



## Development of Learning Media Based on Video Tutorial Service Techniques in The Game of Sepak Takraw at SMP Negeri 4 Kubutambahan

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### Abstract

This research aims to describe the design, determine the validity of results and determine the practicality of learning media based on video tutorials on service techniques in the sepak takraw game at SMP Negeri 4 Kubucepatn. This development research was carried out through 5 stages, namely analysis, design, development, implementation, evaluation. The data collection methods used were interviews and questionnaires. The results of this development research show that: video tutorial-based learning media obtained validation percentage results from content/material experts of 96%, design experts of 86%, media experts of 93%, teacher/field practitioner expert responses of 98%, student responses namely the individual test obtained a percentage result of 99%, the small group test was 97%, the large group test was 96%, so it was declared to have very good validity, and obtained an assessment from the practicality test of 97% with a very good category qualification. Good. So it can be concluded that the learning media based on video tutorials on service techniques in the sepak takraw game is declared feasible and practical to use in learning activities

**Keywords:** Development, Video Tutorials, Learning Media, Sepak Takraw Services.

### INTRODUCTION

Educational process must based on innovation in the learning process where educator responsible answer in manage class for learning process more optimal. According to (G. Suwiwa et al., 2018) Interesting and fun learning become objective from educator or participant educate in the learning process because That required innovation new For develop the latest learning media For add Spirit participant educate in the learning process. According to (IG Suwiwa et al., 2014) Form innovation new that can applied Now This is in the progress of the times in learning media and methods new learning to suit with modern times, namely learning must be modified and utilized technology for the learning process No monotonous and boring so that cause participant educate lazy to study. During this is an educational process Still Many use learning media conventional in implementing the material. In addition, many educators still use learning methods such as lecture methods. According to (Liberta Loviana Carolin et al., 2020) In this era of globalization, learning methods need to be modified or adjusted to the times. Many learning media can be used in the teaching and learning process.

Sepak takraw is a sport that is basically played using all parts of the body except the arms (Semarayasa, 2014) Sepak takraw is a sport originating from Asia where the game is

a mixture of volleyball, using a ball made of woven rattan and the game process uses all parts of the body except the hands . Generally, sepak takraw players are required to master the basic techniques of sepak takraw, one of which is the service technique so that the skills of playing sepak takraw are carried out properly. Service is the first kick that aims to attack the opponent's defense in order to win, if there is no service in sepak takraw, the game will not take place .

In the initial observation conducted at SMP Negeri 4 Kubutambahan, during the sepak takraw learning activities carried out, the learning activities were more centered on the sports teachers at SMP Negeri 4 Kubutambahan. Based on interviews with PJOK teachers at SMP Negeri 4 Kubutambahan and students there, it was found that media was needed to support sepak takraw learning. According to several students, they did not understand if learning was done with pictures only or just reading books, in addition, the media they watched on YouTube was incomplete and specific in explaining how to do service techniques in sepak takraw games, with the advancement of the times, students also need more flexible learning through media so that they can more easily access learning, more interesting and innovative learning media are needed to support sepak takraw learning, students also need learning media that explain how to do sepak takraw techniques in more detail, Therefore, students need media in the form of video tutorials to help them learn sepak takraw sports, especially service techniques, students, especially grade 8, get sepak takraw sports material so that media is needed to help students in the sepak takraw learning process.

From the results of initial observations regarding the characteristics of students, they like materials presented in the form of videos that are not too long so that they do not get bored watching, and videos that are made simplified so that they understand how to do service techniques correctly and most students at SMP Negeri 4 Kubutambahan like to play sepak takraw. Teachers have used YouTube as a tool to help the sepak takraw learning process at SMP Negeri 4 Kubutambahan, but after being implemented by students, it turned out that the video of service techniques in sepak takraw games on YouTube had not been explained in detail about how to serve in sepak takraw. So that students cannot learn independently and students do not have a good understanding of service techniques in sepak takraw games. If this problem continues, it will have a fatal impact on students, so it is very necessary to develop learning media. Therefore, I developed video tutorial-based learning media to support sepak takraw learning that is not yet available.

