

Prototype Of Basic Football Skills Techniques For Students Of The Faculty Of Sports Sciences

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Abstract. Football is a game that is classified as a team sport, players are required to work together. Football is one of the subjects and sports in the curriculum of three Study Programs (Prodi) at the Faculty of Sports Sciences (FIK). The third study program is the IKOR Study Program, the Physical Health and Recreation Education Study Program (PJKR) and the Sports Coaching Education Study Program (PKO). However, the three study programs do not yet have a standard test book for basic football skills that has the same assessment. The purpose of this research is to make a prototype of a basic soccer skills test book. The advantage of the basic soccer skills test book prototype developed is that it is more effective and efficient in terms of shape, time duration and field size.

Keywords: books, tests, football, techniques, skills.

1 Introduction

Prototypes are a quick way to study the characteristics of a product by incorporating direct feedback from users into the designs created to ensure it will turn out as desired (Liou, 2019). Sketching and prototyping are two tools that are often used to explore design concepts (Bao et al., 2018). Bao et al., (2018) also explained that prototyping is a common strategy for a designer to generate ideas that were previously sketched and followed by physical prototypes. Lauff et al. stated that prototyping is one of the most critical activities in new product development, but prototyping may be one of the most important design areas at least explored formally (Lauff et al., 2018). This is the first step in developing a product before it becomes a truly desired product. The development of this prototype was carried out based on previous research related to skills tests that already existed and were used in recent years, such as the measurement test developed by Nurhasan & Cholil (2007), the "David Lee" skill test for the Football School (SSB) age group. 14-15 years old, and skills test for School Football Students (SSB) by Nusri (2018). The skills tests that were developed had significant differences, both in form, time duration, field size, and the age of the sample used.

Football is one of the subjects and sports included in the curriculum of three Study Programs at the Faculty of Sports Science (FIK). The three study programs are IKOR Study Program, Physical Education Health and Recreation Study Program (PJKR) and Sports Coaching Education Study Program (PKO). Therefore, this football course must be given to students who are registered as students at FIK. The football course is one of the courses that requires practical skills in addition to several other subjects. Football courses are placed in semester 2 for the IKOR Study Program and semester 3 for the PKO and PJKR Study Programs. Teachers do not yet have standardized tests for basic skills in football courses. The skills tests that have been developed are one of the important considerations in making basic skills test prototypes.

This basic skill test is also based on real things when playing football, such as when doing a header, of course the direction of the header will go to the target in front or other players, not up because there is no target to aim for when doing this technique. Things like this are what make this prototype very important to develop. For many years, football players have adhered to the fact that football consists of 4 components, namely technique, tactics, physical and mental (Danurwinda et al., 2017). This was also stated by Scheunemann (2012), namely, football is a team game that requires many components that complement each other in football, namely technique, physical, tactical and mental. Motor skills in football can be interpreted as skills to carry out certain movement tasks well (Anwar, 2013). Meanwhile, according to Aquino et al. (2016) motor skills in football are a set of abilities needed to realize body movements, namely the technical strength of the ball. Anwar (2013) also stated that a player will not be able to develop his game if he is not supported by basic football movement skills. Therefore, it is very important for football players to improve basic football skill techniques. The game of football is based on three basic techniques, namely dribbling the ball, kicking the ball and controlling the ball (Erlangga Football Trainers, 2017). Ali (2011) states that the motor skills needed to control passing, dribbling and shooting the ball into the goal are the basic skills of football players. Meanwhile, according to (Avry et al., 2015), running with the ball includes dribbling, while kicking the ball is applied to passing and shooting. Passing is applied in the form of short passes and long passes.

Based on the results of game analysis, technical skills such as ball control, dribbling, passing and shooting can be seen as basic football skills (Forsman, 2016). The basic techniques of dribbling, passing, shooting, heading, receiving and running with the ball as well as various tricks are considered important performance components, which can be trained well up to senior level (Hyballa & Te Poel, 2011). Based on Minister of Education and Culture Regulation number 66 of 2013 concerning Assessment Standards, educators assess skill competencies through performance assessments, namely assessments that require students to demonstrate a certain competency using practical tests, projects and portfolio assessments. Assessment of skills aspects is carried out through stages; a. compile an assessment plan, b. Develop assessment instruments, c. carry out assessments, d. Utilizing the results of the assessment, e. report assessment results in the form of numbers on a scale of 0-100 and descriptions (Joko, 2018).

2 Methods

Prototyping Planning According to Lauff et al. (2018), before prototyping activities are carried out, planning needs to be carried out which is divided into 5 steps, namely as follows:

Step 1: Determine the purpose of making the prototype.

A needs analysis carried out on FIK students and lecturers who teach football courses shows that it is necessary to develop a basic football skills test through one of the core questions in the questionnaire, namely "Is it necessary to develop a basic football skills test?" 95.14% of respondents answered that development tests were necessary. Based on the tests that have been developed, the prototype that will be developed will be adjusted to the deficiencies in the previous test, which will be more complete in testing basic skills in football.

