

Video Based Learning for Basketball Referee

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Abstract: The material of mechanic court is a material that must be mastered by a basketball umpire. The research and development of this Basketball scoresheet refers to the Research & Development (R & D) development model of Borg & Gall Outcomes but uses only seven steps. The result of this research and development is in the form of instructional media of referee bolabasket mechanic court. Learning media packed in a DVD video. The results of small group testing on the product obtained a feasibility percentage of 83.33%, while the results of large group trials obtained a percentage of eligibility of 88.97%. It can be concluded that the learning video of basic basketball refereeing mechanic court of Malang City can be used to achieve the learning objectives. This is in accordance with data analysis which states that this learning video media has the attractiveness, comprehension, conformity, feasibility and completeness of the contents in accordance with the latest FIBA rules.

Key word: *Learning, referee, mechanic court.*

I. INTRODUCTION

Sport is an activity to train one's body. Sports is an activity that is familiar to everyone. Basically everyone has the opportunity to exercise according to their interest.

At present the Indonesian people are popularizing basketball sports. The basketball game is a combination of several individual techniques and teams that blend together in an overall collaboration. Basically, basketball is a very fast and dynamic game. Basketball games are not much different from sports games in general, it requires strength in stamina, mentality, and strategy. However, there are fundamental differences in game patterns, defense patterns and game rules. The game pattern in basketball is dominated by hand games, when attacking more is done by passing and done by shoot laying and shooting. Basketball games known as fast and dynamic games, such games require good endurance and stamina because without being supported by endurance and stamina that are strong enough the pattern of attack and defense patterns built by a team will not go well.

In Malang City, basketball sports are a popular sport. Along with the development of basketball clubs in Indonesia, referees are also required to improve their individual quality, the referee himself is a court judge. In 2015, in East Java precisely in the city of Malang, maintaining and improving the quality of referees is the main priority for the leadership of a match, in this case the intention of each assignment in an event is based on the quality of each individual referee.

There are several ways to improve the quality of a referee's performance, including physical exercise (endurance), FIBA

rules (understanding of basketball rules), and mechanic court (where the referee is located). This physical exercise is used to help increase referee concentration to always be consistent in making decisions and consistently running for 4 x 10 minutes (according to regulations). These FIBA rules are the initial capital of a referee to be able to lead a basketball match, due to FIBA rules regarding the guidelines and rules of the basketball game as a whole.

Actually research on basketball referee is not a new thing, because research on basketball refereeing, has been developed by sister Dina Charisma Ganda in 2012 who researched into the form of a pocket book intended to assist the learning process of one of the material at the Bolabasket II course, Imam Arief Efendi 2014 which developed learning media for basketball referee signals based on mobile learning for theoretical subjects and basketball practice II of Malang State University, Byan Candra Gloria Estefan in 2014 which developed basketball referee signal animation in learning in sports physical education, and health for Brawijaya High School XII class Smart School in Malang City.

Three Person Officiating (2015) referee mechanic court itself is where the referee has an area that is controlled to oversee all people on and off the field. In the basket there are 3 referees who occupy their respective regions and have duties in their respective regions. 3 referees themselves have their own names, referee 1 (main referee) is called referee, referee 2 (second referee) is called umpire 1, and referee 3 (third referee) is called umpire 2.

Based on a survey conducted on April 25, 2015 through a scattered questionnaire, 25 of 37 referees or equal to 90% thought that mechanic court learning was very important. This is because a good mechanic court is able to support the referee's performance better. In becoming a basketball referee, it is necessary to understand the mechanic court, because basketball is a fast and dynamic game, the referee is always required to move so that all movements, mistakes and violations can be seen all. Lack of media to learn mechanic court in basketball, so here the idea arises to solve the problem by making "Development of Basic Video of the Basic Bolabasket Referee Mechanic Court in Malang City".

