

# FOOTBALL LEARNING INNOVATION: THE EFFECTIVENESS OF EDUCATIONAL GAMES TO IMPROVE UNDERSTANDING OF BASIC PASSING TECHNIQUES IN HIGH SCHOOL STUDENTS

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**Abstract.** *Advances in information technology have created opportunities to incorporate digital media, such as educational game media, into learning. Physical education learning, especially football, is also one of the favorite subjects of students. However, students' basic abilities, especially the ability to understand football passing in physical education subjects, are still relatively low. The purpose of this study is to determine the effectiveness of using educational games as a learning medium to improve students' understanding of basic passing techniques. The researcher used a quantitative descriptive method with a sample of 93 students from two schools, namely SMA N 1 Banyudono and SMK N 1 Banyudono. Data were collected through observation and surveys using a four-point Likert type questionnaire. The results of this study show that most students have not understood the basic passing techniques in the game of football, most of the students do not agree with the understanding of the basic passing techniques in football, or I answered that I do not agree. However, the survey also found that as many as 50.9% of students agreed that the use of educational games can help students improve their learning in the game of football passing, with 47.4% strongly agreeing. Educational games provide an interactive and fun learning experience, which stimulates students' interest, motivates them to learn, and makes it easier for them to understand the concepts being taught.*

**Keywords:** *Basic Passing Techniques, Educational Games, High School Students.*

## 1. INTRODUCTION

Physical education is a physical activity that cannot be separated from a learning process (Wati et al., 2024). But at this time, many students who follow the learning process, especially in the subject of Physical Education at school, are also not serious (Simbolon & Dicky Hendrawan, 2022). Previous research from Sri Lestari, revealed that students often get bored quickly in learning, often influenced by the factor that educators cannot use technology as a learning medium and still use conventional learning methods where students are passive recipients of knowledge, while educators are informants and expect students to memorize and remember the information that has been given. According to Rizki, the use of educational games is the right step to use in the learning process because it can increase students' motivation to learn (Lestari, 2021).

From some of the opinions above, it can be concluded that physical education is an important lesson and cannot be separated from learning at school. However, with this, students are still lacking in interest and motivation to participate in penjakas learning. Therefore, teachers must have innovation and creativity to provide a medium for the use of technology to attract the attention of students so that they can be motivated to take part in health education lessons. Efforts that can be made are to implement educational game media so that students are more enthusiastic and motivated in learning health services.

## 2. LITERATURE REVIEW

For physical education, it is the application of physical education learning materials that combine sports such as games, and carry out physical education activities for the purpose of physical education. (Sofiarini, 2016). Learning refers to all efforts made by educators to ensure that the learning process takes place implicitly among students. Learning involves the activity of choosing, determining, and developing methods to achieve the desired learning outcomes. (Junaedi Ifan, 2019). One of the most important activities for students is physical education. Physical education is an integral part of the overall education system that aims to develop elements such as health, physical fitness, critical thinking skills and emotional stability (Sari et al., 2024). One of the most popular and popular physical education lessons by students is football material (Siswa et al., 2017). Of the several parts of the basic football technique, passing is an important part that contributes to the success or improvement in the football game (Romeas et al., 2016). Being an educator, of course, must always have innovations for learning changes, especially physical education midwives (Long & Zhai, 2022). The application and adaptation of technology in the learning space is needed to face changes in the era of globalization. The development of information and communication technology (ICT) has an impact on the world of education, especially the learning process (Seminar et al., 2019). The learning process of physical education is more important in the psychomotor realm, namely motor activities, and the media used must also be in accordance with the nature of learning (Santoso, 2019). However, along with the rapid advancement of technology, some teachers still have difficulty using online learning support applications (Syaflita et al., 2022). So far, teachers have a lecture method that quickly bores students (Kurniawan & Risnani, 2021). In this case, teachers still tend to only give assignments to students without providing detailed material to help them understand the content (Winandari et al., 2022).

Educational games are a solution because they have several advantages so that they are suitable for use with students, because they allow student participation, encourage student activity, and increase learning motivation (Sofiarini, 2016). Sri Mulyani, revealed that we believe that educational games have many functions in the learning process. This means that it not only conveys knowledge through educational games, stimulates children's minds and creativity, creates an interesting playing field, provides convenience to children, but also improves the player's logic and understanding when used to improve themselves. game. Educational games can also improve students' concentration, stay informed, and facilitate understanding of the material (Kurniawan & Risnani, 2021).

