

# The Effect of Visual Media (Video) Based Process Evaluation of Result of Volley Ball Smash for Student of Sport Education and Recreation Fik State University of Medan (Unimed) North Sumatera Indonesia

Suryadi Damanik<sup>1</sup>, Usman Nasution<sup>2</sup>, Suprayitno<sup>3</sup>

Faculty of Sport Science, State University of Medan, Indonesia

**Abstract:** *The specific aim for this research is for increase result of study volleyball smash for students university of faculty of health physical education and recreation ( FIK ) UNIMED academic year 2016 / 2017. Theoretically the result of this study aims to broaden scientific especially sport science in physical education and exercise science, meanwhile the practical result of this study can be utilized by lectures, the physical education teacher, students university and students and can be made in the implementation of policy evaluation model in FIK UNIMED and sport club in held on forms of training that is directly motion in evaluation using recording media. This research using methode experiment pre-test, treatment and post test design. This research was conducted in november. The result this research refers to the application of the evaluation process is based on visual medaia ( video) better in improving learning result volleyball smash in students university of physical health education and recreation FIK UNIMED academic year 2016 /2017 in comparison with conventional learning.*

**Keywords:** Process evaluation, Volleyball smash

## 1. Introduction

Quality of learning in addition supported by the ability of lectures to make learning program is also supported by the ability of the device in the application of technologies such as the use of video media. use of this tool in addition to the preparatory process especially on the cognitive phase ( description )phase fixation and automation ( experiment and improvement ) movement, and also important to improving the quality of learning. In the post impact phase through reflection and evaluation activities. Evaluation in the learning process is one factor that is essential to observe and give an overview of the progress of students university.the use of recording device ( media video) in process learning is still use relatively rare in use eventhough the increase of recording equipment in indonesia has been rapidly. The lectures still use motion instruction base on his observations where students university are not involved evaluating the motion in the show . this has resulted in students do not know motion that has been made whether right or not, then lecture and students can jointly evaluate directly so as to further facilitate the motion improvement efforts that have been and will display so that the learning process volley ball can run effectively and efficiently. In this case researcher tries to conduct research on students who followed subject volleyball games in physical education courses health and recreation ( PJKR ) FIK UNIMED. Learning volleyball is one of the dominant learning requaries the mastery of a fairly complex motion in accordance with the basic techniques that exist in the game of volley ball. The current state of the field that the lectures still do not take advantage of recording media in the learning process. So that the lecturer had difficultly when evaluating the process to observe the process of motion is so complex ( open skill )

especially the movement in the smash are rapidly. Associated with the available time justed to the relatively large number of students ( 40 students ) every class. Because of researchers wanted to know whether the evaluation process of using video media. the effect on learning result of students volley ball smash PJKR UNIMED.

Heinch , Molenda, Russel, and smaldino ( 2006 ), stated that the learning media is tool material or technique that used in teaching and learning activities with the intent to educated the communication process of interaction between teacher and students can take appropriate effective and efficient. Arikunto ( 2004 ) said that evaluation is an activity to gather information about working of something , that further information is used to determine an appropriate alternative in making decision. The main function of the evaluation in this case is to provide useful information to the decision maker to determine the policy which was taken base on the evaluation that has been done.

According stephan, issac, and william ( 2004) evaluation is to find something valuable ( worth ) . something valuable that is information about a program as well as the production of certain alternative procedures. Therefore is not a new thing in human life because the case always accompany a person life. A man who had been working on a case will surely judge whether what has been done accordance with original wishes.

According to stufflebeam in worthen and sanders ( 2008) Evaluation is process of delineating , obtaining, and providing useful information for judging decision alternatives. In evaluation there are aspects that include in evaluation such as : there are process, obtaining ,

Volume 6 Issue 3, March 2017

[www.ijsr.net](http://www.ijsr.net)

[Licensed Under Creative Commons Attribution CC BY](https://creativecommons.org/licenses/by/4.0/)

delineating, providing information that useful information and decision alternatives.

