



Impact Of Active Learning Strategies Cooperation And Peer Mentoring On Students' Football Dribbling And Passing Skills

¹Sabaa Muhamad Hameed*, ²Mohammed Abd Ulhussien, ³Sajad Aiad Hadi

*Corresponding author, E-mail: sabaam.hameed620@uowasit.edu.iq
^{1,2,3} Faculty of Physical Education and Sport Sciences, Wasit University

Abstract

The study aimed to identify effect of two active learning methods cooperative learning and peer mentoring on developing dribbling and passing skills in football among first-year students at College of Physical Education and Sports Sciences, Wasit University, for academic year 2024–2025, and to conduct a comparison between two methods to determine which is better. researcher used experimental method with an equivalent groups design. research sample consisted of (30) students, who were randomly distributed into three groups two experimental groups and one control group, with (10) students in each group. experiment was conducted at college sports field during period from 1/10/2025 to 1/2/2026, and equivalence and homogeneity were ensured for variables of height, weight, and prior skill performance. Key findings active learning groups (cooperative and peer-guided) achieved a significant advantage in post-tests of dribbling and passing skills compared to control group that followed traditional method, results showed that "cooperative learning method" was superior to "peer mentoring method" in improving level of skill performance in football. Interactive strategies contributed to enhancing students' motor coordination, teamwork, and self- confidence. study recommends adopting cooperative learning as a fundamental pillar in football skills training programs, and urges instructors to integrate active learning methods into their curricula to improve quality of educational outcomes and increase students' motivation towards motor learning.

Keywords: Cooperative Learning, Peer Mentoring, Football

1-1 Introduction:-

world has witnessed remarkable development in various fields of life in recent decades, most notably in education, which has undergone qualitative transformations encompassing its goals, content, and methods. This includes physical education and sports, which have garnered widespread attention in light of scientific and technological advancements. Modern sciences, particularly movement science and motor learning, have contributed to this development by supporting training and educational programs and enhancing students' skill and physical performance. Given this progress, it has become essential to review traditional teaching methods and approaches in light of rapid cognitive and educational shifts. These shifts have included a fundamental change in educational process, moving from teacher to learner, who is now considered an active participant in constructing knowledge and acquiring skills, rather than simply a passive recipient of information. This has prompted educators and researchers to seek more interactive and effective teaching methods that align with characteristics and needs of learners in modern educational environments. Football, a team sport, requires mastery of a set of fundamental skills, which are essential for achieving optimal performance in competitive situations. process of acquiring these skills requires use of educational methods based on interaction and practical application, in order to develop skill performance effectively and systematically, especially among

students of faculties of physical education and sports, who represent base for preparing teachers and coaches in future.

Based on above, importance of current research lies in employing cooperative learning and peer-led learning methods to develop dribbling and passing skills in football among physical education students. This represents a scientific attempt to enrich university teaching methods with modern approaches that enhance performance efficiency, contribute to achieving high-quality educational outcomes, and provide an applied model that physical education instructors in relevant colleges and programs can benefit from.

1-2 Research Problem:

Teaching methods in field of physical education and sports science have witnessed remarkable development in light of continuous advancements in educational research. This necessitates that instructors, particularly at university level, adopt diverse teaching methods that contribute to development of students' cognitive, skill-based, and emotional aspects. However, in academic practice, there is a continued reliance on traditional teaching method, based on lecturing and rote learning, which limits learner's effectiveness and makes them a passive recipient of knowledge without genuine participation in learning process . Based on researcher's field experience as an instructor in College of Physical Education and Sports Science, she observed a noticeable weakness in students' skill performance , especially in dribbling and passing in football for first-year students. This poses an obstacle to achieving desired educational objectives of course. This weakness can be attributed to several factors, including: limited time allocated to practical lessons, large group sizes, and lack of interactive teaching methods that enable students to learn independently and collaboratively, in addition to students' roles being limited to passive reception . This situation places an additional burden on instructors in terms of continuous monitoring, error correction, and performance guidance, leading to a waste of time and effort without achieving desired skill development . Based on above, researcher concluded that there is a need to experiment with modern teaching methods that align with contemporary trends in university education and grant students an active role in learning process.

