Vol 2 Issue 4 Thi Qar University Journal of Physical Education

مجلة جامعة ذي قار لعلوم التربية البدنية

مجلة علمية محكمة تصدرها كلية التربية البدنية وعلوم الرياضة

The Effect of Blended Learning Strategy Using StoryLine3on Learning the Skill of Receiving Transmission in Volleyball for Students

Awad Younis Odeh Naeem

Faculty of Physical Education and Sport Sciences – University of Basra

ABSTRACT

Published online: 20/ 12/2025

Keywords: ***Volleyball, teaching methods, receiving the serve***

The research included several chapters, the first of which contained the research problem, its objectives, assumptions and fields, in addition to the importance of employing the blended learning strategy using the StoryLine3 program as a modern tool that combines e-learning and face-to-face to develop the skill performance of students in improving the accuracy and efficiency of the skill of receiving a transmission in the game of volleyball As for the third chapter, it contained the research methodology and its field procedures and the research sample, as the research community is the students of the Faculty of Physical Education and Sport Sciences, University of Basra, and the sample consisted of 35 students from the second stage, the researcher designed an educational program that prepares the electronic content and educational units for natural virtual education as described in Appendix No. 1, and after applying the educational methodology or educational program, he made pre- and post-tests for the students, compared them and addressed this statistically from During SPSS, as for the results and recommendations, the results of the research showed that there were significant differences with statistical significance and the validity of the experimental group, which indicates that the strategy using the Story Line 3 program had a clear effect on improving the students' skills in volleyball, as for the control group that adopted the usual traditional methodology, it showed an improvement, but this improvement is limited in technical performance, which is normal by virtue of the continuation of the practice of the skill, but it did not reach the level of the experimental group. As for the recommendations, it is necessary to have study programs in which modern techniques are used in teaching, as they are the most efficient at the moment and have a real impact on the target samples.

1- Introduction to the research

1-1 Introduction and the importance of research

Recent years have witnessed a great development in the field of physical education, and this is a result of the development of modern technologies used by researchers in the world, as well as the development of educational methods used in the field of education and teaching, and the specialization of physical education and sports sciences has become the attention of many because it develops the educational and teaching abilities and skills of the specialist in it, which enhances the capabilities of individuals and societies, in line with the civilizational development taking place, and studies have shown that the close relationship between the teacher and the learner and between the learners themselves plays A fundamental role in achieving the goals of education and enhancing the levels of educational performance (Ali, 2022), and because the learner is the focus of the educational process and developing his abilities represents a qualitative leap at the real professional level of the emerging teacher, and this process requires the development of modern strategies and the use of modern technologies that keep pace with the technological development taking place, and through this, the researcher used modern technology during the Story Line 3 program. As for volleyball, it is the most welcome team game in societies as it is competitive and contains a high level of skills that the individual must possess, and the teacher must be familiar with this and the use of technology in this game increases the possibilities of its absorption for students, and it is like other games that require modern methods and strategies that help in learning basic skills, especially the skill of receiving transmissions. It is the first skill that the player uses as a second touch after the serve, and it is through which the design of the point or how to obtain it by the team and collect points, so this skill has been focused on because of its importance in the game of volleyball.

The importance of the research lies in employing the blended learning strategy using the StoryLine3 program as a modern tool that combines e-learning and face-to-face learning to develop students' skill performance in improving the accuracy and efficiency of the skill of receiving a transmission in the game of volleyball.

1-2 Research Problem:

Technology has changed the methods of education rapidly, so new means must be used that combine the Internet with old methods to improve studying, it seems that students of physical education and sports sciences find it difficult to learn how to receive a volleyball transmission correctly, because they learn in traditional ways that do not care about their different levels or encourage them to participate in them, and therefore the problem was determined in light of the answer to the following question

Can a blended learning strategy using Story Line 3 improve students' performance in volleyball and receiving skills compared to the old methods?

