

The Effect Of The Interactive Blended Learning Strategy In Learning The Skill Of Crushing Hitting In Volleyball For Students

Awad Younus Oudah¹, prof. Dr Lamia Hasan Diwan², Prof. Dr Shehab Ghalib Shehab³

University of Basra - College of Education and Sports Sciences¹

Almtoory1211994@gmail.com

<https://orcid.org/0000-0001-8439-7639>

University of Basra - College of Education and Sports Science²

lamyaa.hassan@uobasrah.edu.iq

<https://orcid.org/0000-0003-0377-6915>

University of Basra - College of Education and Sports Sciences³

Shehab.ghalib@Uobasrah.edu.iq

<https://orcid.org/0000-0002-8779-4960>

Abstract The effect of the interactive blended learning strategy in learning the skill of crushing hitting in volleyball for students

The research included several important details by building electronic educational units through the story.line3 program for the integrated interactive education strategy in which the researcher targeted the details of the main section, and there are also realistic educational units targeting all sections and details of the skill of crushing hitting in volleyball for students, the most important objectives of the research It is to build virtual and realistic educational units in the skill of crushing beating for students, and to identify the impact of these units on the students' level by testing them before and after performance and statistically processing details. Interactive blended learning and the tribal and remote tests in detail. The researcher presented, analyzed and discussed the results, and through the tables of test results for each of the experimental and control groups and the results of the post tests, it was found that the experimental group outperformed the control group in the skill of hitting the crush in volleyball for the students of the second stage in the College of Education Physical and sports sciences, and from this the researcher concluded to the effect of S The interactive blended learning strategy positively, as well as the superiority of the two groups in the pre and post tests in favor of the experimental group, and the experimental group outperformed the control group in the post tests.

I- Introduction to research

I-1 Introduction and importance of research

Our contemporary world is witnessing a scientific, technological and information revolution that has surpassed the previous revolutions over the centuries, and through modern and appropriate technologies, learners are able to acquire information that is useful to them in facing new situations, in changing ideas, and in making judgments." The e-learning literature has indicated the existence of a number of Models related to its use in the teaching and learning processes, including the interactive blended learning strategy (Blended.Learning), which is based on employing the interactive blended learning strategy with the usual classroom instruction so that they share in the

achievement of the learning process, and in this formula, teaching and learning is directed by the teacher, i.e. led by the teacher (4:112) and the volleyball game is one of the competitive team games that took the lead in terms of its spread in the world, and the volleyball game depends on technical skills as an important base upon which this game is built to advance in the level of performance, and through the foregoing, the importance of the research lies in the benefit From the interactive blended learning strategy and its promotion to serve the sports field and learn some basic skills in volleyball.

Research problem

The problem of the research lies in the absence of a real method or a new method that contributed to the development of the level of students in their field of specialization in this exceptional situation on the student, and it was through building programs that adapt to the level of students and turn it into a practical, simultaneous theoretical application

1-3 Research Objectives:

1- Preparing interactive educational units and identifying the effect of the interactive blended learning strategy in learning the skill of crushing hitting in volleyball for students.

1-4 Research Hypotheses

1- There are significant differences with statistical significance for the interactive blended education in learning the skill of crushing hitting in volleyball among the students of the control and experimental groups.

1-5 Research Areas

- 1- The human field: second stage students in the College of Physical Education - University of Basra for the year 2020-2021
- 2- Time range: from 11/29/2021 to 29/1/2021
- 3- Spatial domain: classrooms in the College of Physical Education - University of Basra, electronic class (Meeting id).

2- Theoretical studies: The researcher wrote the theoretical side of the research by addressing the strategy and its details through its definition and its types, objectives and mechanism of action. for students.

3-1 Research Methodology:

The researcher used the experimental method to suit the nature of the research problem.

3-2 Research community:

The research community was chosen by the intentional method, and they are the students of the second stage in the College of Physical Education and Sports Sciences at the University of Basra for the academic year (2020-2021). The experimental group in Division (H) consisted of (27) students who used the interactive blended learning and its educational units in its main section through the storyLine3 program, and the control group was Division (F) numbering (26) students and they used the usual curriculum. Absentee students were excluded and the pilot sample was also excluded.