From some of the opinions above, it can be concluded that the application and adaptation of technology in the learning process is very important to face the challenges of the globalization era. Information and communication technology (ICT) has a significant influence on education, especially in physical education learning that focuses on psychomotor activities. Appropriate learning media, such as educational games, have proven to be effective in increasing student participation, activity, learning motivation, concentration, and understanding. However, challenges are still faced by some teachers, such as difficulties in utilizing online learning applications and traditional teaching methods that tend to be monotonous, requiring the development of more innovative skills and strategies.

### **3. RESEARCH METHODS**

This research is a quantitative descriptive research. Through this research approach, we can explain more clearly and measurably the effectiveness of using educational games to improve students' understanding of basic passing techniques in football. The identification process begins with observation activities to understand the initial condition of students related to the mastery of basic passing skills in football. The researcher then distributed a questionnaire to students to collect data on their responses to learning using educational game media. The results of data processing are clearly displayed in the form of percentages and graphs. The subject of this research

is the classroom. The subject of his research is the use of educational games as a medium for teaching basic passing techniques in football.

The data collection methods used in this study include surveys and observations. The data was analyzed descriptively using percentages to describe the effectiveness of learning using educational games. The analysis is carried out through four stages, namely data collection through the dissemination of questionnaires and direct observation, reducing the collected data, filtering to focus on the main results, and presenting data that has been reduced (displayed systematically). Table Diagram to draw a final conclusion about what possibilities the use of educational games in physical education offers.

#### 4. RESULTS AND DISCUSSION

The author chose educational games because of the average amount of time children spend playing (Iqbal et al., 2020). Games with educational content are better called learning games. The purpose of this type of educational game is to arouse students' interest in listening to the learning material in a fun way, so that players can more easily understand the learning material presented (Angela & Gani, 2016). Educational games are activities that use games and toys, i.e. play is a play activity, and educational games are activities that stimulate the player's thinking skills, increase concentration, and are able to solve certain problems by the creator for that purpose (Rozi & Kristari, 2020).

The researcher conducted research at SMA N 1 Banyudono and SMK 1 Banyudono, Boyolali Regency. Researchers want to find out the ability of basic passing techniques in football games and what media are needed by schools to improve the learning process. The researcher contains a score scale in his research as many as four likert scales that will be filled in by students to help the researcher find out the level of students' ability in the basic football technique in the passing section. In table 1, it is explained that students who fill out the Likert scale number 4 strongly agree with the questions from the researcher, number 3 students agree, number 2 students disagree and then at number 1 students express disagreement regarding questions from the researcher.

Table 1. Rules for Scoring

Category	Score
(SS) Strongly agree	4
(S) Agree	3
(KS) Disagree	2
(STS) Strongly disagree	1

This research was conducted by involving 93 respondents, namely 57 students from SMA N 1 Banyudono and as many as 36 answers from students of SMK N 1 Banyudono, Boyolali Regency, Central Java Province. The results of the study show that there are shortcomings of students in understanding the basic football technique material in the passing section and presented in figure 1. Based on figure 1 of the research carried out at SMA N 1 Banyudono, it is known that as many as 5.3% of students think that they strongly disagree, which means that students do not understand the main goal related to passing football in the subject of physical education, then there are 56.1% of students of SMA N 1 Banyudono who disagree which means that they also do not understand the purpose of passing in the game of football, The survey was continued and got 29.8% of students voting to agree and as many as 8.8% voting strongly if the students already understood the basic passing technique material of the

football game. This means that many students, the majority of whom cannot understand the basic football techniques in the passing material.

Other data are shown in figure 2. Figure 2 of the research at SMA N 1 Banyudono states that as many as 12.3% of students vote strongly disagree, which means that they do not understand the passing material in the game of football, then it is also strengthened by the data as many as 50.9% of students choose number 2 which means that students do not understand the passing related to the basic football technique game, so students stated that they do not understand the various types of passing techniques in the game of football. Then there were 28.1% of students who chose number 3 which means that they agreed that they already understood the passing material about football techniques and as many as 8.8% of students chose number 4 which stated that the students already understood the basic football techniques in the passing section. With the observations made at SMA N 1 Banyudono, more students are of the opinion that they cannot understand the passing material in the football game of Physical Education, Sports and Health.

