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ORIGINAL STUDY

The Effect of Think-Pair-Share Strategy in Performance the Offensive Skills (Serving and Setting) in Volleyball

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Abstract

The primary objective of this study was to identify the effectiveness of the Think–Pair–Share strategy in volleyball, particularly with regard to the two skills under investigation. The study was conducted on a sample of female students from the College of Physical Education and Sport Sciences for Women, University of Baghdad. Concerning the methodology, the researchers adopted an experimental approach. The research population consisted of 93 female students distributed across five sections, and the study sample comprised 40 students selected randomly. Of these, 20 students were assigned to the experimental group and 20 to the control group, representing 43% of the original population. The instructional units continued for two months. The researchers employed skill-based tests specifically designed for the two skills examined in the study. The findings revealed that the experimental group achieved a higher level of performance in the post-tests of the first skill, with a mean score of 7.25 compared with 5.30 for the control group, yielding a difference of 1.95 points, a t-value of 7.462, and a significance level of 0.000. As for the second skill, the mean score of the experimental group was 7.95 compared with 5.50 for the control group, resulting in a difference of 2.45 points, a t-value of 9.759, and a significance level of 0.000. The most important conclusions and recommendations indicated that the application of the Think–Pair–Share strategy was appropriate for the students in the sample and contributed to improving their performance in the two skills under study. The students who learned through this strategy outperformed those who learned without it. Accordingly, the researchers recommended the use of this strategy in learning other skills and the organization of training courses for teachers to promote its use, and this achieves one of the sustainable development goals of the United Nations in Iraq which is (Quality Education).

Keywords: Think-Pair-Share strategy, Serving skill, Setting skill, Volleyball

1. Introduction

The Think–Pair–Share strategy is widely regarded as an effective instructional approach that enhances learning outcomes. The use of diverse teaching strategies facilitates the development of essential skills, particularly when active learning methods based on group work are employed, as they promote interaction and student engagement. Acquiring such skills affects building their strong personalities

and thus positively influencing society in the future. Strategies are important factors of successful teaching. Students need to be active in the group. They can achieve this by actively participating in learning, interacting with their peers, explaining what they have learned, listening to their viewpoints, and encouraging each other. Think-Pair-Share strategy is one of the most important cooperative learning strategies through which various skills are learned in a positive, collaborative way. Abdullah (2024) defined it as

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a modern cooperative learning strategy and a concise formulation of active cooperative learning. [Abdul-Radhi \(2019\)](#) added that this strategy is an active strategy that focuses on the dynamism, movement, interaction, and participation, and that is used to activate learners' prior knowledge and experiences.

The uniqueness of the Think-Pair-Share strategy revolves around several key elements: the thinking phase, the pairing phase, and the sharing phase. In other words, the learner is exposed to a large amount of information when using this strategy. In addition, applying this strategy will move the student from the stage of storing information to the stage of processing it. Individual reflection, then dialogue, then participation helps to store information in long-term memory significantly, quickly, and with greater retention compared to traditional learning.

This also aligns with the view of [Ben Nouioua and Al-Aqoun \(2021\)](#) who argue that the Think-Pair-Share strategy follows a logical, sequential sequence and relies on several stages, such that no step begins until the preceding step is completed. For example, the second step—i.e. pairing—does not begin until the first step—i.e. thinking—is completed, and the second step—i.e. sharing—does not begin until the second step—i.e. pairing—is completed.

In addition, employing the Think-Pair-Share strategy will help the student quickly recall and retrieve information due to the pressure she becomes accustomed to while sharing information in group discussions in the participation phase, which helps her recall information in the practical exam or match.

Although the Think-Pair-Share strategy places the learner at the center of the educational process, the teacher plays a significant, positive role. The teacher is present with the student at every stage of the strategy: preparing and formulating the questions, guiding students to write down their ideas after they go to the second stage and receive answers through discussion, and then guiding them to participate and discuss further in the sharing stage. Furthermore, the teacher is responsible for guiding students to compare the answers presented by all groups in the final discussion.