3-2-1 Homogeneity of the research sample

In order to identify the homogeneity of the sample and in order to isolate the influences that may affect the experiment, the researcher used the coefficient of variation to find out the extent of the homogeneity of the sample in the physical measurements and age, as the value of the coefficient of variation appeared less than (30%) , which indicates the homogeneity of the sample , the closer the coefficient of variation is from (1%) the homogeneity is considered high, and if it exceeds (30%) , it means that the sample is not homogeneous” (11:161)

3-2-2 Equivalence of the two research groups in the skill and cognitive tests

In order for the researcher to be able to attribute the differences in the results of the dimensional tests to the effect of the experimental factor , he resorted to verifying the equivalence of the two groups, using the (t) test for the asymmetric samples.

Table (1) It shows the equivalence of the two research groups in the skill and cognitive tests

| The significance of the differences | sig . value | t . value calculated | control group | | experimental group | | search variables |
|-------------------------------------|-------------|----------------------|---------------|------|--------------------|------|------------------|
| | | | P | S | P | S | |
| insignificant | 0.700 | 0.378 | 0.72 | 4.88 | 0.73 | 4.96 | smash hit |

3Means, tools and devices used

The researcher used a set of research methods and tools to obtain correct and integrated results in order to solve the problem, which includes the following:

1-3-3Methods for collecting information

Arab and foreign sources
Observation and experiment
The information network (the Internet)

2 - 3 - 3tools use

-Legal volleyball court

25 legal volleyballs
 -Measuring tape and adhesive tape (5 cm)
 2 laptops

4-3 tests used in the research

These tests were used because they were formulated by a specialist in this field and were subject to honesty, consistency and objectivity in order to revise them and provide the opportunity to apply them without scientific errors, and because they fit the skill and research sample that was used on them. In addition, the skills that were taken are based on the approach followed. By the sectoral body in higher education and the Faculty of Physical Education and Sports Sciences, not on the basis of the student's choice in the order of their application. The tests were as follows:

1-4-3 Technical performance evaluation test for the skill of crushing (1)(7:87)

-Purpose of the test: evaluating the technical performance of the confrontational crushing skill in its three sections (preparatory - main - final).
 Equipment: volleyball court, volleyballs, video camera.

-Performance specifications: The student performs the crushing strike facing the center (4) (three attempts) towards the opposite court, regardless of where the ball falls.

-Registration: The experts evaluate (Appendix No. 1) the three consecutive attempts for each player and give them three marks for each expert, noting that the evaluation degree for each attempt is (10) degrees distributed over the three sections of the crushing strike, and as follows: (3) degrees for the preparatory section and (5)) scores for the main section and (2) a score for the final section. The final score for each player is calculated by extracting the arithmetic mean of the three scores for each expert.

5- 3 field research procedures

1-5-3 Identification of Skills: The researcher has chosen the skill of hitting the smash in volleyball for students of the second stage in the College of Physical Education and Sports Science, because it is the skill that will be taught in the second semester.

2-5-3 Experimental Experiment:

In order to determine the accuracy and validity of the research work, and to avoid the obstacles that may appear during the experiment procedures, the researcher conducted an exploratory experiment, as Wajeih Mahjoub states, "Conducting the exploratory experiment leads to avoiding the

shortcomings while specifying the place, time and duration of the experiment(10:239).

The researcher conducted his exploratory experiment on Sunday (29/11/2020) on a random sample similar to the research sample of the second stage students, numbering (10) students, and they are from Division (A), which was carried out in the presence of the assistant staff. The purpose of the exploratory experiment was to identify the extent of Suitability of the strategy used with the sample under investigation

3-5-3 Pre-test:

The tribal test was conducted for the members of the control and experimental research groups for the skill variable of students of the second stage in the College of Physical Education and Sports Sciences - University of Basra, whose number is (50) students. at 8:30 in the morning, and the experimental group at 10:30 in the morning.

3-5-4 The main experiment: The researcher decided to separate it into two parts (real and hypothetical).

