Development of Volleyball Lower Passing Module Web Based on Junior High School Students

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ABSTRACT

This study aims to see the results of web-based developed products regarding the lower passing of volleyball at SMP Negeri 1 Pantai labu. Type. Assessment from material experts 92.6%, from website media experts 88.3% with excellent criteria Assessment from Linguists 88.3% with excellent criteria In the pretest and postest tests conducted in classes VIII- G and VIII-B obtained a score of 64.28% in the pretest class. in the posttest class it gained 83% with a difference of 18.72%. From the trial, an increase in interest in learning was obtained, meaning that website-based learning has a positive impact on student learning outcomes even though learning is still online or 50% face-to-face learning. Overall the assessment of the quality of the product is "very worthy" to use..

KEYWORDS

development; passing down; website

INTRODUCTION

Volleyball game in its development is increasingly accepted and favored by the community, this symptom occurs because volleyball is a fairly interesting sport. Although simple in the form of the game, a person can only play volleyball well if he is able to perform movement techniques that are in accordance with the rules of the game. The new volleyball game can be carried out properly and correctly if someone can master the elements in the game. Elements of basic movements will develop into advanced movements that are more complex. The complexity of the movement that is developed becomes more varied in line with the optimal achievement to be achieved. The technical quality of the volleyball game refers to the level of mastery of the initial basic technique. Therefore, mastery of basic techniques in volleyball games should receive serious attention in efforts to develop and improve the quality of the game. Nuril Ahmadi (2007:20) states, the basic techniques in volleyball games consist of service, bottom passing, top passing, block, and smash. At this time, the health crisis that has hit almost all corners of the world is experiencing the Covid-19 pandemic. This widespread has an affect on different areas, one of which is in instruction. Numerous nations have chosen to briefly near schools and campuses amid the Covid-19 widespread. Site may be a medium utilized to oblige content, picture, sound, and liveliness information that can be shown on the web and can be gotten to by computers connected to the web universally. Site may be a computer network-based data media that can be accessed anywhere at generally moo taken a toll. As a back, there must be intelligently media within the shape of web-based volleyball learning media. Quoted from the journal Heru Supriyono Warta, Vol.18, No.2, September 2015: 98 – 109 The improvement of computer innovation and informatics too influences the shape of

learning media. Learning media that utilized to be as it were within the shape of books or other printed materials can now be made employing a web-based framework so that it does not as it were show content and pictures but can moreover show mixed media materials such as videos so that it is more interesting for students to learn. Based on the results of field studies, namely observations and interviews with 3 physical education teachers and 20 class students. This preliminary research was conducted at SMP Negeri 1 Pantai Labu. The learning activities carried out by the teacher are 40% lecture, 30% discussion, 30% Via Whatsapp. As for carrying out learning activities, the learning media used are 55% practice through youtube, 11.1% modules, 11.1% LKS, and 22.2% printed books. Only 33.3% of teachers use media in learning activities. The teacher explained that there had been no use of Web-based learning modules because of the difficulty of having their own website. Then as many as 100% of the teachers agreed with the development of a website-based learning module on volleyball bottom passing material, to make it easier for students to understand volleyball bottom passing material.

The results of interviews with students that 52% still have difficulty in learning activities in volleyball underpassing. This is because the teacher in explaining the material is still difficult for students to understand and this material is only briefly studied. As many as 85% of students agree that it is necessary to develop a volleyball bottom passing learning module using this website because to make it easier to understand theories and techniques it also increases student interest so that it adds to the enthusiasm for learning. The volleyball underpass module which will later be packaged with a website that contains volleyball material, especially volleyball underpasses, is equipped with a display that is able to attract students' interest and understanding for volleyball sports subjects. This method of making learning media uses the ADDIE development method to produce certain products, and test the effectiveness of these products.

Based on this background, the authors are interested in researching "Development of a Web-Based Volleyball Bottom Passing Module for Junior High School Students".

RESEARCH METHODS

Some models that are often used in research and development include a learning development model that shows a gradual design and a simple and easy-to-learn learning design with 5 main stages, namely (A) analysis, (D) design, (D) development, (I) implementation, and (E) valuation or abbreviated as ADDIE". ADDIE is done systematically and systemically. It is hoped that it can assist teachers in designing efficient and attractive learning programs and have an effective outlook to help in the future so as to produce quality products that can be recognized by everyone.