Think-Pair-Share strategy is an active learning strategy. It encourages students to be active and to communicate with their peers which increases their cognitive motivation. Furthermore, this strategy provides the student with the opportunity to make decisions, engage in group discussions, and choose an alternative answer. This enables students to think at higher levels compared to basic thinking and leads them to acquire higher-order thinking skills because decision-making is one of the most important higher-order thinking skills. [Al-Zuhairi and Nadeem \(2025\)](#) agree with this fact. They indicated that decision-making skills are related to the higher-order thinking

skills, in addition to being “the ability to choose the most suitable alternative from several options.”

The researchers observed that second-year students struggled with serving and setting skills as they were learning these skills for the first time. This prompted the researchers to adopt an alternative instructional strategy, which is the Think-Pair-Share strategy, and through it, answering the following questions:

- Is it possible to learn the skills of serving and setting using the Think-Pair-Share strategy in a more engaging way compared to traditional learning?
- Does the Think-Pair-Share strategy enhance social relationships among students during its implementation more than traditional teaching methods?
- Is it possible for the quality of learning using this strategy to be higher than that of traditional volleyball skills?

The purpose of this study is to develop volleyball training units using the Think-Pair-Share strategy and to identify the effect of this strategy on the performance of the serving and setting skills in volleyball of second-year female students at the College of Physical Education and Sports Sciences for Women. It was hypothesized in this article that there are no significant differences between the pre-test and post-test in the serving and setting skills tests for the experimental and control groups.

2. Methodology and procedures

An experimental design was employed involving two groups: an experimental group and a control group, by conducting pre- and post-tests. The study population consisted of second-year students of the College of Physical Education and Sports Sciences for Women in the morning study in the school year (2024/2025). The population consisted of 93 students distributed across five sections. This sample was selected because the participants study the skills in question in the second stage. The researchers identified the problem of the study with this sample and found that this problem has not been investigated in experimental studies like the current one. A total of (10) female students were randomly selected to represent (10.7%) of the original population. A total of (40) female students was randomly selected from sections (A) and (E) so that they represent (43%) of the original population. A total of (20) students from section (A) constituted the experimental group and 20 students from section (E) represented the control group. The pre- and post-tests were recorded, and performance was evaluated by experts based on three attempts, with an overall score assigned. The distribution of

the test scores is presented in Appendices 1 and 2 (the tests were adopted from Al-Zuhairi and Khalaf (2012)). The scoring criteria were as follows:

- Preparatory Section: 3 points.
- Main Section: 5 points.
- Final Section: 2 points.

The researchers also designed teaching units based on the Think-Pair-Share strategy to teach the two skills in question from an educational and practical point of view as follows:

• Educational Component

This component focused on the process of identifying students individually first, then identifying a partner or colleague for (the second step), which is pairing, and then identifying groups in the third step, which is collaboration. After that, the teacher begins to explain and present the skill in detail followed by using some aids such as showing a live model to increase focus on the details of the skill. Then the stage of asking questions begins. Students were given time to answer the questions in writing then the next step starts by pairing students, during which they were given time to discuss their answers and write down the common answer. The groups then moved to the final step, where they were given time to discuss as a whole group then write down the agreed upon answer. Finally, a discussion was conducted between all the groups and the teacher. Here, the correct answer to the question was confirmed, and the group that arrived at the correct answer was acknowledged.

• Practical Component

- In this component, the same technique was applied with questions which were individual, paired, and then group exercises.
- All students begin by performing individual exercises.
- The students then move on to performing paired exercises.
- The students move into groups to perform the exercises collaboratively.
- The difficulty of the exercises increases gradually with the tasks.
- The students were divided into groups according to levels (low and average) based on the results of the pre-tests.
- Allowing open discussion to select from the alternative answers.
- Developing self-reliance of students so that they can explore, apply, and accept guidance from peers in a cooperative environment.
- Providing ongoing feedback to groups or even individual students when necessary.