1. Saya memahami tujuan utama dari teknik passing dalam sepak bola, yaitu untuk mengalirkan bola ke pemain lain dengan efektif.  
57 jawaban

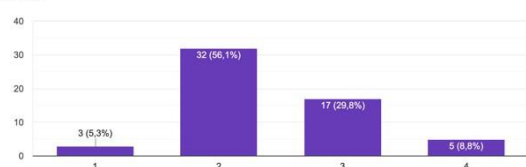


Figure 1.

2. Saya memahami macam macam teknik passing sepakbola  
57 jawaban

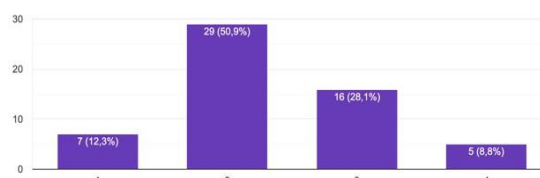


Figure 2.

Figure 3 with research conducted at SMK N 1 Banyudono shows that as many as 33.3% of students have the number 1 column, which means that they strongly disagree about understanding the main goal of the passing football technique in the game of football. Students argue that they have not yet understood the passing that is played in a football game. Furthermore, there were 44.4% of students who chose column number 2 which means they did not agree about understanding football passing techniques. The student expressed his opinion that he still could not understand the basic technique of the passing part of the ball applied in the game of football. Furthermore, there were 19.4% of students who chose column number 3 which stated that the student could understand the passing game applied in football games and as many as 2.8 students chose column number 4 which stated that they strongly agreed which means that the student could understand the basic passing techniques in football games. Related to the results of the observation above, there are still many students who do not understand the basic technique of passing football

Figure 4 The researcher wants to find out how much the level of understanding of students at SMK N 1 Banyudono regarding the understanding of various basic passing techniques in the game of football. In this study, as many as 16.7% of students gave their opinion to choose column number 1 which means they strongly disagree. This explains that students think that they cannot understand various basic passing techniques in the game of football. Furthermore, as many as 61.1% of students chose column number 2 which means they disagree. This explains that the student also cannot understand the various basic passing techniques in the game of football. Next, there were 16.7% of students who gave their opinion to choose column number 3 which means agree. This explains that students state that they are able to understand various basic passing techniques in the game of football. Furthermore, as many as 5.6% of students thought they chose column number 4, which means they strongly agree. This explains that students think that they are able to understand various basic passing techniques in football. As a result of the observation of the research, the researcher was able to conclude that the percentage of students who did not understand the basic technique of passing football was more when compared to students who already

understood the basic technique of passing football.

1. Saya memahami tujuan utama dari teknik passing dalam sepak bola, yaitu untuk mengalirkan bola ke pemain lain dengan efektif.  
36 jawaban

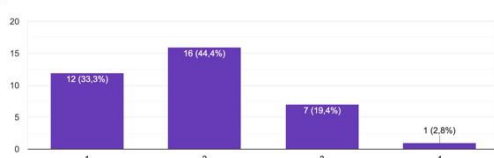


Figure 3.

2. Saya memahami macam macam teknik passing sepakbola  
36 jawaban

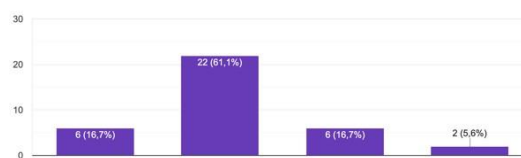


Figure 4.

With the observation results stating that there are still many students who do not understand the basic passing techniques of football, the researcher provides an option for students to apply an educational game application to help students improve their understanding of basic passing techniques in football games by providing an observation questionnaire option.