Dimiyati and Mudjiono (2009: 7) who argued that learning is a preparation prepared by the teacher to attract and provide information to students, so that with good preparation and well designed by the teacher, the teacher will help students in facing the goals to be achieved. The term of learning relates to the notion of learning and teaching. Learning, teaching and learning occur simultaneously. Learning can occur without

teachers or without teaching activities and other formal learning. While teaching includes everything that teachers do inside and outside the classroom. In the sense of Indonesian learning can be interpreted as a process or way of making people or creatures learn. In addition to the above understanding, there are several experts who express the meaning of learning. The word "learning" is a translation of the word "instruction", which is widely used in the world of education in the United States.

Sumiati (2007: 3) states "learning is essentially a complex (complicated) process, but with the same purpose, which is to provide learning experiences to students in accordance with the goals". Rusman (2011: 15) also argues "learning is a process of creating conducive conditions for interaction between teaching and learning and other learning components to achieve learning objectives". Based on this opinion it can be concluded that, learning is an interaction between teachers and students so that students have something new, which they get from their experience, both in terms of knowledge, skills and attitudes.

According to [10] "learning is part of a specific education, the process by which one's environment is intentionally managed in order to learn or involve themselves in specific behaviors with certain conditions or so that he can respond to something specific".

Rosdiana (2012: 1) states "learning is how to do something and help students to understand declarative knowledge, namely knowledge of something". Essentially learning is a process of interaction between the instructor and the learner, both direct and indirect interactions.

According to the UM Education Guidelines (2011: 20) "learning is an active-interactive activity of students with a learning environment that is taught by educators. According to [25] "learning or teaching is an effort to teach students".

From the understanding of media and learning according to the expert above it can be concluded that learning media is a medium used for teaching and learning activities so that the interaction and communication of educators and students can take place in an effective and efficient manner that can stimulate students' interest in learning goals. This is in accordance with [10] which states "something is said to be a learning medium if the media is used to convey messages with educational and learning objectives".

According to [23] "in terms of the readiness of procurement, the media are grouped into two types, namely the finished media because they are trading commodities and are available in the broad market in the media by utilization, and design media because they need to be designed and specially prepared for specific learning purposes (media by design)". In order for interaction and communication between educators and students to take place in an efficient and effective manner that can stimulate students' learning interest to achieve learning goals, the two types of media groups between media by utilization and media by design need to be combined.

Every educator in delivering learning material must think about the learning media that will be used, because the use of appropriate learning media plays an important role to stimulate student activeness in order to achieve learning objectives. According to [10] the use of learning media in the teaching and learning process functions as an attractive learning medium, learning media overcomes differences in learning experiences,

provides learning experiences that are difficult to accept from other ways, learning media fosters self-learning ability, learning media fosters learning excitement, Learning media makes it possible to increase interaction between participants.

According to [25] suggests four functions of media are as follows, (a) change the emphasis of formal education, which means that with the learning media that was abstract to be concrete, learning that was previously theoretical became functionally practical, (b) motivated learning, in this case the media becomes an acatic motivation for students, because the use of instructional media is more interesting and concentrates students' attention, (c) provides clarity, so that the knowledge and experience of students can be clearer and easier to understand then the media can clarify it, (d) Provide learning stimulus, especially student curiosity.

Based on the opinions of some of the experts above, it can be concluded that the learning media function as an intermediary in real and direct delivery of information or material that is packaged attractively so that it creates interest or motivation to learn students. The development of instructional media in the form of basketball referee mechanic court learning videos is expected to attract the interest of Malang City basketball court referees to understand basketball referee mechanic court at the time of the match or not in the match as a form of improving referee performance.

According to [6] learning video media is a media that presents audio and visuals containing good learning messages that contain concepts, principles, procedures, knowledge application theory to help understanding an instructional material.

Video is an audio-visual learning material that can be used to convey messages or subject matter. It is said to be heard because the elements can be heard (audio) and said to be visible because the elements can be seen (video) can be presented together.

Video is learning material that is packaged through video tapes and can be viewed through video / VCD players that are connected to monitor monitors (Sungkono 2003: 65).