Research problem is defined as follows: This study attempts to uncover impact of using active learning strategies, specifically cooperative learning and peer-led learning, on developing dribbling and passing skills of first-year students in College of Physical Education and Sports Sciences.

1-3 Research Objectives

- 1- To determine effect of cooperative style on performance of dribbling and passing skills in football by first-year students in College of Physical Education and Sports Sciences
- 2- To determine effect of peer mentoring on performance of dribbling and passing skills in football by first-year students in College of Physical Education and Sports Sciences
- 3- Comparing collaborative approach and peer-guided approach in improving dribbling and passing skills

1-4 Research hypotheses:

1. There is a positive effect of cooperative style on performance of dribbling and passing skills in football by first-year students in College of Physical Education and Sports Sciences.
- 2- There is a positive effect of peer mentoring method on performance of dribbling and passing skills in football by first-year students in College of Physical Education and Sports Sciences
- 3- There is a positive effect on performance of dribbling and passing skills in football for first-year students in College of Physical Education and Sports Sciences/Wasit University, in favor of group that used cooperative method.

2- Research methodology:

researcher adopted experimental method with a design based on equivalent groups, in order to suit nature of research problem and achieve its objectives.

2-1 Research Sample:

research sample was selected from original population, which consisted of first-year students at College of Physical Education and Sports Sciences, University of Wasit, for academic year (2025-2026). total number of students was (240), distributed across six study groups (A, B, C, D, E, and F) . Using a random method and by lottery, three groups (B, C, and D) were selected to represent research sample.

Group (B) represented cooperative learning method group.

Group (C) represented peer-guided learning style group.

-As for group (D), it was adopted as a control group that follows usual method used by instructor.

student selection was limited to 18-year-old age group. Students whose ages did not match age limit, those who had failed courses, those who had deferred, those with injuries or chronic illnesses, and students registered on university football team were excluded to ensure sample homogeneity. total number of students in three groups was 132, from which 30 students were randomly selected (10 students per group). This sample represents 22.72% of original population, a sufficient percentage to accurately and appropriately represent population.

Table (1) shows distribution of research sample of first-year students in College of Physical Education and Sports Sciences On three study groups, according to educational methods used in study.

Table (1) Number of individuals in research sample and their percentage in three groups are shown.

Group name	Division	Number of students	Excluded students	Number of individuals in sample	Percentage
Cooperative learning style set	for	42	32	10	23.80%
Peer-guided learning style group	C	45	35	10	22.22%
Control group (normal method)	d	45	35	10	22.22%
Total		132	102	30	

2-2 Methods, tools, and equipment used

2-2-1 Research Methods:

- Scientific sources: These include Arabic and foreign books and references related to research topic.

-Systematic observation and experimentation

Tests and Measurement

- Evaluating skill performance in football

2-2-2 Tools and equipment used:

tools and equipment used by researcher are as follows .

Data entry form

- A football field.
- 10 standard footballs.
- A metal measuring tape.
- Medical scale for measuring weight (kg).
- Manual calculator.
- Number of signs (15).
- Two (2) stopwatches.
- One whiteboard
- A whistle .

2-3 Field Procedures for Research

2-3-1 Selecting basic football skills:

basic skills targeted in this research were selected based on curriculum prescribed for first-year students at College of Physical Education and Sports Sciences, as approved by Ministry of Higher Education and Scientific Research. skills of dribbling and passing in football were chosen due to their importance in developing correct technical performance , as they are fundamental skills that form cornerstone for mastering other complex skills in game. Furthermore, they are suitable for students at this educational level.

2-3-2 Choosing appropriate tests to measure skills:

After identifying core skills targeted in football, researcher selected appropriate standardized tests to measure students' skill level in those skills. selection of these tests was based on those used in previous, reliable studies conducted within same discipline and field, and which were suitable for characteristics of research sample.

These tests are characterized by their validity, reliability, and objectivity , and have been adopted by a number of researchers in field of physical education and sports science to measure basic football skills, especially dribbling and passing skills.

