Development of Playing Card Learning Media Using Team Games Tournament Model on Volleyball Passing Materials in Grade 5 of Elementary School

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Abstract

The This research aims to develop a learning media with the teams games tournament (TGT) model using playing cards as a medium in the learning of Sports and Health Physical Education (SHPE) with volleyball game passing materials in elementary school. This research is research and development (R&D) by adopting the 4D development model (Define, Design, Development, and Dissemination) proposed by Thiagarajan in 1974. This study was conducted in the 5th grade of public elementary school, Lamongan, East Java. The data collection technique in this study is in the form of validity questionnaires and practicality of teacher response and student response given to media experts, material experts, teachers and students. The data analysis technique used in this study is to calculate the average percentage score that can be seen from the results of media and material validation and the practical results of teacher and student responses. Results obtained from the media validity test showed that playing card learning using the TGT model on 5th grade volleyball passing material got a very valid category with a percentage score of 90.28%. Practicality got a very practical category with a percentage score of 94.89%. Playing card learning using the TGT model on 5th grade of volleyball passing material is said to be valid and practical because it has met the assessment criteria seen from the media presentation, aspects of media content, aspects of image illustration, material aspects as well as the response of teachers and students. This shows that playing card learning using the TGT model on 5th grade elementary school volleyball passing material is feasible for the use by teachers and students in the SHPE learning process. This research is expected to help educators in using learning media in elementary schools, especially SHPE subjects of volleyball passing materials and can be a reference for researchers who will carry out research with the same study in elementary school.

Keywords: playing card media; team games tournament model; volleyball game

1. INTRODUCTION

Law No. 3 of 2005 concerning the National Sports System states that Sport Education is physical education and sports that are carried out as part of a regular and continuous educational process to acquire knowledge, personality, skills, health, and physical
fitness. The characteristics of individuals or students who are educated in Physical Education are described by the Physical Education Outcomes Committee of The National Association of Physical Education and Sport (NASPE) which Arma Abdullah has quoted in Harsuki (2003), has the following characteristics: (1) Has learned the various skills needed to carry out various physical activities, (2) is physically fresh or fit, (3) participates regularly in physical activities, (4) knows the implications and benefits of his involvement in physical activity, and (5) value physical activity and its contribution to a healthy lifestyle.

In my experience as an educator, the author observed various negative symptoms and behaviors that emerged from students in the PJOK learning process for volleyball game material that had previously been carried out in schools, including the decline in students' learning motivation. These negative symptoms can be proven through observations in grade 5 Elementary School seen from the discipline of time in following lessons. The level of participation of students in the learning process is also less enthusiastic. Most students do not share roles, some are passive while others demonstrate learning activities. Which leads to decreased student learning outcomes both in the Psychomotor, Cognitive, and Affective domains.

The author realizes that the problems that arise may come from various factors. Not only from students, maybe from the author in managing learning that is less innovative and unpleasant or tends to be boring for students. Therefore, the authors try to overcome these problems by developing appropriate learning models by designing active, innovative, creative, effective and fun learning through the Development of Playing Cards Learning Media Using the TGT Model on Volleyball Passing Materials in Grade 5 Elementary School.

The word media comes from Latin and is the plural form of "medium", which literally means "intermediary or introduction" (Arsyad, 2014). Thus, the media is a intermediary from the source of information to the recipient of the information (Sanjaya, 2014). Meanwhile, it can be explained that the media as a tool or the like that can be used as a messenger in learning activities (Nurzayyana et al., 2021). The message in question is the subject matter, where the existence of the message can be more easily understood and understood by students. If the media is a source of learning, then broadly the media can be interpreted as humans, objects, or events that allow students to gain knowledge and skills.

Choosing media accompanied by choosing the right learning model is one of the most important things in the teaching and learning process in order to achieve optimal learning outcomes (Sukarsih et al., 2018; Winanda et al., 2019). The learning model that can be applied to PJOK subjects is a cooperative learning model with the TGT (Teams Games Tournament) type of learning model. TGT (Teams Games Tournament)
TGT is a type of learning that divides students into study groups consisting of 5 to 6 people who have different abilities, gender, race or ethnicity. With this heterogeneous group, students discuss in their groups, learn and work together on the tasks given by the teacher. So when there are group members who do not understand the given task, then other group members can help explain it (Hikmah et al., 2018). Sinta & Handoko (2017) express an opinion about Teams Games Tournament (TGT) is a type of cooperative learning that emphasizes cooperation between group members to achieve learning goals.

