

# Implementation of Audio Visual Media in Improving Learning Outcomes of Throwing Discs with

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## Abstract

This research aims to determine the use of media audio-visual in improving the learning outcomes of lateral disc style throwing in class VIII students of SMP Negeri 18 Medan in the 2014/2015 academic year. To obtain the data in this study, a learning outcome test was conducted at the end of each cycle in the form of an assessment of the sideways force disc throwing technique. With the implementation of this research learning outcomes test is carried out for two weeks or two meetings. The results of the study concluded: (1) from the first cycle learning outcomes test, it was obtained 18 students with the value after being confirmed (66.60%) had reached the level of learning completeness, while 9 students (33.40%) had not reached the level of learning completeness. With the average value of learning outcomes after being confirmed is 68.05. However, it does not meet the expected classical completeness criteria, namely 85%. (2) from the second cycle learning outcomes test data obtained were 24 students with a value after being confirmed as (88.88%) who had achieved mastery in learning and 3 students (11.12%) were still incomplete. With the average value of learning outcomes after being confirmed is 75.23. Based on the results of data analysis, it can be concluded that through the use of audio-visual media, it can improve the learning outcomes of side-to-side disc style throwing in class VIII students of SMP Negeri 18 Medan in the 2014/2015 academic year.

**Keywords:** discus throwing a sideways force, the implementation of audio-visual media,

## Introduction

In discus throwing competition, athletes compete throwing disc-shaped object as far as possible by following regulations. Throwing discs with the prefix sideways is often said to be the old / traditional way. However, for beginners, learning to take a start in throwing discs is still necessary, especially for students.

According to Syarifuddin (1992) the method of throwing the disc is as follows: 1) From the side of the body, the disc is swung forward upward to the left side until the disc is above the left shoulder under the chin. The palm of the left hand helps hold the disc, the right hand holding the disc is above it with the back of the hand facing up and the elbow bent. The body weight is moved to the left leg, the right leg is straight back, and the body is facing forward (in the direction of the throw). 2) From the top of the left shoulder, swing the disc again to the right side and then backwards with your arms straight and the backs of your hands trying to keep it facing upwards, so that the disc is back on the right side slightly below the right shoulder. 3) After you feel that the swing of the disc is steady, then when the disc is in the back with straight arms, get ready to throw the disc with the last disc of the ring finger and little finger moved in and the wrist is moved out. Thus, the course of the disc while floating in the air rotates outward clockwise. Doing the basic technique of throwing discs should require good and correct learning.

Learning according to Conbach in Suryabrata (2005) says that "Learning the best is to experience and in experiencing it learners use their five senses". Gagne in Dimiyati, (2009) says that "Learning can be defined as a process in which an organism changes its behavior as a result of experience". Learning is the "key term" the most vital key term in any educational endeavor, so that without learning there is actually no education. Change and the ability to

change are the limitations contained in learning. Along with Husdarta (2000: 2) argues that: learning is interpreted as a process of changing behavior as a result of the interaction between individuals and their environment. According to Sudjana, (2009) "the assessment of learning outcomes is the process of giving value to the learning outcomes achieved by students with certain criteria". This implies that the object being judged is student learning outcomes. Student learning outcomes are essentially a change in behavior. Behavior as a result of learning in a broad sense includes the cognitive, effective and psychomotor fields.

The learning process can be said to be effective if there are changes that occur in students at least reaching an optimal and efficient level and lies in the speed and mastery of the subject matter presented, even in a relatively short time. Thus, if the chosen style and strategy is right, the learning process activity will be productive, that is, give good results. From the above explanation, it can be said that learning outcomes are the overall results obtained from activities in the form of knowledge, skills and attitudes that are able to cause changes in behavior, where these results are seen through a measuring tool called evaluation. To simplify the learning process, teachers use audio and visual media.

The word media comes from Latin, namely: "medium" which literally means the middle, intermediary or messenger of a person who sends a message to the person receiving the message. Furthermore, Arsyad (2003: 3) explains in Sukiman: "Media is a component of learning resources or a physical vehicle that contains instructional material in the student environment that can stimulate students to learn". From this explanation it can be concluded that learning media is the right tool that can make it easier to achieve learning goals well. This is based on the belief that the teaching and learning process can run well with the help of the media to improve the quality when teaching and learning activities take place. So the media is one of the tools to facilitate the delivery of messages that can encourage or motivate students while learning.

