and learning outcomes. In addition, the talking stick learning model can encourage students to express opinion, train the

concentration and activity of students and develop the ability of students to develop ideas or ideas in solving problems.

From the description above, the research title is appointed as follows; " Improve the activities and learning outcomes of students through the Talking Stick Learning model in science subjects in class VIII SMP Negeri 8 Gorontalo ".

The lack of student activity and the low learning outcomes of students in Class VIII SMP Negeri 8 Gorontalo in science learning need to be addressed immediately by improving learning through the talking stick learning model. Learning using the talking stick method is an effort to create an interesting learning atmosphere for all students through the use of a stick, where students holding the stick must answer the questions, with this learning model it is expected that students can be active and learning outcomes will increase.

THEORETICAL STUDY
Understanding of student learning activities
A learning will be called successful well, when the teacher is able to change the mindset, knowledge, nature and character of students, and is able to grow and develop students' awareness to learn, so that the experience gained by students while they are involved in the learning process can benefit directly. for personal development. The main key to learning is in a teacher. But this does not mean that the learning process is only the teacher who is active, while the students are passive. Learning requires the activeness of both parties who are both subjects of learning. Therefore a teacher must be able to master all forms of teaching, the nature and character and learning abilities of each student.

According to Grasser (in Uno 2014; 157) teachers must master 3 things namely; (1) the ability to diagnose student behavior, (2) the ability to carry out the learning process, (3) the ability to measure student learning outcomes. the nature and character of their students, because if a teacher is able to master the nature and character of his students it will be easy for him to know the abilities and learning outcomes of his students. In addition, the activity also emphasizes the way a group approaches problems, solutions, and generates more ideas from IPA is only one person (helen dawn 2009:51).

Sanjaya (2009: 132) suggests the notion of activity in learning is not memorizing a number of facts or information. Learning is doing, gaining certain experiences in accordance with the expected goals. Therefore learning strategies must be able to encourage student activity. The purpose of learning strategies is to find out the extent to which learning activities and results are obtained by students. If students are able to do activities well, learning outcomes will definitely be good, but if students are not active in learning, learning will not be beneficial (Sardiman 2010 : 100).

the process of learning activities must involve all psychological aspects of students, both physically and spiritually so that changes in behavior can occur quickly, precisely, easily and correctly, both related to cognitive, affective and psychomotor aspects.

H anafiah and S uhana (2009: 24) explain that activities in learning can provide added value for students, in the form of the following: (1) students have awareness (awareness) for learning as a form of internal motivation (driving force) for true learning; (2) students seek experience and directly experience it themselves, which can have an impact on the formation of an integral personality; (3) students learn according to their interests and abilities; (4) fostering a disciplined attitude and a democratic learning atmosphere among students; (5) learning is carried out concretely so that it can

develop understanding and critical thinking and avoid verbalism; (6) developing a cooperative attitude among students so that the school becomes alive, in line with the life of the surrounding community.

Rohani (2009:10) explains that the teacher's role in arousing student activity includes: (1) to arouse student soul activity, teachers need to: (a) ask questions and guide student discussions; (b) giving tasks to solve problems, analyze, make decisions, (c) carry out various experiments by concluding information, giving opinions. (2) to arouse physical activity, the teacher needs: (a) to organize various forms of skill work in workshops, laboratories (b) holding exhibitions, field trips.

Furqon (2005: 66) argues that learning activities are the main thing for good cognitive development. Students need activities to understand various concepts. Schools have an important role in helping students get guidance, teaching and training that helps in developing their basic potential. Meanwhile, according to Hanafiah and S uhana (2009: 23) educating learning activities is a process of learning activities that involves all psychological aspects of students, both physically and spiritually so that accelerated changes in behavior can occur quickly, precisely, easily and correctly, both related to aspects cognitive, affective, and psychomotor.