Based on interviews with several students and educators, educators and students need video tutorial learning media to support learning, in addition, students also need

videos to support learning. There are several studies that inspired the emergence of researchers' ideas to develop video tutorials. According to , the use of video tutorials can encourage creativity and motivation of students. (Mamin et al., 2019) stated that from the results of data analysis using the t-test, there was an increase in students' scores in the learning process, so it was proven that the use of video tutorials was effective in helping students' learning process. (Rizal Lukman & Kurniawan, 2021) stated that the use of video tutorials improves students' learning outcomes. According to (Saputri & Suwiwa, 2022), the development of video tutorial media is suitable for use as a sports learning medium. According to (Muarif et al., 2021) the development of effective learning media to help students in learning. According to (Sapitri & Adri, 2021) video-based learning media is more effective than conventional media. According to (Artawijaya & I Putu Panca Adi, 2023) video-based learning media is more interesting and easier for students to understand. According to (Ali et al., 2023) video tutorial-based media is equipped with visuals, audio and images so that it attracts students' interest. According to (Wati et al., 2022) video-based media greatly influences students' psychomotor control, especially in sports. According to (Kurniawan & Wahyuri, 2022) technological advances have created new innovations in the learning process that are more interesting using videos. According to (Agustin & Kurniawan, 2021) innovative learning media determines students' interest in learning. According to (Okpatrioka, 2023) learning media that combines audio and visuals is more effective and better to be used as learning media compared to images. According to (Wulandari & Yudha Febrianta, 2024) video-based learning media combines all the senses to capture the senses and is more interactive to use.

Research on the development of tutorial-based learning media has been widely studied before, but what distinguishes this research from previous studies is that this study takes the material of upper and lower service techniques in sepak takraw games. In this development research, the advantages of video tutorials are that they are easier to understand and easier to practice than using images as a learning tool, video tutorial-based learning media makes it easier for students and teachers to carry out the learning process because when accessed on YouTube, video tutorial - based learning media combines video and reading where at the end of the video there is a barcode to access complete sepak takraw service technique material, media that is made as detailed as possible so that students can understand the stages of performing service techniques. In addition, the progress of the era and technology is a reference for developing video tutorials to help students in the learning process.

## ***METHOD***

Method research used in research development This that is method research and development (R&D). Research development that will be implemented by researchers that is develop learning media video tutorial based and then Validity test is carried out to products by experts material, expert design, learning media experts, and school teacher response tests Intermediate First.

With Validity test and response test were carried out so can known How level validity and practicality from learning media For made into as source learning. Development model in research This refers to the development model ADDIE research. The five stages in the ADDIE model are analysis, design, development, implementation, evaluation.

## ***RESULTS AND DISCUSSION***

Study development This conducted at SMP Negeri 4 Kubutambahan. The research development This produce learning media video based technique tutorials service in the game sepak takraw which has tested validity and practicality. Research development of learning media tutorial based already Lots investigated previously but what makes the difference study This with study previously that is in study This take material technique service up and down in game sepak takraw. In study development This excess from the video tutorial namely more easy For understandable and easy For put into practice compared to use picture as means learning as well as in the media there is a barcode for access more material complete in pdf format.

Stage analysis aiming For obtain data needs development product, namely in the form of problems faced students and teachers, the media needed as well as expected by students and teachers. Stage analysis conducted that is analysis characteristics students, facilities, and materials. The results from analysis namely, the need for practical, creative and efficient learning media use support activity learning. This is because of during activity teacher learning only teach technique basics and theories only, teachers also only teach theory and technique ahead without the existence of learning media that can used by participants educate For Study in a way independent, so that participant educate only depend on theories and practices exemplified by the teacher at the time activity learning sepak takraw is taking place. Based on results interview, participants educate like activity fun and easy learning boring, students more interested For follow activity learning that uses learning media like use of video, images, and audio. Participants educated at State Middle School 4 Kubutambahan own style diverse learning. Participants educate own style different learning that is with style Study with using visual, auditory, or kinesthetic. There

is facilities that support the learning media development process based on video tutorials such as the internet, laptops, LCDs, and other facilities in the form of field sepak takraw, sepak takraw ball for sons and daughters, and net at SMP Negeri 4 Kubutambahan. The selection the material to be chosen is technique base service in game sepak takraw, namely in accordance with Physical Education Material Sports and Health in class VIII of SMP Negeri 4 Kubutambahan.

Stage learning media design based on video tutorials, namely covering hardware and software determination. Hardware for support development of learning media based on video tutorials in the form of laptops, cameras, cellphones. While *software* used that is in the form of Cap Cut application, and devices software that can support *features - features* like images, text, sound, and animation. Design get up study This researcher prepare framework learning that is in the form of *storyboards* and *flowcharts* developed and compiled become material learning that contains image. The series of ideas developed become a learning video video tutorial based.