Media as a process of information sources for students must be adequate and in accordance with the learning objectives to be achieved, so that educators or teachers are required to be able to choose and provide media according to their needs so that the learning process can be carried out properly. The low student learning outcomes are strongly influenced by the effectiveness of the teacher in designing learning strategies and the teacher's lack of awareness of the responsibility for designing instructional media, the limited time for learning media providers and limitations and even though they are controlled by junior high school teachers in the research location, the use of learning media is very helpful for students in absorbing learning material, but in general there are still many teachers who continue to carry out Physical Education learning without learning media, but use the lecture method, command so that students feel bored and bored with the learning applied by the teacher. So for this, a suitable media is needed in every lesson, one of which is in learning to throw discs sideways, namely by using audio-visual. The use of this media will help students understand the material to throw the disc sideways. In this lesson students are invited to understand the lateral style of throwing discs through information from the teacher assisted by instructions in the form of live pictures / videos or sounds that are produced after which the student learning outcomes are measured through tests.

The use of media in the physical education teaching and learning process must be related to the objectives of the lesson to be delivered. ET Ruseffendi (1993) explains: "The use of media in Physical Education learning has several objectives as follows: a). as a means of concept formation, b). make it easier to understand the concept, c). as training and strengthening, d). cater to individual differences, e). as a measure, f). as his own observation and acceptance, g). as a problem solving, h). to invite / stimulate students to think, i). to invite discussion and, j). to invite students to think actively ". Poerwadarmita (1986) explains: "Audio is something related to hearing, given by using sounds. Meanwhile, visual is based on vision, something that is related to sight, can be seen, is seen, given using pictures ". Sukiman

(2012: 154) explains: "audio is something related to reception through sound and hearing, eyes or sight, visual aids, can be seen and witnessed".

Based on this explanation, it can be concluded that audio-visual is something related to hearing and sight, can be heard with the ear and can be seen with the eye, audible and visible, based on hearing and sight given by using sounds and pictures. Besides receiving through hearing and sight, sound and visual aids that can be heard and witnessed.

Audio visual actually refers to the senses that are the target of the media. Audio-visual media rely on the hearing and sight of the target audience (audience). Audio visual products can be a documentation medium whose main objective is to get facts from an event or incident. Meanwhile, the communication media of an audio visual product involves more media elements and requires more planning in order to communicate something. Examples of audio-visual media with a more prominent communication function are documentation media.

Documentation media is often an element of communication media. Because it involves many media elements, audio visual products that are intended as communication media are now often referred to as multi-media. Audio visual is a combination of complementary components that produce an image and sound that are combined with each other. One example of an audio visual device that combines audio and visual elements in a balanced manner is television. Teaching through audio-visual media is clearly characterized by the use of hardware used during the learning process, such as film projector machines, tape recorders and wide visual projectors. Azhar, (2003) explains in Sukiman: "So teaching with audio-visual media is the production and use of material that is absorbed through views and does not entirely depend on understanding words or symbols".

Sadiman (2008: 49) explains: "devices with audio visual media such as radio, tape recorder, frame film, OHP (overhead projector), micrifis, film, television and video". The advantages of these media are: 1). Subject matter can be distributed to all students simultaneously, 2). Students' attention can be focused on a particular material, 3). Suitable for teaching skills, 4). Can be displayed color, 5). Practical and saves energy and time because it can be used repeatedly, 6). Can stimulate and motivate student activities.