Sardiman (2010:95-96) explains that learning requires activity, this is because learning is doing. Doing to change behavior, so doing activities. There is no learning if there is no activity. That is why activity is a very important principle or principle in teaching and learning interactions.

activities that occur in schools are efforts that have been designed based on existing learning theories such as science lessons which are seen as relevant to the level of education and predetermined educational goals. According to Slameto (2003: 37) the factors that influence learning outcomes can be divided into two types, namely: (1) those originating from humans who learn, which are referred to as internal factors including biological and psychological factors. Biological factors include age, maturity and health. While psychological factors include fatigue, mood, motivation, interests and learning habits, and (2) factors that come from outside the human being who learns, called external factors. These factors include human factors such as family, school and society. Then non-human factors such as nature, objects, animals, air, sounds, smells, and the physical environment, therefore the teacher must master and understand these two factors to organize learning strategies that are more meaningful, interesting and enjoyable for students.   From several definitions put forward by experts regarding the notion of learning activities, it can be concluded that what is meant by learning activities in this study are student activities related to achieving educational goals in general and learning objectives in particular. These activities include; (1) follow the learning process properly. (2) complete the tasks given during the learning process. (3) doing homework. (4) obeying school discipline. (5) participating in extra-curricular activities. a teacher must be able to activate his students so that the learning process can work well. activating student learning in learning activities is one way to animate and train students' memory so that it develops optimally, marno . (2010:78).

Understanding of learning outcomes

Learning is a process of increasing or increasing one's insight and knowledge. In carrying out learning activities there is a thinking process that involves mental activity, there is a preparation of the information-information received relationship so that an understanding and mastery of the given material arises. With the understanding and mastery that is obtained after going through the teaching

and learning process, students have understood a change from the unknown to the known. These changes are called learning outcomes.

According to Row and Row (in Sofyan, 2003: 65) suggests that learning outcomes are the acquisition of habits, knowledge and attitudes, this acquisition includes a new way of doing things and ways of solving problems in new situations. Meanwhile, according to Skiner in conditioning theory (in Ibrahim 2003: 379) says that learning outcomes are new responses (behaviors). Basically, the new response is the same as the new behavior (knowledge, attitude, skills).

While according to Slameto (2003: 2) explains that learning outcomes are the process of changing behavior. Slameto (2003:3-4) suggests several changes in behavior that can be classified into the results of the learning process, namely: (1) changes that occur consciously, meaning that individuals who learn are aware of changes in themselves. (2) changes that are sustainable and functional, meaning that these changes are continuous and not static. (3) the change is positive and active. (4) the change is not temporary. (5) these changes cover all aspects of behavior.

According to Gagne : that there are five kinds of learning outcomes viz. (1) intellectual skills which include learning to solve a problem obtained through the presentation of material at school. (2) cognitive strategies, learning to remember and think. (3) verbal information, the ability to describe something with words by organizing relevant information. (4) motor skills, the ability to carry out and coordinate movements related to muscles. (5) attitudes, internal abilities that affect a person's behavior based on emotions, beliefs, and intellectual factors. From the descriptions above it can be concluded that learning activities can increase if the learning process is carried out in a fun and varied way, as well as learning outcomes will increase if there are activities in the form of skills, and the ability to know, understand, and master the material so that learning outcomes can increase Besides that, attitude is the main factor that must be considered in learning because attitude is a determining factor in student learning success.

While Bloom (in Sardiman 2011: 23) suggests abilities as learning outcomes, consisting of 3 abilities, namely: (1) cognitive abilities, namely the ability to remember the material that has been studied and the ability to develop intelligence . (2) affective abilities, namely abilities related to psychological attitudes such as tendencies to interest and motivation. (3) psychomotor abilities, namely abilities related to skills and physique.

Individual who learner will be aware of the change or at least the individual feels there has been a change in himself. For example, he realizes that his knowledge has increased, his skills have increased, his habits have increased.

 Student learning outcomes are influenced by several factors, namely (1) these factors involve physical and spiritual health. If both are not disturbed in a healthy sense, then students can learn smoothly. Conversely, if both or one of them is disturbed in an unhealthy sense, students cannot learn as they should, because their minds are disturbed. Health that is often disturbed greatly affects, inhibits and disrupts one's study progress. (2) the factor of interest in the lesson. Interest in learning can affect attention in learning. If students have an interest in the lesson, a lot of attention is paid to the subject matter, the student will be more active in learning. Because great interest will provide enormous encouragement as well and can provide positive motivation to students in learning, understanding a subject matter. And conversely if there is no student interest in the lesson, then the student is not serious in receiving the lesson.

According to Yunanto (2004:44) basically conducting learning activities at school and at home is not much different. At home parents, caregivers, adults who are accompanying children need to use principles in teaching and learning activities so that they can support learning activities, namely: (1) children need to be cared for. Attention to is the key to the success of children's learning activities. (2) basically children experience unique growth and development. Learning activities carried out must be adapted to the growth and development of the child that is happening. (3) learning facilities should be provided in a special room. (4) the time for study activities at home can be more relaxed.