4-5-3 The main experiment: The researcher decided to separate it into two parts (real and hypothetical).
 •Educational units (real part)

After taking into account the state of social distancing in the lesson in order to avoid the tyrannical Corona pandemic injuries, the researcher conducted the main experiment on the research sample of only (25) students out of a total of (27) students, after excluding (2) students and the reason for exclusion is that they are players practicing volleyball For the first degree in one of the local clubs, as the educational units began to be applied on the date (6/12/2020) corresponding to Sunday, the program included (6) educational units at a rate of (2) educational units per week, and the time of one educational unit (90) minutes. As for the components of the educational unit, it was divided into three main sections (preparatory, main, and final), and each section had a purpose that links it to the other section and enhances it in reaching the goal. The total number of units time was (540) minutes, and the preparatory section reached (20) One minute for one educational unit, and its total amounted to (120) and included the general warm-up in which various exercises are performed during walking and jogging. Or vice versa.

As for the main section of the program, it included two aspects, namely, the applied section and the educational section, which was presented electronically after formulating its details through

the (Story.Line3) program and holding the lecture through the (Meeting.id) program, in terms of applying the educational unit formulated by the researcher There will be first: the educational activity that was offered electronically, its duration reached (an hour and a half) and its total amounted to (540) minutes, and its details will be clarified below when the virtual aspect is explained. After he finishes clarifying the skill exercises and performance details taken electronically and listens to their problems in the incomprehensible details to clarify them to the students (taking into account the principle of divergence in that) in the same formation, he starts applying the suggested exercises for the skill under study and as shown in the appendices, which contains exercises and details The educational units in the entire applied section, by dividing the students into realistic groups that allow the students to perform the exercise well with the presence of the repetition element of the exercise in order to consolidate it in the The minority of the student who performs the skill for the first time, in addition to a very important matter, which is the continuous feedback to the students and the correction of the performance errors made by the student. As for the final section, which is (10) minutes, and the total time is (60) minutes, and this section included calming exercises and a small game after that. The end of the lesson and departure.

- Virtual (electronic) units

The researcher designed a virtual electronic content that is presented and presented to students without the need for internet service for his work, and it is through the program (Story.Line3) and the details of this program are fully explained, in which the researcher targeted the main section of the skill of crushing and it was presented to students of the second stage in the College of Physical Education and Sports Sciences / University of Basra In it, the educational content of the skill was added to serve the educational process, through images, videos, YouTube illustrations (optional) and audio, in addition to the written content. And this test was designed by the researcher according to and in harmony with the information presented to the students, and this makes the researcher know more than one important aspect, which is that the student viewed the electronic content and the skill part in all its details by watching the explanatory videos of the method of skill performance, reinforced by the pictures as well and with the explanation The method of performance as well as the audio aspects that explain the content of what the student must do before During and after the performance and without

informing the student about it, he cannot answer the test at the end of the content, and also the student recorded his attendance in the lesson before entering and opening the content, and there is an important matter that was also placed in the content, which is a link that contains the students' opinion of the content that They looked at it, and it is important for the researcher to know what the negatives and positives faced by the students when entering the content for the first time. Everything that was mentioned is explained in detail. After the students take the scientific material with the presented electronic content, they are entered into the lesson room through the (Meeting.Id) program, where the In this program, scientific discussions begin with regard to electronic content and the nature of the presentation of the skill and the scientific material. Here, the professor directs questions to the students to know what they have learned in the content and what are the negatives and positives during it. After that, the teacher answers the students' questions and overlaps with them in the core of the material and the given skill. In volleyball, then the teacher presents the exercises that the student will perform in order to describe the skill and its stability and to perform the performance requirements in an ideal manner. The link between what was taken electronically and what will be applied on the ground.

5-5-3Post-test:

The post test was conducted for the members of the control and experimental research groups after completing the application of the main experiment and the skill variable of the students of the second stage in the College of Physical Education and Sports Sciences - University of Basra, which numbered (50) students. The post test of the technical performance variable was conducted on Sunday, 3/ 1/2021, where the control group was tested at 8:30 in the morning, and the experimental group at 10:30 in the morning, and it was taken into account that the timings of the pre-test were the same, and after obtaining the data and recording it in special forms prepared for this purpose in preparation for its statistical processing.

6-5-3Statistical means

The data were treated statistically through the use of the statistical portfolio program (20 SPSS ver.) through the use of multiple applications of the program.