Students are said to be successful in learning if there are changes in students after participating in the learning process. One of the factors that can support this success is the use of varied learning models with the objectives to be achieved. This also applies to physical education subjects, as explained earlier that the problem that has been experienced in learning sideways disc style is the lack of interest and attention of students when participating in the learning process. In addition, most students are not serious and quickly feel bored in the learning process so that in the end the learning outcomes obtained by students are still low. Therefore, a learning concept is needed that can support student success, namely learning using audio visual media. In this lesson students are taught to understand how to learn and how to think so that students can absorb and master the side-to-side discus throwing material with an effective, more enjoyable and more meaningful learning atmosphere. Audio visual media is a learning method that uses a tool or media to facilitate a process of teaching and learning activities. Media is also very useful in supporting learning activities, for example by using audio-visual media, the attention and interest of students in responding to the learning material provided increases and improves learning outcomes and is a new method or way of providing learning material to students. Audio visual media is one of the media that can arouse students' interest in the material presented if the teacher can apply it to the maximum. This is expected and believed to increase better learning outcomes.

Based on this description, in this study, it will be seen how much the student's side-to-side-style discus learning outcomes increase after being given learning treatment using audio-visual media.

## **Methods This**

type of research is classroom action research. This research was conducted at SMP

Negeri 18 Medan in the 2014/2015 academic year. In this study, the researcher took the subject, namely 27 students of class VIII – 13 SMP Negeri 18 Medan in the academic year 2014/2015.

This research design uses research using action research research. The research design can be seen below:

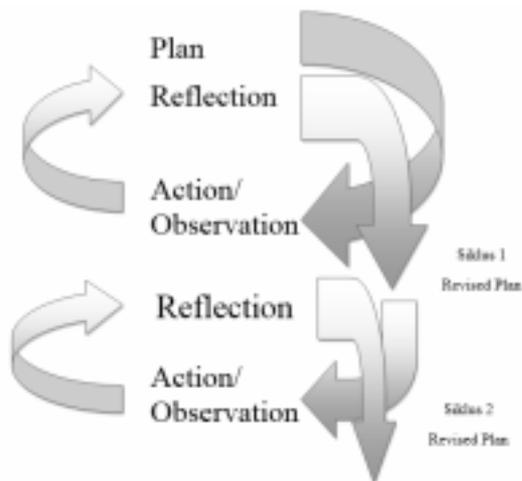


Figure 1. The design of CAR in physical education and sports coaching

Source: (Kristiyanto, 2010)

Furthermore, the instrument used in this study was a discus learning outcome test which was assessed based on the rubric (criteria) of assessment by observations. motion using a portfolio sheet. With as many assessors as the assessment indicators in the portfolio sheet. The procedure for implementing the assessment of learning outcomes of lateral disc style throwing in class VIII students of SMP Negeri 18 Medan.

Table 1. Observation Sheet on Learning Outcomes Test Throw the Discs Sideways

<b>Aspects Assessed</b>			
<b>Element of Motion</b>	<b>Indicator</b>	<b>Descriptors</b>	<b>Check</b>
Throw the disc	Disc-holding technique	<ol style="list-style-type: none"> <li>1. The disc is held with four fingers open.</li> <li>2. The four fingers are placed on the edge of the disc.</li> <li>3. The fingertips bend and cover the edge of the disc to hold it in place.</li> <li>4. The thumb is a bit free</li> </ol>	
	Prefix motion technique	<ol style="list-style-type: none"> <li>1. Stand sideways</li> <li>2. Throwing direction and right hand straight to the back.</li> <li>3. Both knees are lowered.</li> <li>4. Swing your right arm forward with both knees raised.</li> </ol>	

Hand swing technique when throwing	<ol style="list-style-type: none"> <li>1. Stand sideways towards the throw.</li> <li>2. The disc is held by two hands above the shoulder.</li> <li>3. Swinging the disc back with both knees lowering.</li> <li>4. Swing forward again with the knees rising.</li> </ol>
Follow-up technique	<ol style="list-style-type: none"> <li>1. After removing the disc, the right leg was moved immediately.</li> <li>2. Body position slightly inclined.</li> <li>3. Do not cross the throw line.</li> <li>4. Exit through the back of the extension line diameter of the diameter line.</li> </ol>
<b>Total</b>	
<b>Total Average</b>	

The data analysis consisted of several stages including:

The data reduction process was carried out by selecting, simplifying and transforming the data that had been presented in transcript of field notes. This data reduction activity aims to see the mistakes or shortcomings of students in carrying out tests and what actions will be taken to correct these errors.

