



The Impact of The Teaching Game for Understanding Model on Basic Playing Ability and Learning Activities of Students in Soccer Learning

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Abstract.

Basic soccer playing skills are essential for students to play well. This research aims to determine the impact of the Teaching Games for Understanding learning model on the basic playing ability and learning activities of students in soccer learning. The research method used is an experiment with a one-group pre-test-post-test design. The subjects of this research were 23 fifth-grade students at Krikilan State Elementary School, Bayat District, Klaten Regency. The instruments used to measure basic soccer playing skills included two test items: 1) a dribbling test with a validity of 0,72 and reliability of 0,61, and 2) a short pass test with a validity of 0,66 and reliability of 0,69, from Daral Fauzi. The instrument for measuring student learning activities used a teacher observation sheet validated by experts to assess: 1) paying attention to the teacher's or peers' explanations during lessons or discussions, 2) asking questions, 3) completing tasks, and 4) being enthusiastic and motivated in learning. Data analysis in this research used paired samples t-test. The results show a significant impact of the Teaching Games for Understanding learning model on students' basic playing ability in soccer and their learning activities in soccer learning.

Keywords: Teaching Game for Understanding, Basic Skills, Learning Activities

1 Introduction

Learning activities in elementary schools, especially in Physical Education, involve various physical activities to achieve educational goal [1]. Physical education is a process of education through selected physical activities, games, and sports to achieve educational goals. The objectives of physical education are classified into four categories: 1) physical development, 2) motor development, 3) mental development, and 4) social development [2]. Physical Education as an integral part of the national education program aims to develop physical fitness, motor skills, critical thinking skills, social skills, reasoning, emotional stability, moral actions, healthy lifestyles, and environmental awareness . Physical education has different characteristics compared to other subjects, such as its goals, procedures, and media. The content of physical education includes game activities, athletic activities, gymnastics activities, water

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activities and safety, and developmental activities [3]. Soccer, as part of ball games, attracts the attention of sports scientists and governments worldwide to promote physical activity and health at all societal levels, including minorities [4]. According to , soccer is a global sport played almost everywhere, making it an international sport. Soccer learning involves complex movements requiring students' skills [5] . Students need to master basic soccer skills like dribbling and passing, which are essential for performing various game patterns. Several fundamental skills in soccer that students need to acquire include passing, control, heading, shooting, dribbling, and others.

Soccer serves as a medium for physical activity development among upper elementary students. Through soccer learning, students can develop good motor skills, critical thinking problem-solving, and social skills. Therefore, physical education teachers need to choose appropriate learning models to enhance students' skills and understanding of soccer [6] .To achieve physical education goals, elementary school PE teachers must have a good understanding of various learning models in physical education. One such model is Teaching Games for Understanding (TGfU), a game-based pedagogy model aiming to improve understanding of all game aspects while increasing physical activity, engagement, motivation, and enjoyment in PE lessons (Webb & Pearson, 2008). TGfU is considered better than conventional teaching models, which often emphasize a teacher-centered approach. Conventional teaching focuses on skill drills and technique practice [7]. TGfU introduces game understanding through modified games before technical execution, helping students understand when, where, and why to use specific techniques in the game [8].

Many PE teachers still do not adjust their teaching models to accommodate current student needs and characteristics, leading to less meaningful PE learning [9]. The instructional approach predominantly emphasizes a teacher-centered model, where students follow all the instructions or commands given by the physical education teacher. Additionally, physical education teachers tend to employ a performance-oriented approach, leading students to engage in exercises akin to those for competitive sports. This condition results in students disliking physical education, feeling bored, and even becoming frustrated [2]. To teach professionally, PE teachers must understand and master creative and enjoyable learning models suited to the material taught.

TGfU is a game-centered instructional model initially designed to address the limitations of traditional game teaching, particularly regarding technique-based instruction and maintaining students' interest in playing [10]. The limitations identified by Bunker and Thorpe, as cited in [10], manifest in various outcomes, such as limited skill mastery, inadequate understanding of the game, poor decision-making abilities, and excessive reliance on the teacher. Instruction using a tactical approach is considered an effective model for enhancing students' skills and motivation in games. The tactical approach in game teaching combines tactics and skills within the context of sports games, aiming to build students' motivation and interest as an integral part of the game structure [6].

