

The Effect of Active Learning Strategies, Mind Maps, And Cooperative Learning, on Self-Perception And Acquisition of Technical Performance For Short Passing And Scoring Skills In Indoor Soccer For Students

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Abstract:

The research aimed to identify the effect of active learning strategies, mind maps and cooperative learning, on self-awareness and the acquisition of technical performance for short passing and scoring skills in football for connections. The researcher used the experimental method and the equivalent groups method to suit the nature of this research. The research community was selected from third-stage students (Department of Physical Education and Sports Sciences) College of Basic Education - Al-Mustansiriya University for the academic year (2023-2024), numbering (89) male and female students from three halls. As for the research sample, it was selected randomly and by lottery, which represents two experimental groups, numbering (32) students from the original community, with (16) students for each group and from Halls 1 and 2. The two groups were divided. The first experimental group studies according to the mind maps strategy, and the second experimental group studies according to the cooperative learning strategy. Among the most important conclusions, including that cooperative learning provides a dynamic interaction that goes beyond the limits of individual perception that may be imposed by mind maps. One of the most important recommendations is to enhance cooperative learning strategies in academic and sports activities, as it provides a dynamic learning environment that allows students to interact socially.

Keywords: Active learning, mind maps, cooperative learning, self-awareness, technical performance, short passing.

أثر استراتيجيتي التعلم النشط الخرائط الذهنية والتعلم التعاوني في الإدراك الذاتي واكتساب الاداء الفني لمهارتي التمرير القصير والتهديف بكرة القدم للصالات للطلاب

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مستخلص البحث:

هدفاً للبحث الى التعرف على أثر استراتيجيتي التعلم النشط الخرائط الذهنية والتعلم التعاوني في الإدراك الذاتي واكتساب الاداء الفني لمهارتي التمرير القصير والتهديف بكرة القدم للصالات. استخدم الباحث المنهج التجريبي وبأسلوب المجموعات المتكافئة لملائمة طبيعة هذا البحث. تم اختيار مجتمع البحث من طلاب المرحلة الثالثة (قسم التربية البدنية وعلوم الرياضة) كلية التربية الأساسية - الجامعة المستنصرية للعام الدراسي (2023- 2024) والبالغ عددهم (89) طالب وطالبة من ثلاث قاعات ،اما عينة البحث فقد اختيرت بالطريقة العشوائية وبأسلوب القرعة والتي تمثل مجموعتين تجريبيتين والبالغ عددهم (32) طالب من مجتمع الأصل ، وبواقع (16) طالب لكل مجموعة ومن قاعتي 1 و 2 ، وتم تقسيم المجموعتين المجموعة التجريبية الاولى تدرس وفق استراتيجية الخرائط الذهنية المجموعة التجريبية الثانية تدرس وفق استراتيجية التعلم التعاوني ومن اهم الاستنتاجات ومنها أن التعلم التعاوني يوفر تفاعلاً ديناميكياً يتجاوز حدود التصور الفردي الذي قد تفرضه الخرائط الذهنية ، ومن اهم التوصيات تعزيز استراتيجيات التعلم التعاوني في الأنشطة الأكاديمية والرياضية، كونه يوفر بيئة تعليمية ديناميكية تتيح للطلاب التفاعل الاجتماعي.

الكلمات المفتاحية: التعلم النشط، الخرائط الذهنية، التعلم التعاوني، الإدراك الذاتي، الاداء الفني، التمرير القصير، التهديف.

Introduction and importance of research:

Modern trends in teaching methods call for the use of methods Appropriateness and suitability with the type of activity practiced and the tendency to use more advanced strategies to enable the student to reach the best levels of performance, those strategies that make the student the focus of the educational process And help him understand himself, make his decisions and invest his energies in order to achieve awareness with himself and others in how to choose the appropriate method of performance. Among these strategies are the strategies of active learning, mind maps and cooperative learning, which may lead to developing perceptions of learners and developing their abilities, the use of the mind maps strategy may give better results by distributing the effort expended between the student and the teacher. It may have other benefits as it is necessary to use devices and tools that help students develop their skills. As for strategy Cooperative Learning may result in a more motivated learners to acquire skills through an environment similar to the real game situation. My two strategies will be used. Learning the above-mentioned activities include indoor football for students. It is meant for learners acquire basic skills, especially the technical performance of short passing and scoring skills, where in fact, Futsal for students is one of the modern

developments in football, as this game receives great attention everywhere because it is one of the games that has greatly flourished in popularity in the world recently. In light of the above, the importance of this research becomes clear, as it aims to recognize the best strategies that would help in acquiring and developing the basic skills of indoor football for students. This comes with focus, especially on short passing and scoring. It also aims at developing self-awareness among students, through optimal investment of time and effort and utilizing the proper scientific method and gradual learning, in addition to the element of suspense in order to achieve this.

Conducting a survey study to show the level of skill performance of short passing and shooting skills in football:

The researcher's experience and work in the field of teaching methods of physical education, football and futsal is lined with modern educational trends and recommendations that call for innovation in the methods used in learning. As a result, the current study came to experiment with new teaching strategies that work to enrich and develop the learning process and help develop students' self-awareness for the purpose of achieving optimal learning. Therefore, the researcher decided to conduct an experimental study by addressing two proposed active learning strategies for teaching: the first is the mind maps strategy and the second is cooperative learning. These are two newly used strategies in the field of teaching futsal to students where implementing them during the lesson to identify the extent of their impact on acquiring short passing and scoring. In addition, the study aims to investigate their impact on students' self-awareness.