Furthermore, in this activity the data obtained from student learning outcomes is presented in table form using a predetermined formula, if the indicators have criteria of high complexity, high carrying capacity and moderate student intake, then the KKM score is:

Table 2. Student Assessment Indicators

Descriptors indicator	Descriptors			
Discus holding technique	4	3	2	1
Prefix motion technique	4	3	2	1
Hand swing technique when throwing	4	3	2	1
Follow-up motion technique	4	3	2	1

$$KKM = \frac{\text{indicator 1} + \text{indicator 2} + \text{indicator 3} + \text{indicator 4}}{\text{Number of descriptors (16)}} \times 100$$

With the following criteria:

$0 \leq KKM < 75$  = students have not completed learning

$75 > KKM \leq 100$  = students have completed learning

From the description above, it can be seen that students who have not completed learning and students who have completed learning individually. Furthermore, it can also be known whether classical completeness of learning can be achieved, seen from the percentage of students who have completed learning can be formulated as follows:

Looking for classical student learning completeness with the formula:

$$PKK = \frac{T}{N} \times 100\%$$

Information :

PKK: Percentage of classical completeness

T: Number students who score  $\geq 75$

N: Number of research subjects

(Aqib, 2009: 41)

As a group (classical), learning completeness is stated to have been achieved if at least 85% of students in the group have met the minimum completeness criteria per individual at  $\geq 75$ .

## Results The

following is a description of the research data starting from the test cycle I, cycle II. To find out the students' ability in performing the basic technique of throwing the disc side-by-side, the researcher gave the post test I, it turned out that the results obtained had not yet achieved classical completeness. This is because there are still students who cannot understand the steps for implementing the discus throwing technique correctly and some of them have mistakes. As for the successes and failures that occur in the implementation of the discus throwing technique. Following are the results of the post test I obtained from the students.

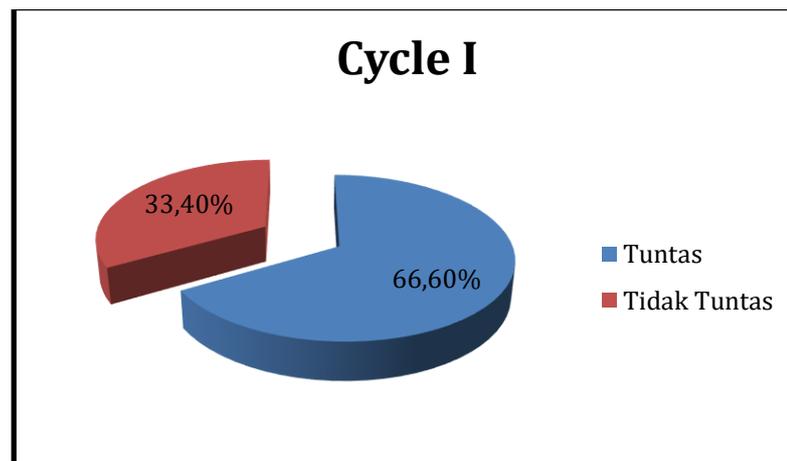


Figure 2. Cycle I Test Results for Class VIII Students of SMP Negeri 18 Medan

Based on the description table and graph of the results of the post test I, it can be seen that the student learning outcomes in learning material side-to-side discus throwing style has started to increase. Of the 27 students who were the subjects in this study, it turned out that there were 18 students (66.60%) who had complete learning, while 9 students (33.40%) were still incomplete in the learning process. The average value obtained in this cycle has reached (68.05). In the first cycle the highest value was 87.5 and the lowest value was 43.75.

Table 3. Description of Results Post Test (cycle I) Throw the disc sideways

No	Test Result	Number of Student	Persentase	Information
1	< 75	9	33,40%	Not complete
2	$\geq 75$	18	66,60%	Complete

By paying attention to the table above, it can be seen that the analysis of the results of

students 'learning to throw discs in the first cycle turned out to be better than the pre-test, although the results were not maximal, so it was necessary to proceed to cycle II, this could be seen from the students' mistakes in practicing. the learning material for throwing the disc style sideways and the value obtained is still low. Furthermore, the learning outcomes of cycle I are used as a reference in providing action in cycle II to overcome student difficulties in studying the material side-to-side discus throwing.