Sudjarwo in Faritodi (2008: 31) product-focused development can be defined as a systematic process for producing more specific instructional materials, based on predetermined goals so that a program form (product), which is most effectively and efficiently used in the learning process, can be defined. teaching in a relatively short time. This research can be applied in junior high schools by paying attention to environmental conditions and understanding what is needed. An attempt to develop a product so that it becomes effective and can be used as a teacher in junior high schools. The adjustment is showed within the frame of specialized arranging, proposals and sorts of exercises to be carried out at each organize. In the event that the ten steps of inquire about and development are taken after accurately, it'll deliver a item that can be accounted for. These steps are standard things that must be taken after, the steps taken can be balanced to the wants of the analyst.
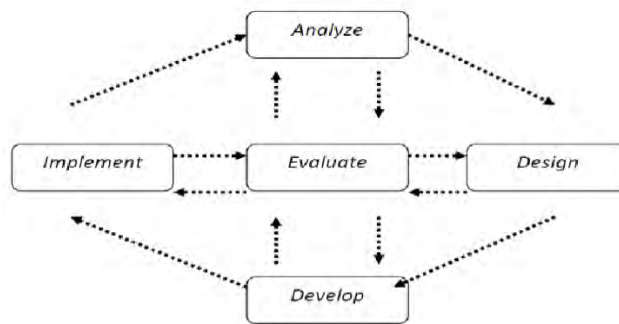
Figure 1. Stages and Steps of ADDIE Development Research

The ADDIE advancement was created by Dick and Carry (1996) in Endang, 2013: 200. The ADDIE show employments five stages of improvement, namely:

1. Investigation, to be specific conducting a needs examination. Recognize issues, distinguish items that coordinate the target, considerations around the item to be developed.
2. Plan, the plan organize is the organize of planning the item concept to be developed.
3. Advancement, advancement is the method of making the plan a reality.
4. Execution, execution is item testing as a genuine step to actualize the item we are making.
5. Assessment, specifically the method to see whether the item made is fruitful, in agreement with introductory desires or not.

RESULTS AND DISCUSSION

This research was conducted in class VIII/8 SMPN 1 Pantai Labu. The result of this research and development is a website-based volleyball underpassing module. This study is also to determine the development of a website-based module, the feasibility of a website-based learning module with underpassing volleyball material for corner learning in junior high school. Research & Development (R&D) development uses the ADDIE Analize, Design, Development, Implement, Evaluation development model (Endang, 2013:200). This development design model is a general model that is used as a guide in making an effective design. The stages of learning design using the ADIIE approach begin with Analysis, Design, Development, Implementation, and Evaluation (Aldoobie, 2015; Branch, 2009). The ADDIE model was developed systematically and based on the theoretical foundation of learning design.

Analysis Stage

At this stage of analysis, the analysis stage is divided into three parts, namely:
1. Needs Analysis

   Needs analysis in the form of investigation of field conditions and members as well as collection of reference materials that will be the subject of talk within the advancement of web-based modules. Field investigation exercises were carried out by collecting data almost the learning conditions at SMPN 1 Pantai Labu. The results of information regarding the student learning process and the development of learning modules obtained from field observations on August 11, 2021 in volleyball learning activities in class VIII of SMPN 1 Pantai Labu.

2. Curriculum Analysis

In the 2013 revised 2018 curriculum, the assessment aspect is only emphasized on the cognitive aspect, namely the assessment of KI 3 and KI 4 in this case the achievement of psychomotor skills. As in the following basic competencies KD 3.1 Understanding the concept of variations and combinations of big ball game skills. KD 4.1 Practicing variations and combinations of skills in various big ball games with good coordination.In the basic competencies in the 2013 revised 2018 PJOK curriculum, the educational programs targets incorporate four competencies, specifically (1) otherworldly state of mind competencies, (2) social demeanors, (3) information, and (4) aptitudes. These competencies are accomplished through intracurricular, cocurricular, and/or extracurricular learning forms. The detailing of otherworldly demeanor competence is, "Increasing in value and living the lessons of the religion he follows to".