Semiawan (2002: 57) argues, "in the educational process every parent is obliged in the educational process to develop the potential of their students, and a lot depends on the atmosphere in which the task is realized." For this reason, parents must instill children's study habits as early as possible so that children become accustomed to independent learning. According to Djaali (2000: 164) that "learning habits can be interpreted as ways or techniques that settle in students when receiving lessons, reading books, doing assignments, and setting the time to complete activities." Good study habits must be cultivated from an early age in students. This must start from the home environment, because the home environment is the first and foremost dominant influence on children's learning habits. According to D jamarah (2010: 4), the teaching and learning process is nothing but instilling a number of norms into the souls of students. All norms that are believed to contain goodness need to be instilled into the souls of students through the teacher's role in learning. Learning facilities are also an important issue and also have a very big influence on the teaching and learning process.

According to D jamarah (2010: 77), "teachers must be responsive in identifying student learning difficulties, then determine the main causes of student learning difficulties." Sudjana (2002: 37) argues that learning facilities are part of learning facilities which are included in environmental variables. Therefore the availability of these learning facilities can affect student learning success. In addition, Slameto (2003: 76) also argues that in order to be able to learn effectively, a good and regular physical environment is needed which is related to learning facilities such as: clean study rooms, sufficient lighting, facilities and infrastructure such as media and textbooks.

From some of the definitions above, it can be concluded that learning outcomes are changes in the form of changes in behavior, knowledge and attitudes that a person acquires after carrying out the process of learning activities.

Learning model of Talking Stick

According to the Big Indonesian Dictionary, a method is an organized and well-thought-out way to achieve a goal (knowledge, etc.). Furthermore, according to the Big Indonesian Dictionary, a method is a systematic way of working to facilitate an activity in order to achieve a specified goal. The method is more procedural and systematic because the goal is to make it easier to do a job.

In science learning at the Bina Nusantara Health Vocational School, Gorontalo, the talking stick model is a medium that can assist teachers in conducting learning and activating students in learning because with this learning model, teachers can carry out the learning process with two forms of play at once, namely carrying out sticks. for all students, and giving them questions by singing with the aim of eliminating the boredom of students in understanding the material so as to create a fun learning situation.

The steps in implementing the talking stick model (in Ramadhan , 2010:23), namely: (1) the teacher forms a group consisting of 5 or more children, (2) the teacher prepares a stick that is 20 cm long, (3) the teacher convey the main material to be studied, then give the groups the opportunity to read and study the subject matter, (4) students discuss the problems contained in the discourse, (5) after the group has finished reading the subject matter and studying its contents, the teacher invites group members to closing the contents of the reading, (6) the teacher takes a stick and gives it to one of the group members, after that the teacher gives a question and the group member holding the stick has to answer it, and so on until most of the students get a part to answer each question from the teacher, (7) other students may help answer questions if group members cannot answer questions, (8) the teacher gives conclusions, (9) the teacher evaluates/assesses both groups and individually, and (10) the teacher closes the lesson.

The talking stick model in its implementation process certainly goes through several implementation steps, Suprijono (2009: 109-110) mentions the steps in implementing the talking stick model are: (1) learning with the talking stick model begins with the teacher's explanation of the subject matter to be studied, (2) students are given the opportunity to read and study the material, (3) students are given enough time to study the material, (4) the teacher then asks students to close their books, (5) the teacher takes a stick that has been prepared beforehand . The stick is given to one of the students. Students who receive the stick are required to answer questions from the teacher and so on, (6) when the stick rolls from student to other students, it should be accompanied by music, (7) the final step of the talking stick model is for the teacher to provide opportunities for students to reflect on the material they have learned, and (8) the teacher provides a review of all the answers given by students, then together students formulate conclusions.

RESEARCH METHODS

This research was conducted in Class VIII at SMP Negeri 8 Gorontalo . With this talking stick learning model, the researcher wants to know whether 30 students taken randomly in several classes at the same level are motivated to learn science so that their activity and learning outcomes increase. In addition, the position of the school is right in the center of the crowd so it is very easy to reach to serve as a research location. The characteristics of this study were Grade VIII students at SMP Negeri 8 Gorontalo , with a total of 30 students taken randomly from several students in each class at the same level , 17 male students, 13 female students with different levels of ability and learning outcomes.

Based on the results of monitoring and evaluation, percentage analysis will be carried out and the results will reflect on oneself and the entire activity process. In this case, the strengths and weaknesses that occur in the ongoing process will be identified and then followed up in the next activity and will be used as material for compiling a research report.