At the stage development that is activity produce product in the form of learning media tutorial based according to with the design that has been created, and realized with help Cap Cut application. The video *background* is in the campus GOR Jineng Deep Faculty Undiksha Sports and Health, and the models in the video at the time demonstrate service tutorial up and down game sepak takraw is one of the junior high school students where adapt with characteristics participant educate who become objective research. Development of learning videos video based tutorials are made in accordance with *storyboard* that has been designed previously. Learning media video tutorial based consists of from opening, content, and closing. Before conduct validity test learning media products video tutorial based, especially formerly instrument testing was carried out For know relevant or whether or not grains developed instruments. Next validity test was conducted development of learning media video tutorial based. There is 1 lecturer as expert content / material, 1 lecturer as expert design, and 1 lecturer as media expert and 1 teacher/ expert response practitioner field.

Stage implementation is stage real in application of learning media based on video tutorials that have been made, where development carried out can utilized and applied in accordance with its function. At the stage This 4 activities were carried out namely a practical test by participants Didi K Class VIII of SMP Negeri 4 Kubutambahan ( individual test, group test small, group test large, and practicality test ) as video learning users video tutorial based aims For to obtain comments and suggestions from participant educate towards learning media video tutorial based. Practicality test participant educate

implemented with spread questionnaire. Individual test done by 3 participants educate, group test small conducted by 6 participants educate, group test big conducted by 12 participants educate, and test practicality conducted by 12 participants educate.

At the stage evaluation aiming For know how far is the learning Already achieved through learning media. Based on expert / expert tests Contents material, expert design, media experts, and teacher response, response students (trial ) individual, group test small, group test large ) and practicality test that learning media video based technical tutorials service in the game sepak takraw is worthy used in the learning process. Stage evaluation done on every stages during the research process. At this stage analysis done evaluation with analyze problems in the place study Then identify reason the problem. At the stage design done activity evaluation instrument research and design learning media products tutorial based with lecturer mentor. At the stage development done validation by experts, and assessment Respondent as well as repair product based on results revisions, input, and suggestions from expert. At the stage implementation a practical test was conducted on the media developed.

Research result development This show that : (1) learning media video based technique tutorials service in the game sepak takraw wins results percentage validation from expert content / material by 96% with qualification very good category, expert design by 86% with qualification category well, media experts by 93% with qualification very good category, teacher/ expert response practitioner field by 98% with qualification very good category, response participant educate namely individual test to obtain results percentage by 99% with qualification very good category, group test small by 97%, with qualification very good category, group test big by 96% with qualification very good category, so stated own very good validity, and obtained evaluation from the practicality test by 97% with qualification very good category.

**Table 1**Content/ Material Expert Assessment

No	Criteria	Score
1	Compliance the material presented in learning media video tutorial based with characteristics participant educate	5
2	Clarity presentation material in learning media video tutorial based	5
3	Completeness material in learning media video tutorial based	5
4	Suitability of learning media video tutorial based with material service in game sepak takraw	5
5	Accuracy of learning media video tutorial based in follow <i>trend</i> latest in technique service game sepak takraw	5
6	Clarity attitude beginning, implementation and end of the technique base service game sepak takraw in learning media video tutorial based	5
7	Compliance picture in learning media video tutorial based with material service in the game sepak takraw	5
8	Accuracy use Language in learning media video tutorial based	5
9	Clarity language used in learning media video tutorial based	4

No	Criteria	Score
10	Compliance evaluation in learning media video tutorial based with objective	4
<b>Total Score</b>		<b>48</b>

**Table 2Design Expert Assessment**

No	Criteria	Score
1	Clarity objective learning in learning media video tutorial based	4
2	Consistency between objective learning, content material, and evaluation in learning media video tutorial based	4
3	Systematicity material Whichdelivered in learning media video tutorial based	4
4	Suitability of learning media video tutorial based on influence motivation to participant educate	5
5	Compliance example shown in learning media video tutorial based	5
6	Harmony order location writing in learning media video tutorial based	4
7	The attraction of learning media video tutorial based to attention Study participant educate	4
8	Suitability of learning media video tutorial based to chance participant educate For Study independent	5
9	Compliance evaluation in learning media video tutorial based for test understanding participant educate	4
10	Compliance evaluation in learning media video tutorial based with objective learning	4
<b>Total Score</b>		<b>43</b>