Learning video media can be classified into audio visual aids (AVA) media types or media that can be seen and heard. Usually this media is stored in the form of a dish and ribbon. VCD media is a media with a video storage and recording system where audio visual signals are recorded on plastic disks instead of magnetic tape (Arsyad 2004: 36).

The advantage of using learning video media according to [7] video display size is very flexible and can be adjusted according to need, video is a non-print teaching material that is rich in information and straightforward because it can get to the user's face directly and videos add a new dimension to learning

It can be concluded that with the addition of music in video media will be able to attract the attention of people who see in listening to the material provided. Video development procedure.

- 1 Video media framework
 - a. Preliminary
 - b. Opening show
 - c. Introduction
 - d. Fill in the video
 - e. Cover

In the preliminary presentation, it needs to be presented as an introduction to why material is important, how it relates to other materials. The important thing is also the presentation of the purpose of making needs to be displayed.

The contents of the video contain a complete description of the material, so that all the material that will be delivered is distributed in its entirety. The length of time available during the video takes place on the contents of this video.

The closing is filled with the biodata of the researcher, who plays a role in the making of the video and thanks to anyone who has a role in making the video and to the lecturers concerned.

2 Team involvement

The development of video learning is an activity that involves several skills / skills that are very synergic to produce learning video media, in accordance with the needs of these groups. In general, the making of a learning video requires ability in the following fields:

- a. Substance experts, people who have competency material and are responsible for writing material texts.
- b. Media experts, namely people who design and develop media specifications (text, graphics, animation and audio) that are in accordance with the material developed.
- c. Instructional method experts, namely people who design and determine the right method according to the material developed.
- d. Director, that is the person who is conceptually and technically responsible for the course of production activities.
- e. Computer experts in video editing and graphic design, namely people who have the ability in the field of video editing and graphic design according to the material developed.
- f. Sound director, the person responsible for producing good sound quality, including music selection. In learning videos, sound plays a role because learning messages are dominated by visuals and sounds. [6].

Development of video scripts According to [7] the general steps usually taken in making a video learning script:

- 1 Determine ideas, good ideas usually arise from a problem. Problems can be formulated as gaps between existing and supposed realities.
- 2 Formulate the objectives, what is meant here is the formulation of competencies as what the writer will expect, so that after watching this video learning becomes understood.
- 3 Conducting surveys, aiming to collect information as supporting material.
- 4 But the outline of the contents, the material that has been collected from the survey must be closely related to the objectives that have been formulated. In other words, the materials that will be presented through the author's program must be able to support the achievement of the objectives that have been formulated.
- 5 Create a synopsis, briefly describe the contents of the program and still be general.
- 6 Make treatment, is a further development of the synopsis that has been prepared previously. Treatment is made close to the series of film scenes, the sequence looks chronologically or sequence of activities.

7 Storyboard, is the creation of each scene, which is explained in detail the changes in each scene, usually for beginners in one sheet there are 2-3 scenes but for those who are professionals, the scene is made in pieces.

8 Manuscript, according to Warsihna (2009) the script is not much different from the storyboard, the difference is the sequence of presentation of visualization, the text contains words in general and detailed.

FIBA Rules (2014) Referees are court judges in the field. The referee has full rights during the match to all players and coaches and official teams. The role of the referee is very important for the implementation of a regular match. Each referee has the authority to make decisions within his duties, but has no authority to ignore or oppose decisions made by other referees.

Pedowitz (2008) said that there are several elements that influence the character of an referee, including a basketball referee can be assessed by looking at the age, how many years to be a referee, the level of education and evaluation results of each match aimed at producing a basketball referee who is ready to work in all matches .