According Arikunto ( 2004) there are two aim of evaluation such as general purpose and specific purpose . General purpose is refers to program is all of them while specific purpose more focused in each componet.

Nowdays, this study more oriented how the teacher to created the good learning environment , such as structuring environment ,preparing tools, and source of learning and so on that enable students endure and feel happy, so can develop in a optimal manner. Appropriate with talent , interest her/ his potential. Related to learning Husdarta ( 2010: 32 ) explain that learning is every manner that done by teacher ( educator ) so occur the process learning in students.

According to waiter Dick and lou caey ( 2005: 205 ) in H.Syaiful ( 2006 : 11 ) is refers to learning as combination event or activity that extend in a structural manner and planned with using one or some media. volleyball games is one of part of sport that many fans and from year to year thats occur development rapidly. In basically smash is effort from a player to do hard smack and sharp. In opponent area have been aim to do attact so that the opponent will dead.

Deborah ( 2002 : 67 ) is state smash was the highlight of attack sometimes occurs in a blow to two but is most often used on the third.

According M.Yunus ( 1992 : 108 ) smash is a skill that is essential , an easy way to win the numbers, a smart player who smash or term shall have the agility smasher. Smart jump and has the ability to hit the ball as hard as possible players who have this expertise can be classified as good strikes.

According Dieter ( 2005 : 8) techniques or processes smash divided into several stage : 1) when the prefiks, 2) when repulsion, 3) when a punch 4) timing 5) when landing

## 2. Analysis Method

Data from the result of treatment of sample will be analyzed using T- test need to be done yet before normality and homogeneity test as a pre requisite for the test.

**Table 1:** Smash evaluation of Experiment and Contol class

|                      | N  | Minimum | Maximum | Mean  | Std. Deviation |
|----------------------|----|---------|---------|-------|----------------|
| Experiment Pre test  | 35 | 65,00   | 85,00   | 74,14 | 4,62           |
| Experiment Post test | 35 | 76,67   | 95,00   | 85,62 | 4,66           |
| Control Pre test     | 32 | 66,67   | 85,00   | 73,91 | 4,14           |
| Control Post test    | 32 | 71,67   | 88,33   | 80,68 | 4,56           |

**Table 2:** Normality of pre test and post test

|                      | Dk | L <sub>table</sub> | L <sub>count</sub> | Conclusion |
|----------------------|----|--------------------|--------------------|------------|
| Experiment Pre test  | 35 | 0,150              | 0,096              | Normal     |
| Experiment Post test | 35 | 0,150              | 0,117              | Normal     |
| Control Pre test     | 32 | 0,157              | 0,091              | Normal     |
| Control Post test    | 32 | 0,157              | 0,122              | Normal     |

**Table 3:** Homogeneity

|           | F <sub>count</sub> | Sig.  | Conclusion |
|-----------|--------------------|-------|------------|
| Pre test  | 1,162              | 1,693 | Homogen    |
| Post test | 1,047              | 1,693 | Homogen    |

**Table 4:** T Pre Test and Post Test of Experiment class

| Class                | Average | T <sub>table</sub> | T <sub>count</sub> |
|----------------------|---------|--------------------|--------------------|
| Experiment Pre test  | 74,14   | 1,691              | 64,55              |
| Experiment Post test | 85,62   |                    |                    |

**Table 5:** T Pre Test dan Post Test Control class

| Class     | Average | T <sub>table</sub> | T <sub>count</sub> |
|-----------|---------|--------------------|--------------------|
| Pre test  | 73,91   | 1,696              | 27,36              |
| Post test | 80,68   |                    |                    |

**Table 6:** T Post Test Experiment and Control class

| Class      | Average | T <sub>table</sub> | T <sub>count</sub> |
|------------|---------|--------------------|--------------------|
| Experiment | 85,62   | 1,671              | 4,38               |
| Control    | 80,68   |                    |                    |

**Table 7:** T Increasing Score Experiment and Control class

| Class      | Average | T <sub>table</sub> | T <sub>Count</sub> |
|------------|---------|--------------------|--------------------|
| Experiment | 11,48   | 1,671              | 15,64              |
| Control    | 6,77    |                    |                    |

L (count) for the variable value of learning result volleyball smash is greater than the value of his critism ( $L_o < L_t (0,05)$ ), it can be conclude that the value of learning result volleyball smash on overall normal distribution of data. Based on the above calculation result obtained value  $F_o < F_t$  that is  $1,162 < 1,683 (0,05)$  and value  $F_o < F_t$  that is  $1,047 < 1,683 (0,05)$ . The result of this study has shown that the sample has a homogeous variance.