The definition of social state of mind competence is, "Appearing fair behavior, teach, duty, caring (resistance, shared participation), respectful, and sure in association viably with the social and characteristic environment inside the reach of affiliation and presence". These two competencies are accomplished through circuitous instructing, specifically commendable, habituation, and school culture by taking under consideration the characteristics of the subjects, as well as wants and conditions of understudies. The development and advancement of demeanor competence is carried out all through the learning handle, and can be utilized as a teacher's thought in making choices further develop the character of students. Knowledge Competencies and Skills Competencies.

3. Theory Analysis

The theoretical study used in formulating the product is in the form of a website-based Learning Module on volleyball underpassing material. using Ausabel's theory of meaningful learning. That is, learning that is linked to information on relevant concepts contained in students' cognitive (Dahar in Trianto, 2011: 37). In this theory, it means a process that relates new information to relevant concepts contained in a person's cognitive structure. In meaningful learning, new information is assimilated into existing subsums. At the initial understanding of students about volleyball, they are given the concept of knowledge about general and specific knowledge about volleyball as well as knowledge of psychomotor motion how to do basic volleyball techniques, one of which is the underhand passing technique, all of which are website-based so that it is relevant to the situation that will be faced by students, both learning done online or offline will be the same.

Based on the results of the analysis, an evaluation of several things will be developed based on needs analysis, curriculum studies, and theories. The results of the evaluation carried out in the form of adjustments to the level of development of students' ages. By aligning the language that will be used later, as well as content content that can attract students' attention, which will later be incorporated in the website design that will be developed. So that it can facilitate learning activities on passing down in volleyball games.

Design Stage

The content of the material is grouped according to the material in the indicators and each material is made into several sub-materials. Images are taken from existing sources. The video was obtained with the researcher practicing the movements according to the existing movements from the source. The evaluation in this module is a question of quizzes,

evaluations are made for each volleyball material. After the content of the material has been collected, it is continued to create a website account and create a template design according to the volleyball bottom passing module then the display is arranged as attractive as possible which includes an initial display or module cover containing menu buttons: Home, Volleyball Techniques, Volleyball Gif Movement, Video Volleyball and Volleyball Modern Quiz as an evaluation. For more details can be seen in the image below.
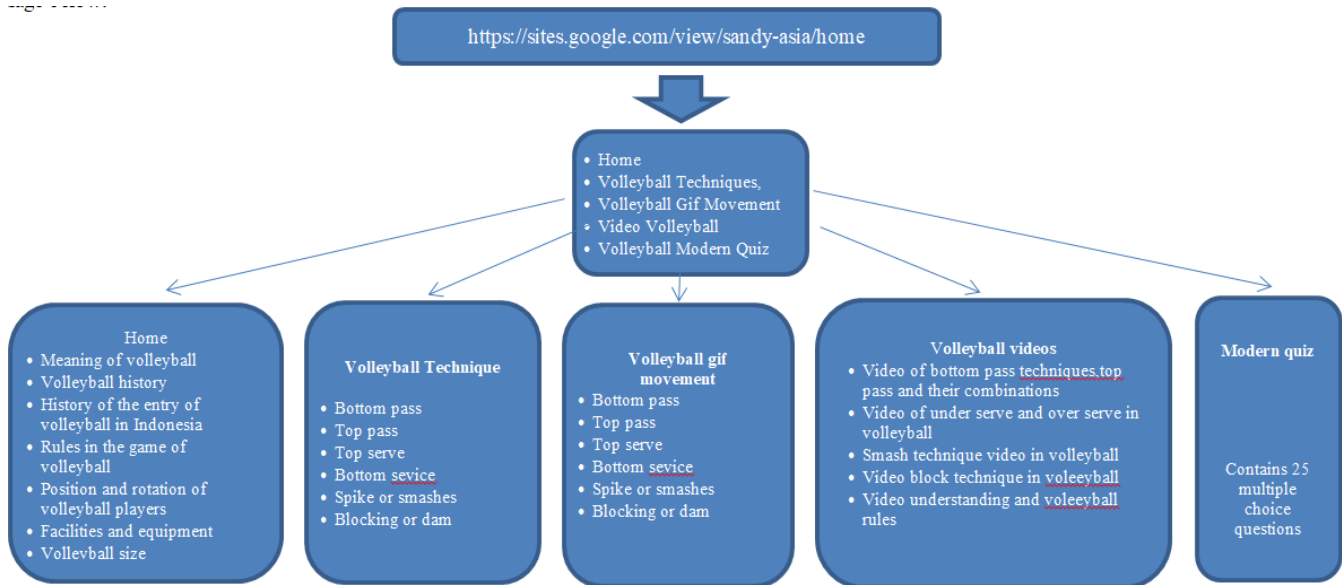