The indicator of success in this classroom action research is that student learning outcomes increase from 13 students to 75% or 23 students achieve success out of a total of 30 students in science lessons. Meanwhile, individually, students can improve their learning outcomes in the learning process including: (1) the ability to remember subject matter that has been previously studied; (2) the ability to explain the material that has been studied; (3) the ability to interpret learned subject matter into new or concrete situations; (4) the ability to break something down into components or parts so that the structure can be understood; (5) the ability to use knowledge to make something based on certain

criteria; (6) as well as students' self-confidence can increase in an effort to answer questions from the teacher.

RESEARCH RESULT

A.   Research result

Cycle I

a.   Planning

I activities in science learning were held in 2 meetings, namely in February 2018 with the same theme. Cycle I activities are carried out in the following way: first: prepare observation sheets about the activities of teachers and students as well as observation sheets of student learning outcomes. Stage I and stage II prepare learning preparations for action, namely preparing a schedule for implementing activities, preparing a syllabus, preparing lesson plans, developing learning scenarios and assessment instruments. Second: prepare learning media. Third: designing learning scenarios using the talking stick learning model. Fourth: determine the time of implementation of the action.

b.   Acting

The implementation of cycle I as explained in the planning was carried out in March 2019 which was attended by 30 students as a sample , 17 male students and 13 female students with an allotted time of 1 meeting or 1 day of learning . As for the things that were done by researchers in the implementation of cycle I in accordance with the learning design/scenario using the talking stick model can be described as follows: 1) prepare students to learn, 2) absent students, 3) carry out apperception activities by reviewing previous material, 4) ask questions that have to do with the material to be taught, 5) deliver the theme, 6) convey learning objectives orally and in writing, 7) master the material by providing explanations, guiding students and giving students opportunities to ask questions, 8) invite students to observe the material in the textbook, 9) provide opportunities for students to write down the results of their observations, 10) provide opportunities for students to communicate the results of their observations. provide opportunities for students to ask questions that are lacking in science ,12) invite students to discuss , 13) dividing students into 5 groups by paying attention to the terms of group division, namely each group must be heterogeneous, 14) distributing textbooks to each group, 15) students study and discuss material according to instructions from the teacher, 16) together do quizzes or learning models by activating students through the talking stick or walking stick model.

The implementation of the activities in cycle I was directly observed by the observer teacher to see the activeness of the students and the success of the learning process as input for the implementation of the next follow-up.

The results of observing the implementation of learning carried out by teachers and students can be seen in table 1

Table 1 Teacher and student activities In cycle I

No	Observed aspect	Teacher activity					Student activities				
		Jl	Bt	%	Q	%	Jl	Bt	%	Q	%
I	Early learning activities	8	3	37.5	5	62.5	8	3	37.5	5	62.5
ii	Core learning activities	26	8	30,7	18	69,2	26	11	42,3	15	57,6
iii	Final learning activities	6	3	5.0	3	5.0	6	3	5.0	3	5.0
	Amount Aspect and percentage	**40**	**14**	**35.0**	**26**	**65.0**	**40**	**17**	**42.5**	**23**	**57.5**

Information :

Jlh   : observed aspect

Bt   : not implemented yet (bt)

T   : implemented (t)

The results of teacher and student activities in table 1 which were carried out in cycle I which consisted of 3 activities with initial activities consisting of 8 aspects, with teacher activities not being carried out (bt) as many as 3 aspects or 37.5% and those that had been carried out (t) as many as 5 aspects or 62.5%, in student activities 3 aspects have not been implemented (bt) or 37.5% and 5 aspects have been implemented (t) or 62.5%. In the core activities which consist of 26 aspects, 8 aspects have not been implemented (bt) or 30.7% and 18 aspects have been implemented (t) or 69.2%, in student activities 11 aspects have not been implemented (bt) or 42.3 % and 15 aspects have been implemented (t) or 57.6%, at the end of learning activities which consist of 6 aspects, in teacher activities 3 aspects have not been implemented (bt) or 5.0% and 3 aspects have been implemented (t) or 5 .0% while the student activities are the same as the activities that have been carried out by the teacher, namely 3 aspects have not been carried out (bt) or 5.0% and 3 aspects have been carried out (t) or 5.0%.