Based on the results of the researchers' reflection, an action plan II will be drawn up to overcome the problems found in the first cycle and overcome the problems experienced by students during the sideways style discus throwing learning.

Observation and evaluation are carried out to see the deficiencies that occur and whether the teaching and learning conditions have been implemented according to the program when the action is taken. At this stage the physical education teacher also assists in the assessment.

Table 4. Descriptions of Post Test Results (cycle II) Throwing Discs Sideways No  
Test Results Information Number of students Percentage 1 <75 Not complete 3  
 11.12% 2 ≥ 75 Complete 24 88.88%

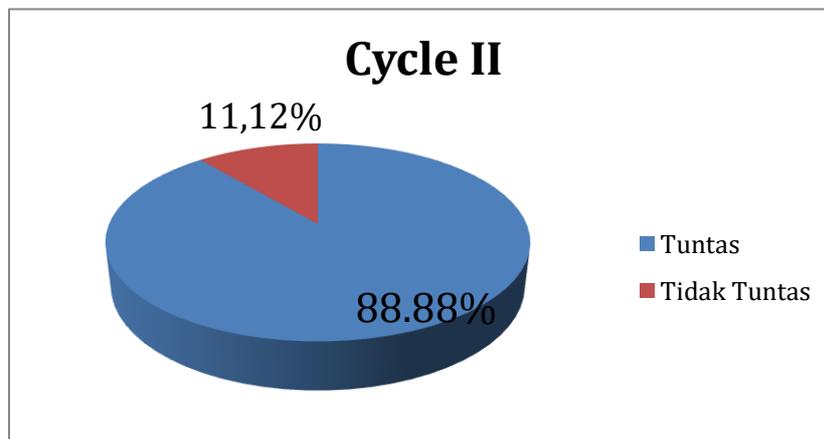


Figure 3. Cycle II Test Results for Class VIII Students of SMP Negeri 18 Medan

Based on the learning outcomes of the post test cycle II above, it can be seen that student learning outcomes in learning the sideways style disc throwing technique have actually increased. Of the 27 students who were the subjects in this study, it turned out that there were 24 students (88.88%) who had complete learning, and there were 3 students (11.12%) who had not yet completed learning the discus throwing technique. The class average value obtained in the second cycle reached (75.23). In the second cycle the highest value was 87.5 and the lowest value was 56.25.

By paying attention to the table above, it can be seen that the analysis of the results of learning to throw discs in the post test II in the cycle turns out to be better than the post test I, the increase in student learning completeness is high. From the observations it can be seen that the students have been able to do the sideways technique of throwing the disc well and it is maximal. Even though there are still some students who have not achieved completeness, classically the number of students has reached mastery learning so this research does not need to be carried out to the next cycle.

## Discussion

In the first cycle, it was found that the research results did not meet the expected classical completeness criteria, namely 85%. Because there are several factors these students have not been able to reach the level of learning completeness, namely the lack of understanding of students with the process of doing throwing techniques properly and the students are less active in the learning process.

In the first cycle the teacher found many difficulties experienced by students in learning, including: 1) There were still students who did not understand the throwing technique properly, namely the technique of positioning the body when throwing and releasing the throwing was still not good. And how to overcome this in cycle II students are given more learning by using audio visual media, which is expected to be able to provide in understanding the basic technique of throwing a side-style disc. To correct the mistakes and deficiencies of students on the I learning outcomes test, especially mistakes in the throwing technique. 2) Students are less active in independent training and how to deal with it the teacher provides more time for independent practice while being directed so that students want to practice to correct the mistakes they made on the learning outcome test I. 3) Many students are still confused about how to make the disc rotate clockwise.

For this reason, it is necessary to carry out improvements in cycle II actions. So in cycle II the teacher explained and re-emphasized the basic technique of throwing a good sideways style disc so that the throwing results were also good.