4- Presentation and discussion of the results

1-4Presenting the results of the tests (pre and post) for the (control) group for the skill of crushing in volleyball

Table (2) It shows the arithmetic means, standard deviations , the calculated T value , and the significance of the differences between the results of the pre and post tests for some basic skills of the control group.

| The significance of the differences | sig . value | t . value calculated | control group | | experimental group | | search variables |
|-------------------------------------|-------------|----------------------|---------------|------|--------------------|------|------------------|
| | | | P | S | P | S | |
| insignificant | 0.00 | 5.43 | 0.70 | 6.20 | 0.72 | 4.88 | smash hit |

It is clear from Table (2) that shows the arithmetic means, standard deviations, and the calculated T-test values for the technical performance of the basic skills in the tribal and remote tests of the control group. It reached (0.72), and the arithmetic mean value in the post-test of the control group for the skill of crushing hit was (6.20), while the value of the standard deviation reached (0.70), and the calculated (T) value reached (5.43), and the value of (sig) It reached (0.00), and this value is less than the significance level of (0.05), which indicates the existence of significant differences in favor of the post test.

1-1-4 Discussing the results of the tests (before and after) of the (control) group for the skill of crushing volleyball

Through the results shown in Table (2), the researcher attributes the reason for this to the fact that the control group that followed the traditional method makes the teacher the active element and the student the recipient of information. The process of

producing ideas and their diversity was less than the experimental group that used the interactive blended learning strategy. However, it It has developed, but to a lesser extent, because it followed an educational curriculum that contains the skills under study and relied on the teacher's explanation of the skills in theory and practice without relying on the student or the lack of student participation and stimulating his thinking and motives towards learning, and not giving the space to make the student think and contribute to learning the skill used and participation In absorbing the information about the method of performing the skill and storing it after a while, and this result is consistent with the study conducted by (Haider Taha Abdel Reda 2014) on "The traditional method of learning does not help the learner's progress in learning technical skills well, which creates a negative attitude among learners towards The educational situation that was touched upon(2:35).

2-4Presenting the results of the tests (pre and post) of the (experimental) group for the skill of crushing volleyball

Table (3)

It shows the value of the arithmetic means, standard deviations, the calculated (t) value and the significance of the differences between the results of the pre and post tests of the crushing skill of the experimental group

| The significance of the differences | sig . value | t . value calculated | control group | | experimental group | | search variables |
|-------------------------------------|-------------|----------------------|---------------|------|--------------------|------|------------------|
| | | | P | S | P | S | |
| insignificant | 0.00 | 13.09 | 0.78 | 7.88 | 0.73 | 4.96 | smash hit |

It is clear from Table (3) that shows the arithmetic means, standard deviations, and the calculated T-test values for the technical performance of the crushing skill in the tribal and dimensional tests of the experimental group. The standard deviation

amounted to (0.73), and the arithmetic mean value in the post-test of the experimental group for the skill of crushing hit was (7.88), while the standard deviation value reached (0.78), and the calculated (T) value reached (13.09), and the value of (sig) has

reached (0.00), and this value is less than the significance level of (0.05), which indicates the existence of significant differences in favor of the post-test of the experimental group.

1-2-4Discussing the results of the tests (before and after) of the (experimental) group for the skill of crushing hitting in volleyball

Table (3) shows the results of the pre and post tests of the skill of crushing for the experimental group, and it is noted that there are differences between the results of the pre and post tests in favor of the post tests of the experimental group. The units for this strategy, as well as benefiting from the technological development to serve the educational process through the use of the (StoryLine3) program, which made a great contribution to the production of electronic educational content and presented to students in a way that makes them control the details of the lecture even without the need for Internet service, stresses (Nebras Ali Latif) That “the ability for the student to control the speed of displaying the skill performance, especially with slow presentation, repeated viewing and repeating the clip more than once, has a benefit and an impact on understanding and perceiving the material more((9:78))”. In this regard, Abbas Zaki and others asserted, "By using an alternative system to the method of teaching used, they used the e-learning system as an

3-4Presenting the results of the (post-test) tests for the two groups (experimental and control) for the skill of overwhelming hitting in volleyball.

