

# The Application of Long-Jump Variations Based on Macromedia Flash for Students of Sports Training Education in the Faculty of Sport Science, Universitas Negeri Medan 2022

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## ABSTRACT

*This study aims to improve the quality of learning and learning outcomes of students of Sports Coaching Education, especially at the State University of Medan, Faculty of Sports Science. This research will produce a learning product that is combined with technology so that it can facilitate the implementation of higher quality learning. The research used in this study is experimental, meaning that research that aims to find a quality or causal relationship with the research design used in this study is a one group pretest-posttest design. The results of the study obtained the value of Sig. (2-tailed) is 0.000 while when compared with a significance level of 0.05, the results obtained from the conclusions of the paired test are: The significance value (2-tailed) <0.05 indicates a significant increase between the initial variable and the final variable. This shows that there is a significant increase in the difference in treatment given to each variable. So it was concluded that the significance value of 0.000 < 0.05 there was an increase in the application of long-jump variations based on macromedia flash for students of sports training education in the faculty of sport science, Universitas Negeri Medan 2022. It is very significant in the application of learning using digital media students experience changes in behavior because students are more confident, easily/quickly understand the long jump variation, so that the development of student learning abilities will increase and be able to think more critically (High Order Thinking Skill)*

## KEYWORDS

*Learning; long jump; micromedia flash; student behaviour*

## INTRODUCTION

The learning process will be able to run effectively and efficiently if there is a positive interaction between several components contained in the teaching system. "The components of the teaching system are objectives, learning subjects, subject matter, learning strategies, learning media and support (learning facilities, learning tools, learning materials, and the like)" (Haryati, 2020). The linkages between components contribute to the creation of an effective learning atmosphere for the achievement of student learning outcomes. The presence of the media has a fairly important meaning. The lack of clarity in the material presented can be helped by presenting the media as an intermediary. The complexity of the material that will be delivered to students can be simplified with the help of the media. Abstract material can be concretized with the presence of the media. Learning using Micromedia Flash is expected to motivate students to study harder because

learning can take place in an interesting and informative manner (Suherman et al, 2001). One strategy in archival learning is the audio-visual model. According to Haryati (2020) "audio-visual media is a combination of audio and visual or can be called media of hearing". Audio visuals will make the presentation of teaching materials to students more complete and optimal. The long jump motion is a combination of training elements: speed, strength, flexibility, endurance, accuracy which are coordinated into a good and perfect movement so as to produce a highly coveted achievement. Based on the results of previous research, eight variations of long jump learning have been designed and have been tested and will be developed in variations of software-based learning. To test the perfection of the model, it is necessary to take further action, namely the application of the developed variation so that it is proven true. This study will apply audio-visual media based on Micromedia Flash.

## **LITERATURE REVIEW**

The concept of learning according to Corey (Syaiful Sagala, 2011) is a process in which a person's environment is intentionally managed to allow him to participate in certain behaviors under special conditions or produce responses to certain situations, learning is a special subset of education. Learning media according to (Falahudin, 2014) namely learning media can be understood as anything that can channel information from information sources to recipients of information. Learning media as a whole is a tool or material used in the teaching and learning process which has a function as a carrier of information from learning resources (Muller, 2000). Micromedia Flash According to (Sugiyono, 2008) the early development of Flash is widely used for learning media because of the advantages it has. According to Haryati (2020), Flash is one of the software which is a superior product for making vector image animations that are in great demand today. Files generated by this software have a file extension.swf and can be played in any web browser with Flash Player installed. Flash uses a program called Action Script. From several definitions regarding the Micromedia Flash software above, it can be concluded that this Micromedia Flash software is a program that combines audio and visual which is capable of producing animated graphics, both objects and text in a more attractive form. animations such as: making 3D transformation animations, making decoration animations and making Bone animations. Because it has various uses, this Micromedia Flash Software can be used in the world of education as a tool in delivering learning materials and so on.

## **RESEARCH METHODS**

The research used in this study is experimental, meaning research that aims to find quality or cause-effect relationships. Bompaa (1993) say that the experimental method is a research method that tests hypotheses in the form of a causal relationship through the manipulation of independent variables and examines the changes caused by the treatment. Based on the above opinion that the experiment in this study is a variation of long jump learning based on Micromedia Flash which is carried out on students with the aim of improving long jump learning outcomes. Thus the research design used in this study is a one group pretest-posttest design. One group pretest-posttest design is a research design that uses one research subject, where the subject will be given a pretest and posttest. The form of the one group pretest-posttest design according to Sidik (2013) is as follows: The population in this study were 231 Sports Coaching Education students. The sampling technique used was purposive sampling, thus the sample in this study were 220 students of the 2021 Sports Coaching Education who were actively participating in lectures in semesters I and II.

## RESULTS AND DISCUSSION

There are 40 questionnaires with 220 respondents, it is concluded that the results obtained are, all questionnaire items with respondents are declared valid, it can be proven by  $r$  arithmetic  $>$   $r$  table, the value of  $r$  table is with a significance of 5% or 0.5, namely 0.138. It is said to be valid because all the values of the responses are greater than the  $r$ -table with the lowest  $r$ ing 0.167 for the pre-test and 0.150 for the post-test. . The basis for making decisions on the homogeneity test is if the value of Sig.  $>$  0.05 then the data is homogeneously distributed and if the value of Sig.  $<$  than 0.05 then the data is homogeneous. The homogeneity test of the Pre-test and Post-test data above shows the value of Sig. 0.536 This value is greater than the alpha value (0.536 $>$ 0.05). So it can be concluded that the distribution of the data on the Pre-test and Post-test is homogeneously distributed. obtained the value of Sig. (2-tailed) is 0.000 while when compared with a significance level of 0.05, the results obtained from the conclusions of the paired test are: The significance value (2-tailed)  $<$ 0.05 indicates a significant increase between the initial variable and the final variable. This shows that there is a significant increase in the difference in treatment given to each variable. So it was concluded that the significance value of 0.000  $<$  0.05 there was an increase the application of long-jump variations based on macromedia flash for students of sports training education in the faculty of sport science, Universitas Negeri Medan 2022.

## CONCLUSION

Based on the results of the research above, it can be concluded in this study, namely increase the application of long-jump variations based on macromedia flash for students of sports training education in the faculty of sport science, Universitas Negeri Medan 2022. It is very significant in the application of learning using digital media students experience changes in behavior because students are more confident, easily/quickly understand the long jump variation, so that the development of student learning abilities will increase and be able to think more critically (High Order Thinking Skill)

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