Figure 2. Design Stage

Development Stage

The stage of making a website-based passing learning module using a series of all components such as materials, images, Gif Movements, videos and quizzes that can be used and accessed through the website with the URL *https://sites.google.com/view/sandy-asia/home* or the quick way can be accessed at *urlis.net/voli*
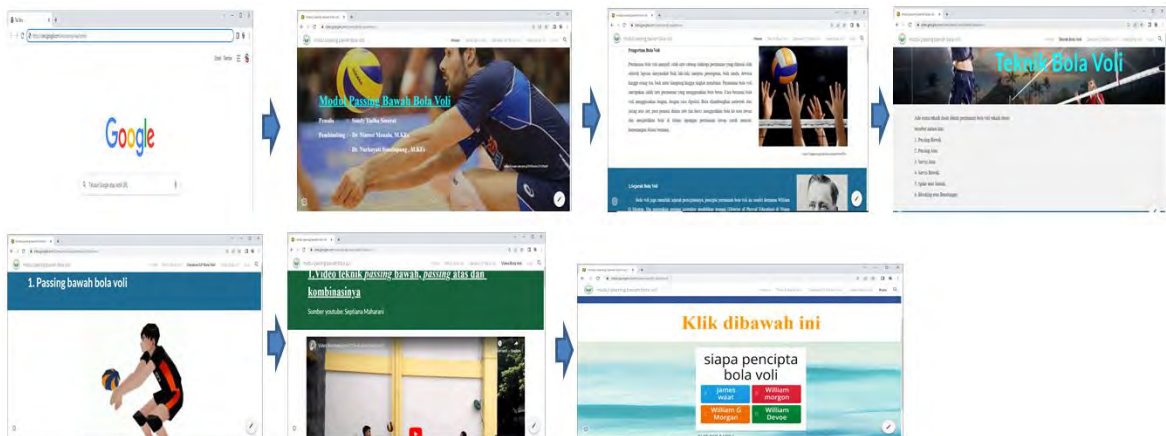

Figure 3. Website circuit tutorial

Based on the results of the assessment from material experts, the results of the validation of the overall assessment were 92.6% with very good criteria. The results of the assessment are divided into three indicators with each indicator having an assessment sub-indicator. In the content feasibility indicator there is a total acquisition result of 91% with very good criteria for the sub-indicator regarding the suitability of the material with ki and kd obtaining results of 90% with very good criteria,

The results of the assessment from website media experts obtained a total percentage of 88.33% with very good criteria. There are two indicators that are used as a reference for assessment, namely the indicators for the display aspect of website-based learning media, the results are 93% with very good criteria and in the programming aspect, the results are 83.3% with very good criteria. The results of the expert assessment of volleyball games, the results of each of the questions contained in the assessment of the content contained in the website-based module are obtained, namely the module Explaining the history of the origin of the volleyball game getting results of 100% with very good criteria, the module explains the rules and conditions in the volleyball game facilities obtained a result of 75% with good criteria. This learning module is able to explain the basic techniques of volleyball well, getting results of 75% with good criteria. The volleyball technical features help to know the techniques and how to do the volleyball material and get 75% results with good criteria. Then the video questions contained in the module help to understand how to do basic volleyball techniques to get 100% results with very good criteria, then the pictures and gifs contained in the module help to understand how to do basic volleyball techniques to get 75% results. with good criteria. In the modern quiz feature to help understand volleyball material, the result is 75% with good criteria, In the module questions, knowledge about volleyball, especially underpassing techniques, completely obtained results of 100 with very good criteria, then the systematic description of the material about volleyball and underpassing was in accordance with the cognitive aspects of students obtaining results of 100% with very good criteria, illustrations The information presented regarding underpassing in volleyball is appropriate and interesting, obtaining results of 75% with good criteria, in the module it is explained easily about underpassing in volleyball games obtaining results of 75% with good criteria. And on the question of the learning module that is in accordance with the content of the volleyball game regarding underpassing, the results are 75% with good criteria with the overall average getting a presentation of 83% with very good criteria.