From all aspects of teacher activities that have not been carried out both in the initial observation and cycle I it has a percentage of 97.5% with an acquisition score of 48.75 and teacher activities carried out in the initial observation and cycle 1 have a percentage of 102.5% with an acquisition value of 51.25. Activities that have not been carried out in the initial observation and cycle I have a percentage of 105% with an acquisition value of 52.5 and activities that have been carried out in the initial observation and cycle 1 have a percentage of 95% with an acquisition value of 47.5. The percentage gain from the two activities is shown in table 4.4 below.

Table 2 Percentage of teacher and student activity
In the initial observation and cycle I

Evaluation	Teacher activity		Student activities	
	Bt	**Q**	**Bt**	**Q**
Initial observation	62.5%	37.5%	62.5%	37.5%
Cycle I	35.0%	65.0%	42.5%	57.5%
Amount	**97.5%**	**102.5%**	**105%**	**95%**
Mark	**48.75**	**51.25**	**52.5**	**47.5**

c.   **Observation and evaluation (observation and evaluation)**

From the results of teacher and student activities that have been observed and carried out in the initial observation and cycle I , it shows that teacher and student activities that have not been carried out are higher than the activities of teachers and students that have been carried out, this affects student learning outcomes, so students get low scores in the unfavorable category, most students have low scores as shown in table 2 below.

Table 3 Observation of cycle I
Student learning outcomes

No	Asepk assessment	Value range	Jl	%
1	The ability to remember the subject matter that has been studied	90 – 100	4	13,3
		75 – 89	9	30
		50–74	16	53,3
		0 – 49	1	03,3
2	The ability to explain the material that has been studied	90 – 100	4	13,3
		75 – 89	9	30
		50–74	16	53,3
		0 – 49	1	03,3
3	The ability to mention the subject matter that has been studied	90 – 100	5	16,6
		75 – 89	13	43,3
		50–74	11	36,6
		0 – 49	1	03,3
4	The ability to distinguish the subject matter that has been studied	90 – 100	5	16,6
		75 – 89	10	33,3
		50–74	15	50
		0 – 49	0	0
5	The ability to conclude the subject matter into a whole	90 – 100	4	13,3
		75 – 89	1 1	36,3
		50–74	13	43,3
		0 – 49	2	06,6
	Percentage of students who scored ≥75 = 49.2 4 % The percentage of students who scored ≤74 = 50.6 2 %			

By looking at the learning outcomes of students in the implementation of cycle 1, previously during the implementation of the initial observation, the percentage was only 29.34% or 9 people out of 30 students who scored above 75 completeness, ≥but after implementing the talking stick learning model as a learning medium and strategy learning in the implementation of cycle 1 of students who obtained a score percentage of ≥75 was 49.24% with the completeness of 13 students or 43.3%, there was an increase from the implementation of initial observations that had not used the talking stick learning model as a learning medium.

From the results of the evaluation of researchers and teacher observers, the following observations were obtained. For the ability to remember previously studied subject matter, there were 4 students or 13.3% in the 90-100 score range in the very good category, in the 75-89 value range 9 people or 30% in the good category, in the 75-89 score range 50-74 as many as 16 people or 53.3% in the not good category, in the range of values 0-49 as many as 1 person or 03.3% in the not good category, in the aspect of the ability to explain the material that has been studied there are 4 students or 13 .3% in the value range 90-100 with very good category, in the value range 75-89 as many as 9 people or 30% good, in the value range 50-74 as many as 16 people or 53.3% not good, in the value range 0- 49 as many as 1 person or 03.3% in the bad category. In the aspect of the ability to state the subject matter that has been studied, there were 5 students with a score of 16.6% in the range of 90-100 in the very good

category, in the range of values 75-89 as many as 13 people or 43.3% in the good category, in the range score 50-74 as many as 11 people or 43.3% not good, in the range of values 0-49 as many as 1 person or 03.3% in the not good category. In the aspect of the ability to distinguish the subject matter that has been studied, there were 5 students or 16.6% in the range of 90-100 in the very good category, in the range of 75-89 there were 10 students or 33.3% in the good category, in the range score 50-74 as many as 15 people or 50% in the not good category, in the range of values 0-49 there are no students or 0%. In the aspect of the ability to conclude subject matter there are 4 students or 13.3% in the range of values 90-100 in the very good category, in the range of values 75-89 as many as 11 people or 36.3% in the good category, in the value range of 50- 74 as many as 13 people or 43.3% in the not good category, in the value range 0-49 there are 2 people or 06.6% in the bad category. The percentage of students obtaining a score of ≥75 is 49.24% and the percentage of obtaining a score of ≤74 is 50.62%.