The experimental and control groups consisted of (40) female students. They received the tests at 9:00 am on Monday morning on (7/10/2024). The two skills performance tests (serving and setting) were administered and filmed with a video camera. The video recording of the skill measurement was presented to three evaluators. The grades of the evaluation are as follows: 3 points for the preparatory section, 5 points for the main section, and 2 points for the final section. The pre-test data was statistically processed using Levene's test to verify the homogeneity. The researchers applied the Think-Pair-Share strategy to the experimental group over (8) consecutive weeks of the first semester of the academic year (2023–2024) with a lesson once a week. Thus, the total is (8) practical lessons. Each of these skills has (4) practical lessons. The teaching plan included this strategy started from Monday, October 14, 2024, and ended on Monday, December 2, 2024. The Think-Pair-Share strategy was applied in both the educational and practical sides. The researchers used (56) educational exercises distributed over 8 units. A total of (28) exercises were specified for each skill with (7) exercises per lesson, and each exercise lasted for (5) minutes. In contrast, the control group, was taught the two skills in the standard way. The total duration of each practical session was 90 minutes, divided into a 15-minute preparatory phase, a 65-minute main phase, and a 10-minute concluding phase. The instructional component lasted 30 minutes, while the practical component required 35 minutes. The control group received the same instructional time as the experimental group. Following the implementation of the Think-Pair-Share strategy over eight consecutive weeks, post-tests were administered to 40 students from both the experimental and control groups under conditions identical to those of the pre-tests on Tuesday, 9 December 2024. Furthermore, after conducting the experiment, the results were processed using the Statistical Package for the Social Sciences (SPSS/V28) to find out percentage, arithmetic mean, standard deviation, Levene's test for homogeneity of variance, (t-test) for independent samples, and (t-test) for paired samples.

3. Results

The unit of measurement is scores. The difference is not significant if (Sig) > (0.05) at (0.05) significance level and 38 degrees of freedom.

Table 1 shows that there were no statistically significant differences between the experimental and control groups in the pre-tests for the serving and setting skills. The Sig value for the serving skill was

Table 1. The results of the pre-tests.

Test and Groups	N	Mean	SD±	Levene's test	(Sig)	t-value	(Sig)	Difference
Serving skill performance								
Experimental	20	1.55	1.146	0.419	0.521	0.257	0.799	Not significant
Control	20	1.65	1.309					
Setting skill performance								
Experimental	20	2.35	1.309	0.408	0.527	0.483	0.632	Not significant
Control	20	2.15	1.309					

(0.799) and for the setting skill (0.632), both of which are greater than the accepted significance level (0.05). Furthermore, the mean scores were comparable between the two groups. For the serving skill, the mean was (1.55) while it was 1.65 for the control group. For the setting skill, it was (2.35) for the experimental group compared to (2.15) for the control group.

The unit of measurement is scores; the difference is significant if (Sig) < (0.05) at a (0.05) significance and (19) degrees of freedom.

Table 2 indicates a statistically significant improvement in the performance of serving and setting skills in both the experimental and control groups between the pre- and post-tests; however, the experimental group demonstrated greater gains. In the serving skill, the mean score for the experimental group increased from 1.55 to 7.25, a difference of 5.70 points, while for the control group it increased from 1.65 to 5.30, a difference of 3.65 points. In the setting skill, the mean score for the experimental group increased from 2.35 to 7.95, a difference of 5.60 points, while for the control group it increased from 2.15 to 5.50, a difference of 3.35 points. Furthermore, the very high t-values with a significance level of 0.000 confirm that this improvement is not random. The low standard

deviations in the post-tests, particularly in the experimental group, also indicate that the improvement was not only in performance level but also in the degree of homogeneity and consistency between the groups.

The unit of measurement is scores; the difference is significant if (Sig) < (0.05) at a (0.05) significance and 38 degrees of freedom.

Table 3 shows that there are statistically significant differences in the post-tests between the two groups, in favor of the experimental group, in both skills. In the serving skill, the mean score for the experimental group was 7.25 compared to 5.30 for the control group, a difference of 1.95 points, with a t-value of 7.462 and a significance level of 0.000. In the setting skill, the mean score for the experimental group was 7.95 compared to 5.50 for the control group, a difference of 2.45 points, with a significance level of 0.000 and a t-value of 9.759. These results indicate that the educational units based on the (Think-Pair-Share) strategy were more effective than the method used in raising the level of skill performance, and that their effect was clearer in the setting skill compared to the serving skill, as evidenced by the wide difference between the two groups in this skill.

Table 2. The results of the pre- and post-tests for the two groups.

Test	Group	Comparison	Mean	SD±	Mean Difference	SD of Differences	t-value	(Sig)	Difference
Serving skill performance	Experimental	Pre-test	1.55	1.146	5.7	1.455	17.525	0.000	Significant
		Post-test	7.25	0.716					
	Control	Pre-test	1.65	1.309	3.65	1.424	11.46	0.000	Significant
		Post-test	5.3	0.923					
Setting skill performance	Experimental	Pre-test	2.35	1.309	5.6	1.429	17.525	0.000	Significant
		Post-test	7.95	0.605					
	Control	Pre-test	2.15	1.309	3.35	1.843	8.128	0.000	Significant
		Post-test	5.5	0.946					

Table 3. The results of the post-tests between the two groups.