3-1 Research Objectives:

1- Identifying the Effect of Blended Learning Strategy on the Learning Level of Receiving Transmission in Volleyball for Students

2- Preparing electronic and face-to-face educational modules to learn the skill of receiving the transmission in volleyball for students

1-4 Research Hypotheses:

1- There are significant differences in learning to perform the skill of receiving the transmission between the pre- and post-tests of the control and experimental groups and in favor of the experimental group

1-5 Research Areas:

1- **Human Field** : A Sample of Second Stage Students at the Faculty of Physical Education and Sport Sciences – University of Basra

2- **Time Domain** : 15/9/2024 – 21/1/2025

3- **Spatial Field** : Indoor Indoor Halls in the College

3. Research methodology and field procedures

3-1 Research Methodology:

The researcher used the experimental method by designing the two equal control and experimental groups to suit the research

3-2 Research Population and its Sample:

The research population was determined by the deliberate method, which are the students of the second stage in the college, as the study material is suitable for what will be presented in the research and because the material is taken at this stage, where the research population is from the students of the second stage in the Faculty of Physical Education and Sport Sciences - University of Basra for the academic year 2024-2025, which are 280 students, distributed over eight divisions and each division has 35 students, while the research sample was selected by the deliberate method, which consisted of two divisions (A and B) The number of (70 students), who constitute 25% of the total research population, where Division A was for the control group and Division B was for the experimental group, while the research sample for the exploratory experiment consisted of 10 students outside the research sample to ensure the validity of the research tools and its details.

3-3 Methods and Tools Used in the Research:

Arab and foreign sources, personal interviews, performance evaluation form, tests, volleyball court, balls, net, whistle, laptop calculator 1.

3-4 Research Procedures:

3.4.1 Identifying Research Variables:

The researcher reviewed previous studies and scientific sources and it was agreed to choose the variables he needs in the current research to suit his requirements.

3-5 Exploratory Experiment:

The researcher conducted the exploratory experiment to inculcate the accuracy of the work results and to avoid errors and obstacles that occur during the completion of the research, as the exploratory experiment was carried out on Thursday, 19/9/2024, on a random sample similar to your research eye.

3-6 Tests used in the research:

3.6.1 Technical Performance Evaluation Test of Transmitter Receiving Skill [1]

Objective of the test: Measuring the skill of receiving a transmission

Tools:

1 - The legal volleyball court and a net with a legal height for men, and (2) collars of diameter (1 m) each are placed in the position of (5) position (1) and two (2.5 meters) from the final line.

2- The front area is divided by three squares and the length of the side of each of them is (3 m)

Performance: The laboratory enters the center (5) inside the hoop and receives the ball with the arms from the bottom received from the teacher, and the student directs the ball to square (1) for five attempts, and for five attempts to square (2) and then to square (3) for five more attempts. The performance is repeated with the same number of attempts from the center (1) and from inside the hoop.

Performance Conditions

1- Total attempts (30) attempts from each collar (15) attempts

2- Performing all attempts and receiving with hands from below

Calculating Grades

1- (Three degrees) the ball falling inside the box

2- (Two degrees) Ball falling outside and near the square

3- One degree the ball falls outside the box but inside the pitch

4- Except for the above, the laboratory obtains zero grades and the maximum score is 90.

3-7 Pre-Test:

The researcher conducted the pre-test for the skill performance variable, and it was on Thursday, 26/9/2025, where the control group was tested at 8:30 am, and the experimental group at

[1] - Ali Mahdi Hadi and Adel Majeed Khazal: Field Tests in the Volleyball Event, 1st Edition, Neypour House for Printing, Publishing and Distribution, Iraq, Deposit No. 2293, 2015, pp. 142-143.

10:30 am, where the researcher prepared the needs of the test by preparing the camera, preparing it, and preparing the balls, and before that, he did the performance experiment in front of the students to teach them how to perform the test and when the student performs it.