Based on the results of the assessment conducted by linguists regarding the product being developed, the results of the assessment of each indicator and sub-indicator were obtained. The presentation technique was 85% with very good criteria and the completeness of the presentation obtained results of 100% with very good criteria. In the straightforward indicator, the results are 83.3% with very good criteria and the use of terms, symbols and icons results in 85% with very good criteria. With a total average of 88% obtained results with very good criteria. Thus the assessment obtained by the linguist regarding the language in the developed module is valid. It can be concluded that the results of the assessment of the experts stated that the website-based underpassing module was feasible.

Implementation Stage

This stage is a very important stage in a development research where the product that has been designed is used to answer field needs from the data obtained from the needs analysis. Then see the success of the product after being validated by experts.

Implementation was carried out for PJOK teachers at SMPN 1 Pantai Labu and grade VIII/8 students at SMPN 1 Pantai Labu. This implementation is carried out on teachers and students. For teachers, product assessment is carried out, while for students, product testing is carried out on individual tests, small group tests, and limited fields.

A. Product Assessment by Physical Education Teacher at SMPN 1 Pantai Labu

Product assessment is carried out by physical education teachers as many as five people who are in charge of physical education subjects. This assessment is carried out to see

input and assessments regarding the products developed for improvement when tested on students. The results of the assessment conducted by Physical Education teachers at SMPN 1 Pantai Labu obtained a result of 85.25 with a total score of 341 on the Very Good criteria.

The results of tests carried out in small groups obtained test results with a total acquisition percentage of 83.4% with very good criteria. The results of this test increased by 1% with the addition of the number of samples from the previous number. In items of questions assessed by students the improvement occurred in the previous improvement so that improvements do not need to be in this small group test and can be continued in a limited field test.

Based on the results of the responses to the field group testing, the number of students was limited to 32 students. The test results regarding student responses regarding the product developed obtained a percentage result of 85.8% with very good criteria. This is the result of a positive response regarding the website-based underpass module that was developed.
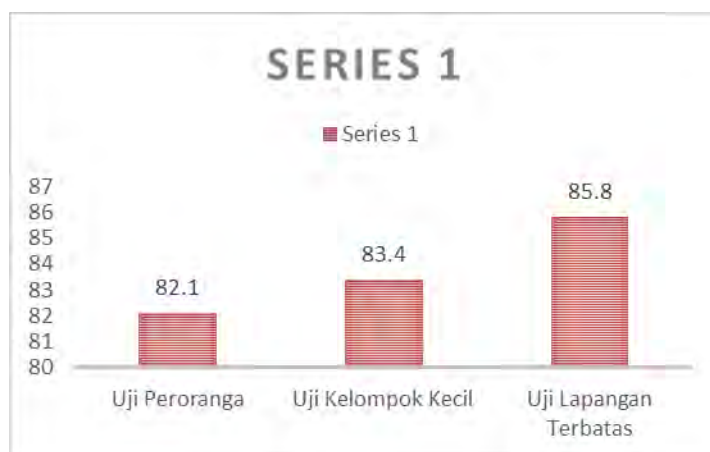

Figure 4. Diagram Test Results of Student Responses to Products

Based on the table above, it can be described that the average acquisition result in the pretest test obtained an acquisition score of 2250 from a total of thirty-two students. With an average of 64.28 with good criteria. With the highest score 83 and the lowest 42.Then from these results it can be determined the range of values, the number of classes, and the length of the class, namely:

Specifies the range of values
Value range = 83 – 42 = 41
Define multiple classes
Number of classes = 1 + (3.3) log n
= 1 + (3.3) log 32
= 1+ (3,3) 1.50
= 5.95 = 6
Determine the class length
Class length = (Value Range)/(Many Classes)
= 41/6 = 6.83= 6
The frequency distribution of the Pretest scores before using the developed product can be seen from the following table.