Research objectives: The research aims to:

- Identify the effect of the mind maps strategy on self-awareness and the acquisition of technical performance for the skills of short passing and scoring in football for the connections.
- Identify the effect of the cooperative learning strategy on self-awareness and the acquisition of technical performance for the skills of short passing and scoring in football for the connections.
- Identify the significance of the differences in the results of the post-tests between the two research groups (mind maps and cooperative learning) on self-awareness and the acquisition of technical performance for the skills of short passing and scoring in football for the connections.

Hypothesis of the research:

- There is a positive effect of the mind mapping and cooperative learning strategies on self-awareness and the acquisition of technical performance for the short passing and scoring skills in football

- The cooperative learning strategy has the advantage of developing self-awareness and acquiring technical performance for the skills of short passing and scoring in football for the players.

Research Limitations

Human domain: Third-year students, Department of Education and Sports Sciences, College of Basic Education - Al-Mustansiriyah University, for the academic year (2023-2024).

1-5-2 - Time domain:(30/10/2023 -15/1/2024).

1-5-3- Spatial domain: Indoor football stadium for students in the Department of Education and Sports Sciences, College of Basic Education - Al-Mustansiriyah University.

3- Research methodology and field procedures:-

3-1 Research Methodology:-

The researcher used the experimental method using the experimental design with two groups, one experimental and the other control group, by means of pre- and post-measurement of each group.

3-2 Research community and sample:

The research community was selected from third-year students (Department of Physical Education and Sports Sciences) College of Basic Education - Al-Mustansiriyah University for the academic year (2023-2024) and their number is (89) student A student from three study halls (Class 1 31 students, Class 2 28 students, Class 3 30), As for the research sample, it was chosen randomly and by lottery, representing two experimental groups, totaling (32) students from the original community, with (16) students for each group. From halls 1 and 2, and excluded students from the experimental group, where the sample to the population ratio is (35.95%) The two groups were divided as follows:

- First experimental group: Study according to the mind maps strategy
- Second experimental group: Study according to strategy of Cooperative Learning.

Research sample equivalence:

Information collection methods, devices and tools used:

Information collection methods:

- Arabic resources.
- Survey forms.
- Self-perception scale questionnaire form.
- Form to determine the most appropriate test for the technical performance of the short passing and scoring skills in indoor soccer for students.
- Technical Performance Evaluation Form

2- Tests and measurements.

3-2-2 Devices and tools used:

3-2-2-1 Devices used:

Which device?

- electronic stopwatchCasio number (2).
- Video camera type(NANO)

3-4-2-2 Tools used:

- (5) indoor soccer balls for students.
- Adhesive tape.
- blackboard .
- Magic pens.
- Tablets (CD).

3-3 Estimation study (survey):

The first assessment study was conducted on 10/11/2023 at the indoor football field for students in the Department of Physical Education and Sports Sciences - College of Basic Education, Al-Mustansiriyah University, on a sample consisting of (13) students. From Hall 3From the research community, they were selected randomly and outside the main research sample. The aim was to:

- Know the obstacles facing the researcher when applying the main experiment.
- Identify the difficulties facing the researcher and finding appropriate solutions for them.
- Examine the validity of the tests, devices and tools used, as well as finding out the time required to implement the vocabulary of a single lesson.
- Identify and prepare the support team when implementing the main experiment
- Ensure the suitability of the field and the tools used when implementing the experiment, Home.

3-4 Designing two forms to evaluate the technical performance of the short passing and scoring skills in indoor soccer for students:

In order to evaluate the technical performance of each student in the short passing and scoring tests, this requires preparing a form for each skill. Based on review of a number of sources, a form was prepared to evaluate the technical performance of each skill. In order to know the extent of their stability, the researcher photographed the technical performance of the short passing and scoring skills for the exploratory experiment sample, which numbered (13) students. The same test was repeated after (7) days and the Pearson correlation coefficient was extracted between the scores of the two tests. The value of the correlation coefficient for the

short passing skill was (0.82) and for the scoring skill was (0.80), which are greater than the value of the tabular correlation coefficient of (0.55) with a degree of freedom (11) and a significance level of (0.05), which indicates the stability of the two forms. As for the objectivity of the two forms, it was found by finding the stability of the measurement units, which is the degree, which for the short passing skill was equal to (0.87) and for the scoring skill (0.91). These values are greater than the value of the tabular correlation coefficient of (0.55) with a degree of freedom (11) and a significance level of (0.05). (0.05) indicating the objectivity of the two questionnaires. The final score for the evaluation was (10) points, which was based on the apparent structure of the skill. The score was divided according to the three skill sections:

The preparatory department grants (3) grades.

- The main section grants (3) grades.

The final section awards (4) points.

3-5 Self-perception scale:

Through the extrapolation of many studies and researches that examined the study of self-perception, it was found that benefit on the scale prepared earlier (Alaa Aladdin and Nagham Khaled 2023) (1) which consists of 36 paragraphs and within 5 magazines and within the five-point Likert classification (applies to a very great extent, applies to a great extent, applies to a medium extent, applies to a very little extent for football coaches in the northern region. After Linguistics modifications of the scale paragraphs and their transfer from the trainer to the student. In a manner that is appropriate for the students' indoor football activities, the scale items became (36) items. A paragraph on a group of experts and specialists in the fields of psychology, teaching methods, motor learning and training, numbering (20). After collecting the forms, the researcher used the (Ka) 2 law to determine the validity of the paragraphs. The paragraph was adopted when approved by (18) experts out of (20) experts, which is equivalent to a percentage of (90%).