## 3. Hypothesis Test

This study aims to determine the effect of the evaluation process visual media based on learning result volleyball smash at the student health physical education and recreation . FIK UNIMED academic year 2016/2017. Data analysis used was t-test the details of the analysis of data in each variable is as follow :

- 1) T- test pre test and post test experiment class

The second test of his data is done to see whether there is an increase in value of learning result based on the t- test pre test and post test experiment class known to average value pre test is 74,14 and average value post test is 85,62 so it can be seen there is an increase in the average value of 11,48. The t-test calculation results also show that  $t_{count} > t_{table}$  at the significant level 0,05 that is  $64,55 > 1,691$  which concluded that there is a significant increase in the value of learning volleyball smash at the experimental class.

- 2) T-test pre test and post test control class

Statistical analysis was also applied in this group using the t-test data pre test and post tes. This application is made to see whether there is a significant increase in the value of learning result , improvement of learning result can be seen from the average value of the original study 73,91 into 80,68 meaning that there is an increase of 6,77 and the significant test with t-test  $t_{count} = 27,36$  and  $t_{table} = 1,696$  at the significant level 0,05 that is  $t_{count} > t_{table}$  it can be conclude there is a significant increase in

the value of learning result volleyball smash at the control class.

- 3) T –test post test experiment class and post test control test

T- test performed on the value post test experiments class and post test control class for determine whether there is a significant difference between these data conclusion determine whether there is a significant different between the two data conclusion of the study are summarized significant if  $t_{count} > t_{table}$  in the significant level 0,05 . based on the average values in table 6 in the know the average value of the experimental class is 85,62 greater when compared with the control class that is 80,68 so it can be conclude that the average increase learning result are more common in the experimental class of the control class is 4,94. From statistical test also obtained  $t_{count}$  is 4,38 and  $t_{table}$  is 1,696 which mean  $t_{count} > t_{table}$  in the signifacant level 0,05 so it can be conclude there is a difference in the value of learning result significantly for experiment class and control class

- 4) T- test increase in value of the experimental class and control

T-test carried out on the increase in the experimental class and the control to see if there are differences in the increase in the value of learning result in the experimental class and control class. The average increase in the value of learning result in experimental class is 11,48 and the average increase in the value learning result in control class is 4,71 also known that  $t_{count}(15,64) > t_{table}(1,671)$  in significant level 0.05 it can be conclude there is a significant differences in the increase in the value of learning result in the experimental class and control class.

## 4. Discussion

### The effect of the application evaluation process visual media based on learning result smash volleyball

Based on the result of pre test conducted on october 2<sup>nd</sup>2016. The average value of learning result volleyball is 74,14. Many students who have not been able to hit the ball with precision and has not been able to control the ball to fall in the area volleyball courts, and then need to restore the value of the learning result by evaluating the deficiencies observed through video. At the date of october 25<sup>th</sup>2016. Give students in learning begin with a video featuring their smash this is done as an evaluation of the process undertaken smash, so it will be easy to determine on which part of the movement is less than perfect, evaluation done in the classroom by using the projector as a visual media and continued to smash the ball because at this meeting the students still improve the whole process of motion volleyball smash.