Media that is very easy and simple without the need for technological assistance by applying this type of TGT cooperative learning model is playing cards. Playing cards media are basically innovative learning media by using 1 set of playing cards and volleyball combined with down-passing and upper-passing techniques in volleyball games. This learning is quite interesting where students will find new experiences in learning, so that it becomes a solution from boredom with the previous learning process. Learning media using playing cards requires the participation of students independently, without neglecting the role of friends, so as to foster responsibility in a special and social way, mutual respect between friends.

This research on the development of playing card learning media helps educators in directing students when taking PJOK lessons with passing material. Previous research using the same media but there are differences in the development and variables studied have been carried out by Irvan et al (2021) with the title of developing playing cards "Pancasila" to improve students' civic literacy skills. The purpose of the research and development of playing card learning media using the TGT model on volleyball passing materials in class 5 elementary school is to produce a learning model that can be used as a learning model for Physical Education, Sports and Health on volleyball material.

2. METHODS

This research was conducted in the odd semester of the 2021/2022 academic year. The object of this research is the 5th grade students of SDN Tambakploso whose address is in Plosolebak Hamlet, Tambakploso, Turi District, Lamongan Regency, East Java. This research is a research and development (Research and Development). The main activity carried out in this research is conducting literature studies and research to produce certain products. In addition, product development is also carried out by testing the validity of the designs that have been made, so as to obtain valid results that can be used by educators and other students. This research adopts a 4D research and development model (Define, Design, Development, Types of data obtained in the form of qualitative and quantitative data. Qualitative data is obtained based on the results of suggestions and comments.
given by expert validators and practitioners, while quantitative data is obtained based on the assessment scores given to the instruments that have been distributed either obtained from validators or practitioners. At the product validation stage, an assessment of the validity of the media and material aspects is carried out, while at the practical stage a teacher and student response test is carried out to see the feasibility of the media to be used in the learning process (Table 1 and Table 2). The data analysis technique used in this research is descriptive qualitative data analysis and descriptive quantitative data analysis. Descriptive qualitative data analysis was used to analyze data in the form of suggestions and comments given by expert validators and practitioners so as to obtain valid and practical result criteria that can be a reference for revising the media so that the media is suitable for use in the learning process. Descriptive quantitative data analysis was used to analyze data in the form of assessment scores from instrument sheets given to expert validators and practitioners.

| Rating Score | Category          |
|--------------|-------------------|
| 5            | SS: Totally Agree |
| 4            | S: Agreed         |
| 3            | KS: Disagree      |
| 2            | TS: Disagree      |
| 1            | STS: Strongly Disagree |

Table 2. Practicality Assessment Category

| Rating Score | Category          |
|--------------|-------------------|
| 4            | SS: Totally Agree |
| 3            | S: Agreed         |
| 2            | KS: Disagree      |
| 1            | TS: Disagree      |

To find out the average score obtained from expert validators and practitioners can be obtained through the formula:

\[
\text{Average Score} = \frac{\text{skor item yang diperoleh}}{\text{skor peryataan}}
\]

The criteria given in making decisions about the validity and practicality of interactive media are presented in Table 3.

Table 3. Decision Making Criteria Validity and Practicality

| Mark | Average Score | Category                             |
|------|---------------|--------------------------------------|
| A    | 81% - 100%    | Very Valid / Very Practical          |
| B    | 61% - 80%     | Valid / Practical                    |
| C    | 41% - 60%     | Quite Valid / Quite Practical        |
| D    | 21% - 40%     | Less Valid / Less Practical          |
| E    | 0 – 20%       | Very Invalid / Very Impractical      |

3. RESULTS

The Card Sharks Passing Game Learning Model is an innovative learning model using 1 set of playing cards and volleyball combined with the technique of passing down and passing in volleyball. This learning is quite interesting where
students will find new experiences in learning, so that it becomes a solution from boredom with the previous learning process. The Card Sharks Passing Game Learning Model demands the participation of students independently, without neglecting the role of friends, so as to foster responsibility in a special way and socially respect each other.

Learning volleyball games using the Card Sharks Passing Game learning model is one of the easy-to-apply cooperative learning models involving the activities of all students without any difference in status, involving the role of students as peer tutors, and containing elements of games and reinforcement that we are familiar with. Team Games Tournament (TGT) learning model. According to Johnson-Johnson (in Caroly W Rouviere) TGT is cooperative learning which consists of teaching (teaching), learning in teams (team study), and academic matches (game tournament). (Slavin, 2009). Rusman (2012:224) explains that TGT is a type of cooperative learning that places students in study groups consisting of 5-6 students who have the ability.