1-Zigzag ball run test

Test description: ball is run between five cones, each separated from next by a distance of 9 feet, back and forth.

2- Ball passing test on a drawn target

Test description: student passes ball onto a square target drawn on wall (1x1 m), 10 cm high, from a distance of 3 meters, continuously for 30 seconds.

2-3-3 Exploratory Experiment:

October 10-11, 2025) on a sample of ten first-year students from College of Physical Education and Sports Sciences, who were not part of main research sample. aim of this pilot study was:

Verifying validity of tools and equipment used in conducting tests. -1

Testing efficiency of support team and determining their readiness to accurately execute required tasks. -2

Calculating scientific coefficients (validity, reliability, objectivity) of skills tests used in research. -3

Identifying and addressing potential difficulties and obstacles that researcher may encounter during field application, and dealing with them in advance to ensure main experiment proceeds with high efficiency.

2-4 scientific basis of testing:

Stability:

researcher administered skill performance tests in football dribbling and passing to a pilot sample, selected from same original research population but outside main sample. same tests were then administered again after one week, and using Pearson's simple correlation coefficient, results showed a high degree of reliability, indicating consistency in measurements between first and second administrations.

Validity and objectivity were also verified through analysis of correlation coefficients between results, as shown in Table (2).

Table (2) shows coefficients of scientific foundations (reliability, validity , objectivity)

technical performance tests of my dribbling and ball passing skills

No.	Transactions skill	Stability coefficient	Validity coefficient	Objectivity factor
1	Dribbling skill	0.83	0.91	0.79
2	Passing skill	0.76	0.86	0.77

Validity:

researcher relied on face validity of tests used by presenting them to a group of experts and specialists in field of physical education and sports science, who agreed on suitability of these tests for measuring targeted skills . validity of these tests is further strengthened by their prior use in scientific studies, confirming their appropriateness to nature of sample and skills being measured.

Objectivity:

tests used by researcher are characterized by their clear and specific conditions, which contributes to achieving objective measurement of performance. researcher employed two evaluators to assess artistic performance of each student in research sample, and based analysis on best (time or number) achieved in evaluation results . correlation coefficient between evaluators' scores was then calculated, and results showed that correlation coefficient was high and statistically significant, indicating that evaluation results were free from bias and reflect students' actual performance level.

2-5 Homogeneity and equivalence of research groups:

Before commencing main experiment, researcher conducted homogenization and equivalence operations between three research groups, in order to ensure that levels of sample members were similar in variables under study, and to identify any differences that might affect research results.

Homogeneity was achieved in following variables:

Height, weight, and skill performance level in skills of dribbling and passing a football, using appropriate statistical methods.

age variable was excluded from analysis, since all members of sample are first-year college students, and therefore they fall within a relatively close age group and do not constitute a distinguishing factor between groups, as shown in Table (3).

Table (3) results of analysis of variance for height, weight, and skill tests for three research groups are shown

No.	Variables	Measurement unit	Source of variation	Sum of squares	Degree of freedom	Average of squares	Calculated value of F	Sig.
1	Height	cm.	Among groups	0.00000004	2	0.00000002	0.126	Insig.
			Inside groups	0.000000076	27	0.000000028		
			Total	0.000000083	29			
2	Weight	Kg.	Among groups	8.267	2	4.133	0.244	Insig.
			Inside groups	457,600	27	16.948		
			Total	465.867	29			
3	Dribbling	Second	Among groups	1.614	2	0.807	0.82	Insig.

			Inside groups	26.573	27	0.984		
			Total	28.187	29			
4	Passing	30 sec.	Among groups	1.4	2	0.7	0.395	Insig.
			Inside groups	47.8	27	1.770		
			Total	49.2	29			

tabulated F-value at a significance level $\geq (0.05)$ and for two degrees of freedom $(2, 27) = 3.31$ analysis results show that differences are not significant, indicating that homogeneity and equivalence were achieved among three groups in studied variables.