Test and Groups	N	Mean	SD±	t-value	(Sig)	Difference
Serving skill performance						
Experimental	20	7.25	0.716	7.462	0.000	Significant
Control	20	5.3	0.923			
Setting skill performance						
Experimental	20	7.95	0.605	9.759	0.000	Significant
Control	20	5.5	0.946			

4. Discussion

The researchers found that the improvement was attributable to enhanced preparation and communication skills in both groups. The teacher's questions were stimulating and cognitively engaging. The researchers carefully applied the strategy to address the specific requirements of each skill while teaching the serving and setting skills. This is consistent with the view of [Qu et al. \(2025\)](#) who believe that long-term retention is more evident in practice groups. The researchers also believe that these results come from the adequate frequency of the exercise in a comfortable environment. The students experienced an engaging and enjoyable learning environment that played an active and positive role in the learning process, creating a feeling among the students that they were part of the educational process because this strategy makes the learner active and effective throughout the lesson through its three stages (think-pair-share). The student engages in self-reflection in finding the answer during the individual thinking step, then with her peer in the pairing step, and finally with the group in the collaborative teamwork step. All of this places the students in learning situations that require them to raise their level of utilizing mental processes in order to apply this teaching strategy. Applying the strategy triggered their mental stimulation and increased their ability to process the information. [Lola et al. \(2024\)](#) believed that external focus in teamwork contributes to improving the form and outcome of movement in simple tasks. As a result of the students being influenced by their peers' performance, whether in the pairing or participation phase, this was reflected in raising the level of individual student performance in post-tests. This agrees with the opinion of [Dawood and Salman \(2023\)](#) who believes that the Think-Pair-Share strategy is one of the active cooperative learning strategies since it helps provide an opportunity for individual thinking and for each learner to present what he has achieved to his colleague in a cooperative sharing manner and depends on reciprocal learning between peers. This aligns with the view of [Akkaya and Mirzeoglu \(2024\)](#) who believe that cooperative learning is more effective in academic learning and in acquiring volleyball skills. They also found that the Think-Pair-Share strategy, which included a sufficient number of specialized exercises for each skill within the learning unit and allocated enough time for each exercise, had a significant impact on the positive results. The repetition of the performance with a number of different exercises and sufficient time made the learning process easier and more engaging. This is similar to the view of [Hamid and Yahya \(2019\)](#) who believes that "using the Think-Pair-Share strategy puts students

in interaction with the educational situation. This strategy is characterized by reducing the level of fear and embarrassment and providing an interesting atmosphere". Furthermore, "Teachers can capitalize on learners' excitement and motivation by guiding them towards planned learning situations that they actively engage with. This engagement should be sustained until the learning process is completed within a plan that includes precisely defining the learning objectives, stimulating learners' excitement and motivation to achieve specific goals, maintaining interaction between learners and teachers, ensuring learning takes place, and accurately evaluating the objectives" ([Ghazi, 2016](#)). This is consistent with the findings of [Azzaloualidine and Erturan \(2025\)](#) who believe that the evaluation process has improved students' learning experiences. [Sultan \(2007\)](#) indicates that "this strategy makes the learner active and effective through interactive, collaborative discussions which are its focus, thus helping to increase the rate of effective participation of learners." In addition, [Abdulameer \(2022\)](#) indicates that this strategy is based on theoretical foundations for teaching concepts and is related to the presentation of those concepts, which leads to the retention of cognitive information by students. The researchers also believe that learning according to this strategy will inevitably affect the form of play and the optimal application of the skills in question when students begin to implement them in play. This aligns with the view of [Amparo et al. \(2025\)](#) who believes that such results indicate the development of roles in tactical variables in volleyball matches.

5. Conclusions

- 1- The Think-Pair-Share strategy has a positive effect on the learning of second-year female students at the College of Physical Education and Sports Sciences for Women.
- 2- The application of the Think-Pair-Share strategy improves the performance of serving and setting skills in volleyball among second-year female students at the College of Physical Education and Sports Sciences for Women.