Table (1)

Shows the number of agreeing experts, the calculated χ^2 value and the percentage. Centennial Statistical significance of each paragraph

Statistical significance	Calculated value of (χ^2)	Ratio Centennial	Number of experts agreeing	Paragraph name	T
Dal	18	100%	18	I can identify my strengths and weaknesses on the field, and I work to constantly improve my performance.	1
Dal	18	100%	18	I enjoy challenging myself in every match, and I see every experience as an opportunity to grow.	2
Dal	16.2	95%	17	I know that success in football requires commitment and hard work, and I try hard to do my best.	3
Not significant	1.8	65%	13	I believe that every goal I score or opportunity I miss is a lesson for me to grow and learn.	4
Dal	16.2	95%	19	I would like to teach futsal skills to students, but I feel embarrassed in front of others.	5
Dal	20	100%	20	I can acquire all the skills Futsal for students If you focus your mind on it	6
Dal	20	100%	20	It is easy for me to acquire new skills.	7
Dal	20	100%	20	I see that I have an influential role in my colleagues acquiring different skills.	8
Dal	12.8	90%	18	I feel shy when I compete with someone of the opposite sex.	9
Dal	16.2	95%	19	I feel hopeless when I fail to perform skills.	10
Dal	12.8	90%	18	I have a high ability to perform game skills.	11
Not significant	0.2	55%	11	I do my best for fear of failing to perform.	12
Dal	16.2	95%	19	I find it difficult to acquire new skills.	13
Dal	12.8	90%	18	I can't handle the difficulty of acquiring skills and better help others	14
Dal	16.2	95%	19	My classmates judge me as a student who is unable to perform skills. Futsal for students	15

Dal	12.8	90%	18	When I try to learn a new skill, I quickly forget it.	16
Dal	12.8	90%	18	I feel uncomfortable doing skills exercises with students below my level.	17
Dal	16.2	95%	19	I think I have the potential. No, I don't and Various sporting events	18
Dal	20	100%	20	I think I can perform complex skills well.	19
Dal	20	100%	20	I think I have a strong determination and will when taking the skills exam.	20
Not significant	0.8	40%	8	I try not to yell at my colleague when she makes a mistake in a technique skill	21
Dal	12.8	90%	18	I feel I have the ability to solve acquisition problems. Skills for my colleagues	22
Dal	16.2	95%	19	I strive to do difficult exercises despite their danger.	23
Not significant	0.2	55%	11	When I fall behind in performing a certain skill, I feel that my colleagues sympathize with me.	24
Dal	20	100%	20	Adhere to the correct technical performance stages of skills.	25
Not significant	0.2	55%	11	I hesitate to take the initiative to perform the skill.	26
Dal	12.8	90%	18	I quickly understand the skill acquisition issues for students.	27
Dal	20	100%	20	I can control my emotions during performance.	28
Dal	16.2	95%	19	My colleagues' failure to perform a certain skill increases my ability to perform.	29
Dal	12.8	90%	18	I don't stick to skill training.	30
Dal	20	100%	20	I can't remember the stages of successful performance while performing skills.	31
Dal	20	100%	20	It is difficult to implement a plan I have set for myself to acquire skills.	32
Dal	16.2	95%	19	I find it difficult to get over the sadness I feel when I fail to acquire a certain skill.	33
Not significant	0.2	55%	11	I feel like I'm getting better with every workout, and I'm gaining new skills that make me a better player..	34
Dal	16.2	95%	19	I realize the importance of communicating with my	35

				colleagues and I always try to be a leader who supports the team.	
Dal	20	100%	20	Every match I participate in gives me the opportunity to discover my true potential, and I realize that learning from mistakes is an essential part of my journey as an athlete.	36

* The value of χ^2 is equal to (3.84) with a degree of freedom of (1) and a significance level of (0.05).

As a result, (6) Paragraphs, which are paragraphs numbered (4,12,21, 24,26,34) And making the amendments to each paragraph that the experts indicated, so the scale form now contains (30).

3-6 Estimation (Study initial application of the scale)

The initial application of the self-perception scale was on a preliminary sample that included (13) students from Hall 3 Stage 3 (morning) Department of Physical Education and Sports Sciences, College of Basic Education, Al-Mustansiriyah University. They were selected randomly and not from the main experiment sample on (10/15/2023), where the aim of the research and the method of answering were explained, then the form was distributed to them, and they were given the choice and sufficient time to answer its paragraphs. It became clear from this experiment what does it mean? Y:

- 1- Ensure that the scale instructions and paragraphs are clear.
- 2- Identifying the time taken to answer the scale, as the time taken to answer the scale was approximately (10) minutes. Calculating the response time for the scale by calculating the time of the first respondent plus the time of the second respondent and dividing by A. Thus, the response time was 10 minutes.
- 3- Identifying the conditions for applying the scale and the difficulties that accompany it.
- 4- The researcher should have practical training to identify the negatives and positives that he encounters during the main test.

3-7 Scientific transactions Self-perception scale:

3-7-1 Content Authenticity: The researcher relied on the validity of the content by

presenting it to a number of experts and specialists to express their opinions. Their opinions Regarding the validity of paragraphs and their invalidity or merging or modifying what they see fit and providing an alternative for them. The researcher also relied on the validity of the internal structure by finding the relationship between the degree of each

paragraph and the degree of the section for the paragraphs, as in the table (2) .