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Table 1. Frequency Distribution of Pretest Values

Interval	Frequency	Percentage
42-47	1	3,1%
48-54	1	3,1%
55-60	6	18,7%
61-65	0	0%
66-71	6	18,7%
72-77	13	40,6%
78-83	5	15,6%
Total	**32**	**100%**

The results obtained in the posttest class can be described in the table above, the lowest score is 67 and the highest score is 92. The total score is 2625 with an average of 83 with very good criteria. Earnings in this posttest class.

Then from these results it can be determined the range of values, the number of classes, and the length of the class, namely:

Specifies the range of values

Value range = 92 – 67 =25

Define multiple classes

Number of classes = 1 + (3.3) log n

= 1 + (3.3) log 32

= 1+ (3,3) 1.50

= 5.95 = 6

Determine the class length

Class length = (Value Range)/(Many Classes)

= 25/6 = 4.16= 5

The frequency distribution of the posttest scores for the volleyball underpass test after learning to use the web-based volleyball underpass module can be seen from the following table.

Table 2. Frequency Distribution of Posttest Values

Interval	Frequency	Percentage
67-71	3	9,37%
72-76	11	34,3%
77-81	0	0%
72-86	6	18,75%
87-91	0	0%
92-96	12	37,5%
97-100	0	0%
Total	**32**	**100%**

It can be concluded that there is a difference between the posttest and pretest classes. before and after using the developed product experienced a significant increase, namely 18.72%. The average score before (Pretest) was 64.28 and the average score after (Posttest) was 83.64. The average value of the Pretest and Posttest can be seen in the following table. A conclusion can be drawn, namely the use of the website-based volleyball underpass module provides positive results in teaching big ball material in volleyball games on the basic technique of passing down.
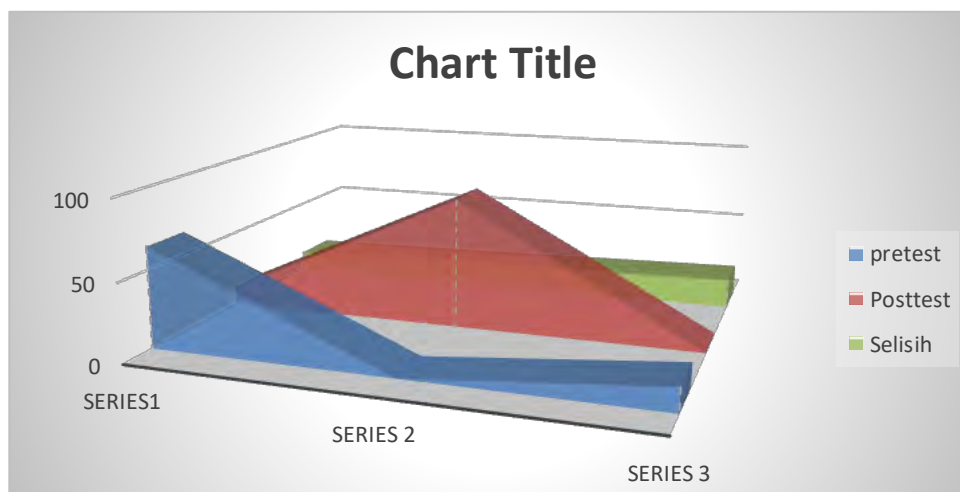
Figure 5. Diagram Average Value of Pretest and Posttest

Evaluation

Based on the results of the stages carried out at each stage in the development model that occurs. A formative evaluation has been carried out in it, where improvements have been made at each stage. However, in this evaluation stage, the researcher will conduct a summative evaluation where the evaluation is explained in general in an outline at each stage of the development model. At the analysis stage, an evaluation of several things will be developed based on needs analysis, curriculum studies, and theory. The results of the evaluation carried out in the form of adjustments to the level of development of students' ages. By aligning the language that will be used later, as well as content content that can attract students' attention, which will later be incorporated in the website design that will be developed. So that it can facilitate learning activities on passing down in volleyball games. At the design evaluation stage the design on the website was developed by prioritizing making it easier for students to access, with additional interesting content and student interest in carrying out learning. As well as emphasizing the principle of flexibility that can be accessed using smartphones and computers via internet access. The website-based bottom passing module design