2-6 Pre-tests:

researcher conducted pre-tests for research sample on 17th and 18th of October 2025 , at 10:30 AM, with aim of measuring performance level of sample members in specified skills before applying main experiment.

performance results were validated by two expert evaluators to ensure objectivity and accuracy.

researcher also ensured control over all variables and conditions surrounding testing procedures, including testing location, timing, and environmental and atmospheric conditions, to guarantee a level playing field for all members of sample and ensure reliability and validity of results .

2-7 Main Experiment

- Curriculum vocabulary:

researcher developed a teaching curriculum based on cooperative learning and peer-led learning methods to teach and develop dribbling and passing skills in football, drawing on specialized literature and opinions of experienced individuals . Since practical lecture at college is allocated two hours per week (120 minutes), curriculum was organized as follows :

Details of curriculum organization

Item	Details
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Program implementation duration	8 weeks
Number of practical lectures per week	1 lecture (lasting two hours)
Number of learning units per skill	4 units (over 4 weeks for each skill)
Number of skills	2 (Dribbling and Handling)
Total number of practical lectures	8 lectures
Total time for each lecture	120 minutes
Time management within lecture	Each lecture is divided into two learning units (60 minutes per unit).
Total number of educational units	16 units (8 for rolling, 8 for passing)

Notes:

- Weeks 1–4 are dedicated to teaching and developing dribbling skill.
- Weeks 5–8 are dedicated to teaching and developing passing skills.
- units within each lecture were distributed in a way that ensures a gradual increase in difficulty and a variety of teaching methods, in line with characteristics of both cooperative learning and peer mentoring approaches.

2-8 Cooperative Learning Method Group :

learning units assigned to this group were implemented by instructor (researcher) in an organized manner, starting with a general warm-up followed by a specific warm-up, followed by dividing students into two groups, each group comprising five students.

researcher explained skill being learned and stated main objective of educational unit, while providing a practical model of correct motor performance to help students – especially leaders of two groups – understand ideal mechanism for implementing skill.

After presentation, each group moved to its designated location to perform educational task under supervision of group leader, while researcher took on task of guidance, follow-up and providing support through leaders, in order to ensure achievement of cooperative interaction between members of same group .

2-9 Peer - guided learning style group:

educational units assigned to this group were also implemented by researcher, and according to sequence planned in curriculum.

This method was characterized by organizing students in pairs (duos) who alternated between role of performer and observer.

One student performs skill while other observes it and provides immediate feedback based on specific criteria previously provided to them by researcher. This peer feedback is a key factor in improving skill performance and consolidating learning, because it provides continuous correction and high motivation .

2-10 Control group (usual method used by instructor):

This group adopted traditional teaching method, which included explaining skill, setting goals, and implementing exercises within framework of planned educational units.

This method was implemented without relying on group activities or role-sharing between students, and with same number of educational units and repetitions used in two experimental groups, to ensure equivalence of experimental treatment in terms of time and teaching volume .

2-11 Post - tests:

Post-tests were conducted to measure students' performance in targeted skills (dribbling and handling) after completion of educational program, under same time and place conditions as pre -tests. tests were administered at 10:30 AM, and researcher ensured control over all influencing environmental and technical variables to guarantee validity of results and reliability of comparison between three groups. Implemented during two days (21-22/ 1 / 2026)

2-12 Statistical methods:

To achieve research objectives and process data collected from measurement tools used, researcher employed a range of statistical methods and techniques appropriate to nature of study, as follows: mean. Standard deviation. pattern. Torsion coefficient. t-test for matched samples. Analysis of variance test. Simple correlation coefficient. Least Significant Difference Test. LSD. Percentage.

3- Presenting, analyzing, and discussing results:

This section includes presentation and analysis of pre- and post-test results for research sample, through presentation of arithmetic means and standard deviations for three research groups, to evaluate technical performance of two skills (dribbling and passing) in football.

1. Presentation of results of learning technical performance of dribbling skill for three research groups.

1.1 impact of teaching methods on teaching and developing dribbling skills among members of three groups. Pre-test, post-test, and (t) value for evaluating technical performance of dribbling skill for three research groups

Table (4) shows calculated and tabulated standard deviations between two tests.