Table (4)

It shows the arithmetic means, standard deviations, the calculated (T) value, and the significance of the differences between the results of the post-tests for the two experimental and control groups.

| The significance of the differences | sig . value | t . value calculated | control group | | experimental group | | search variables |
|-------------------------------------|-------------|----------------------|---------------|------|--------------------|------|------------------|
| | | | P | S | P | S | |
| insignificant | 0.00 | 7.97 | 0.70 | 6.20 | 0.78 | 7.88 | smash hit |

It is clear from the table (10) that shows the arithmetic means, standard deviations, and the calculated T-test values for the technical performance of the basic skills in the post tests of the experimental and control groups. It reached (0.78), and the arithmetic mean value in the post-test of the control group for the skill of crushing hit was (6.20), while the standard deviation value reached (0.70), and the calculated (T) value reached (7.97), and the (sig) value It reached (0.00), and this value is less

alternative to the teaching process in communicating the material to the students. Electronic networks provide means of guidance, direction, organization of tests, as well as managing and evaluating resources and processes(3:329) .

And she also mentions (Dr. Lamia Al-Diwan 2009) in this regard that "when the learner has the opportunity to learn at his own pace, it is considered a way to eliminate individual differences between learners(5:22) ."

This is what Abd Rabbo Hashem indicated, quoting from Alaa Badr Nouri and others, that designing lessons electronically is through which the theories of teaching and learning are linked and their applications in reality, through which a link is formed between educational theories and modern technology, and that the educational design process is a branch of Knowledge that is concerned with researching specialized theories in education strategies and the process of development and implementation of these strategies and after educational design from the modern sciences that have recently emerged in the field of education and works in the development of education and its experiences and data and describes the best educational methods that achieve the desired educational outcomes and describes the procedures related to testing the desired educational material to design (1:3) "

than the significance level of (0.05), which indicates the existence of significant differences in favor of the post-test of the experimental group.

1-3-4Discussing the results of the (post-test) tests for the two groups (experimental and control) for the skill of crushing hitting in volleyball.

In light of the results reached by the researcher in Table (4) and in light of the differences between

the results of the pre and post tests of the research sample, the impact of the interactive blended learning strategy appears as a modern strategy that aroused the learner's interest and interest in the game of volleyball and the details of its basic skills, and increased their desire Through knowledge of the subject, their preparation and readiness for it, and their integration with each other, which led to an increase in their academic achievement in this subject.

The use of the blended learning strategy in education led to an increase in the demand for volleyball lesson by members of the experimental group and led to motivating them to participate in the lecture more, considering that most of the topics raised from the stages of technical performance for volleyball are raised through discussion and deep research on The information while asking questions in a way that ensures that the learner works to benefit from the technological development and to serve the educational process through the programs that were used in preparing the material and posing it to the students, and that he is not only a recipient of the information, but rather a researcher, participant and interacting with his colleagues and more competition between him and them and this is what made the The strategy is interesting for learners and at a level of excitement, which makes the educational process more effective, and this is what the modern education process aspires to.

And (Nebras Ali Latif) pointed out, "The presentation of the most important common mistakes of the skill and their correction to reach the best performance helped the student to avoid falling into these errors during the motor performance and to make them more clear during the correct performance of the skill()".

This is consistent with what Lamia Al-Diwan and others indicated as "consistent with the requirements of the movement, the development of thinking and finding solutions during performance, and that strengthening the thinking process through the curriculum in a correct manner leads to the preparation of a generation of productive and thinkers of learners who are characterized by continuous self-learning, and that teaching through the development of thinking skills leads the learner to actual participation in the formation of a thinking structure, and this leads to transforming the educational process from indoctrination to relying on thinking and analysis and acquiring skills in self-learning.(6:343)

Conclusions and Recommendations

5.1 Conclusions

-1The educational units using the interactive blended learning strategy made an effective contribution to learning the skill of crushing volleyball for the students of the second stage of the experimental group.

-2The traditional curriculum prepared by the subject teacher has a positive effect on learning technical performance, and this was evident in the moral differences between the pre and post tests of the control group.

-3The students of the experimental group who used the interactive blended learning strategy and were subjected to the electronic curriculum through the (StoryLine3) program outperformed the control group in learning skills over the control group.

5.2 Recommendations

-1Urging educational institutions in the Ministries of Higher Education and Education to prepare educational units that take into account the use of the blended education strategy, especially when we are in this difficult circumstance that forces us to diversify or search for what suits students while they are far from studying in colleges or schools.

2- Emphasis on the use of the interactive blended learning strategy because of its importance in giving some pleasure and the desire to learn for any scientific subject, and this is what the researcher and supervisors touched during the experiment.

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