ELECTRONIC TRIADIC DIALOGUE STRATEGY AND ITS EFFECT ON THE LEVEL OF COGNITIVE ACHIEVEMENT OF SOME TECHNICAL SKILLS IN VOLLEYBALL

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ABSTRACT

The study aimed to define and modify a test for the cognitive achievement of some technical skills in volleyball for sophomores at the College of Physical Education and Sports Science as well as to identify the effect of using Electronic triadic dialogue strategy educational units on the level of cognitive achievement of some technical skills in volleyball for the subjects of the study. The researchers adopted the experimental method and decided the number of study subjects to be (15) students for each experimental and control group. The main inquiry-based experiment then executed in one educational unit per week for a period of (8) weeks. The results of the study indicated a significant effect on the results of the cognitive achievement test between the two groups in favor of the Electronic triadic dialogue strategy experimental group.

INTRODUCTION

Modern technology has many advantages in learning that are not provided by other educational methods, which are considered as one of the auxiliary media and an effective means in the educational process, and provide an effective environment for the learner by designing programs and applications that help to receive information, learn better, and remain easier in the memory for the longest possible period.

One of the modern methods used in the learning process is the use of modern software and the exploitation of individuals 'inclinations and employing them in learning processes based on learning methods, including the triple electronic dialogue strategy, which was designed for educational purposes because of its many advantages that may make it an effective tool in learning/

Hence the importance of research through developing the ability of students in the achievement of knowledge through diversity in the learning process using the triple electronic dialogue strategy and by using modern techniques in presentation and interpretation that enable the development of their cognitive abilities and employ them in a way that reflects on the achievement of knowledge and then obtain educational results of excellent quality And high.

The research problem emerged through the follow-up and observation of the students of the College of Physical Education and Sports Science / University of Baghdad and in volleyball specifically, the researchers emerged with a concrete problem from the ground, which is that the cognitive level of these skills needs to use modern methods of learning and diversity in them that integrate with electronic development Which helps the learner to understand and understand all the information and his

knowledge about the performance of these skills and their various aspects of knowledge. One of these modern methods is the electronic triple dialogue, which depends in its application on the knowledge explanation of the skill and discussion about the most important For points and then the application and evaluation of the learning process, so the two researchers decided to go into this problem and try to solve it by applying this educational method.

A study which is a previous study related to the subject of the study as a study (Dalia, 2011) showed that the use of triple dialogue has contributed to reaching the goal of the learning process and the integration of cognitive achievement through discussion, participation, providing feedback and improving their abilities in learning topics and solving problems during the stages of learning, and in (Karim, 2014) study revealed through the results of this study that the use of the tripartite dialogue strategy was effective in increasing the cognitive achievement of students from the experimental group and that it has the effect of increasing learning for students of this stage and increasing their awareness and awareness of what they are thinking as well as an increase in achieving the plans On the learning process, and in a study (Trad, 2017), it was found that the adoption of the tripartite dialogue strategy, by teachers and teachers contributed to the teaching and learning process and made the learner creative as well as it contributes to increasing the effectiveness between the student and the teacher through discussion and active participation of the student.

As the purpose of the study was:

- Preparing a cognitive achievement test for some basic skills in volleyball for students of the second stage in the College of Physical Education and Sports Science.
- Learn about the effect of using the triple-dialogue strategy on electronic and cognitive achievement of some of the volleyball skills of the research sample.

MATERIALS AND METHODS:

The researchers used in his research the experimental approach to design the two equivalent groups with pre and post tests, as the research community was represented by the second stage students at the College of Physical Education and Sports Science at the University of Baghdad for the academic year (2018-2019), as the researchers deliberately selected two divisions, as the sample for each division reached (15) , While the sample of the exploratory experiment (12) was from outside the research sample and from Division (H), while the building sample for the cognitive achievement test was on 3 subjects (B, C, E) of (98) students out of the total number of students.

The researchers used parity in the subject of cognitive achievement between the two research groups, as shown in the table below

Table (1)

Sig value	Computed t value	Control group		Experimental group		Measurement unit	Cognitive achievement
		standard deviation	Arithmetic mean	standard deviation	Arithmetic mean		
0.127	**1.04**	**0.974**	**7.898**	**0.612**	**8.624**	Degree	

The researchers relied on the application of the experiment on the specific vocabulary of the second semester of the curriculum of the College of Physical Education and Sports Science for the academic year (2018-2019) and prepared for the second phase of volleyball for skills (technical skills), as a test was prepared for the purpose of measuring the level of knowledge achievement of specific skills (multiplication The landslide, blocking wall, defending the stadium) and presenting its paragraphs to a group of experts and specialists in the subject of the study to know the validity of each paragraph through their agreement and as shown in the table below, which showed the extent of the experts' agreement on the paragraphs of the cognitive achievement test and showing its validity.