d.   Reflecting (reflecting) cycle I
a)   The steps of teaching and learning activities have not been effective and efficient
b)   Apperception and motivation have not been maximized
c)   Presentation of subject matter is not systematic
d)   Methods and approaches are not yet relevant
e)   Lack of guidance and motivation to students
f)   Lack of giving opportunities to students to develop their knowledge.
g)   The conclusion of the material is not maximized and implemented well.
h)   Implementation of learning is not in accordance with the allocation of learning time.
Although it has weaknesses, cycle I also has advantages. The advantages obtained from the implementation of cycle I are:
a)   Teachers can see and know clearly the abilities of each student.
b)   The teacher can see the activity of each student during the learning process.
c)   The teacher can find out the level of difficulty of the material which will later become a guide in the next lesson.
In addition, the weaknesses obtained in student activities are:
1.   Lack of student participation in science learning during the learning process
2.   Most students have not been able to remember the material well
3.   Most students have not been able to explain back the material that has been studied
4.   Most students have not been able to mention the material that has been learned
5.   Most students have not been able to distinguish the material that has been studied
6.   Most students have not been able to conclude the subject matter
From the weaknesses of the student activities described above, there are also advantages in this activity:
1.   Students will have the courage to express their opinion
2.   With the talking stick learning model each student can know each other's level of ability, help each other in groups by answering each question together.
3.   Fostering self-confidence among fellow students.
4.   Improving good cooperation between students and teachers.

Based on the reflection results to correct the weaknesses that occurred in cycle I regarding teacher and student activities and student learning outcomes in science lessons in class VIII SMP Negeri 8 Gorontalo needs to take corrective action in the implementation of cycle II .

Cycle II
Cycle ii is a follow-up to cycle 1 by using the talking stick learning model. Cycle II was carried out as an effort to improve student learning outcomes in understanding the material through talking stick learning model.

The implementation of cycle II is the same as the implementation of cycle I , namely through the following stages:

a.   Planning

In the implementation of cycle II , researchers and teacher observers continued to collaborate on planning the implementation of cycle II by looking at the results obtained by students in cycle I. The implementation of cycle II was carried out according to the learning schedule.

b.   Implementation (acting) cycle II

From the learning activities which are still the same with the same learning theme in cycle I but the material is different. The implementation of this cycle was carried out in 2 meetings after reflection and analysis of the results of the implementation of the actions with the steps that had been implemented in cycle I by paying attention to aspects that needed to be improved in the management of cycle I.

From the results of observing the implementation of learning carried out by the teacher and students through the observation sheet, the results of the activities are obtained as shown in table 4.6.

Table 4 Teacher and student activities
In cycle II

No	Observed aspect	Teacher activity					Student activities				
		Jl	Bt	%	Q	%	Jl	Bt	%	Q	%
I	Early learning activities	8	-	%	5	100	8	-	%	8	100
ii	Core learning activities	26	-	%	26	100	26	-	%	26	100
No	Observed aspect	Teacher activity					Student activities				
		Jl	Bt	%	Q	%	Jl	Bt	%	Q	%
iii	Final learning activities	6	-	%	6	100	6	-	%	6	100
	Amount Aspect and percentage	**40**	**-**	**%**	**40**	**100**	**40**	**-**	**%**	**40**	**100**

Based on the table it is clear that all teacher activities that have not been carried out in the initial observation and cycle I were 97.5% with a value of 48.75, in cycle II it became 0% while the previous teacher activities in the initial observation and cycle I were 102.5 with the value of 51.25 increased in cycle II to 165% with a value of 82.5. Likewise with student activities that had not been carried out in the initial observation and cycle I was 105% with a total value of 51.5 but in cycle II it became 0%. In student activities carried out in the initial observation and cycle I with a percentage of 95% with a value

of 47.5, in cycle II it increased to 157.5% with a value of 80. The overall percentage of teacher and student activities in cycle I and cycle II appears in following table

Table 5 Percentage of teacher and student activity In cycles I and II

Evaluation	Teacher activity		Student activities	
	Bt	Q	Bt	Q
Cycle i	35.0%	65.0%	42.5%	57.5%
Cycle i i	0%	100%	0%	100%
Amount	0%	165%	0 %	157.5 %
Mark	0	82.5	0	80

The activities of teachers and students in the table above show that all aspects of the activities carried out by teachers and students have been carried out with a success percentage of 100 %.

c. **Observation and evaluation (observation and evaluating)**

In the second cycle the learning process was carried out well, all aspects had been carried out by both the teacher and the students so that the learning outcomes of students who were previously in the less good category increased to be better or very good, and experienced completeness with a percentage of scores above 75. while in the acquisition individual scores of 25 students have achieved completeness with a score of 83.3% and in all aspects observed the percentage gain is 85.96% as shown in the table below.