Step 2: Determine the level of prototype estimation.

The best prototype must be the simplest prototype that will use minimum resources to achieve the objectives of the prototyping activity (Lauff et al., 2018). Defined based on analytical or physical models and based on the level of focus or understanding.

Step 3: Outline the experiment plan.

In this step, estimate the value of the developed prototype, identify the test protocol, identify the measurements performed, and identify how to analyze the resulting data. The value of the prototype developed, namely the basic soccer skills test, is a test update that is adapted to the real game when the soccer game is carried out, as explained in the introduction. The goal is for the test to be developed into an accurate test to measure students' basic skills, so that their ability to play soccer can be measured. Measurements will be carried out with prototypes developed by means of expert validation and trials conducted in small groups and large groups. Meanwhile, to analyze the prototype test that was developed, it was taken based on the scores produced by each student in the trials that were carried out.

Step 4: Create a procurement, construction and testing schedule.

Procurement of the prototype was carried out after analyzing the needs of students and lecturers teaching football courses. Once the needs are known, it will be adjusted to the tests that have been previously developed.

Step 5: Design a prototype based on the results of the experimental plan.

The research framework for creating a prototype of a basic football skills test for FIK students

3 Results and Discussion

Based on the needs analysis obtained from the questionnaire distributed to students, an average percentage score of 87.41 was obtained. This is confirmed by an important question which reads "Are the skills tests carried out by the lecturer in accordance with the student's character?", it was found that the majority of students answered that the test was not in accordance with the student's characteristics. Another question asked "Is it necessary to develop a basic football skills test", 95.14% of respondents answered that it was necessary to develop a test. Based on the results of a questionnaire submitted to Lecturers in Basic Football Courses in three study programs at the Faculty of Sports Science and accompanied by Semester Learning Plan documents which were attempted to be compiled, it can be concluded that the skills provided in basic football courses are as follows: basic football skill techniques consist of various test forms, namely short passing, long passing, receiving, dribbling, shooting and heading, each test has the following details:

a) Short Passing

1. Done within 10 m of the target.
2. The target is a wall measuring 75 cm high and 375 cm wide. The target is divided into 5 parts, each measuring 75 cm.

3. Each target is given a score: the very center with a score of 3, the left and right with a score of 2, and the very edge with a score of 1.
4. The testee passes 5 times.
5. The accumulated score is a reflection of the testee's skills in making short passes.

b) Long Passing

1. Performed within 30 m from the kick point.
2. The target is a circle in the field with a radius of 2 m, 4 m and 6 m.
3. Each target is given a score: the innermost circle with a score of 3, the second circle with a score of 2, and the outermost circle with a score of 1.
4. The testee passes 5 times.
5. The accumulated score is an illustration of the testi's skills in doing long passing.

c) Receiving

1. Done within 3 m of the target.
2. The target is a wall measuring 75 cm high and 375 cm wide.
3. The testee passes to the target wall for 20 seconds.
4. The testee must receive the ball's reflection from the target wall.
5. The number of testees who can receive the ball within 20 seconds is a description of the testee's skills in receiving.

d) Dribbling

1. Testi dribbling from the starting line straight ahead as far as 5 m marked by the first cone, then testi goes to the second cone which is 2.83 m away from the third cone, and so on until the fifth cone. Then testi to the finish line.
2. To enter the finish, the stopwatch is turned off by the officer/tester when the testee has crossed the finish line with the ball.
3. The time obtained by the testees in completing the route is a reflection of their dribbling abilities.

e) Shooting

1. Performed within 16 m (male) and 12 m (female) from the target.

2. The target is a wall measuring 244 cm high and 732 cm wide. The target is divided into 5 parts in size, the middle target is 300 cm wide, the left and right sides are 175 cm wide, and the outermost part is 91 cm wide.
3. Each target is given a score: the very center with a score of 1, the left and right with a score of 2, and the very edge with a score of 3.
4. The duration of the 5 kicks is 3 minutes.
5. The accumulated score resulting from 5 kicks is an illustration of the testee's skills in shooting.

f) Headings

1. Done within 150 cm of the target.
2. The target is a wall measuring 4 m high and 4 m wide.
3. The execution time is 20 seconds.
4. The accumulated score that is generated within 20 seconds of doing the heading is an illustration of the testee's skills in doing the heading.

4 Conclusion

The conclusions that can be obtained from this research are, a prototype of basic football skill techniques that has been validated by experts; material experts with an average score of 4.27 (valid), evaluation experts with an average score of 4.6 (valid), and media experts with an average score of 4.5 (valid), so it can be said that the prototype developed is valid and worth developing. Sports skills tests are still very limited in number, therefore they need to be developed. This is the same as the expression conveyed, which states that considering that sports skills tests are still very limited, parties directly related to sports coaches can, in addition to using existing standard instruments, also make efforts to create a sports skills test that can be practically used and is very appropriate to the characteristics of each sport being coached. Based on these several things, a prototype of basic football skills techniques was developed for students of the Faculty of Sports Sciences (FIK).

Thank-You Note

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