

DEVELOPMENT OF TECHNICAL LEARNING MEDIA MULTIMEDIA BASED VOLLEYBALL IN SMP NEGERI 3 SATU ATAP GEBANG

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Abstract

This research is motivated by the fact that learning volleyball at school is still mostly conventional, such as learning activities at school are still centered on the teacher. The objectives of this study are: To determine the feasibility of Interactive Multimedia-Based Volleyball Learning Media for Junior High School students. This study uses the Research and Development model *using the ADDIE development model* which includes (1) *Analyze* , (2) *Design* , (3) *Develop* , (4) *Implementation* . and (5) *Evaluate* (Evaluation). After this learning media is used in the implementation stage, the learning media is declared fit for use as teaching materials in schools with an average acquisition score of material experts of 3.6 and an average acquisition score of media experts of 3.6, an average acquisition score of trials the moderate group is 3.7 and the student response as a user is 3.8 so that the feasibility of the learning media developed falls into the "very good" category.

Keywords: *Passing Development, Learning Media, and Volleyball*

Journal Physical Education, Health and Recreation

Introduction

Background of the problem

Pen suit is a very broad subject that focuses on improving human movement. This is the relationship between mental and physical development (Purnama, 2017) as described in the article (Nazirum et al., 2019). According to the article (Nazirum et al., 2019) (Zulrafla, Turimin, & Muspita, 2016), PE lessons foster physical fitness and fitness , create individuals who are athletic, brave, disciplined, cheerful and determined. Traditional activities carried out can improve the quality of training, so as to achieve a good level of physical fitness. In the learning process, the teacher must be able to do this by realizing and communicating good basic movement skills and athletic abilities, as well as conveying the values that exist in sports, for example cooperation, honesty, discipline, mutual respect, and responsibility. and spiritual values.

and learning process is still monotonous, uninteresting and boring interesting for student . This fact was also found in one of the schools in the Gebang sub-district, namely Gebang One Roof Public Middle School. Teachers still apply the teaching and learning process with conventional methods or lecture

methods. This is also motivated by the absence of learning facilities such as projectors and computers so that the lessons presented are less effective and have a traditional impression and there is still a lack of variations in educational media. There are weaknesses in the learning process, namely:

1. Students are only attached to educators through conventional teaching and learning methods
2. Students are only adrift to understand writing and pictures
3. Students do not get the opportunity to convey ideas, develop experiences and ideas in learning
4. Interest and motivation to learn students to be low
5. The value of students' volleyball skills did not reach the KKM target (Minimum Completeness Criteria), namely in the basic volleyball technique material with a score of 70, while that was found from students at levels VII 1 and VII 2 with an average score of 64.57, namely 24 people and those who completed 8 people out of 32 students

Based on the above problems, it is hoped that the product will be designed by the researcher, namely in the form of learning media, can improve the quality of learning so that it becomes effective and efficient. It will make it easier for teachers and students to achieve their educational goals and it is hoped that through the development of learning media, what must be designed can also increase KKM scores. (Minimum Completeness Criteria) of students, especially in basic volleyball technique subjects. The development takes place in an interesting teaching and learning media. Interesting teaching and learning media make it easier for teachers to learn to motivate and understand students who record lesson material.

Teaching and learning media can also improve student learning processes. Benefits Learning media Provided by (Herdiana, 2018) The benefits of teaching and learning media in the learning process of students , namely:

1. When lessons get more attention, students can be more motivated to learn.
2. The importance of teaching materials becomes clearer and helps students understand and promotes the acquisition and achievement of educational goals.
3. Not only oral communication but also various teaching methods. Through the use of media, teaching methods will differ depending on the teaching materials provided.
4. Students engage in more activities during their learning activities, such as observing, demonstrating, teaching, and acting, as well as listening. From the perspective above, teaching and learning media can help in the teaching and learning process such as helping to overcome student boredom and interest. attention of students in the class, especially by participating in learning physical education subjects increased.

The basic technique of volleyball is a team game where two teams play a large ball facing each other, and each team consists of 6 players. Each team can play up to 3 shots in the defensive area. (Susila, 2021) .

Efforts to make the game more interesting have changed the basic technical elements of the game of volleyball. Technological developments will

increase the effort involved in designing movement skills to allow the ball to be played over a wide opponent's net, making it difficult or impossible for the opponent to return the ball.