6. Recommendations

- 1- Update the teaching strategies in physical education.
- 2- Include the Think-Pair-Share strategy in training courses and workshops in the General Directorates of Education, and to familiarize sports teachers with them.

- 3- Utilize active learning strategies to ensure the quality of education and, on the other hand, to promote health and well-being. Implementing these strategies leads to skill mastery, and through this development in performance, we will have helped build a generation that possesses physical and social competence.
- 4- Conduct further studies and research on other sports and athletic activities.

Author's declaration

Conflicts of interest

None.

We confirm that all tables and figures in this article are ours and written by the researchers themselves.

Ethical-Clearance

This manuscript approved by the Scientific Committee of the College of Physical Education and Sports Sciences for Women, University of Baghdad, Iraq, on (2024/10/01).

Author's contributions

All contributions to this study were carried out by the listed authors. Najlaa Abbas Al-Zuhairi contributed to the study design, supervision of the research procedures, and final revision of the manuscript. Nihad Mohammed Alwan contributed to data collection, organization, and implementation of the experimental program, as well as drafting the manuscript. Liza Rustum Yaqoob contributed to data collection, implementation of the experimental procedures, and preparation of the initial draft of the manuscript. Missaa Nadem contributed to data organization and analysis. Yousra Juma Al-Sinani contributed to reviewing, editing, and finalizing the manuscript.

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Roles of each researcher in the research

Najlaa Abbas Al-Zuhairi was responsible for the conceptualization of the research idea, study design, supervision of the research procedures, interpretation of the results, and final revision of the manuscript. Nihad Mohammed Alwan participated in data collection, organization, and implementation of the experimental program, and contributed to drafting the manuscript. Liza Rustum Yaqoob contributed to data collection, implementation of the experimental procedures, and preparation of the initial draft of the manuscript. Missaa Nadem assisted in data organization, statistical processing, and interpretation of results. Yousra Juma Al-Sinani contributed to reviewing, editing, and finalizing the manuscript.

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Data availability

The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

References

- Abdulameer, H. H. (2022). The effectiveness of the Think-Pair-Share strategy in acquiring concepts of art elements and principles among students of the Art Education Department. *Wasit Journal of Human Sciences*.
- Abdullah, H. R. (2024). The effect of the Think-Pair-Share strategy on developing creative thinking among students of the Art Education Department in ceramics. *Journal of the College of Basic Education, Al-Mustansiriyah University*.
- Abdul-Radhi, H. A. (2019). The effect of the Think-Pair-Share strategy on cognitive achievement and learning selected volleyball skills among students of the Faculty of Physical Education in Qena. [10.13140/RG.2.2.27819.26407](https://doi.org/10.13140/RG.2.2.27819.26407)
- Akkaya, E., & Mirzeoglu, A. (2024). The effect of cooperative learning model on academic learning time and acquiring volleyball knowledge and skills. *Education and Science*, 49(220), 83–108. <https://doi.org/10.15390/EB.2024.13111>
- Al-Zuhairi, N. A., & Khalaf, N. Z. (2012). *Fundamental principles of volleyball skills and methods of learning them*. Al-Mawal Press.
- Al-Zuhairi, N. A., & Nadeem, M. (2025). *Contemporary teaching principles: From brain research to virtual reality*. Araa Printing and Publishing House. https://isbniaraq.org/?s=9789922821146&post_type=product
- Amparo, R.-G., Manuel, C. S., & Alberto, M. D. (2025). The effect of ecological approaches on tactical performance in volleyball: A systematic review. *Applied Sciences*, 15(12), 6721. <https://doi.org/10.3390/app15126721>
- Azzaloulaidine, Y., & Erturan, G. (2025). The effects of peer and self-assessment on students' self-regulation, perceived motivational climate and volleyball skill in physical education. *Pamukkale Journal of Sport Sciences*, 16(2), 398–426. <https://doi.org/10.54141/psbd.1665313>
- Ben Nouioua, S., & Al-Aqoun, K. E.-D. (2021). The effectiveness of the Think-Pair-Share strategy in developing critical thinking skills among secondary school students. *Journal of Emir Abdelkader University for Islamic Sciences*, 34(3), 535–576.
- Dawood, S. S., & Salman, A. S. (2023). The impact of the Think-Pair-Share strategy supported by instructional videos