Groups	Pre-test		Post -test		Calculated t value	tabulated t value	Sig.
	M.	St.d	M.	St.d			
Cooperative learning method	15.58	0.76	11.79	0.63	13.08	2.26	Sig.
Peer-guided learning approach	15.28	1.05	12.7	0.64	9.56		

Control	15.85	1.12	14.2	0.50	6.05		
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Degree of freedom (9) and significance level (0.05)

- ❖ Experimental group (cooperative learning) recorded a remarkable improvement, as arithmetic mean decreased from (15.58) in pre-test to (11.79) in post-test, and calculated (t) value reached (13.08), which is higher than tabulated value (2.26), indicating that there are statistically significant differences in favor of post -test .
- ❖ As for second experimental group (peer guidance), it also showed significant differences, as performance improved from (15.28) to (12.7). calculated value of (t) was (9.56), which is greater than its tabulated value of (2.26) at a degree of freedom of (9) and a significance level of (0.05). This indicates that there is a significant difference between two tests and in favor of post -test .
- ❖ As for control group that used conventional method, it improved slightly from (15.85) to (14.2). calculated value of (t) was (6.05), which is greater than its tabulated value of (2.26) at a degree of freedom of (9) and a significance level of (0.05). This indicates that there is a significant difference between two tests and in favor of post -test .

-1-3 2 Results of (F) test for analysis of variance in dribbling skill

Table (5) indicates that there are significant differences between three groups in post-test for dribbling skill, where calculated value of (F) reached (35.845), which is higher than tabulated value of (3.31), which indicates that teaching method had a clear effect .

Table (5) shows results of three post-test for evaluating technical performance for skill of dribbling a football.

Source of variation	Sum of squares	Degree of freedom	Average of squares	Calculated value of (f)	tabulated value (f)	Level of significance	Sig.
Among groups	25.02	2	12.51	35.845	3.31	0.05	Sig.
Inside groups	9.43	27	0.349				
Total	34.45	29					

LSD test was used:

Table (6) shows results of a significant test among three groups to evaluate technical performance of football dribbling skill to determine least significant difference (LSD)

Groups	Difference between two environments	Team results	Value of least sig. difference	Sig.

G1 - G2	11.79 - 12.7	0.91 *	0.59	In favor of cooperative approach
G1 - G3	11.79 - 14.02	2.23 *		In favor of cooperative approach
G2 - G3	12.7 - 14.02	1.32 *		In favor of peer-led learning

To determine inter-rater differences, researcher used LSD test shown in Table (6), and it was found that cooperative group significantly outperformed both peer mentoring group and control group. peer mentoring group also outperformed linking group .

3-2 Presentation of results of learning technical performance of passing skill and for three research groups.

3-2-1 effect of educational methods on teaching and developing passing skill among members of three groups. Pre- and post-tests to evaluate technical performance of passing skill and for three research groups

Table (7) shows means, standard deviations and value of (t) Calculated and tabulated between two tests

Groups	Pre-test		Post -test		Calculated (t) value	tabular (t) value	Sig.
	M.	St.d	M.	St.d			
Cooperative learning method	11.90	1.97	20.01	2.85	9.08	2.26	Sig.
Peer-guided learning approach	11.40	1.35	16.30	1.25	7.65		
Control	11.5	1.43	14.09	0.74	6.53		

Degree of freedom (9) and significance level (0.05)

Table (7) shows improvement in technical performance of passing skill between pre- and post-measurements cooperative group recorded an increase from (11.90) to (20.01), and value of (t) (9.08) (This indicates a significant impact .(7.65 (t) As for peer mentoring group, it increased from (11.40) to (16.30), and value (6.53) (t) While control group improved from (11.5) to (14.09) by a value. All calculated values were higher than critical value (2.26), indicating statistically significant differences in favor of post-test, but to varying degrees.

3-2-2 Displaying results of test (f) to analyze variation in technical performance of passing skill among three research groups in post-test

Table (8) shows results of (f) test for analyzing variance between three groups in post-test for evaluating technical performance of passing skill in football.