2 Method

This research employed a quasi-experimental method with a one-group pre-test-post-test design. The subjects of this research were 23 fifth-grade students from Krikilan State Elementary School, Bayat District, Klaten Regency. The research instruments to measure basic soccer skills consisted of two test items: 1) a dribbling test with a validity of 0,72 and reliability of 0,61, and 2) a short pass test with a validity of 0,66 and reliability of 0,69, as developed by Daral Fauzi. The instrument for assessing students' learning activities used an observation sheet completed by the teacher, validated by experts to determine the following: 1) paying attention to the teacher's or peers' explanations during lessons or discussions, 2) asking questions, 3) completing assignments, and 4) being happy and enthusiastic about learning, assessed through a checklist. Data analysis in this research used SPSS with a paired samples t-test hypothesis test to determine the effect of the TGfU teaching model on students' basic skills and learning activities in soccer instruction.

3 Results

The descriptive statistics results can be shown in the table below:

Table 1. Descriptive Statistics Results of Students' Learning Activities and Soccer Playing Skills

	N	Range	Minimum	Maximum	Mean	SD	Variance
Initial Learning Activity	23	4,00	1,00	5,00	3,0000	1,24316	1,545
Final Learning Activity	23	2,00	3,00	5,00	4,5652	0,66237	0,439
Pre-test	23	23,00	44,00	67,00	59,6522	5,93609	35,237
Post-test	23	34,00	60,00	97,00	77,5652	11,31703	128,075
Valid N	23						

Based on the average calculation results, it can be observed that there is an increase in students' learning activities (paying attention to the teacher's or peers' explanations during lessons or discussions, asking questions, completing assignments, and being happy and enthusiastic about learning) from the initial treatment to the final treatment. Similarly, the results indicate an increase in basic soccer playing skills, as evidenced by the rise in the average scores from the pre-test to the post-test following the implementation of the TGfU model.

The t-test results conducted using SPSS 22 regarding the students' learning activities at the initial and end of the treatment, applying the TGfU model, are presented in the following table:

Table 2. Results of the t-Test on Students' Learning Activities at the Initial and End of the Treatment

		N	Correlation	Sig.
Part 1	The Initial Learning Activity and the End Learning Activity	23	0,607	0,002

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	SD	Std	95% Confidence Interval of the				
					Lower	Upper			
Part 1	The Initial Learning Activity – The End Learning Activity	-1,56522	0,99206	0,20686	-1,99422	- 1,13622	- 7,567	22	0,000

These results indicate a significant relationship between learning activities at the initial and learning activities at the end of the treatment. The correlation coefficient is 0,607 with a significance level of 0,002. Since the significance level is less than 0,05, it can be concluded that there is a significant relationship between learning activities at the initial and learning activities at the end of the treatment. Based on the calculation using paired samples t-test, a significance value (Sig 2-tailed) of 0,000 (less than 0,05) was obtained, indicating a difference between learning activities at the initial and learning activities at the end of the treatment.

The t-test results using SPSS 22 regarding the initial and final treatment of students' basic football playing skills with the application of the TGfU model are as follows:

Table 3. Results of the t-Test for Students' Basic Football Playing Skills Pre-test and Post-test

		N	Correlation	Sig.
Part 1	Pre-test & Post-test	23	0,493	0,017

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	SD	Std	95% Confidence Interval of the				
					Lower	Upper			
Part 1	Pre-test – Post-test	- 17,91304	9,85307	2,05451	-22,17383	- 13,65226	- 8.719	22	0,000

This result indicates a significant relationship between pre-test and post-test basic football playing skills. The correlation value is 0,493 with a significance level of 0,017. As the significance level is less than 0,05, it can be concluded that there is a significant relationship between pre-test and post-test basic football playing skills. Based on the

calculation using paired samples t-test, a significance value (Sig 2-tailed) of 0,000 was obtained (which is less than 0,05), therefore, the conclusion is that there is a difference in basic football playing skills between the pre-test and post-test.