Figure 5 states that the research conducted at SMA N 1 Banyudono states that as many as 1.8% of students choose column number 2 which means that the student chooses not to agree if educational game applications, images or videos are applied in learning. Furthermore, 50.9% of students chose column number 3 which means that students agree that educational game applications, images, and videos are included in learning to help improve the learning of basic football passing techniques. This is also strengthened by the opinion of students who chose column number 4 as many as 47.4% who stated that the student strongly agrees that learning is supported by educational game applications, images or videos.

Therefore, by looking at the results of observations related to the need for media in the form of educational games, students need these media to help in the learning process in understanding the basic passing techniques in the game of football.

Figure 6 of the research conducted at SMK N 1 Banyudono results that as many as 5.6% of students think that they choose column number 2 which means that they do not agree when learning the basic technique of passing football. Furthermore, as many as 66.7% of students think that they agree to use educational game media, videos or images by choosing column number 3. Then, there were 27.8% of students who gave their opinion to choose column number 4 which means that students strongly agree that in the learning process related to the basic passing techniques of football games are supported using educational game media, videos, or images.

Therefore, looking at the results of the observation of the research, it can be concluded that students who choose to apply educational game media are more when compared to students who do not agree with the existence of educational game media applied in teaching.

15. penggunaan media pembelajaran seperti video, gambar, game atau simulasi sangat dibutuhkan dalam proses pembelajaran  
57 jawaban

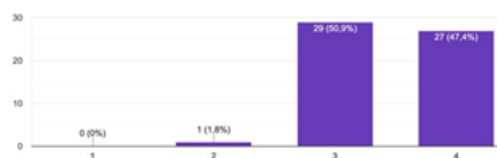


Figure 5.

15. penggunaan media pembelajaran seperti video, gambar, game atau simulasi sangat dibutuhkan dalam proses pembelajaran  
36 jawaban

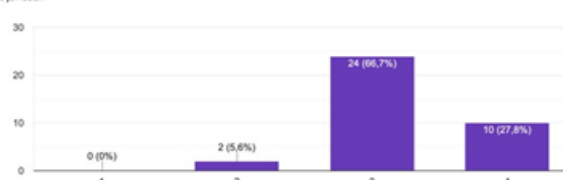


Figure 6.

## DISCUSSION

JASMANI education is a medium to encourage motor development, physical ability, knowledge and reasoning, appreciation of mental, emotional, spiritual and social attitude values and habituation of healthy patterns that lead to stimulating balanced student growth and development (Panjaitan & Fardana, 2023). Methods, systems, and

others in the learning process need to be improved to achieve universal learning goals. (Siregar et al., 2021). Being an educator or teacher at least has the ability to supervise, foster, and develop the competencies of their students, both personally, socially, and managerially (Wulandari et al., 2023).

Physical education is one of the subjects that must be taught as a core subject in all schools and must be followed by all students (Sari et al., 2024). Football is a material that is very popular with students because students' interest in football includes the fun of playing, dreams of becoming professional football players and full of love for their idol team (Mulyana et al., 2024). Lyon Kuswoyo (2023:3) argues that the game of football is one of the sports that has a lot of fans, both in villages, cities and even spread widely to formal institutions such as elementary schools, junior high schools, high schools or the like. Passing is a basic technique of the football game that is often favored by students (Muhammad Janwar et al., 2021). But according to Khinta, there are still many students who have not been able to do the basic football techniques well, one of which is passing and they only have the desire to play football when playing football.

In the implementation of the learning process, the Health Service is also inseparable from the use of learning media so that in its implementation it can run smoothly and learning goals can be achieved (Putri et al., 2021). In order to improve students' abilities related to basic techniques, especially passing, it is necessary to have programmed and directed exercises, namely by providing simulations in the form of games (Kismono & Dewi, 2021). Septi Nurul, argues that games do have an addictive charm that can make people addicted, so with that it is necessary to innovate creatively in creating educational games as a supporting medium as an innovation in the learning process.

## CONCLUSION

The results of the research conducted show that there is a great opportunity for the use of educational game media in passing materials in health education subjects in high school/vocational schools. Most students are of the opinion that they are still lacking and have difficulty understanding related to the basic passing technique in football. Then by looking at the data that most students also agree and strongly agree that to improve the learning process to help understand the basic passing techniques in football, there is a need for supporting media such as educational games. This is a great opportunity for teachers to take advantage of educational game media to help in the learning process in the current digital era.

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