3.8 Main Experience:

Type of indication	Value SIG	Calculated value (t)	Post-testing		Pre-test		Variables
			Standard deviation	Arithmetic mean	Standard deviation	Arithmetic mean	
Moral	0.00	5.14	0.85	6.22	0.74	4.90	**Receiving Transmitter**

The researcher conducted the main experiment on the experimental group after excluding those who practice the game in the group, as the application of the educational units started on Sunday, 6/10/2024, and the program contained two educational units per week, divided into an educational unit and an attendance unit, until 23/10/2024, and the time of the educational unit was 90 minutes, which contained three preparatory sections, and its time reached 20 minutes, which included general warm-up, jogging exercises, walking, and physical exercises, and the main one included two applied sections that amounted to Its time is 50 minutes, and the educational time is 10 minutes, after the researcher finishes clarifying the skill, we start by applying the suggested exercises for the skill in the educational units, and the concluding ones, as explained in the appendix (1).

3-9 Post-Test:

The researcher conducted the post-test of the skill performance variable, and it was on Thursday, 24/10/2024, where the control group was tested at 8:30 am, and the experimental group at 10:30 am, as the researcher created the same conditions as the pre-test.

3-10 Statistical Methods:

Data Processed Statistically via SPSS V2019

4. Present, analyze, and discuss the results

4-1 Presentation and discussion of the results of the pre- and post-tests of the control group for the skill of receiving the transmission

Table (1)

Presentation and discussion of the results of the pre and post tests of the control group for the skill of receiving the transmitter

It is clear from Table (1) which shows the arithmetic media, standard deviations, and test values (T) calculated for the technical performance of the transmission receiving skill in the pre- and post-tests of the control group, we find that the value of the arithmetic mean in the pre-test of the control group for the transmission reception skill was (4.90) while the value of the standard

deviation was (0.74), while the value of the arithmetic mean of the post-test was (6.22) and the standard deviation was (0.85), while the calculated value of (T) was (5.14) and the value of Sig was (5.14). It reached (0.00) and this value is less than the significance level of (0.05), which

Type of indication	Value SIG	Calculated value (t)	Post-testing		Pre-test		Variables
			Standard deviation	Arithmetic mean	Standard deviation	Arithmetic mean	
Moral	0.00	14.32	0.70	8.01	0.70	5.13	**Receiving Transmitter**

indicates that there are significant differences in favor of the post-test

The researcher attributes this improvement to the effect of the traditional educational program followed in the college, as (Mohammed Jassim Al-Azzawi)[1] pointed out that continuous exercise in performance during the period of the exercise release contributes to raising the level of skill among students even if modern teaching strategies are not used, as a result of the factor of experience in performance and the development of skills and motor abilities over time, if the effect is clear in the traditional program, and the differences between the pre- and post-tests are an indication that Traditional education has a clear impact on improving skill performance, as Abdulhamid Ahmed Hassan points[2] out in that the amount of this effect is often less compared to modern strategies based on interaction and guided practice such as project-based learning or blended learning, which provide a stimulating learning environment for active learning and critical thinking.

4.2 Presentation and discussion of the results of the pre- and post-tests of the experimental group for the skill of receiving the transmission

Table (2)

Presentation and discussion of the results of the pre- and post-tests of the experimental group for the skill of receiving the transmission

[1] - Al-Azzawi, Jassim Mohammed. Modern Teaching Methods in Physical Education and Sport Sciences. Baghdad: Dar Wael Publishing, 2020, p. 156.

[2] - Hassan, Abdel Hamid Ahmed, Scientific Foundations of Sport Training, 2nd Edition, Cairo: Dar Al-Fikr Al-Arabi, 2018, p. 112.

It is clear from Table (2) which shows the arithmetic media, standard deviations, and test values (T) calculated for the technical performance of the transmission receiving skill in the pre- and post-tests of the experimental group, where we find that the value of the arithmetic mean in the pre-test of theexperimental group for the transmission receiving skill was (5.13) while the value of the standard deviation was (0.70), while the value of the arithmetic mean of the post-test was (8.01) and standard deviation (0.70) The calculated value of (T) was (14.32) and the value of SIG was (0.00), and this value is less than the significance level of (0.05), which indicates that there are significant differences in favor of the post-test of the experimental group.