Table (2)

The table shows all values of the correlation coefficients for the paragraphs are statistically significant at a significance level of (0.05) and a degree of freedom of (30), noting that the value of the tabular correlation coefficient is (0.349).

Statistical significance	Correlation coefficient value	T	Statistical significance	Correlation coefficient value	T	Statistical significance	Correlation coefficient value	T
Dal	0.676	21	Dal	0.601	11	Dal	0.622	1
Dal	0.708	22	Dal	0.774	12	Dal	0.667	2
Dal	0.756	23	Dal	0.676	13	Dal	0.741	3
Dal	0.635	24	Dal	0.651	14	Dal	0.711	4
Dal	0.622	25	Dal	0.645	15	Dal	0.609	5
Dal	0.687	26	Dal	0.693	16	Dal	0.589	6
Dal	0.781	27	Dal	0.687	17	Dal	0.713	7
Dal	0.721	28	Dal	0.717	18	Dal	0.785	8
Dal	0.773	29	Dal	0.814	19	Dal	0.724	9
Dal	0.618	30	Dal	0.763	20	Dal	0.672	10

3-7-2 Stability:

The researcher relied on the method of applying the test and reapplying it to extract the stability coefficient, as the first test was conducted for the exploratory experiment sample, which numbered (13) students, on (10/15/2023), and the test was repeated after (7) days on (10/22/2023), and the correlation coefficient was extracted using Pearson's law between the scores of the two tests, which amounted to (0.670), which is higher than the tabular correlation value of (0.553) with a degree of freedom of (11) and a significance level of (0.05), which indicates the stability of the scale.

3-7-3 Objectivity:

I depend the researcher designed the scale form so that its paragraphs would be in clear and understandable terms and with specific questions that the sample members could answer easily and without any ambiguity, which confirms its objectivity.

Field research procedures:

Add a table showing the homogeneity of the research sample

The pre-tests for the research sample were conducted on the days corresponding to (23-24/10/2023). On the first day, the technical performance tests for the short passing and scoring skills were conducted, but the second day for the purpose of applying the self-perception scale, the tests were conducted on the indoor football field for students in the Department of Physical Education and Sports Sciences, College of Basic

Education, Al-Mustansiriyah University. The researcher used the method of calculating the accuracy achieved by each student in the test with photographing the test for the purpose of measuring the technical performance of the student's performance on the same test. And In order to ensure the equivalence of the two groups in the variables of the technical performance tests for the short passing and scoring skills in indoor soccer for students, as well as self-awareness, the researcher conducted the equivalence by finding the arithmetic mean, standard deviation, and value of (t) For unrelated samples, as shown in Table (3):

Table (3)

Shows sample equivalence in Self-awareness and Technical performance of short passing and scoring skills for the two experimental groups

Statistical significance	value (t) Calculated	Experimental group		Experimental group		Groups
		First group	Second	First	Second	Dependent variables
Not significant	0.68	5.54	71,56	12.28	70.	Self-awareness
Not significant	1,11	1.07	2.49	1.20	2,97	short scroll
Not significant	0.34	1.41	2.61	1.27	2,56	A To score

* Value (t) The table equals (2.04) with a degree of freedom (30) and a significance level of (0.05).

3-9 Design of educational units

After completing the tests Tribal: Two introductory units were given: an introductory unit for the first group, the mind maps group, and an introductory unit for the second experimental group, the cooperative learning group. After that, the educational curriculum was implemented according to the curriculum set for the indoor soccer subject for students in the Physical Education Department, but it was implemented using the mind maps strategy for the first experimental group. And with strategy Learning Cooperative for the second experimental group, and the application of the method began on Sunday (30/ 10 / 2023 AD) where the curriculum included (10) educational units that took (10) weeks to implement, at a rate of (3) Short Passing Units, (4) Scoring Units, and (3) Overlapping Short Passing and Scoring Units And in reality (90) minutes.

3-9-1 Educational unit procedures with mind mapping strategy:

The distribution of sections of the 90-minute physical education lesson includes an introduction, a main section, and a conclusion, and each section has its own objectives. At first, it starts Subject teacher with an introductory part that takes about 15 minutes. During this period, students are contacted to introduce them to the topic of the lesson and focus on the importance of self-awareness in futsal, as they are invited to reflect on their current skills and abilities. The introductory part can include some light motor activities to engage and motivate students, such as warm-up exercises and interactive questions on how to improve passing and scoring. The subject teacher uses Mind maps are a powerful tool for organizing information and enhancing understanding, and they play an important role in a variety of areas, including physical education. When considering a lesson on futsal, we may find that there are different types of mind maps that can be used effectively. One common type is the traditional mind map, where information is presented in an attractive visual way. A lesson topic, such as a soccer lesson, can be placed at the heart of the map. Branches can then be drawn radiating out from the center, with each branch reflecting a related concept, such as self-awareness, short passing, and scoring. From these branches, details and notes can be added to explain how each concept relates to the lesson. Then there is the concept map, which focuses on the connections between different ideas and concepts. In this type of map, it can be shown how self-perception affects passing and scoring skills. By showing these relationships, students can gain a deeper understanding of how all of these elements work together to perform better in the game. Timelines also help organize the lesson effectively. A timeline can be created that shows the lesson divided into three main parts: introduction, main part, and conclusion. This type of map helps students see the sequence of activities and the time allocated for each, which enhances their understanding of the overall structure of the lesson. A behavioral map can also be used, which highlights the behavioral goals required of students. By identifying target behaviors, such as improving passing ability under pressure and increasing scoring accuracy, the teacher can clarify success criteria and how progress in these areas will be measured. The group interactive map helps to understand how students interact with each other during activities. It shows how collaboration in passing and teamwork in defense can impact understanding within the team. All of these types of mind maps come together to enhance the learning experience in the futsal lesson, helping students better absorb the content and achieve higher performance through self-awareness and constructive interaction. The