Table (2)

Statistical significance	The value of the Chi square		The percentage of expert opinions				The number of paragraphs	Paragraph number in the scale
	Tabular	Calculated	The ratio	Disagree	The ratio	Agree		
Moral	**3,84**	**11**	**zero**%	**zero**	**100%**	**11**	**13**	**1-5-8-14-17-18-20-22-23-24-25-26-28**
Moral		**7.36**	**9.09%**	**1**	**90.90%**	**10**	**7**	**7-9-11-12-16-21-30**
Moral		**4.54**	**18.18%**	**2**	**81.81%**	**9**	**9**	**2-3-4-6-10-13-15-19-29**
Moral Not		**0.818**	**63.63%**	**7**	**36.36%**	**4**	**1**	**27**

After completing the formulation of the paragraphs for cognitive achievement and determining their validity by presenting them to a group of experts and specialists, and in order to ensure that the test is comprehensive of the scientific steps in construction, the researchers prepared instructions for cognitive achievement test that show how to answer the test paragraphs, as the researchers took a look Consider some instructions when preparing, which are to be clear, easy, and understandable, in addition to this the need to answer all paragraphs in a way that is appropriate to the understanding and perception of the laboratory, for the researchers to carry out their exploratory experience on a sample of the 12 students. B out of my sample search (construction and application), and the purpose of which is to identify the most important difficulties facing researchers when building a sample application and the application, identify the extent to which students' understanding of the paragraphs of the test and clarity as well as the safety of their language and way of formulation. After that, the researchers applied the cognitive test to the construction sample, on a group of students of the second stage in the College of Physical Education and Sports Science, University of Baghdad, on the students of each section (B, C, E) and the number (98) students, and after scrutiny and examination were excluded (4) Cognitive test forms, which do not match the test terms and instructions.

After that, the two researchers perform the statistical analysis of the cognitive test items, as follows:

First: Coefficient of ease and difficulty and coefficient of distinction of the paragraph:

Table (3)

Coefficient of discrimination	Difficulty coefficient	Coefficient of ease	Paragraph number
0.52	**0.35**	**0.65**	**1**
0.40	**0.46**	**0.54**	**2**
0.57	**0.60**	**0.40**	**3**
0.62	**0.25**	**0.75**	**4**
0.42	**0.56**	**0.44**	**5**
0.65	**0.50**	**0.50**	**6**
0.5	**0.33**	**0.67**	**7**

0.42	**0.51**	**0.49**	**8**
0.60	**0.45**	**0.55**	**9**
0.42	**0.61**	**0.39**	**10**
0.60	**0.35**	**0.65**	**11**
0.42	**0.43**	**0.57**	**12**
0.40	**0.45**	**0.55**	**13**
0.34	**0.40**	**0.59**	**14**
0.42	**0.25**	**0.75**	**15**
0.42	**0.42**	**0.57**	**16**
0.52	**0.47**	**0.53**	**17**
0.55	**0.40**	**0.60**	**18**
0.47	**0.63**	**0.36**	**19**
0.35	**0.61**	**0.38**	**20**
0.47	**0.47**	**0.53**	**21**
0.47	**0.35**	**0.65**	**22**
0.51	**0.48**	**0.52**	**23**
0.67	**0.44**	**0.55**	**24**
0.42	**0.51**	**0.48**	**25**
0.65	**0.48**	**0.52**	**26**
0.42	**0.46**	**0.54**	**27**
0.50	**0.37**	**0.63**	**28**
0.42	**0.53**	**0.46**	**29**
0.58	**0.36**	**0.64**	**30**

Internal consistency of vertebrae (correlation of vertebra degree with overall test score)
Table (4)

Significance level	Calculated value of t	Correlation coefficient	sequence
0.000	**3.695**	**0.491**	**1**
0.016	**4.795**	**0.591**	**2**