FIBA Official Interpretations (2014), In the basketball court, there are 3 referees on duty and have different designations. Referee is the name for the main referee or chief referee, because the Referee or the referee has more roles in a match. There are Umpire 1 and Umpire 2, they are referees who work with Referee in a match. Overall Referee and Umpire is a unit to lead a match. Same with referees in other sports, that referees on basketball have characteristics in dress, such as on clothes, basketball referees use clothes that have gray dominance and the models are almost the same in every region in Indonesia. In addition to clothes, black pants are the hallmark of basketball referees and shoes that must be black. The next important thing is the question of pluit, the pluit in the basket has special characteristics. Formerly the referee basketball used pluit with the Dolphin model and brand, now in 2015, FIBA regulations issued a special pluit used in basketball bags, namely Dolphin B (Dolphin Basketball).

The role of the referee in a match is very large, because the referee has special duties as a referee. FIBA Rules (2014) here will explain the duties and authorities of the basketball referee:

- 1 Referee checks and approves all equipment that will be used during the match. All equipment that will be used is in accordance with the referee's approval.
- 2 Referee choose the match hour, hours / twenty four (24) seconds, stopwatch and ensure the desk clerk. The selection of the clock is the most suitable countdown timer.
- 3 Referee chooses a ball, there are at least two balls provided by the host, if there is no suitable ball, the referee may choose another ball with good quality.
- 4 Referee does not allow to use objects that can injure other players. Prohibit accessories that are not suitable for use in matches.
- 5 Referee carries out a jump ball for the start of the first period, and throws the ball in the other period.
- 6 Referee has the authority to terminate the match if the situation is appropriate to be stopped.
- 7 Referee has the authority to determine a team affected by forfeit in a match.

- 8 Referee check with the scoresheet sample at the end of the match and whatever time it feels necessary.
- 9 Referee endorses and signs the scoresheet at the end of the match, stopping the assignment and the relationship with the match. Referee authority will begin when they arrive at the game field twenty minutes before the game starts and ends, when the match hour signal reads to end the game time as authorized by the referee.
- 10 Referee record on the score sheet back page if there is a forfeit and the player rejects it.
- 11 Referee makes the final decision, if it happens between referees there is a different decision. Because the referee is the main referee, so if there is a difference of opinion, the referee decides.
- 12 Referee has special authority if there are no regulations covered by this regulation. If there are events that are outside the rules, the referee has the right to make decisions.
- 13 The referee has the authority to stop all deviant events from basketball.

The 13 items above are the tasks of a basketball referee consisting of 1 Referee and 2 Umpire in accordance with FIBA rules (2014).

The basketball rules philosophy is to allow both teams to play so that both teams draw or do not have the advantage. The role of the referee is to uphold the rules, mechanics are the tools needed to place the referee in the right position to apply a rule. This is made with 3 objectives, the referee must enforce the rules in accordance with the rules written in the latest rule book and the referee himself is grouped both men and women. And 99% of referees must know the purpose of the regulations of each region and state as practiced at AHSAA. A good referee must deepen the knowledge of basketball rules as a whole because by thoroughly exploring the rules and understanding the location and movement of referees in the field can help referee work and make the referee a fair court judge.

Three Person Officiating (2015), Mechanic court is a properly arranged referee layout. In the sense that the placement of basketball referee positions is to be in the right position to get a good view or view to produce a good decision, and if there is movement, error, violation, displacement and emphasis, the referee has a mechanism or rule to move places well

II. METHOD

This research and development method uses procedural models. According to the Guidelines for Scientific Writing (2010: 46) "The procedural model is a descriptive model, which outlines the steps that must be followed to produce a product". The research and development of this basketball scoresheet refers to the Research & Development (R & D) development model of [5] which consists of ten steps. . Each developer can of course choose and determine the steps that are most appropriate for him based on the specific conditions he faces in the development process [3]. Researchers did not use all the steps of the [5] development model, but only used seven

steps because of limited time, effort, and costs and adjusted to the characteristics of the product to be developed.

The design of the development of basketball scoresheet learning media based on mobile learning is as follows: (1) needs analysis, (2) making the initial product namely, the initial product learning media for the referee basketball mechanic court learning video, (3) expert evaluation, (4) product revision, (5) small group trials, (6) large group trials, and (7) final results of the development of learning media for mechanic court instructional video baskets.