- on learning the straddle and tuck vaults on the women's artistic gymnastics vaulting table. *Scientific Journal of Physical Activity and Sports Sciences*. <https://doi.org/10.5281/zenodo.15211908>
- Ghazi, J. H. (2016). *The effect of accelerated learning on the acquisition, accuracy, and retention of selected fundamental volleyball skills* (Master's thesis, University of Kufa, College of Physical Education and Sports Sciences).
- Hamid, A. F. & Yahya, Y. J. (2019). The effect of using the Think–Pair–Share strategy within a group-based system on second-grade intermediate students' acquisition of physical concepts. *Iraqi University Journal*, 45(2), 408–418.
- Lola, A., Dalamitros, A. A., Zafeiroudi, A., Eradli, N., Clemente-Suárez, V. J., & Martín-Rodríguez, A. (2024). The Impact of an External Compared to an Internal Focus of Attention on Simple and Complex Motor Skills Acquisition in Novice Female Volleyball Players. *Children*, 11(12), 1560. <https://doi.org/10.3390/children11121560>
- Qu, L., Xiao, W., Zhang, S., Wang, K., & Li, H. (2025). Contextual interference effects on volleyball serve acquisition: A controlled trial with physical-education majors. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2025.1635207>
- Sultan, S. A. A. (2007). Developing the Think–Pair–Share strategy and its effect on improving selected written expression skills among primary school pupils. *Arab Studies in Education and Psychology*, 1(4), 69–119.

اثر استخدام استراتيجيات (فكر. زواج. شارك) في تعلم المهارتين الهجوميتين (الارسال والإعداد) بالكرة الطائرة لدى طالبات

نجلاء عباس الزهيري، نهاد محمد علوان، ليزا رستم يعقوب، ميساء نديم، يسرا جمعة السناني

المستخلص

كان الهدف الرئيسي من هذه الدراسة هو التعرف على فاعلية استراتيجيات فكر-زواج-شارك في الكرة الطائرة، ولا سيما فيما يتعلق بالمهارتين قيد البحث. أجريت الدراسة على عينة من طالبات كلية التربية البدنية وعلوم الرياضة للبنات في جامعة بغداد. ومن حيث المنهجية، اعتمد الباحثون المنهج التجريبي. تكوّن مجتمع البحث من (93) طالبة موزعات على خمس شعب، في حين بلغت عينة الدراسة (40) طالبة تم اختيارهن عشوائياً، حيث تم توزيع (20) طالبة في المجموعة التجريبية و(20) طالبة في المجموعة الضابطة، وبنسبة (43%) من المجتمع الأصلي. واستمرت الوحدات التعليمية لمدة شهرين. أظهرت النتائج أن المجموعة التجريبية حققت مستوى أداء أعلى في الاختبارات البعدية للمهارة الأولى، إذ بلغ المتوسط الحسابي (7.25) مقارنة بـ(5.30) للمجموعة الضابطة، وبفارق قدره (1.95) نقطة، وقيمة (t) بلغت (7.462)، ومستوى دلالة (0.000). أما بالنسبة للمهارة الثانية، فقد بلغ المتوسط الحسابي للمجموعة التجريبية (7.95) مقارنة بـ(5.50) للمجموعة الضابطة، وبفارق (2.45) نقطة، وقيمة (t) بلغت (9.759)، ومستوى دلالة (0.000). وأشارت أهم الاستنتاجات والتوصيات إلى أن تطبيق استراتيجيات فكر-زواج-شارك كان مناسباً لطالبات العينة وأسهم في تحسين أدائهن في المهارتين قيد الدراسة، كما تفوق الطلاب الذين تعلموا باستخدام هذه الاستراتيجيات على أقرانهم الذين تعلموا دونها. وبناءً على ذلك، أوصى الباحثون باستخدام هذه الاستراتيجيات في تعلم مهارات أخرى، وتنظيم دورات تدريبية للمدرسين لتعزيز استخدامها، لما لذلك من إسهام في تحقيق أحد أهداف التنمية المستدامة للأمم المتحدة في العراق، وهو (التعليم الجيد).

الكلمات المفتاحية: إستراتيجية فكر. زواج. شارك، مهارة الارسال، مهارة الإعداد، الكرة الطائرة.