teacher then moves on to the main section, which lasts approximately 60 minutes. In this part, students apply self-awareness concepts through activities that focus on short passing and scoring. The teacher divides students into small groups, where each group learns how to improve their passing skills through interactive exercises, which enhances their ability to communicate with their teammates. This is followed by scoring drills that include team competition to create an exciting and competitive atmosphere. The teacher makes sure to guide students to monitor their performance and evaluate themselves at each stage to ensure their self-awareness. In the concluding section, which lasts approximately 15 minutes, the teacher gathers students to share their experiences and what they have learned during the lesson. The teacher provides feedback on overall performance and focuses on the importance of self-awareness in improving individual and team skills. The concluding section can also include some light recreational activities to relieve tension and encourage students to express their opinions.

3-9-2 Educational unit procedures with strategy of Cooperative learning:

In a ninety-minute PE lesson, which focuses on the topics of self-awareness, short passing, and scoring in futsal, time is strategically distributed to fit into the three lesson sections: introductory, main, and closing, taking into account the cooperative learning strategy. The class starts on the first 30 minute dedicated to the introductory section, the purpose of which is to prepare students for this lesson by strengthening their knowledge of basic concepts. The teacher guides students towards understanding self-perception through group conversations that promote critical thinking, helping them explore how their thoughts and self-perceptions affect their performance in the field. During this time, students participate in collaborative activities such as group conversations or mind games that encourage them to reflect on their current passing and scoring skills. Group interaction tools or activities are used to build an atmosphere of collaboration and interaction among students. Then the lesson moves to the main part which takes about 50 Minutes, where the teacher focuses on practical activities related to short passing and scoring. Students are divided into small groups, The subject teacher uses one of the most prominent forms of cooperative learning is small group learning, where students are divided into groups of usually four to six people. These groups work on specific tasks, giving each member the opportunity to contribute their opinion and skills. This approach helps to promote communication and active participation, as students learn to benefit from each other's opinions and work together to achieve common goals.

Another type of collaborative learning method is project-based learning. In this context, students are asked to collaborate to complete a specific project that requires planning and implementation. Students share knowledge and resources, which enhances their ability to research, analyze, and solve problems together. This type of learning also enhances leadership skills, as students can take on various roles within their group. There is also peer-based learning, a method that focuses on students supporting each other. In this type, students collaborate in teaching each other, which enhances mutual understanding and helps build self-confidence. This method encourages students to express their ideas and points of view, which helps promote critical thinking and positive interaction.

Each group can work together to develop their short passing skills through guided drills. Students are encouraged to communicate with each other and take turns as a team, which contributes to enhancing their self-awareness through practical practice. Next, the goal-scoring section is moved, where the teacher organizes a preliminary competition involving scoring goals, which enhances the spirit of group competition and motivates students to improve their accuracy. Activities can include some mini-games, such as the 3-goal game, where students compete as teams to score the most goals in a set time, which increases interaction and cooperation among them. 10 minutes are allocated for the concluding section, where the teacher summarizes the lesson and reinforces the concepts learned. Students are invited to share their experiences and observations about what they learned during the lesson, and exchange ideas about how to improve their performance in the future. Each group can also be asked to present a new idea or strategy they learned during the activities. This practice not only helps to enhance group understanding, but also contributes to enhancing communication between students and building effective collaboration skills.

In this way, lesson time is distributed in a balanced and effective manner to make the best possible use of the educational content, enhancing students' learning experience in self-awareness, passing and scoring skills in futsal.

3-10 Post-tests:

The post-tests were administered on Sunday and Monday (8-9/ 1/ 2024), and the researcher followed the same conditions and procedures of the pre-tests in terms of the time and place of conducting the tests, the assistant work team, and the method of calculating the test score.

3-11 Statistical means:

The researcher used the statistical program (SPSS) to extract statistical results.

4-Display, analyze and discuss the results: -

4-1-1 Display and analyze pre- and post-test results. In self-awareness and for technical performance technical performance of short passing and scoring skills in indoor soccer for students for the first experimental group .

Table (4)

The table shows the values of the arithmetic means and standard deviations, and the value of (t) Calculated for pre-performance and the dimension for the first experimental group in Self-awareness and technical performance of short passing and scoring skills in indoor soccer for students.

Statistical significance	value (t) Calculated	The Post-test		Pre-test		Groups
		A	M	S	D	Dependent variables
Dal	2.56	7.73	78.68	12.28	70.35	Self-awareness
Dal	3.39	1.43	3.72	1.20	2.97	short scroll
Dal	4.15	1.55	4.13	1.27	2.36	ATo score

* Value (t) The table equals (2.04) with a degree of freedom (30) and a significance level of (0.05).