The type of data obtained is qualitative and quantitative. Qualitative data is obtained from the results of expert reviews in the form of inputs, suggestions and evaluations. While quantitative data is obtained from needs analysis, trial I (small group) and trial II (large group).

Data collection instruments used in this study are questionnaires. Questionnaires were used for quantitative data collection, including needs analysis, evaluation from experts, trial I (small group), and trial II (large group).

III. RESUTH & DISCUSSION

In the results of this research and development, a needs analysis data will be presented from the distribution of questionnaires to 37 referees of Kota Malnag basket. In addition, data will be presented on the results of expert evaluation of instructional media, results of expert evaluation of learning, results of expert evaluation of basketball players, results of small group trials, and results of large group trials. Small group trials using research subjects were as many as 6 elementary school basketball court referees in Malang City, while large group trials used 31 subjects of City basketball referees. Data from small group and large group trials were obtained from the answers of Malang City basketball court referees as subjects, using data collection methods in the form of instruments in the form of questionnaires. Data from expert evaluations were also obtained from expert answers to the questionnaire given.

In the development of mechanic court learning videos for elementary-level basketball court officials in Malang City, the technique used to process data is the percentage technique. The results of the data that were presented were data from expert evaluation of instructional media, results of expert evaluation of basketball learning, results of expert evaluation of basketball players, results of small group trials, and results of large group trials.

In the results of this development presented data analysis needs obtained from 37 basketball referees in Malang City. The data obtained by using a questionnaire distributed to the basketball court referees in Malang City. Then the result data was obtained by answering the answers from 37 students.

Based on the results of filling out the needs analysis questionnaire, it is known that around 90% of students need to learn about mechanic court referee basketball.

From the results of expert evaluation, learning media obtained 100% results so that it can be concluded that the learning media in the form of basketball referee mechanic court learning videos are already good, but there is still a lack of development results to be more interesting and achieved

learning objectives through the developed media. From the evaluation results, instructional media experts obtain advice and input that improve by eliminating the word development of mechanic court and adding introduction to the beginning of the video.

From the results of the evaluation of learning experts obtained 100% results so that it can be concluded that the material coverage is very complete and suitable for use as a learning media by the basketball referee of Malang City. From the evaluation results, basketball learning experts obtain advice and input that must be given an introductory introduction, videos given identifiers and anyone who plays a role in making the video at the end of the video, and giving information when the referee moves after blowing a foul

From the results of expert evaluation of basketball players, 100% results were obtained so that it could be concluded that the material presented was very suitable and easily understood. From the results of the evaluation the basketball experts obtained suggestions and input that there was a lack of explanation about the transfer of the referee after blowing a foul.

The first trial (small group) was conducted on Sunday, April 9, 2017. From the results of the Phase I trial evaluation (small group, $n = 9$), the percentage of 83.33% was obtained so that the overall referee mechanic court learning video products were quite interesting, it is very suitable to help Malang City basketball court referee, easy and useful to improve the performance of Malang City basketball referees. However, there is a lack of recognition of who the product belongs to and the lack of clarity about the information when the referee moves when after blowing a foul. Therefore, based on these results, the learning media in the form of learning videos need to be revised so that they can be used as a learning media for basketball referees in the form of learning videos for basketball referee participants in Malang City.

Trial II (large group) was conducted on Sunday, April 23, 2017. From the results of the Phase I trial evaluation (small group, $n = 9$), the percentage of 88.97% was obtained so that the developed mechanic court learning video product was very clear, the overall appearance was very interesting, easy to use, and right when used as a media for mechanic court basketball learning media in Malang City referee.

Based on data collected from the results of expert evaluations, small group trials, and large group trials conducted, the product of the development of mechanic court learning videos for elementary school basketball court referees in Malang City has several parts of the product that need to be revised. Product revision based on input and findings obtained during expert evaluation, small group and large group trials are intended so that the products developed are better and suitable for use.