Table 6 Observation of cycle II
Student learning outcomes

No	As pe k assessment	Value range	Jl	%
1	The ability to remember the subject matter that has been studied	90 – 100	7	23,3
		75 – 89	19	63 ,3
		50–74	4	13,3
		0 – 49	0	0
2	The ability to explain the material that has been studied	90 – 100	7	23,3
		75 – 89	18	60
		50–74	5	16,7
		0 – 49	0	0
3	The ability to mention the subject matter that has been studied	90 – 100	7	23,3
		75 – 89	19	63,3
		50–74	4	13,3
		0 – 49	0	0
4	The ability to distinguish the subject matter that has been studied	90 – 100	9	30
		75 – 89	17	56,7
		50–74	4	13,3
		0 – 49	-	0
5	The ability to conclude the subject matter into a whole	90 – 100	4	13,3
		75 – 89	22	73,3
		50–74	4	13,3
		0 – 49	0	0
	The percentage of students who scored ≥75 = 85.96% The percentage of students who scored ≤74 = 13.98 %			

Based on table 6 it appears that for the ability to remember the subject matter that has been studied there are 7 students or 23.3% in the range of values 90-100 in the very good category, in the range of values 75-89 as many as 19 students or 63% in the category good, in the range of values 50 - 74 as many as 4 students or 13.3% are in the less good category, while in the range of values 0 - 49 there are no students gaining grades or only 0%.

The percentage of students who scored ≥ 75 was 85.9% in all aspects and students who scored above 75 or in the very good and good category had a percentage of 83.3 or 25 students who had achieved completeness, while students who received ≤ 74 as many as 5 people with a percentage of success in all aspects of 13.98% and the percentage of students in the less good category is 16.7 or 5 students.

d. Reflecting (reflecting) cycle II

Reflection carried out in cycle II is an activity to improve the deficiencies and weaknesses that occurred in cycle I. The implementation of cycle II has achieved completeness with a score of 100% or very good category, as expected. While the learning outcomes of most students have obtained a score of 75 and above according to the expected success indicators in the learning process.

From the results of the reflection and description of the data described above, it is clear that the expected increase has occurred in accordance with the predetermined indicators, therefore this research does not need to be continued in the next cycle. The results of research on the entire cycle of teacher and student activities can be seen in the following table:

Table 7 Implementation conclusion Teacher and student activities On the whole cycle

No	Evaluation	Teacher activity		Student activities	
		Bt	Q	Bt	Q
I	Initial observation	62.5%	37.5%	62.5%	37.5 % _
ii	Cycle I	35.0%	65.0%	42.5%	57.5%
No	Evaluation	Teacher activity		Student activities	
		Bt	Q	Bt	Q
	Cycle II	0%	100%	0%	100%
	Amount	97.5 %	103.5 %	105 %	195 %

For the overall conclusion of student learning outcomes can be seen in the following table.

Table 8 Conclusion of student learning outcomes

No	Asepk assessment	Value range	Observation Beginning		Cycle I		Cycle II	
			Jl	%	Jl	%	Jl	%
1	The ability to remember the subject matter that has been studied	90 – 100	0	0	4	13,3	7	23,3
		75 – 89	9	30	9	30	19	63
		50–74	17	56,7	16	53,3	4	13,3
		0 – 49	4	13,3	1	03,3	0	0
2	The ability to explain the material that has been studied	90 – 100	0	0	4	13,3	7	23,3
		75 – 89	9	30	9	30	18	60
		50–74	17	56,7	16	53,3	5	16,7
		0 – 49	4	13,3	1	03,3	0	0