By presenting the data in Table No.(4), the researcher attributes the existence of significant differences between the results of the pre-test and post-test of the first experimental group to the role of the strategy. Mind maps to improve self-awareness and learn handling and scoring skills in futsal, so T Futsal is one of the exciting sports that requires high technical skills, the most important of which are handling and scoring. With the increasing complexity of the game and the need for players to achieve outstanding performance, modern methods of learning and

training have become an urgent necessity. Among these methods, the importance of mind maps stands out as an effective tool in improving self-awareness and developing skills." Mind maps help organize ideas and information visually, making it easier for the player to understand the relationships between the different skills being learned (Ali Hekmat Hamid, (2023)). By creating a mind map that focuses on handling and scoring, a player can clearly see how these skills overlap, and how they can be enhanced through continued training. This process of organization encourages creative thinking and opens up new horizons for students to achieve their goals. In addition, mind maps help enhance memory. When the student by visually representing ideas and concepts, it makes it easier for him to remember the strategies and technical tips he has learned previously. For example, by creating a mind map that highlights different scoring techniques, a player can easily recall the information during important matches.

Mind maps are not only about organizing and remembering, but also about improving self-awareness. These maps allow for students evaluate their performance objectively, by identifying the strengths and weaknesses in their skills. This evaluation contributes to developing customized training plans that help them develop their performance and reach higher levels of professionalism, mind maps are also a learning facilitator. By simplifying complex concepts, they make the learning process smoother and less stressful (Abdullah Al-Marghali, (2020)). Therefore, improving aiming accuracy and handling speed becomes a task that is not far-fetched, but can be achieved by focusing on the basic aspects recorded in the maps.

The researcher confirms that mind maps enhance teamwork among players. They can be used to clarify technical strategies, which helps in distributing roles and coordinating movement in the field. Defining common goals and a collective vision increases the effectiveness of team performance and achieves positive results during matches.

4-1-2 Display and analyze pre- and post-test results. In self-awareness and for technical performance technical performance of short passing and scoring skills in indoor soccer for students for the second experimental group.

Table (5)

The table shows the values of the arithmetic means and standard deviations, and the value of (t) calculated for pre-performance and the dimension for the second experimental group in Self-awareness and technical performance of short passing and scoring skills in indoor soccer for students.

Statistic al significa nce	value (t) Calculat ed	The Post- test		Pre-test		Groups
		A	M	S	D	Dependent variables
Dal	3.71	6.93	80.82	5.54	71.59	Self-awareness
Dal	5.12	1.71	5.30	1.07	2.42	short scroll
Dal	5.13	1.54	5.56	2.59	2.59	A To score

*** Value (t) The table equals (2.04) with a degree of freedom (30) and a significance level of (0.05).**

By presenting the data in Table No. (5), the researcher attributes the existence of significant differences between the results of the pre-test and post-test of the second experimental group to the role of cooperative learning strategy in improving self-awareness and learning the skills of handling and scoring in indoor soccer As you count The cooperative learning strategy is one of the most effective teaching methods, especially in the field of sports and specifically in learning futsal skills such as handling and scoring. This strategy is based on the basics of cooperation between students, which contributes to enhancing their overall educational experience." Collaborative learning promotes a deeper understanding of mathematical concepts and skills. When students work together in groups, they have the opportunity to collectively discuss playing strategies and execution techniques. This dynamic allows them to exchange ideas and handling and scoring techniques, leading to a deeper understanding of these skills."M The advantage of cooperative learning is that the student's achievement and learning are positively linked with the rest of the group to which he belongs, unlike the traditional method, which is based on individual or competitive performance among students in the same class."(1)

The researcher also confirms that the cooperative learning strategy enhances students' self-awareness. Through the feedback and constructive criticism, they receive from their peers, students are able to identify their strengths and weaknesses. This awareness helps them improve their performance and self-confidence, which is an important aspect of developing their mathematical skills."Learning in a collaborative environment also motivates students to put in more effort (Ismail Abdul-Zaid Ashour (et al.), (2024)) when they feel supported by their teammates, they are more motivated to practice skills, which positively impacts their performance levels in handling and scoring.

4-1-3 Display and analyze post-test results. In self-awareness and technical performance of short passing skills and Futsal Scoring for Students For the first and second experimental groups

Table (6)

The table shows the values of the arithmetic means and standard deviations, and the value of (t) calculated. In self-awareness and for artistic performance for testing the dimension for the first and second experimental groups in self-awareness and technical performance of short passing and scoring skills in indoor soccer for students.

Statistic al significa nce	value (t) Calculated	Experimen tal group Second		Experimental group First		Groups
		A	M	S	D	Dependent variables
Dal	2.81	6.93	80.82	7.73	78.68	Self- awareness
Dal	2.60	1.71	5.30	1.43	3.72	short scroll
Dal	0.81	1.54	5.56	1.55	4.13	A To score

*** Value (t) The table equals (2.04) with a degree of freedom (30) and a significance level of (0.05).**

By presenting the data in Table No. (6), the researcher attributes the existence of significant differences between the results of the post-tests of the first and second experimental groups in favor of the second experimental group that used the cooperative learning strategy. In improving self-awareness and learning the skills of handling and scoring in indoor soccer. The researcher confirms the reason for these differences is that the cooperative learning strategy is an effective tool for improving

self-awareness and learning the skills of handling and scoring in futsal, as this strategy ensures an interactive learning environment that contributes to enhancing communication and interaction between students. In the framework of group work, students have the opportunity to exchange ideas and experiences, which leads to enhancing their deep understanding of the basic skills required in the game, such as handling and scoring.