4 Discussion

A teaching model using games to enhance understanding is one of several second-generation pedagogical models that focus on learning beyond the psychomotor domain [11]. TGfU was designed as a teaching model in response to students' dissatisfaction with technique-based learning [12]. Technique-based learning tends to create an environment characterized by students who lack skills, low success rates among some students, dependence on the teacher for performance, tedious exercises, and non-contextual learning.

Conversely, learning that applies the TGfU model essentially must consider four aspects: 1) Students must experiment through modified game formats with adapted game structures tailored to their conditions and accommodated at a broader level of capability. 2) Students must engage in reflection to understand what has been done, what should be done, and why. 3) Students must learn the technical execution contextualized in decision-making, considering similarities with similar games, and playing as team members. 4) Students must be physically and mentally involved in every task, actively engaging in their relationship with their peers. As a consequence, students construct their knowledge thanks to the environment designed by physical education and health teachers. TGfU model demands that students understand the concept of play and physical education learning. The TGfU model serves as a teaching framework to introduce how students comprehend physical education learning through fundamental concepts of play [13].

The curriculum and instructional model of TGfU can yield several physical, psychological, and affective benefits by increasing the level of student activity, thereby enhancing motivation, enthusiasm, and participation . TGFU serves as an instructional model used to explore how students understand sports through the fundamental ideas of games [14]. TGfU does not emphasize learning sports-playing strategies, thus making learning clearer and more tailored to the developmental stages of students (the concept of play). Physical education teachers proficient in using the TGfU model effectively can develop students in the cognitive, psychomotor, and affective domains as a priority, and students learn the tactical aspects of the game by playing small-scale and/or modified versions adapted to their development [15]. Moreover, to achieve optimal game understanding among students, the TGfU model is based on representative and modified games. TGfU serves as a learning model in games based on the tactical games model, providing playing concepts to enhance the development of skills and tactical understanding required to competently engage in a game [16].

The tactical approach serves as a means to enhance student's awareness of playing concepts through the application of appropriate techniques (basic motor skills) tailored to the problems or situations within the game [17]. Furthermore, it is elucidated that the

objective of teaching through the tactical approach is to improve students' playing skills by engaging in a combination of tactical awareness and the application of basic skills in simple game forms or modifications.

According to Pujianto [5], the TGfU model is highly compatible with the objectives of physical education using the PAIKEM approach (active, innovative, creative, effective, and enjoyable learning) in terms of achieving success in cognitive, affective, and psychomotor domains. Through the TGfU instructional model, students are motivated to engage in learning through a play-based approach tailored to the learning objectives. Student learning activities will increase in terms of paying attention to the teacher or peer explanations during lessons or discussions, asking questions, completing tasks, and enjoying and being enthusiastic about learning. Physical education teachers must be able to facilitate and create a learning atmosphere that guides students toward achieving learning goals and education in general [12]. Instructional models using the TGfU approach.

5 Conclusion

There is a significant relationship between the learning activities at the initial and end of the treatment. The correlation coefficient is 0,607 with a significance level of 0,002. Thus, it can be concluded that there is a significant relationship between the learning activities at the initial and end of the treatment. Based on calculations using paired samples t-test or paired t-test, a significance value (Sig 2-tailed) of 0,000 was obtained, indicating that there is a difference between the learning activities at the initial and end of the treatment. There is a significant relationship between the pre-test and post-test scores of basic football playing skills. The correlation coefficient is 0,493 with a significance level of 0,017. Consequently, it can be concluded that there is a significant relationship between the pre-test and post-test scores of basic football playing skills. Based on calculations using paired samples t-test or paired t-test, a significance value (Sig 2-tailed) of 0,000 was obtained, indicating that there is a difference in basic football playing skills between the pre-test and post-test.

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