0.003	**2.976**	**0.486**	**3**
0.000	**4.452**	**0.562**	**4**
0.000	**4.064**	**0.691**	**5**
0.001	**3.797**	**0.509**	**6**
0.005	**3.286**	**0.544**	**7**
0.045	**2.563**	**0.305**	**8**
0.038	**2.526**	**0.375**	**9**
0.025	**3.2014**	**0.411**	**10**
0.034	**3.558**	**0.477**	**11**
0.000	**4.305**	**0.549**	**12**
0.000	**4.626**	**0.662**	**13**
0.001	**3.964**	**0.582**	**14**
0.002	**3.725**	**0.494**	**15**
0.000	**4.408**	**0.559**	**16**
0.042	**2.737**	**0.380**	**17**
0.018	**3.868**	**0.508**	**18**
0.001	**3.765**	**0.498**	**19**
0.047	**2.953**	**0.385**	**20**
0.048	**3.567**	**0.478**	**21**
0.044	**3.414**	**0.462**	**22**
0.022	**3.627**	**0.692**	**23**
0.003	**3.015**	**0.466**	**24**
0.004	**3.174**	**0.490**	**25**
0.001	**3.897**	**0.518**	**26**
0.081	**3.405**	**0.468**	**27**
0.004	**3.970**	**0.518**	**28**
0.039	**4.475**	**0,506**	**29**
0.002	**3.417**	**0.333**	**30**

The value of the attributable tr (2.42) at the degree of freedom (79) and under the significance level (0.05)

As the two researchers point to the significance of the results for each of the paragraph discrimination factor, the ease, difficulty and difficulty of the paragraphs, and their internal consistency.

As for the psychometric properties of the cognitive test, the researchers followed

Verify the test:

The researchers used the differential honesty, by finding the coefficient of ease and difficulty of the paragraph, as indicated previously in Table (3), and the method of calculating the internal consistency of the paragraphs by finding the correlation coefficient between the degree of the paragraph and the total degree of the test as in Table (4), as well as finding the apparent honesty when Presenting the achievement paragraphs to experts and specialists to show their suitability, as shown in Table (2)

Stability of the test:

The two researchers used the midterm fractionation method, and the two researchers adopted the method of even and odd paragraphs and extracting the coefficient of stability by means of the correlation value.

Through this, the researchers were able to identify the extent of homogeneity of the two test items by using the (F) homogeneity test and confirm it, as the value of the mean, standard deviation, and variance of the first sample, respectively (9.03) (2.65) (3.45), and the mean value and standard deviation The variance for the second sample was respectively (8,85) (2.64) (4.34), but when applying the formula for fixed ratios, the calculated value of (f) was (1.09) which is less than the tabular value of (2,176) below the significance level (0.05) at a degree Freedom (95), and the two researchers then calculated the simple correlation coefficient (Pearson) between the two halves of the test, whose value was (0.894), and the researcher used this mod (Spearman-Brown). Thus, the value of the stability coefficient of the test was (0.865). To identify the significance of the statistical stability coefficient, the researchers used the second test, the correlation (TR), which showed its significance because the calculated value of (TR) of (7,650) is greater than its tabular value of (4.16) at a degree Freedom (95) and significance level (0.05). This is a sign of high stability to the cognitive achievement test.

After that, the two researchers conducted the pre-test of the research sample in mid-April, by preparing the appropriate and appropriate place, taking into account the conditions for carrying out the previously mentioned test, then the assistant team distributed the forms to the research sample after reading the instructions for answering the test and listening to some questions posed by students.

Preparing educational units using the electronic triple dialogue strategy:

The researcher prepared educational units using the tripartite dialogue strategy, as he prepared educational units based on the curriculum established for the second experimental group, where this method was applied through its main steps, which are as follows:

- At the beginning of the educational unit the main part a model of the targeted skill was presented through a pre-prepared video clip that covers the performance of the skill in all its aspects and this is the first step and is called the beginning.
- In the second paragraph, questions arise about the performance of the skill and what the students concluded and learned through this presentation and in the event that the exact answers are not obtained, a second video clip helps to enrich the student cognitively in order to try to reach the correct answers about the performance and the common mistakes and how to avoid them and then be done Applying exercises directly on the scene and during the performances the third stage is applied.
- At this stage, performance is evaluated by giving a correction between one exercise and another that contributes to enhancing performance. This correction is done through the presentation of an electronically prepared form that includes the correct form of ideal performance in a brief and rapid manner and the evaluation is repeated when the learner reaches the correct performance.

And the researcher took into consideration the strategy of the tripartite dialogue the following:

- The video demo includes kinetic skills, perfect performance, common mistakes and smooth and easy performance correction.
- Ensure that all students view the course by alerting them, discussing and discussing questions through the specified application.
- Questions and discussions are appropriate for the students 'level and the level of the material downloaded to the electronic application.

A model for electronic triple dialogue

After that, the researchers conducted the post-test in the beginning of June and accompanied the assistant work, under the same temporal and spatial conditions that were applied in the exploratory experiment and the same conditions for performing the test.