"Improved self-awareness is the ability for students to better evaluate themselves and their performance. When students work together, they gain immediate feedback from their peers, which helps them recognize their strengths and weaknesses. This awareness boosts their self-confidence and motivates them to improve their performance and develop their skills, leading to positive outcomes in the sports field."(1)

The researcher also points out the role of Self-awareness is the cornerstone of learning sports skills and developing sports performance., the This awareness represents the ability to understand oneself, one's interactions with one's body and mind during training and practical application. An athlete who has self-awareness is better able to understand one's strengths and weaknesses, which gives him the ability to continuously improve his performance. An important aspect of self-awareness is identifying strengths and weaknesses. When an athlete is fully aware of what they are good at and what they need to improve on, they can focus on developing their skills in a structured and effective manner. This continuous assessment creates a fertile ground for continuous growth and learning, as the athlete becomes aware of their performance each time they play sports, which enhances their ability to take control of their personal development.

On the other hand, self-awareness plays a fundamental role in motivating continuous learning. An athlete who knows that a certain skill needs improvement is more motivated to train and work hard to develop that skill. He transforms from someone who trains only to achieve immediate results to someone who seeks to learn and improve himself continuously. This self-motivation enhances the athlete's ability to reach his long-term goals and makes him challenge himself and persevere to achieve the best. Self-awareness provides a sense of one's feelings, motivations, and behavior (Alaa Alaa El-Din and Nagham Khaled Najib, (2023)) when comparing the cooperative learning strategy to the mind mapping strategy, we find that cooperative learning provides a dynamic interaction that goes beyond the individual perception that mind maps may impose. Mind maps focus on visual perception, while" Cooperative learning involves social interaction that helps students take initiative and learn through actual practice (Mahmoud Daoud Salman and Amina Karim

Hussein, (2021)). This enhances the development of handling and scoring skills through practical application and practice, away from theoretical learning related to mind maps.

As the researcher points out, Cooperative learning strategy Enable Students work in an encouraging environment that encourages creativity and innovation." Learning in a group increases the team spirit and instills the concepts of teamwork and cooperation (Ismail Abdul Zaid Ashour and Ali Hekmat, (2024)) which helps them improve their technical performance in handling and scoring. This provides them with a sense of shared responsibility, which is positively reflected in their results in play.

Conclusions and recommendations

Conclusions:

- Collaborative learning provides a dynamic interaction that goes beyond the limitations of individual perception that mind maps may impose .so Cooperative learning involves social interaction that contributes to student motivation. for.
- Shares Self-awareness. In turn Essentially in the incentivize the students someone who knows a particular skill needs improvement will be more motivated to train and work hard to develop that skill.
- It is Cooperative learning strategy is an effective tool for improving self-awareness and learning the skills of handling and scoring in futsal.
- Contributed Mind maps organize ideas and information visually, making it easier for the player to understand the relationships between the different skills learned.

Recommendations

- Enhancing cooperative learning strategies in academic and sports activities, Being. It provides a dynamic learning environment that allows students to interact socially and motivate each other to learn and develop their skills.
- Supporting educational programs based on self-awareness, so that students are directed to periodically evaluate their skills to identify strengths and weaknesses, which enhances their motivation to improve and develop their own abilities.
- Integrating cooperative learning strategy into Physical education lessons Especially in sports like futsal, where it has proven effective in improving self-awareness and developing player skills like dribbling and scoring.

Conflicts of Interest: None

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College of Physical Education and Sports Sciences, University of Diyala,
pp. 231-240.

Performance Motivation Scale

Very much so	To a large extent	moderately	To a small extent	Very little	Paragraphs	T
					I avoid blaming my colleagues if they make some mistakes.	1
					Be realistic in situations that require adventure and risk.	2
					I look forward to performing positions that require firmness, intensity and perseverance.	3
					I have a lot of self-confidence while learning.	4
					I like my performance to be distinctive even if the skills are easy	5
					I want to do my best to achieve performance.	6
					I can handle unexpected situations well during training.	7
					I strive for my performance to be admired by my colleagues and teachers.	8
					I feel safe performing the skill with my peers.	9
					I am not sure of my own abilities.	10
					I do my best while learning to perform.	11
					Long-term learning is the path to athletic excellence.	12
					When I learn a new skill, I learn it until I master it completely.	13
					My abilities and skills are high compared to my colleagues.	14
					I constantly strive to achieve the best in my motor performance.	15

					I can't interact with my colleagues to a great extent.	16
					I have the will and ambition to overcome performance difficulties.	17
					I have confidence in all the capabilities, abilities and potentials of my colleagues.	18
					I have great confidence in my skills and fitness.	19
					I have a high will to exert high effort while performing skills	20
					It's hard for others to trust me for some reason I don't know.	21
					I look forward to the tutorials.	22
					Failure pushes me to work harder to change others' perception of me.	23
					Others usually listen to my ideas and suggestions.	24
					I do whatever he asks. The teacher until avoids his punishment.	25
					The required motor performance is characterized by do it right up to the end.	26
					I accept the movement performance as it is without complaint or grumbling.	27
					I work hard to achieve higher skill performance.	28
					My motor performance increases when I fear failure.	29
					I feel that success in motor performance earns me respect and appreciation.	30

Extension educational unit based on concept maps for football

Educational unit: (2) Educational objective: Teaching the stages of defense.

Stage: Third. Benin

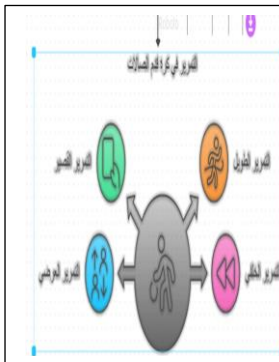
Number of students: 16

Educational objective: Developing the spirit of perseverance and creativity.