The results of observations and non-formal interviews conducted in March - April 2022, researchers dig up information related to the development of learning media, especially basic volleyball techniques in all Public Middle Schools in Gebang District, it was found that until now there has been no development of learning media for basic volleyball basic techniques. applied by the teacher. There are no educators who use technology as a learning tool or teaching and learning media . Educators still use books as learning references and blackboards as teaching and learning media . It makes students more passive in the teaching and learning process , so that they are only recipients of information from the teacher. When this teacher uses traditional teaching and learning methods, students have fewer opportunities to communicate ideas and gain experience and potential in the learning process. There is no computer technology. It is used in the physical education learning process, especially in the basic volleyball technique subjects

The program used by researchers to create multimedia teaching and learning media is video tutorials. The advantages of this program can be used as a more interesting learning media.

Identification of problems

Based on the description of the background above, it is necessary to identify the problem so that the research focus and target are directed. Because of that, identifying the problems in this research are:

1. There is no application of multimedia in the process of learning basic volleyball techniques
2. Students only understand with text and pictures
3. Students only rely on teachers who use traditional learning methods
4. Teachers have never made multimedia-based learning media

Restricting the problem

The limitations of this research problem are limited to the development of multimedia-based learning media for basic volleyball techniques at Gebang One Atap Gebang 3 Public High School .

Formulation of the problem

The formulation of the problem in this study is: is the learning media for basic volleyball techniques based on multimedia appropriate for use in Gebang One Atap Gebang Public High School?

Research purposes

The research objectives of this study were: To find out the feasibility of learning media for basic volleyball techniques based on multimedia for students of Gebang One Roof One Roof Middle School .

Benefits of research

Theoretical and practical benefits are expected from this research. In theory, learning media can improve learning success with the basic techniques of volleyball multimedia. quality of learning and can provide theoretical support for research related to further learning basic volleyball technique.

Theoretical Study

Physical education curriculum development is the basic construction of physical education schools that must be considered and studied seriously to promote the scientific development of the physical education curriculum. The physical education curriculum involves education, health, research, physical therapy, entertainment and other functions. Due to the need to promote social change and cultural diversity, the task of the physical education curriculum is to continuously improve and improve physical education, thereby updating the curriculum to meet the special requirements of talent training. (Hussain et al., 2020)

Physical education is the only subject that provides opportunities for children to develop their motor skills and acquire the knowledge to participate in various physical activities. (Mustafa, 2021) . Physical education is also a learning process with physical activity aimed at increasing physical fitness, sports achievement, knowledge, healthy and active lifestyle, sports achievement, and emotional intelligence index. (Mustafa, 2021)

The Indonesian volleyball game was developed and introduced when the Dutch colonized Indonesia. From the beginning, the game of volleyball developed in society and spread throughout Indonesia (PBVSI). (Wijaya & Pd, 2019)

Volleyball game is a volleyball sport where the ball is thrown back and forth in the air through the net with the aim of dropping the ball into the opponent's area to seek victory. Tying the ball in volleyball or in the air allows you to perfectly bounce every part of your body, from your toes to your head. (Yusmar, 2017)

This volleyball game is played by two teams, each team consisting of six players. All players must possess the physical, technical and tactical as well as mastery and spiritual aspects to win the game. One of the required technical aspects. According to Bachtiar et al. The technique can be defined as: physical activity or the process of playing ball and presented in the form of reaching movements Meaning you efficiently and effectively according to current regulations. Technique always good based on theoretical laws, knowledge and rules of the game in books (Astuti et al., 2020)

learning activities in the classroom are another world of communication where educators and students exchange ideas to deepen their ideas and understanding. The development of science and technology will further encourage innovative businesses to use technical results in the teaching and learning process

to be systematically planned, designed, implemented, and evaluated to help students achieve their learning goals effectively and efficiently.

Before discussing further about the use of learning media, let's first agree on the definition of learning media. Based on Indonesia's leading online dictionary (KBBI Online), the word media is defined as a tool. Mediators; link; or meanwhile. The word media itself comes from the Latin media. It literally means "intermediary" or referent (Rahimi, 2021)

Pratiwi in the article (Novita et al., 2019) Learning media suggests that this is a factor that can encourage students to do so, motivate themselves to learn and achieve excellent learning results .

Meanwhile, Arsyad's (2017: 4) learning media, Gagne and Briggs, implicitly contain the tools used to convey the contents of physical material , for example books, tape recorders, cassettes, camcorders, VCRs, films, slides (picture frames). , Photography, photography, graphics, tv, computer.

In line with using the 2 terms above, the author of learning media has come to the conclusion that the sender sends a message to the receiver to convey his thoughts, feelings, concerns and interests. and student tendencies as well as to facilitate the learning process. effective in achieving learning objectives.