The Card Sharks Passing Game Learning Model provides opportunities for students to be able to study in groups with their friends by respecting each other's opinions and providing opportunities for friends to carry out activities by expressing their opinions in groups so that learning will be fun, so what goals are expected by the author will be achieved.

The Card Sharks Passing Game learning model presents various student activities in applying up-and-down passing techniques in volleyball games. The use of playing cards in volleyball games makes students enthusiastic, tends to be curious which raises various kinds of questions, so that the learning model is able to stimulate students' ideas to ask questions so that students' cognitive abilities can develop. And will continue to increase along with the learning process and mastery of skills.

The implementation of learning activities for the Card Sharks Passing Game learning model is focused on improving student learning outcomes seen from the Cognitive, Affective, and Psychomotor assessment domains.

This research and development produces a product in the form of a teaching module with the title "Card Sharks Passing Game Model TGT Learning". The Team Games Tournament (TGT) learning model is one of the cooperative learning models. In the learning process using the TGT learning model, there are competitions or tournaments in groups to obtain rankings to be included in inter-group competitions, there are also inter-group tournaments. The tournament is held for two times: practicing racing (first) in groups and practicing competing (second) between groups. Determine the TGT learning model that has been developed by researchers. then evaluated by two expert reviewers of learning planning in vocational productive
Iswahyudi et al., Development of Playing Card Learning Media

Page | 74

Based on the research data as shown in table 4, it can be seen that the TGT Card Sharks Passing Game Learning Model that has been developed by the researcher gets an overall average score of 97% with a good category for the Card Sharks Passing Learning Model Reviewer. The first TGT Game Model, for the second TGT RPP Card Sharks Passing

### Table 4. Evaluation of Card Sharks Passing Game Model

| RPP Components | Average Score | Note |
|----------------|--------------|------|
|                | P1 | P2 | Average |
| 1. Curriculum Suitability |   |   |   |
| a. Formulation of Competency Standards | 4 | 4 | 4 |
| b. Basic competencies | 4 | 4 | 4 |
| c. Indicator | 4 | 4 | 4 |
| 2. Selection of learning models according to indicators | 3 | 4 | 3.5 |
| 3. Determination of learning steps according to indicators |   |   |   |
| a. Initial activity |   |   |   |
| 1. Motivate students with pre-test | 4 | 4 | 4 |
| 2. Retaining students' initial abilities | 4 | 4 | 4 |
| b. Core activities |   |   |   |
| 1. Media views | 4 | 4 | 4 |
| 2. Learning process | 4 | 4 | 4 |
| 3. Giving evaluation | 4 | 4 | 4 |
| 4. Learning conclusion | 4 | 3 | 3.5 |
| c. End activities |   |   |   |
| 1. Evaluation discussion | 4 | 4 | 4 |
| 2. Learning summary | 4 | 4 | 4 |
| 4. Selection of learning media in accordance with the indicators. | 4 | 4 | 4 |
| 5. Development of learning tools according to indicators. | 4 | 4 | 4 |
| 6. Good and correct technical use. | 4 | 4 | 4 |
| 7. The accuracy of the indicators with the expected student situation. | 3 | 3 | 3 |

| Amount | 62 | 63 | 62 |
| Percentage | 97% | 98% | 97% |
Game Learning Model, 98% in the good category.

The results of the limited trial of the development of the Card Sharks Passing Game Model TGT Learning Model in Grade 5 SD, in the form of product questionnaire results and observations of student and teacher activities as well as student responses to learning.

The data from observing the activities of teachers or researchers using the Card Sharks Passing Game Learning Model, the TGT Model developed, can be seen in table below 5.

| Category                                      | Value/Score | P1 | P2 | P 3 | P4 | Average |
|-----------------------------------------------|-------------|----|----|-----|----|---------|
| 1. Motivating students with learning models   | 4           | 4  | 4  | 4   | 4  | 4       |
| 2. Cultivating "What to Pay Attention to"     | 4           | 3  | 4  | 3   |    | 3.5     |
| 3. Exploring students' prior knowledge        | 4           | 4  | 4  | 4   |    | 4       |
| 4. Explain the material                       | 4           | 4  | 4  | 4   |    | 4       |
| 5. Divide work groups                         | 4           | 3  | 4  | 3   |    | 3.5     |
| 6. Asking students to practice volleyball     | 4           | 4  | 4  | 4   |    | 4       |
| passing                                       |             |    |    |     |    |         |
| 7. Guiding students to practice volleyball    | 3           | 3  | 3  | 3   |    | 3       |
| passing                                       |             |    |    |     |    |         |
| Average                                       |             | 3.8| 3  | 3.8 | 3  | 3.4     |

From table 5, it can be seen that all observers of teacher activities in motivating students gave four points. The same thing is also found in the teacher’s activities when asking students to do the activities ordered in the practice questions, explaining the material and giving awards to students. For the teacher’s activity to grow "Guiding students to practice volleyball passing", the score is at least three from all reviewers.