Date:

Equipment used: Futsal field - balls halls feet- blackboard

Notes	Organization (Formations)	Content	Time	Section
The role of the students is to follow the explanation by the teacher. Y Students connect previously learned ideas and information to new information presented by the teacher. The work can be done individually or by dividing the class into groups to draw a map for each group.	Here Comes picture of teacher. By explaining and presenting to students on the board is the topic of the lesson and a pointer on the board. The importance of passing in indoor soccer and its types	Determine the objective of the educational unit and clarify and explain the main and sub-ideas. passing in futsal and its importance, then discussing when to use passing and the types of short and medium passes in futsal. The teacher works to stimulate discussion to provide a competitive atmosphere to reach a pre-map drawing, reading. Y have students draw a map based on what they have learned and discuss how to organize all these ideas (pre-reading map).	60. D 40. D 15. D	Main Section Educational activity The first stage Pre-reading stage
Reading is done through what is written on the board or through an educational booklet or worksheet designed by the teacher. The aim	Here comes the picture of the students in the form of a ring looking at booklet, worksheets or brochure.	Y have students read and review what they have learned in the first stage. Reading is done individually.	5. D	Phase 2 Reading stage

of reading is to expand ideas and arrange them to build a new map. The teacher's role is to answer questions (feedback).				
Drawing can be done individually or in collaborative groups to arrive at a new map that represents all the elements of the formation. Defensive	<p>Here comes a comprehensive map of the defensive position.</p> 	<p>The aim of this stage is to build a new map that represents all the main and secondary elements of the defensive position (5-1) through what was identified in stages (1,2).</p> <p>- Students draw a map based on the information they learn from (1,2).</p> <p>The most comprehensive and clear map that achieves the goal of the educational unit is tested and approved. The map is drawn on the board and each part is discussed by the teacher and students.</p>	20. d	Stage 3 Post-reading stage
The role of the teacher is to supervise and guide the practical work.		<p>After adopting a map representing futsal passing students do application short passing exercises practical by students and under the supervision of the teacher, with an explanation of the positives and negatives and the exchange of positions between students.</p>	20. D	Practical activity

Supplement to a teaching unit on the cooperative learning strategy

Educational unit (second)

Classroom/outdoor

futsal pitch

Number/16 students

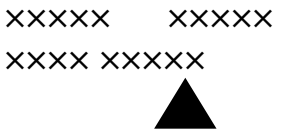
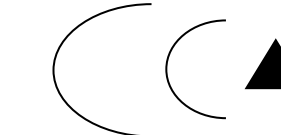

the date

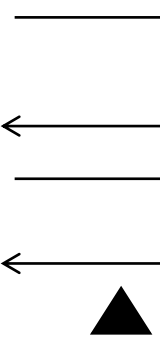
Time: 45 minutes


Grade: Third – Boys

Educational objective: Teaching the skill of handling (with the front of the foot) Educational objective: Emphasizing cooperation and respect

Tools (five legal footballs)

Notes	organization	All skill details	Time	educational unit sections
Ensure That all supplies are available and ready		Taking absences preparing all tools and placing them in the yard	5 d	Preparatory Section Introduction
Emphasis on adequate warm-up, proper uniform and proper exercise.		General preparation for all body parts and joints, and special preparation for the muscles and joints that perform the skill and all body parts related to movement.	5 d	General and special warm-up
Ensure detailed explanation and correct performance in front of students		The support team gives a clear idea about the handling skill and how to	10 d	Main part Educational part

		perform the skill through clear explanation and presentation by the model. Feedback is given by the team to the group leader in order to correct errors.		
Ensure that the groups work cooperatively and that everyone exchanges periodically, with feedback provided by the leader and teacher.	<div> <div>X</div> <div>X</div> <div>X</div> <div>X</div> </div> 	<p>Divide the group members into four cooperative groups, each group consisting of five students. After the teacher explains the skill, the students stand in front of the wall with the ball in their possession. Student (A) approaches the ball,</p>	20 d	The applied part

		then student (B) moves his leg back, then student (C) extends his leg forward, then student (D) touches the ball, then student (F) hits the ball, with feedback from the teacher until the skill is mastered.		
Ensure order and fun	xxxxx xxxxx xxxxx xxxxx 	Mini Game – Performing the Salute	5 d	Final section

Futsal Passing Skill Performance Evaluation Form

Final grade	Final stage	Main stage		Preliminary stage		Stage
From (10)	Body position after execution Evaluation From (2)	Kickin g ball place Evalua tion From (2)	Direct ion of gaze while kickin g the ball Ratin g from (2)	Back kicking leg swing Evaluati on From (2)	Place the pivot foot with a feel for the ball before kicking. Evaluatio n From (2)	Skill parts sequence Students
						1
						2
						3
						4
						5
						6
						7
						8
						9
						10
						11
						12
						13
						14
						15
						16

Futsal Goal Skill Performance Evaluation Form

Final grade	Final stage	Main stage		Preliminary stage		Stage
From (10)	Ball control and scoring Evaluation From (2)	Position the part of the body receiving the ball to absorb the momentum of the ball. Evaluation From (2)	Body position when receiving the ball Rating from (2)	Focus on the ball Evaluation From (2)	Body position before hitting the ball Evaluation From (2)	Skill parts sequence Students
						1
						2
						3
						4
						5
						6
						7
						8
						9
						10
						11
						12
						13
						14
						15
						16