Then in the implementation of the learning process in cycle II, it can be seen that there has been an increase in student activity from the previous cycle. From the test results of the analysis conducted, it was concluded that there had been an increase in students' abilities. This increase occurred after learning with the use of audio-visual media designed in cycle II was based on reflection and experience in cycle I. In cycle II, the results of the increase in students' classical learning completeness were 88.88%, which was greater than completeness. Classically, it is 85%, which means there is an increase from cycle to cycle. In cycle II students have improved and students understand better throwing techniques properly where the teacher provides treatment, among others: 1) In cycle II the teacher also shows the audio visual media emitted through infocus on learning to throw discs sideways which are at the stage of movement further release whose material will be carried out in the field. 2) In the second cycle the teacher and the researcher also provide the opportunity for students to carry out a series of side-to-side disc styles after being given the material through the use of audio visual media.

However, there are still some students who have not obtained individual learning completeness even though the scores obtained have increased compared to cycle I. Mastery of techniques in each sport is the main key in achieving success, as is the case in sideways style discus throwing. To better be able to master and understand the sideways style discus throwing technique properly, a teaching style is needed as a material to provide learning material, especially with the use of audio-visual media. Based on the description of the research data, the following results were obtained in this study: 1) After giving the action in the first cycle of one meeting, students were given the first learning outcome test which was then obtained by 18 students (66.60%) who had achieved completeness learning, while the other 9 students (33.40%) had not yet reached the expected level of learning completeness. With difficulty (1) Students are not serious enough to throw the disc sideways. To overcome this, the teacher evaluates students' mistakes in making movements and provides motivation to students. (2) In the assessment of the portfolio indicator 3, namely the implementation stage of the students still making a lot of mistakes when swinging their hands while throwing, students swinging their hands higher and throwing the caram downward so that the student looks like throwing a disc from behind over his head. (3) Students still do not understand about the audio-visual display of throwing discs so that during the implementation of learning, there are still students who are confused. 2) Then after being given the action in cycle II for one meeting, the students were again given the second learning result test, which

was then obtained by 24 students (88.88%) who had achieved mastery learning and 3 students (11.12%) who had not achieve completeness in learning. And the students who have not completed these are 2 female students and 1 male student, with difficulty swinging their hands when throwing discs and making follow-up movements. And to fix the student's problem, it is returned to the physical education teacher to improve student learning outcomes. From the research results, it was found that the average value of student learning outcomes in cycle II was 75.23 with a classical level of completeness of learning of 88.88%. This means that there is an increase in cycle I and cycle II.

From the data analysis that has been done, it can be concluded that by utilizing audio-visual media it can improve the learning outcomes of sideways-style disc throwing in class VIII students of SMP Negeri 18 Medan in the 2014/2015 academic year.

## **Conclusions**

Based on the results of the study, it can be concluded that learning with the use of audio-visual media can improve the learning outcomes of side-to-side discs in class VIII SMP Negeri 18 Medan Academic Year 2014/2015

## **Suggestion**

Based on the results of this study, the researcher provides the following suggestions: 1) It is recommended that the physical education teachers of SMP Negeri 18 Medan consider the use of audio-visual media with adapted material as this can arouse students' enthusiasm for learning. 2) The use of audio visual media is a learning medium that can be used to improve student learning outcomes to make it more attractive. 3) So that teachers pay special attention to the learning process for students who have not yet completed it. 4) Readers who might be doing research using audio-visual media might try other subject matter.

## **References**

- Azhar, A. (2003). *Learning Media*. Raja Grafindo Persada.
- Dimiyati, M. (2009). *Learning and Learning*. Rineka Cipta.
- ET Ruseffendi. (1993). *Learning Media*. Raja Grafindo Persada.
- Kristiyanto, A. (2010). *Classroom Action Research (CAR) in Physical Education & Sports Coaching*. UNS PRESS.
- Poerwadarmita. (1986). *General Indonesian Dictionary*. Publisher Balai Pustaka.
- Sudjana, N. (2009). *Assessment of Results and Teaching and Learning Process*.
- Rosdakarya youth. Suryabrata, S. (2005). *Educational Psychology*. Raja Grafindo Persada.
- Syarifuddin, A. (1992). *Athletics*. Department of Education and Culture.