Data from observing student activities was obtained by observing student activities during learning test activities. Students were observed by one researcher from the beginning of the lesson to the end of the lesson. The data from observations of student activities can be seen by the value of both Observers 1,2,3 and 4 in the table 6.
Table 6. Observation Result of Students’ Activities

| Category                                                                 | Percentage of students (%) |
|--------------------------------------------------------------------------|----------------------------|
|                                                                          | P1  | P2  | P3  | P4  | Average |
| 1. Listening when the teacher explains                                   | 100 | 86  | 100 | 100 | 96      |
| 2. Paying attention when the teacher explains                            | 100 | 100 | 100 | 100 | 100     |
| 3. Take notes on the material being taught                               | 93  | 100 | 70  | 53  | 79      |
| 4. Answer the questions posed by the teacher                             | 77  | 87  | 86  | 93  | 86      |
| 5. Actively discuss in completing the exercise                           | 100 | 100 | 100 | 100 | 100     |
| 6. Practicing volleyball passing                                          | 100 | 100 | 100 | 100 | 100     |
| 7. Doing practice questions independently                                 | 100 | 100 | 89  | 80  | 92      |
| 8. Take notes on the summary given by the teacher                        | 100 | 100 | 100 | 100 | 100     |
| 9. Work on student activity sheets (individual)                          | 100 | 100 | 100 | 100 | 100     |
| 10. Fill out a response questionnaire (individual)                       | 100 | 100 | 100 | 100 | 100     |

Based on the data as listed in table 6 above, it can be seen that each observer made quite thorough observations. The maximum percentage is found in the activity of students paying attention when the teacher explains, discussing in completing the exercise, paying attention to media shows, noting the summary given by the teacher and doing practice questions (individual). It can be seen from the percentage of the activity is 100%. However, in the activity of recording the material being taught the lowest percentage is 79%, this happens because the material has been received before. Likewise for the activity of answering questions given by the teacher, the percentage is 86%. For student activities working on practice questions in pairs the percentage is 92%.

Data on student responses to the Card Sharks Passing Game Model TGT was obtained by asking students to fill out the instrument/student response sheet. This data is used to determine student responses to the implementation of learning for the Card Sharks Passing Game Model TGT learning model developed by the researcher. The percentage of student responses for each aspect in the student response sheet can be seen in the table 7.
Table 7. Teacher Activities in Motivating students

| No | Statement                                                                 | Positive | Negative |
|----|---------------------------------------------------------------------------|----------|----------|
| 1  | How do you feel after following this lesson?                              | 34       | 2        |
| 2  | Is this lesson new to you?                                                | 35       | 1        |
| 3  | What if the next material is taught using this kind of learning?         | 35       | 1        |
| 4  | What is the state of the props used?                                      | 36       | 0        |
| 5  | How do learning models help understand lessons?                          | 36       | 0        |

From the table above, it can be seen that of the 36 respondents, more students gave positive responses in these learning activities.

4. DISCUSSION

Based on the results of the study of the learning model, it can be seen that the learning model that has been developed by the researcher is categorized as good. On the advice of the reviewers, the learning model developed by the researcher has been improved or revised to make it more perfect.

Based on suggestions from reviewers, researchers have revised the learning model. In developing the learning model, researchers have also paid attention to the criteria for a good learning model in general (valid) and adjusted to the level of student understanding.

In addition, researchers also conduct evaluations to measure learning understanding/learning acquisition. Evaluation of learning using an evaluation sheet containing questions about the material as many as 5 items with the highest score of 100. The results of the learning evaluation can be seen in table 8.

Table 8. Students' Understanding/ Learning Acquisition

| Class | 60 | 70 | 80 | 90 | 100 | Total |
|-------|----|----|----|----|-----|-------|
| 5 Sd  | 3  | 4  | 14 | 8  | 7   | 36    |
| Total | 3  | 4  | 14 | 8  | 7   | 36    |

With the evaluation data above, students who get scores between 80-100 (in the good category) are 29 students or 80.56%, then this gives an illustration that the learning model developed by the researcher is able to increase student interest in learning and help students understand learning. volleyball.