Multimedia is a combination of the two words "multi" and "media". Multi means "many" and media or multi-media comes from Latin and means "intermediary, or reference". (Kurniawan et al., 2021) . This intermediary or introductory term, according to (Kurniawan et al., 2021) , is used for mediation or referral from the sender of the message to the recipient (*recipient*). The function of the media is as a message.

teaching and learning media is indicated to improve the learning process. Therefore, various educational studies in Indonesia seek to develop instructional media and study their effects on the learning process. Some of these studies include the development of takbulta (Susetyarini, A, Fitriasari, & Fauzi, 2018) in the article (Kurniawan et al., 2021)

Framework of thinking

In the course of increasing the quality of education, teachers today need relatively good provisions to carry out education and learning. Current developments in science and technology encourage global education to always try to update and utilize technology in the learning process. This is realized by the school by facilitating learning activities using technology-based facilities that can support the learning process at school.

Along with the development of changes in the curriculum as the 2013 curriculum, the learning system that was previously Teacher Centered should have changed to Student Centered because it was hoped that a Multimedia-based Learning Media would enable students to be active in the learning process. You must be able to present learning media with various types of learning materials such as text, images, animation, audio in video form, so that they are easier to use and make the learning material easy to understand.

Learning multimedia based on information technology can help increase learning independence and understanding concepts. Learning multimedia Learning refers to a combination of different audiovisual media. can be applied to teaching and learning activities (Arista & Kuswanto, 2018)

Based on the description above, it is necessary to use varied and innovative learning media as a result of being able to help teachers in the learning process, namely using the making of Learning Media basic techniques of volleyball which can support students and teachers in the learning process. Development of Learning Media for basic volleyball techniques contains material packaged in such a way that it is easy for students to understand and students are required to study independently. This study uses the extension research method to create exclusive items in the form of teaching and learning media . The researcher validated and then tried it out.

Research Methodology

Place and time of research

This research was conducted at Gebang One Roof Public Middle School 3 which is located in VIII Kelantan Luar Hamlet, Pasar Rawa Village, Gebang District, Langkat Regency, North Sumatra Province. This research was conducted in May – June 2022.

Population And Sample

The population that became the subject of the study were students of class VII SMP Negeri 3 Satu Atap Gebang and the sample of this study was students of class VII SMP Negeri 3 Satu Atap Gebang.

Research methods

This research uses research and development methods (Research and Development). This research method is used to produce certain products, and test the effectiveness of these products. The product to be developed in this research is in the form of Multimedia-Based Volleyball Basic Engineering Learning Media at Gebang One Roof 3 Public Middle School.

Development style

The research and development model used is the ADDIE development model which includes the Analysis, Design, Development, Implementation, Evaluation stages.

Data collection technique

This research data collection technique uses a questionnaire and documentation.

a. Questionnaire

The questionnaire used in this study is a validation questionnaire and a questionnaire to determine student responses. The questionnaire contains written questions to collect information from respondents. This method is used to retrieve data validation of learning media for basic volleyball techniques from a team of experts (lecturers) related to the assessment of learning media for teaching basic

volleyball techniques by students' responses when using learning media for basic volleyball techniques.

b. Documentation

Documentation is the collection of data in the form of photos or pictures during the implementation of teaching and learning media for basic volleyball techniques which are carried out at Gebang One Atap One Roof Middle School.

Data analysis technique

The data analysis method used in this study is a quantitative descriptive analysis method which describes the results of product development in terms of post-implementation teaching and learning media, testing the level of validation and product feasibility. The measure used to determine the feasibility category of a product is to use a modification of the 4 Likert scale.

Research Results and Discussion

Model Development Results

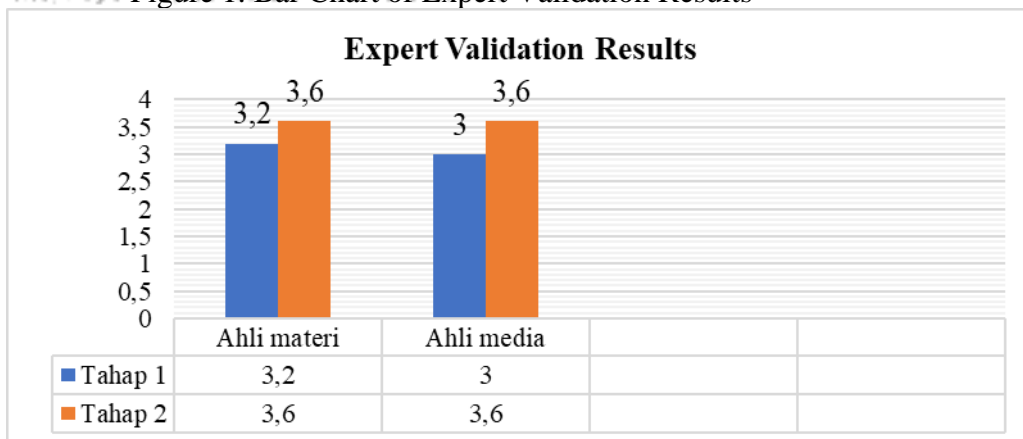
This research was carried out with the aim of creating a product in the form of teaching and learning media for basic volleyball techniques, material for teaching and learning activities for basic volleyball techniques. This media is expanded using the ADDIE development model with the results of each development stage .