Effectiveness of Using Website-Based Volleyball Bottom Pass Module

The results of the effectiveness of using the product developed in volleyball underpassing material for class students of SMP Negeri 1 Pantai Labu. In the pretest and posttest tests carried out in class VIII-G and VIII-B in the learning phase of the test, the score was 64.28 in the pretest class. However, in the posttest class, the results obtained were 83 with a significant difference of 18.72%. Thus the results of the effectiveness of using the website-based volleyball underpass module have a significant impact with a significant difference of 18.72%. The difference in the average value of students before and after using the developed product. Shows an increase that can be identified from the results of the average acquisition in the pretest and posttest classes. Seeing the increase in the results described above, it can be concluded that the website-based volleyball underpass module that was developed is suitable for use in learning volleyball underpassing material. This is often in understanding with the conclusion of Kemp and Dayton (in Rusman, 2013: 168) which states that the utilize of learning media includes a commitment to the improvement and change of learning, to be specific as takes after: (1) conveyance of learning messages is more standardized, (2) learning can be more curiously, (3) learning gets to be more

intelligently by applying learning hypothesis, (4) learning execution time can be effective, (5) learning quality can be moved forward; (6) learning can take put at whatever point and wherever required, (7) increment students' positive demeanors towards the fabric and learning handle, and (8) the teacher's part changes in a more positive heading.

There are a few hypotheses on the utilize of directions media, one of which is the hypothesis of Dale's Cone of Involvement (Dale, 1969). Dale gauges that learning results gotten through the sense of locate are almost 75%, the sense of hearing is approximately 13%, and the other faculties are around 12% (Rusman, 2013: 165). Typically what causes the utilize of learning media to be exceptionally critical to utilize in learning activities.The use of a website-based volleyball underpass module contains a positive affect on students' capacity to perform volleyball underpasses. As expressed by Hooper (in Siyamta, 2013: 2) states that mixed media as a introduction medium is diverse from mixed media as a learning medium.

Research Findings

The research findings obtained in this study, namely:

1. The results of the data obtained by the teacher stated that the website-based volleyball bottom passing module for class VIII students of SMP Negeri 1 Pantai Labu that was developed was feasible and appropriate.
2. After testing, the ability of students to learn to use the website-based volleyball bottom passing module has increased, this can be seen from the pretest with an average of 64.28 and an average posttest of 83 which means an increase in learning outcomes of 18, 72% In other words, learning using a website-based volleyball underpass module can improve teaching on volleyball underpassing.
3. The improvement of student learning outcomes is evidence that the website-based volleyball underpass module that was developed has proven to be effective in learning volleyball underpassing, this is in line with Hooper's opinion (in Siyamta, 2013: 2) which states that the media is an intermediary for delivering messages through the media. learning. Learning media requires users to actively interact in it; even if there is interactivity, the interactivity is covert interactivity. From this perspective, the specific mental activities required for learning to occur can be generated through the systematic manipulation of instructional events.

CONCLUSION

Based on the results of research and development of web-based volleyball bottom passing learning modules for junior high school students, especially for physical education lessons, health sports are suitable for learning at school or at home or stay at home as it is today. Products that have been validated and declared very suitable for use are then tested by users. From the trial, it was found that there was an increase in students' interest in learning, meaning that website-based learning had a positive impact on student learning outcomes even though learning was still online or face-to-face learning was 50%. Overall, the assessment of the quality of this website-based learning product includes the "very feasible" criteria for use.

In this section, the implications of the results of the research on developing a website-based volleyball underpass module for students of SMPN 1 Pantai Labu: (1) on this website-based volleyball underpass module development product, it can be used as a source of independent learning, especially on technical material. basic volleyball, (2) with the development of a website-based volleyball underpass module, it can help improve

understanding in learning basic volleyball techniques, (3). which during the Covid-19 pandemic is very limited face-to-face learning at all levels of education.

Based on the conclusions and implications of suggestions for the research conducted are: (1). This website-based volleyball bottom passing learning module can really be used as an effective independent learning resource, (2). This website-based volleyball bottom passing learning module can be disseminated anywhere and anytime via smartphones, tablets or computers (3). There is still a need for attention guidance and efforts to develop better and interactive learning resources for corner learning in particular, (4). the emergence of new research related to volleyball learning resources and also in other sciences where the results in the research are in the form of website link products that can later be used by many people.

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