Source of variation	Sum of squares	Degree of freedom	Average of squares	Calculated (f) value	Tabular (f) value	Sig. level	Sig. type

Among groups	144.80	2	72.4	21.29	3.31	0.05	Sig.
Inside groups	91.90	27	3.40				
Total	236.70	29					

Table (8) showed significant differences between three groups in post-test performance of passing skill, (F) where calculated value reached (21.29), which is higher than tabulated value (3.31). To identify which of three groups was best in learning and developing technical performance of passing skill in football, researcher used LSD test to find least significant difference between groups, as shown in Table (9).

Table (9) shows results of LSD test to determine lowest significant difference between three groups for performance evaluation technical skill of passing a football

Groups	Difference between two environments	Team results	Value of least sig. difference	Sig.
G1 - G2	20.01-16.30	3.71 [*]	1.86	In favor of cooperative approach
G1 - G3	20.01-14.09	5.92 [*]		In favor of cooperative approach
G2 - G3	30.16 -14.09	2.21 [*]		In favor of peer-led learning

- cooperative group significantly outperformed both peer and control groups .
- peer mentoring group also outperformed control group .

3-3 Discussion:

3-3-1 Discussion of results of three research groups in basic ball skills

results in tables indicate that all three groups have achieved a significant improvement in technical performance of dribbling and passing skills, reflecting effectiveness of educational programs used. researcher attributes this improvement to educational curriculum is based on a gradual increase in difficulty. selected exercises were appropriate for students' level. Repeated performance and continuous feedback and (Nizar Al-Talib) have confirmed that quality of exercises and clarity of teaching method play a major role in speed of learning and achieving mastery. This is what Mufti Ibrahim confirmed. coach's choice of challenging exercises will increase experience of some players, but not all of them.

teaching methods used, whether in educational or practical part, were sufficient to give a clear picture of skill, which contributed to giving a complete picture of movement and its path, in addition to increasing players'

experience when practicing it actually, as Nizar Al-Talib points out. Teaching methods and techniques are of paramount importance in educational process and they affect speed of learning. results of Tables (8.5) for analysis of variance test for three research groups also showed that there is a variation in learning and development of technical performance of two skills (dribbling and passing) in football.

These differences are attributed to variation in teaching methods and their suitability to level and abilities of learners. This has had a significant impact, greatly helping to raise students' abilities to good performance. impulsiveness in performance is a result of competitive and exciting nature of selected exercises, which are appropriate to age group of research sample in terms of their compatibility with students' motor and skill abilities. This is consistent with what Shafiq Fallah indicated, If training comes at right time, which is time when individual is mature enough to benefit and receive, it will be useful and successful and will contribute to individual's motor development.

Based on results of analysis of variance and LSD test, it became clear that cooperative learning method was most effective, followed by peer mentoring, and finally traditional method. superiority of cooperative group is attributed to active student participation. Taking responsibility within group interaction. Cooperative learning promotes effective communication among group members. peer mentoring method was effective because of mutual monitoring and continuous feedback among students, which led to improved performance. In contrast, results of control group were lower as a result of following traditional approach that focuses on teacher as primary source of education and neglects individual differences between students, as pointed out by (Ghassan Abdul Karim).

4-1 Conclusions:

Results of study proved superiority of active learning strategies, represented by cooperative learning style and peer-guided learning, over usual method followed by teacher, in developing level of performance of dribbling and passing skills in football. cooperative learning method showed greater effectiveness compared to peer mentoring method in improving students' skill performance, which indicates its high suitability to nature of two skills under study, and what they require in terms of interaction and group coordination.

4-2 Recommendations

Based on research findings, researcher recommends following adopting cooperative learning method systematically within football skills education programs, especially skills of dribbling and passing, due to its proven effectiveness in improving students' skill performance. need to diversify use of teaching methods and techniques within physical education lectures in order to achieve positive interaction among students, increase their motivation to learn, and add an element of excitement to process of acquiring skills. Encouraging physical education teachers to integrate active learning methods into their curricula, which contributes to achieving higher quality and more effective educational outcomes.

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