RESULT AND DISCUSSION:

Table (5)

SIG	Calculated T value	test after		test before		measruing unit	Variables
		standard deviation	Arithmetic mean	standard deviation	Arithmetic mean		
0.000	**29.597**	**.5707**	**24.375**	**0.612**	**8.624**	**Degree**	Cognitive achievement (experimental)
0.015	**18.604**	**3.204**	**20.097**	**0.974**	**7.898**		Cognitive achievement (control)

By presenting the results in the above table, which shows the existence of significant differences between the pre and post tests, and for both control and experimental groups in the cognitive achievement test, but the superiority in the tests is in favor of experimental, as the researchers attribute this superiority in the level of

cognitive achievement of the skills studied to the effectiveness of the strategy (dialogue Trio) through its three phases, as it contributed to improving knowledge through the demonstration of the educational content received by the experimental group followed by the response by the members of the sample through dialogue through scientific discussion among them about the educational content This, in turn, contributed to increasing the learners 'desire to discuss and reveal the pending information through the questions that are asked in the next stage, followed by the learners' evaluation about the educational material and the correction of errors, if any, which contributed mainly to the good presentation of the educational content, and this is what he indicated (Clinic, 2019) (This strategy is an effective learning strategy and it has a great role in providing an opportunity for dialogue, participation and reflection for students between them and the teacher, and this dialogue and participation led to the acquisition of a lot of knowledge of skills, creating a kind of interaction and Competition between the same group and the other groups, as the questions included in this strategy and its provocation, which in turn clarified all the contents of the educational material and this led to the task of participation for students to think continuously to search for the correct answer among them, and this generated a kind of complex thinking through stimulation Mental processes and gave birth to new ideas that led to an increase in their activity and pushed them to continuous communication to search for problem solving and for optimal performance, so this affected the level of learning).

As for the control group, its differences emerged significantly in cognitive achievement, due to their commitment to attending the lectures, and following the cognitive approach followed by the subject teacher during theoretical and practical lectures in volleyball skills, which was characterized by one educational method and non-diversification, which is the method (explanation and repetition), through What the subject teacher does in explaining the educational content of each skill by relying on the sources approved by the college and then asking questions to the students to see the extent of understanding the private information the educational content that was explained, and then he re-explains some points that some students could not In its knowledge and understanding the points of that subject, repetition and repetition by the subject teacher contributed to the acquisition of information on the cognitive aspect, and this educational method led to a slight development compared to the experimental group in the cognitive achievement of the control group, as (Jawad et al., 1989) indicate that It is necessary to introduce some diverse elements during the learning process or during the lesson for the purpose of excitement and excitement among learners.

View and discuss the results of cognitive achievement of some technical skills in volleyball for the two research groups.

Table (6)

SIG	Calculated T value	Control		Experimental		measruing unit	Variables
		standard deviation	Arithmetic mean	standard deviation	Arithmetic mean		
0.019	**2.616**	**3.204**	**20.097**	**.5707**	**24.375**	Degree	Cognitive achievement

Through the above table, there were significant differences in the cognitive achievement test in the dimensional tests between the control and experimental groups and for the benefit of the experimental group, as the researchers attribute these differences to the effectiveness of using the triple dialogue strategy, which is one of the theories that support cognitive constructive theory, through what is characterized by these The strategy that pays attention in building cognitive processes by building the educational material in a coherent and integrated manner, and organizing the content of the educational content to be learned, through a dialogue between the teacher and the learner, which generates an interaction in the educational process and The what referred to him (Trad 0.2017) "The component president of the theory Bannaiah- social focus is on the role of the teacher and the learner and the dialogue between them to learn, as it helps the language to

identify vital ideas through emerging between the learner and teacher dialogue or among learners with each other."

The researchers also see that this superiority is due to the effectiveness of the concepts of electronic maps, which adopted the style and method of learning on visual forms such as pictures and videos, and the merging of textual clips with them that contribute to the presentation of the concept of educational content for each skill, which contributed to the consolidation of this image, The information on their minds, in addition to the effectiveness of this strategy in more than one sense in the learning process, will be more effective in knowledge, and this is confirmed by (Khion, 2010) The learning process takes place through several senses, the most effective of which is to implement or work with performance. ” hear - Forget, see - Remember, work - learn) And learning occurs in the kinetic memory by looking and then the memory of hearing, so the trainers and teachers use the various means of clarification for the purpose of enhancing the memory) and this is what the traditional method of the control group lacked.

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