The researcher attributes this clear improvement in the experimental sample to the application of the strategy he adopted, which provided them with the appropriate means to learn and practice the skill to reach mastery and real interaction between students and the teacher, and this thing contributes greatly to raising the level of skill performance significantly.

Al-Azzawi (2020)[1] **believes that the adoption of modern learning strategies such as active or project-based learning provides the student with multiple opportunities for conscious practice, which enhances motor acquisition and increases skill stability[1].**

As Abboud (2021) [2]**points out,** experiential strategies in physical education allow the student to have a deeper understanding of the skill through observation, analysis, and repeated practical application, which leads to higher motor response efficiency and performance accuracy

On the other hand, regular practice within structured learning units, while providing real-time and quick feedback, contributes to faster improvement of the learning process and the reduction of errors during the implementation of the performance, which is confirmed **by Hassan (2018[3])**

- Muhammad Jassim Al-Azzawi: Modern Teaching Methods in Physical Education and Sport Sciences. Baghdad: [1] Wael Publishing House, 2020, p. 156.
- Mahmoud Sami Abboud: Active Learning in Physical Education and its Impact on Motor Skills. Baghdad: Dar Al-[2] Taqaddam University, 2021, p. 134.
- Ahmed Abdel Hamid Hassan: The Scientific Foundations of Sport Training. 2nd Edition. Cairo: Dar Al-Fikr Al-[3] Arabi, 2018, p. 112.

who pointed out that learning by practice and immediate performance correction increases the speed of learning and enhances confidence in technical performance.

Type of indication	Value SIG	Calculated value (t)	Experimental Group		Control Group		Variables
			Standard deviation	Arithmetic mean	Standard deviation	Arithmetic mean	
Moral	0.00	**9.62**	0.70	8.01	0.85	6.22	**Receiving Transmitter**

These results are consistent with what **Mohammed (2019)** [1] said that the development of motor skills requires stimulating educational attitudes that combine the practical aspect and critical thinking, because when the student is given the opportunity for guided practice, he becomes more able to correct his motor mistakes and understand the mechanisms of correct performance.

Thus, it can be said that the educational strategy used had a real and direct effective impact on the development of the skill of receiving the transmission among the students of the experimental group and the target sample, by activating the positive feedback of the students and motivating them to self-learn, constructive criticism during the application and performance correction.

4-3 Presentation and discussion of the results of the post-tests of the control and experimental groups of the transmitting reception skill

Table (3)

Presentation and discussion of the results of the post-tests of the control and experimental groups of the skill of receiving the transmission

It is clear from Table (3) which shows the arithmetic media, standard deviations, and test values (T) calculated for the technical performance of the skill of receiving the transmission in the post-tests of the control and experimental groups, where we find that the value of the arithmetic mean in thepost-test of the control group for the skill of receiving the transmission reached (6.22) while the value of the standard deviation reached (0.85), while the value of the arithmetic mean of the post-test For the experimental group, the standard deviation was (8.01) and the standard

[1] - Raad Abdul Zahra Muhammad: Measurement and Evaluation in Physical and Sport Education. Basra: University of Basra, 2019, p. 87.

deviation was (0.70) The calculated value of (T) was (9.62) and the value of (Sig) was (0.00), and this value is less than the significance level of (0.05), which indicates that there are significant differences in favor of the post-test of the experimental group.

This superiority is attributed to the nature of the educational strategy in the experimental group, which relies on involving the learner in real and realistic educational situations, activating his positive role in solving problems and employing feedback during the skill implementation of the requirements of that performance, which leads to the improvement of the learning process and clarification of the skills ideas with its requirements **clearly**, [1] as Hamid (2019) points out. Noted that active strategies based on guided practice and performance awareness contribute to increasing the effectiveness of motor learning and develop the student's ability to self-correct mistakes

Salman (2020) [2] also emphasizes that the adoption of modern educational methods based on experimentation, observation and kinesthetic analysis achieves tangible progress in the level of artistic performance compared to traditional methods, because the student becomes the center of the educational process and not only the recipient

On the other hand, the use of teaching methods based on analysis and feedback contributes to the consolidation of learning and increases motor comprehension, as **Abdullah (2018)** [3] explains that practical application accompanied by a discussion of performance increases the quality of learning and leads to better results in post-tests

This superiority in the experimental group, especially in the post-test, completely reflected the efficiency of the blended learning strategy using the Story Line 3 program , which put the points on the letters and provided the opportunity for the actual development of the target sample, and showed them full knowledge of the requirements of the skill performance from the real picture of the theoretical explanation and the real presented model to the application and the mechanism of application and finding the immediate feedback of the performance.