No	Asepk assessment	Value range	Observation Beginning		Cycle i		cycle ii	
			Jl	%	Jl	%	Jl	%
3	The ability to mention the subject matter that has been studied	90 – 100	0	0	5	16,6	7	23,3
		75 – 89	9	30	13	43,3	19	63,3
		50–74	18	60	11	36,6	4	13,3
		0 – 49	3	10	1	03,3	0	0
4	The ability to distinguish the subject matter that has been studied	90 – 100	0	0	5	16,6	9	30
		75 – 89	9	30	10	33,3	17	56,7
		50–74	19	63,3	15	50	4	13,3
		0 – 49	2	6,7	0	0	0	0
No	Asepk assessment	Value range	Observation Beginning		Cycle i		cycle ii	
			Jl	%	Jl	%	Jl	%
5	The ability to conclude the subject matter into a whole	90 – 100	0	0	4	13,3	4	13,3
		75 – 89	8	26,7	1 1	40	22	73,3
		50–74	18	60	13	43,3	4	13,3
		0 – 49	4	13,3	2	06,6	0	0
	% ≥ 75		9	29,34	18	49,24	2 5	85.9
	% ≤ 74		21	70,66	12	50,62	5	13.98

Based on table 8 , the learning outcomes obtained in the initial observation were 30% or 9 people who scored above 75% and 21 people who scored below 74. Cycle I, the percentage gain increased from 30% to 56.7% or 17 students who received scores above 75 and 13 students scored below 74 or 43.3%. The previous score obtained in the initial cycle was 70% or 21 students who scored in the less good category, but in cycle I it became 40 % . In cycle II there was an increase in the percentage of all aspects of student assessment reaching a percentage value of 85.9%, and learning outcomes reaching 83.3% or 25 students achieving completeness and 5 students or 16.7% not achieving completeness.

## B.	Discussion

This class action research activity establishes a performance indicator of the success of 75% of students who have obtained scores above 75 or already have the desired learning achievement and achieve completeness, then the action is said to be successful. From this classroom action research the results were obtained, namely, in the first cycle of teacher activities that had not been carried out 35% or 14 aspects consisting of 3 aspects in the initial activities, 8 aspects in the core activities and 3 aspects in the final activities, but in cycle two it increased to 100 % or all aspects have been carried out, as well as the activities of students in cycle I, the percentage of activities that have not been carried out is 42.5% or 17 aspects that have not been carried out but in cycle II it has increased to 100% or all aspects have been carried out. While the learning outcomes of students in cycle 1 with the percentage of students who scored in each aspect and above 75 was 49.24% with the acquisition of scores that reached completeness of 13 students or 43.3%, and those who had not reached 75 and above 56 .7%, on the aspect of ability to remember material there were 16 students who scored in the poor category, and 4 students in the very good category, on the aspect of ability to explain there were 16 students who scored in the poor category, and 4 students in the very good category, in the aspect mentioned there were 11 students who scored in the less good category and 5 people in the very good category, in the aspect of distinguishing material there were 15 students who scored in the less good category and 5 people in the very good category, while in the concluding aspect there were 13 students who scored in the poor

category and 4 people in the very good category. And those who obtained a percentage below 75 were 50.62, with a total of 5 students or 16, 7%, in cycle 11 the percentage of students who scored above 75 increased to 85.9% in all aspects, and 83.3% or 25 students who achieved mastery in learning. Meanwhile, students who scored below 75 were 13 .98%. Teacher activities carried out in cycle I with a total of 40 aspects, 14 aspects or 35.00% that have not been implemented and 26 aspects or 65.00% that have been implemented. In cycle I student activities , 17 aspects had not been implemented but in cycle II it increased to 100% with all aspects that had been implemented.

CONCLUSION

Based on the results of the research and discussion, it was concluded that in the implementation of the first cycle , the learning outcomes of students obtained a very low score of 49.24% but in the second cycle it increased to 85.9% with indicators (1) the ability to remember the subject matter that had been studied, (2) the ability to explain the material that has been studied, (3) the ability to mention the material that has been studied, (4) the ability to distinguish the material that has been explained, (5) the ability to conclude the material that has been studied. In the first cycle of teacher activities, 14 aspects have not been implemented and in student activities 17 aspects have not been implemented but in cycle II it has increased, namely all aspects have been implemented according to success indicators. Thus students' understanding of Indonesian language learning can be improved through the talking learning model stick.

Based on the conclusions that have been described, it is necessary to suggest the following:

1. In carrying out the learning process activities the teacher should use media or methods to determine the level of development and understanding of students towards the material.

2. The use of learning models should be matched with the material or teaching materials

3. The principal should supervise the class every month, so that deficiencies can be found in the teacher during the learning process and evaluate the learning process carried out by the teacher and provide motivation for performance development so that it can be beneficial for the success of students.

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