Revisions or field improvements have been carried out by researchers in the form of improving learning models that are better. The results of the learning model developed by the researchers are expected to increase students' interest in learning and help students understand volleyball learning.
a. **Media Expert**

Based on the results of a limited trial on the development of the TGT learning model that has been carried out by researchers in Grade 5 SD, it can be seen that media experts state that the development of the TGT learning model can be continued.

b. **Design Expert**

Based on the results of a limited trial on the development of the TGT learning model that has been carried out by researchers in Grade 5 SD, it can be seen that the design expert stated that the development of the TGT learning model could be continued.

c. **Material Expert**

Based on the results of a limited trial on the development of the TGT learning model that has been carried out by researchers in Grade 5 SD, it can be seen that the material expert stated that the development of the TGT learning model could be continued.

d. **Teacher Activities**

Based on the results of a limited trial on the development of the TGT learning model that has been carried out by researchers in Grade 5 SD, it can be seen that the teacher's activity in the form of giving awards to students is an activity with a good percentage. In addition to these activities, there are also activities to explain the material and reward students with good presentations. Based on the test results as shown in table 4.3 the teacher's activities showed good scores. This is also the background of researchers developing the TGT learning model, namely so that students can easily understand the existing materials with a fun and interesting learning atmosphere.

Before carrying out learning the teacher should also be able to create a link between the material and everyday life so that students feel more interested in learning the material to be taught. Based on the research data, it can be seen that the teacher has succeeded in attracting students' interest in learning volleyball. The students feel happy with the teacher's learning. This can also be a factor in the high value of teacher activities in delivering material. Based on the observations during the trial, it can also be seen that the teacher has carried out all the learning phases well.

e. **Student Activities**

The high percentage of activity can be caused by several factors. The first factor is that students feel interested in the material being taught and the teacher provides opportunities for students to ask questions so that students feel brave to ask various kinds of questions related to the material. Furthermore, students also feel interested in listening to answers or explanations from the teacher because the teacher can create a learning atmosphere that is fun and not boring even though the teacher gives a lot of information.

Because the teacher has succeeded in influencing student interest, irrelevant activities carried out by students in each meeting are also increasingly rarely
carried out by students, in the sense that if in the first meeting students still often carry out activities that are not relevant to learning, then in the second meeting and These three activities are rarely carried out or even almost not done at all.

This success is because the teacher or researcher has really paid attention to the things or principles and principles of learning both in conducting learning and when developing the Card Sharks Passing Game Model TGT learning model.

f. Student Response

Based on the results of the questionnaire that has been filled out by Grade 5 students, it can be seen that they feel that the TGT Card Sharks Passing Game Learning Model makes learning fun. Based on the results of student questionnaires, it can also be seen that many students said that the TGT Model Learning Model developed by researchers produced an interesting TGT Card Sharks Passing Game Learning Model and could help students understand the material being taught.

5. METHODS

The development of the Card Sharks Passing Game Learning Model TGT Model Class 5 Elementary School in the first semester, improvements have been made based on the data analysis of individual trials, small groups and large groups, it can be concluded that: (1) Learning using the Card Sharks Passing Game Learning Model TGT Model this can increase students' attention, (2) Learning using the Card Sharks Passing Game Learning Model TGT Model can increase student learning motivation, (3) Learning with the Card Sharks Passing Game Learning Model TGT Model can increase student activity.

The development of the Card Sharks Passing Game Learning Model TGT Model Class 5 semester I is intended to improve the quality of learning, basically between the design and development of learning systems have a close relationship. System design is a pattern of planning, development, implementation and evaluation. Meanwhile, system development as part of the design is an analytical technique to produce a teaching system.

The use of the instructional design developed by Thiagarajan et al. turned out to be suitable for developing a flexible learning process. In developing the design of teaching materials, a learning development model is needed that is in accordance with the characteristics of the content being developed. Competencies that must be mastered by students need to be stated in such a way that they can be assessed, as a form of student learning outcomes that refer to direct experience (Mulyasa, 2005: 38). So that in the development of the Card Sharks Passing Game Learning Model the TGT Class 5 semester I was identified into 5 formula points, namely: (1) Students can be actively involved in learning. (2) Students can learn interactively in learning in an easy and interesting way. (3) Students can
improve learning achievement in PJOK subjects.

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