5- Conclusions and recommendations

5.1 Conclusions

[1] - Adel Abdel Karim Hamid: Modern Teaching Methods in Physical and Sport Education. Baghdad: University Culture House, 2019, p. 142.

[2] - Hussein Ali Suleiman , The Effectiveness of Active Learning Strategies in the Development of Motor Skills. Basra: University of Basra, 2020, p. 128.

[3] - Kazim Muhammad Abdullah: Foundations of Motor Learning and its Applications in Physical Education. Amman: Dar Degla Publishing and Distribution, 2018, p. 95

1- The results of the research showed that there were significant differences with statistical significance and the testimony of the experimental group, which indicates that the strategy using the Story Line 3 program had a clear effect on improving the students' volleyball skills.
2- As for the control group that adopted the usual traditional methodology, it showed improvement, but this improvement is limited in technical performance, which is normal due to the continuation of the practice of the skill, but it did not reach the level of the experimental group.
3- These results confirm that the integration of modern technology and technologies that are actually useful to students represents an effective guide in the development of teaching of the core skill, performance analysis and satisfactory results.
4- The Story Line 3 program contributed to enhancing students' interactive learning through designed activities, which provided opportunities for visual, auditory, and motor interaction among students, which led to an increase in the desire to learn and improved attention and actual focus on performance.

5.2 Recommendations

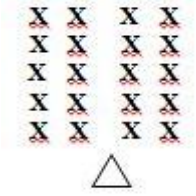
1- It is necessary to have study programs in which modern techniques are used in teaching, as they are the most efficient at the moment and have a real impact on the target samples.
2- Encouraging researchers to work on modern technology and encouraging research work that includes modern technologies because of their clear impact on the development of education, teaching and all modern learning assets.
3- Holding training workshops for professors and graduate students that include interactive lesson design and the use of digital technologies.

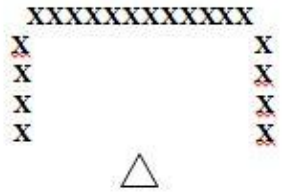
Sources:

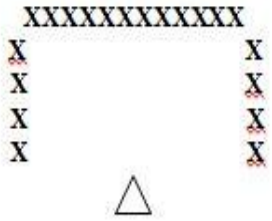
- Ali Mahdi Hadi and Adel Majeed Khazal: Field Tests in the Volleyball Event, 1st Edition, Dar Neyppur for Printing, Publishing and Distribution – Iraq, Deposit Number in the House of Iraqi Books and Documents 2293, Year 2015,
- Al-Azzawi, Jassim Mohammed. Modern teaching methods in physical education and sports sciences. Baghdad: Wael Publishing House, 2020
- Hassan, Abdel Hamid Ahmed. Scientific foundations of sports training. 2nd Edition. Cairo: Dar Al-Fikr Al-Arabi, 2018,
- Mohammed Jassim Al-Azzawi: Modern Teaching Methods in Physical Education and Sport Sciences. Baghdad: Wael Publishing House, 2020
- Mahmoud Sami Abboud: Active learning in physical education and its impact on motor skills. Baghdad: Dar al-Taqaddam University, 2021
- Ahmed Abdel Hamid Hassan: The Scientific Foundations of Sport Training. 2nd Edition. Cairo: Dar Al-Fikr Al-Arabi, 2018
- Raad Abdel Zahra Mohammed: Measurement and Evaluation in Physical and Sport Education. Basra: University of Basra, 2019
- Adel Abdel Karim Hamid: Modern Teaching Methods in Physical and Sport Education. Baghdad: University Culture House, 2019