The following are suggestions from instructional media experts on the initial product design for the development of mechanic court learning video for basketball referees at the basic level of Malang City, including: (1) there must be an identifier as a product identity, (2) deletion of a few words so that the title looks interesting and clear.

Furthermore, the learning expert also gave some suggestions on the results of the initial product design for the

development of mechanic court learning video, the basic level basketball referee of Malang City included: (1) the introduction of the cover at the beginning of the video opener, (2) giving information when the referee moved after blowing a foul, (3) the credit title is given at the end of the video as a description of the data of the researcher and who is the person who has a role in the video making process.

In addition to advice from instructional media experts and basketball learning experts, basketball experts also advised on the initial product design in the form of the need to be given a statement when the referee moved after blowing a foul, this was because the learning video product was not only useful for basketball referees, but there were big hope this video product marketing can be useful for sports students and other students who want to be involved as referees

After a revision of the experts' suggestions, the researchers proceeded to the next step, product testing, which was carried out in two stages, the first stage was a small group trial, where the results of the group test were 83.33% of the 6 basketball referees. the basic level of Malang City and this media are categorized as quite valid. However, there are deficiencies in the description of the information during the referee's movement after making a foul blow. After that the researchers made a revision and proceeded to the next stage, namely a large group trial field test, and obtained 88.97% of 31 Malang City referee basketball players and the referee basketball mechanic court video media was very interesting, very understandable, very suitable for helping basketball referee performance, is very feasible and very complete if the mechanic court learning video is used for basketball referee participants in Malang City.

The final product of this research and development is in the form of a mechanic court basketball game referee in the elementary level of Malang City. According to [6] learning video media is a media that presents audio and visuals containing good learning messages that contain concepts, principles, procedures, knowledge application theory to help understanding an instructional material.

Video is an audio-visual learning material that can be used to convey messages or subject matter. It is said to be heard because the elements can be heard (audio) and said to be visible because the elements can be seen (video) can be presented together.

According to [6] to produce a learning video that is able to increase the motivation and effectiveness of its users, the development of learning videos must pay attention to the characters and criteria, the character of the learning video including clarity of message, with learning video media can understand learning messages more meaningfully and information can be received in full so that information will automatically be stored in long-term memory, after the learning video has a message, the video must also be able to stand alone, in the sense that it does not have to be used with other material together, then, the learning video is also friendly with users, using simple language, easy to understand, using common language, as well as exposure to information displayed to help the wearer, including making it easier for users to respond accordingly. The contents of the material in the video must be truly representative, for example the existence of good

simulation and demonstration material, in addition to the material content that is representative, the material also needs to be packed with multimedia in which there is text, animation, sound and video accordingly. Video quality must also be high resolution and with graphics made with digital engineering technology but still have to support each computer system speech, can be used classically or individually, learning videos can be used by students individually, not only in school settings, but can also be used at home. Can also be used classically with a total of 50 people guided by the teacher or just listening to the description.

In the development of mechanic court learning videos for elementary-level basketball court officials in Malang City, the technique used to process data is the percentage technique. The results of the data that were presented were data from expert learning media evaluations, basketball learning expert evaluations, evaluation results from basketball experts, results of small group trials, and results of large group trials.

The final product of this research was an increase in understanding of the mechanic court basketball referee. This is consistent with the results of the percentage of small group trials of 83.33% to increase in large group trials of 88.97%.