**Table 3Media Expert Assessment**

No	Criteria	Score
1	Convenience in use media learning video tutorial based	4
2	Media convenience learning video tutorial based in help participant educate For understand material	5
3	Media convenience learning video tutorial based in to awaken motivation participant educate in Study	5
4	The attractiveness of the display of learning media video tutorial based	5
5	Consistency display of learning media video tutorial based	4
6	Suitability of the model in learning media video tutorial based with characteristics participant educate	5
7	Accuracy use type letterWhich used in media learning video tutorial based	5
8	Accuracy size letter Which used in media learning video tutorial based	4
9	Accuracy space in writing Which used in media learning video tutorial based	4
10	Use picture in the media learning video tutorial basedFor support material learning	5
11	Use picture in the media learning video tutorial based for support understanding to material	5
<b>Total Score</b>		<b>51</b>
<b>Ideal Maximum Score</b>		<b>55</b>

**Table 4Assessment Teacher/Expert Practitioner Response Field**

No	Criteria	Score
1	Compliance material in instructional Media video tutorial based with objective learning	5
2	Convenience material in instructional Media video tutorial based for understood	5
3	Compliance Language in learning media video tutorial based with characteristics participant educate	5
4	Effectiveness sentences used in learning media video tutorial based	4
5	Compliance illustration in learning media video tutorial based	5

No	Criteria	Score
6	Attraction <i>background</i> used in learning media video tutorial based	5
7	Clarity text in learning media video tutorial based	5
8	Compliance voice with text in learning media video tutorial based	5
9	Clarity and comfort of sound volume in learning media video tutorial based when be heard	5
10	Compliance emergence text and sound	5
11	Convenience use of learning media video tutorial based	5
12	Practicality use of learning media video tutorial based	5
<b>Total Score</b>		<b>59</b>
<b>Ideal Maximum Score</b>		<b>60</b>

**Table 5 Individual Test Assessment**

No	Criteria	Respondents			Score
		1	2	3	
1	Appealing appearance instructional Media video tutorial based	5	5	5	15
2	Convenience read text in instructional Media video tutorial based	5	5	4	14
3	Clarity the image shown on instructional Media video tutorial based	5	5	5	15
4	Clarity of video in learning media based on video tutorial	5	5	5	15
5	Audio clarity in learning media based on video tutorial	5	4	5	14
6	Convenience material Which served in instructional Media video tutorial based for understood	5	5	5	15
7	Clarity description material in instructional Media video tutorial based	5	5	5	15
8	Relatedness the material presented in instructional Media video tutorial based with objective learning	5	5	5	15
9	Motivating participant educate Study cognitive in Study use instructional Media video tutorial based	5	5	5	15
10	Motivating participant educate Study motion in Study use instructional Media video tutorial based	5	5	5	15
11	Convenience use instructional Media video tutorial based	5	5	5	15
12	Practicality use instructional Media video tutorial based	5	5	5	15
<b>Total Score</b>		<b>60</b>	<b>59</b>	<b>59</b>	
<b>Ideal Maximum Score</b>		<b>60</b>	<b>60</b>	<b>60</b>	
<b>Percentage</b>		<b>100%</b>	<b>98%</b>	<b>98%</b>	
<b>Total Percentage</b>			<b>99%</b>		

**Table 6 Small Group Test Assessment**

No	Criteria	Respondents						Score
		1	2	3	4	5	6	
1	Attraction display of learning media based on video tutorial	5	3	5	5	5	4	27
2	Convenience read text in learning media video tutorial based	5	5	5	5	5	5	30
3	Clarity images displayed on the media	5	5	4	5	5	5	29