Discussion of Research Results

The development of learning media for basic volleyball techniques can be seen from the results of the verification of material experts. namely Mr. Muhammad Fahmi, S.Pd, M.Or and media experts namely Mr. Iwan Saputra, S.Pd, M.Pd.

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Figure 1: Bar Chart of Expert Validation Results



Based on the results of validation by material experts, it can be seen that learning media get an overall average rating score of 3.2 and a percentage of 81 % with a very good product category but there are several revisions and input from material experts. Based on the advice of material experts, the material that must be revised, namely the word systematics in the material quality indicator number 10, is replaced with the word flow . The research consisted of 3 assessment aspects, namely the relevance of the material to the syllabus , the quality of the material , and the language and typography .

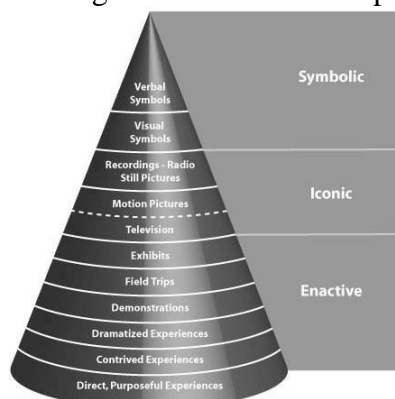
The results of the revision for the validation of material experts are to obtain an overall average score of 3.6 and a percentage of 90 % in the very good product category without revision . Thus the learning media based on the overall average score shows that the material in the learning media meets the eligibility requirements of learning materials.

Furthermore, the results of the analysis of the assessment of the basic volleyball technique learning media from media expert lecturers found an average overall score of 3 and a percentage of 81 % with a good product category, but there were several suggestions and revisions to the basic volleyball technique learning media. Based on the advice of media experts, the learning media for basic volleyball techniques that have been developed must be revised into sentences for language accuracy and replaced with language selection sentences . The research consisted of 5 assessment aspects, namely visual media , audio media , typography , language and media programming .

The results of the revision for media expert validation were to obtain an overall average rating score of 3.6 and a percentage of 93 % in the very good product category without revision . Thus the results of the average overall score indicate that the learning media for basic volleyball techniques has fulfilled the eligibility requirements. Material and media assessment has shown very good results with product improvements according to suggestions and input from material and media experts.

To find out whether the learning media for basic volleyball techniques is appropriate as a learning medium, one of the theories that can be used as a reference as a basis for evaluating media selection in the learning process is the theory presented by Edgar Dale, namely Dale's Cone of Experience Theory. The cone of experience or *the cone of experience* shows the experience gained in using learning media from the most concrete to the most abstract parts. In the theory presented by Edgar Dale, he mentions that the experience category is divided into several parts, which can be seen from the following figure:

Figure 2. Edgar Dale's Cone of Experience



From this assessment it can be seen that the learning media for basic volleyball techniques is "**appropriate**" to be a learning medium in the learning process at school, because the learning media for basic volleyball techniques already includes several aspects of the experience conveyed by Dale's theory such as audio, images, video, Text, and in its use must be direct so that it is more interactive.

Conclusions and Recommendations

Conclusion

Based on the results of the research and discussion regarding the development of multimedia-based learning media for basic volleyball techniques at SMP Negeri 3 Satu Atap Gebang it can be concluded as follows: The research results obtained indicate that the learning media for basic volleyball techniques for SMP students in Developed can be used as a learning medium for teachers and students in ongoing learning activities, namely the basic techniques of volleyball. This can be seen from the acquisition of the overall average aspect score by material experts in the first stage of 3.2 in the **very good category** and the second stage after revision rose to 3.6 in the **very good category** , the average overall aspect score by stage media experts the first was 3 **good categories** and the second stage after revision rose to 3.6 with the **very good category** , the average overall aspect score by the results of the initial trial/response of students in the medium group was 3.7 with a **very good category** and the average overall aspect score by students' responses to learning media for basic volleyball techniques of 3.8 **very good categories** .

Suggestions

The suggestions given are based on the results of research conducted:

1. It is hoped that this basic volleyball technique learning media can be used in other schools with more complete material.
2. The learning media for basic volleyball techniques is expected to be an additional variety of teaching materials for learning basic volleyball techniques at school.

3. In the research conducted, the effectiveness of learning media for basic volleyball techniques has not been tested in everyday learning. Therefore, other researchers had the opportunity to further test the effectiveness of learning media on basic volleyball techniques in learning.

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