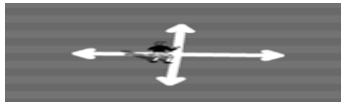
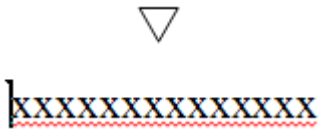
- Hussein Ali Suleiman The Effectiveness of Active Learning Strategies in the Development of Motor Skills. Basra: University of Basra, 2020
- Kazem Mohammed Abdullah: Foundations of motor learning and its applications in physical education. Amman: Dar Degla Publishing and Distribution, 201

Faculty of Physical Education and Sport Sciences Hall	Location	Teaching the skill of receiving a transmitter	Educational Objective	1	Unit Number
The second	Stage	Accustoming learners to teamwork	Educational Objective	Sunday 6/10/2024	Today and History
35 students	Number of Students	Whistle , Volleyball Court , Volleyball	Tools used		
90 minutes	Lecture Time	The student must perform the primary section of the skill of receiving the transmission	Behavioral Goal		

General Notes	Organizational Aspect	Activity Explained	Time	Type of Activity	Divisions of the Unit
Stand up regularly and wear a sports uniform to start the unit	xxxxxxxxxxxxx △	Attending the stadium to register attendance and reaffirm commitment to the starting shout.	2D	Introduction	Preparatory Section (20 min)
Emphasize a warm-up procedure for all body parts and perform accurately and energetically.	xxxxxxxxxxxxx ◁ xxxxxxxxxxxxx	Normal Walking - Normal Jogging - Jogging with the arms rotated forward and back - Side jogging - Jogging with the knees high - Jogging with the whistle touching the ground right and left - Normal walking.	8D	Warm-up	
Emphasize that you perform the exercise correctly and give		- (Standing – Waisting) Jumps on the spots by opening and joining the legs (several times) - (Front Support) Arms Bending and Extension (Tools) - (Standing) Jumping by opening and joining the legs with the arms raised to the side and lowered (several times)	10 D	Physical Exercise	

relaxation exercisesfrom one workout to another.					**Main Section (60 minutes)**
- Emphasizing the clarification of the skill and its performance requirements for everyone through the students' position by listening to the content, answering the tests, and entering the electronic classroom. - Emphasizing the formation of a square minus a side by spacing .		- The teacher of the course presented the educational part after the electronic content was created through the Story.Line3 program and it was included for the students through the Meeting.id program after they reviewed it to discuss and understand the details of the lecture in addition to the exercises for the applied part as shown in the form		**Educational Part**	

- Emphasizing correct performance (arm and leg position) - Validation of performance - All students perform the skill - Perform the exercise correctly and try to remember the requirements for the correct performance of the skill		1- Students stand in two opposite groups, one student versus the other, and the student does a moderate bend with the knee joint and the torso perpendicular to the pelvis and look forward with concentration with the arms raised at face level, the exercise without a ball, and perform 5 attempts and the performance time is 30 seconds for each attempt, with a rest between exercises of 30 seconds. 2- The same exercise 1 and it is added to it a movement of stability and flexion in the knee joint, going down and up 5 times with a rest of 30 seconds between attempts, and then the second set. 3- The same exercise No. 2 with the arms raised high and corresponds to the movement of the legs, looking forward, the same attempts and rest time, then the second set is applied. 4- The two groups stand in front of each other at a short distance (0.5 m) and perform in intermittent parts with the whistle during the knee joint and the arms are extended and the arms go down 10 attempts, then the second group is applied.	**60 min**	**The Applied Part**	

Emphasizing the recreational part and practicing the game for all students Emphasize calm and relaxation	 	- **Signal Reversal Game** The teacher gathers the students in the middle and at the whistle he directs his arm in a certain direction, the students are required to run around against this signal, and the student who falls behind is out of the game until one student remains the winner and applauds him. Learners stand in a straight line, finish the lesson, return tools, and leave.	**8D** **2D**	**Game** **Small** **Departure**	**Concluding Section (10 min)**