No	Criteria	Respondents						Score
		1	2	3	4	5	6	
4	learning video tutorial based Clarity of video in learning media video tutorial based	5	5	5	5	4	5	29
5	Audio clarity in learning media video tutorial based	5	5	5	4	5	5	29
6	Convenience the material presented in the media learning video tutorial based for understood	5	5	4	5	5	5	29
7	Clarity description material in learning media video tutorial based	5	5	5	5	5	5	30
8	Relatedness the material presented in the media learning video tutorial based with objective learning	5	5	5	5	5	4	29
9	Motivating participant educate Study cognitive in Study using learning media video tutorial based	4	5	5	5	5	4	28
10	Motivating participant educate Study motion in Study using learning media video tutorial based	5	5	5	5	5	5	30
11	Convenience use of learning media video tutorial based	5	5	5	5	5	5	30
12	Practicality use of learning media video tutorial based	5	5	5	5	5	5	30
<b>Total Score</b>		<b>59</b>	<b>58</b>	<b>58</b>	<b>59</b>	<b>59</b>	<b>57</b>	
<b>Ideal Maximum Score</b>		<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	
<b>Percentage</b>		<b>98%</b>	<b>97%</b>	<b>97%</b>	<b>98%</b>	<b>98%</b>	<b>95%</b>	
<b>Total Percentage</b>		<b>97%</b>						

Table 7 Trial Assessment Group Big

No	Criteria	Respondents												Score
		1	2	3	4	5	6	7	8	9	10	11	12	
1	K1	5	5	5	5	5	5	5	5	5	5	4	5	59
2	K2	5	5	5	5	5	5	5	5	4	5	5	5	59
3	K3	5	3	5	5	5	5	5	5	5	5	5	5	57
4	K4	5	5	5	5	4	5	5	3	5	5	5	3	55
5	K5	4	5	5	5	5	5	5	5	5	5	4	5	58
6	K6	5	5	3	5	5	5	5	5	5	5	5	5	57
7	K7	5	5	5	4	5	5	5	5	5	5	5	5	59
8	K8	5	4	5	4	4	5	5	5	5	3	5	5	55
9	K9	5	5	5	5	5	5	5	5	5	5	5	5	60
10	K10	5	5	5	5	5	5	3	5	5	5	5	5	57
11	K11	5	5	5	5	5	4	5	5	4	5	5	5	58
12	K12	5	5	5	5	5	5	5	5	5	5	5	5	60
<b>Total Score</b>		<b>59</b>	<b>57</b>	<b>58</b>	<b>58</b>	<b>58</b>	<b>59</b>	<b>58</b>	<b>58</b>	<b>58</b>	<b>58</b>	<b>58</b>	<b>58</b>	
<b>Ideal Maximum Score</b>		<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	
<b>Percentage</b>		<b>98%</b>	<b>95%</b>	<b>96%</b>	<b>96%</b>	<b>96%</b>	<b>98%</b>	<b>96%</b>	<b>96%</b>	<b>96%</b>	<b>96%</b>	<b>96%</b>	<b>96%</b>	

No	Criteria	Respondents												Score
		1	2	3	4	5	6	7	8	9	10	11	12	
	<b>Total Percentage</b>	<b>96%</b>												

**Table 8 Practicality Test Assessment Product**

No	Criteria	Respondents												Score
		1	2	3	4	5	6	7	8	9	10	11	12	
1	K1	5	3	5	5	5	5	5	5	4	5	5	5	57
2	K2	5	5	5	4	5	3	5	5	5	5	5	5	57
3	K3	5	5	4	5	5	5	5	5	5	5	5	4	58
4	K4	5	5	5	5	4	5	5	5	5	5	5	5	59
5	K5	5	4	5	5	5	5	5	5	5	5	5	5	59
6	K6	4	5	5	5	5	5	5	5	5	5	5	5	59
7	K7	5	5	5	5	5	5	5	3	5	5	4	5	57
8	K8	5	5	5	4	5	5	5	5	5	5	5	5	59
9	K9	5	5	5	5	5	5	5	5	5	5	5	5	60
10	K10	4	5	5	5	5	5	3	5	5	4	5	4	59
	<b>Total Score</b>	<b>48</b>	<b>47</b>	<b>49</b>	<b>48</b>	<b>49</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>49</b>	<b>49</b>	<b>49</b>	<b>48</b>	
	<b>Ideal</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	
	<b>Maximum Score Percentage</b>	<b>96</b>	<b>94</b>	<b>98</b>	<b>96</b>	<b>98</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>96</b>	
		<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	
	<b>Total Percentage</b>	<b>97%</b>												

## CONCLUSION

From the presentation material on can concluded that based on expert testing, namely expert material by 96%, experts design by 86%, media experts by 93%, and teacher/ expert responses practitioner field by 98%, so that stated own validity is very good.and individual test assessment by 99%, group test small by 97%, group test big by 96%, and practicality test by 97% so that stated to be very practical. So the learning media video based technique tutorials service in the game sepak takraw is worthy used in the learning process.

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