The second meeting was held on november 1<sup>st</sup> 2016. The second meeting start with the evaluation based learning video first, in this activity the students will know where mistakes are still lacking for doing motion. Volleyball smash it is missing is the part of repulsion technique in which position less lower body to do repulsion. After finding errors that need to be improve students and lecturer was continue learning both in the field , in this learning students

movement using a smash volleyball bouyed by his friend it aims to mastery of motion and improve students ability to manage time leap base on time arrival of the ball in order to set the touches with hands and fix the position of the body in doing repulsion. The third meeting held on november 8<sup>th</sup> 2016. The meeting begins with an evaluation through the second instructional video and then proceed to smash learning at the previous meeting a lot of students who have not mastered the techniques in hitting the ball so that it also had an impact on the success in hitting the ball. Therefore students smash started with a ball thrown up to toser then toser doing passing on to students who will be doing a smash and the last students in open smash volleyball. The smash scenarioin saying also smash in play because it resemble the shape of a real volleyball game. At the last stage is the fifth meeting held data retrieval ( post test ). This stage was held on november 10<sup>th</sup>, 2016 for the test result turned out to be an average value of learning result volleyball smash has reached 85,62. It meaning that there is increase after a given evaluation process based processes visual media ( video ) . significantly increase learning result smash by an increase in the basic techniques ranging from engineering prefix smash repulsion when a punch ( touching ball) and when landing improvement of the basic techniques in getting students through the process of reflection on the mistakes made through the medium of video, start of the learning process without the ball smash, smash through ball. In the feed and smash in play this it can be conclude that the evaluation process is based on visual media can improve students learning result smash on Physical Education and Recreation FIK UNIMED academic year 2016/2017.

The application of evaluation is in contrast to conventional learning where the evaluation process on conventioanal learning is not done using visual media only with the evaluation process of lecturer and makes faculty have an active role and this of course makes students less able to correction defeciencies in motion smash. It certainly creates difficulties in mastering motor skill smash a volleyball this is proved by increasing the average value of result of students learning with conventional learning but the increase is still less when compared with learning to apply the evaluation process the average value of the conventional study is 80,68 and the average value , on learning by applying the evaluation process is 85,62. And other then that the average increase in value of learning result was also better in the experimental class in second grade t – test showed a significant difference.

## 5. Conclusion

Based on the result analysis and hypothesis testing can be obtained conclusion of the application evaluation process based visual media ( video ) in improving learning result volleyball smash for student university Faculty of Sport education and recreation FIK UNIMED academic year 2016 / 2017 in comparison with conventional learning.

## References

- [1] Arikunto, suharsimi.2008.*Penelitian Tindakan Kelas*.jakarta: Bumi Aksara

- [2] A.pribadi, Benny.2009.*Model Desain Sistem Pembelajaran*. Jakarta : Dian Rakyat
- [3] Beutelsthal, Dieter.2005.*Belajar Bermain Bola Voli*. Bandung : Pionir Jaya
- [4] Husdarta.2010. *Pertumbuhan Dan Perkembangan Peserta Didik*. Bandung : Alfabeta
- [5] Hamalik,Oemar.2011.*kurikulum dan pembelajaran.jakarta*.Bumi Aksara
- [6] Sagala, H.Syaiful.2006. *Konsep Dan Makna Pembelajaran : Untuk Membantu Memecahkan Problematika Belajar Dan Mengajar*. Bandung : Alfabeta
- [7] [Herdian,S.Pd.,M.Pd.\(http://herdy07.wordpress.com/2009/04/22/model-pembelajaran-vak-visualization-auditory-kinestetik/.22April2009\)](http://herdy07.wordpress.com/2009/04/22/model-pembelajaran-vak-visualization-auditory-kinestetik/) (Diakses 22 juni 2011)
- [8] Munadi, Yudi.2008. *Media Pembelajaran, Sebuah Pendekatan Baru*. Jakarta : Persada Press.
- [9] Heinich,R., Molenda,M., Russel, J.D., dan Smaldino, S.E., 2006. *Instruksional Media and technology for Learning*, 7th edition.new Jersey : Prentice Hall, Inc.
- [10] Stephen, Isaac, dan William B. Michel.2004. *Handbooking in Reaearch and Evaluation (3th edition)* San Diego California : Educational and industrial Testing Services.
- [11] Kemp and Dayton 2001. *Instructional Technology and Media for Learning*.Ohio : Pearson Merrill Prentice Hall.