From the results of the small group trial, it can be seen that 83.33% stated that the learning media in the form of basketball referee basketball learning videos were quite interesting, 83.33% stated that the learning media in the form of mechanic court basketball referee learning videos were quite understandable, 88.88 % stated that the learning media in the form of basketball referee mechanic court learning videos were very suitable, 75% stated that the learning media in the form of basketball referee basketball learning videos were quite decent, 83.33% stated that the learning media in the form of basketball referee basketball mechanic learning videos were quite complete. So it was concluded that 83.33% of Malang City basketball referees stated that the media referee mechanic court learning video was made as a whole quite interesting, quite understandable, very suitable to help basketball referee performance, quite decent and quite complete. However, there are deficiencies in the attractiveness of the design in some parts of this learning video, namely the lack of recognition of who the product belongs to and the lack of clarity about the information when the referee moves when after blowing a foul. Therefore, based on these results, the learning media in the form of learning videos need to be revised so that they can be used as a learning media for basketball referees in the form of learning videos for basketball referee participants in Malang City.

From the results of the large group trial, it can be seen that 88.70% stated that the learning media in the form of basketball referee basketball learning videos were very interesting, 87.09% stated that the learning media in the form of mechanic court basketball learning videos were very understandable, 89.24 % stated that the learning media in the form of basketball referee mechanic court learning videos were very suitable,

91.93% stated that the learning media in the form of basketball referee basketball mechanic learning videos was very feasible, 88.70% stated that the learning media in the form of referee basketball mechanic court learning videos were very complete . So it was concluded that 88.97% of basketball court referees in Malang City stated that this referee basketball mechanic court learning media as a whole was very interesting, very understandable, very suitable to help basketball referee performance, very feasible and very complete if this mechanic court learning video was used for Malang basketball referee participants.

The increase in percentage results is the result of an evaluation of several experts who participated in the manufacture of the product, from the results of expert evaluation of learning media obtained 100% results so that it can be concluded that the learning media in the form of basketball referee mechanic court learning videos are good, but there is still a lack of development results. so that it becomes more attractive and achieves the learning objectives through the developed media. From the evaluation results, media learning experts obtain suggestions and input that improvements by removing the word development and adding identifiers at the beginning of the video. The results of the next evaluation are by the learning experts who obtained 100% percentage results, so that it can be concluded that the material coverage is very complete and suitable for use as a learning media by Malang city basketball referees. From the results of expert evaluation, learning to get advice and input must be given an introduction at the beginning of the video, the video is given an identifier of anyone who plays a role in making the video at the end of the video, and giving information when the referee moves after blowing a foul. And the final results by basketball experts, that obtained a percentage of 100%, so it can be concluded that the material presented is very appropriate and easy to understand. From the results of the expert basketball player obtained a suggestion and input that the lack of information and explanation after the referee blew a foul.

[7] the size of the video display is very flexible and can be adjusted as needed, the video is a non-print instructional materials information-rich and straightforward as it can get to the front of the user directly and video adds a new dimension to learning. In making learning videos using DVD format, why is the DVD because this media has advantages that are in line with the expectations of researchers. Image clarity is the main factor, because image clarity is very important in a learning video media, besides that DVD has a larger space that is able to play longer shows.

In addition to the excellence above, the referee basketball game mechanic court learning video is high resolution, with the hope, clear picture quality, basketball referee can understand mechanic court correctly. Video learning mechanic referee basketball court is already equipped with the corresponding 3-dimensional animation events in the field according to the latest regulations of FIBA, 2014. The advantages of the product instructional videos mechanic subsequent court is the testimony writing animation, which makes learning video to be interesting, and supported by the dubber increasingly making

the referee basketball mechanic court learning videos more easily understood.

From the advantages outlined above, this product also has several disadvantages including, this product has a high image resolution that requires large capacity storage space. This product also uses simple 3-dimensional animation and this learning video does not use attractive writing animation.

IV. CONCLUSION

It can be concluded that the mechanic court basketball basement learning videos at the basic level of Malang City can be used to achieve learning objectives, this is in accordance with data analysis which states that this learning video media has the interest, understanding, suitability, suitability and completeness of content in accordance with the latest FIBA rules. The results of the large group trial also showed that this learning video media had the interest, understanding, suitability, feasibility and completeness of the contents expected that Malang City basketball referees could understand and be able to practice basketball referee mechanic court as an independent learning media that could be used anywhere and when only..

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