Proximus Journal of Sports Science and Physical Education

Volume 1, Issue 5, May 2024

https://proximusjournal.com/index.php/PJSSPE

ISSN (E): 2942-9943

THE EFFECT OF THE ANALOGICAL THINKING STRATEGY IN TEACHING SOME DEFENSIVE AND OFFENSIVE PRINCIPLES OF HANDBALL TO STUDENTS

Asst. Lect Mohammed Jaber Dawood (Basra Education Directorate**)**

Abw45528@gmail.com

Prof. Dr Hussain Ali Muhsin (university of Basra**)**

Prof. Dr Kaem Habib (university of Basra**)**

ABSTRACT

One of the modern strategies that works within the principles and ideas of constructivist theory, which is considered a teaching approach that enables teachers to teach their students in a way that is described as constructivist, is the analogical thinking strategy, which works to link information, observations, and previous experiences with new information and assignments that are similar, different, or They are similar to each other in theory or application.

From all of the above, the importance of research lies in experimenting with the analogical thinking strategy, which enables, through the sequence of its steps, the creation and representation of concepts and variables (similarities and differences) and the strengthening of students' potentials and abilities in building knowledge, relying on their stored knowledge environment to reach common solutions. Or individually by students to achieve the goal of the educational unit

The problem of the research is how the teacher can establish a method of thinking about analogical knowledge and the method of obtaining it, reformulating it, and building it in the theoretical and practical aspects through an organized set of facts, concepts, and instructions, and drawing a map of the extent of similarity and difference in thinking and performance. Arriving at solutions based on the knowledge environment he possesses to achieve the goal or goals of the educational unit and not through automatic learning by the teacher.

The aim of the research was to prepare an educational curriculum according to the analogical thinking strategy in teaching some offensive and defensive principles of handball to students. Also identifying the effect of the analogical thinking strategy using physical modeling and the method used by the teacher (Al-Amri) in teaching some defensive and offensive principles of handball to students.

The researcher used the experimental method (two equal groups) because "the experiment searches for the cause and how it occurs, and the researcher addresses the variables of the phenomenon by studying the causes of a sample of third-year students in the College of Physical Education and Sports Sciences at the University of Basra for the academic year (2022-2023) for study." Al-Sabah (305) students. The most important conclusions were that the educational curriculum prepared by the researcher had a positive impact on all the variables investigated, as well as the approach, but the best was the curriculum prepared by the teacher.

The educational units provided active participation and departure from the familiar by comparing similarities and contrasts and arriving at applied solutions.

Keywords: Analogical Thinking: Strategy: Defensive and Offensive Principles:

Proximus Journal of Sports Science and Physical Education
Volume 1, Issue 5, May 2024
https://proximusjournal.com/index.php/PJSSPE
ISSN (E): 2942-9943

Introduction

The goal of education is no longer only the acquisition of quantitative and qualitative knowledge, but in addition to that, the acquisition of multiple skills in the field of education, whether they depend on personal efforts or group work. Teaching is a science and an art. It is a science like the rest of the other sciences because of the attitudes and attitudes it contains. Multiple information and skills represent the teaching environment and the learner's environment, and this requires the teacher to use teaching methods, methods and strategies that have an impact on achieving educational and pedagogical goals.

God Almighty has bestowed upon man many blessings, the most important of which is the human mind, which if it is exploited thoughtfully, the results will inevitably be crowned with success through planning and organizing ideas in a way that is compatible with the desired goal, and that thinking is a human characteristic that is activated through follow-up and planning. Using methods and strategies that the learner can follow in researching and investigating information to find the solution to a problem.

One of the modern strategies that works within the principles and ideas of constructivist theory, which is considered a teaching approach that enables teachers to teach their students in a way that is described as constructivist, is the analogical thinking strategy, which works to link information, observations, and previous experiences with new information and assignments that are similar, different, or They are similar to each other in theory or application.

Finding the relationship between them in terms of similarity or difference and the situations in which these situations can be used is by adopting modeling, which depends on material or visual means and data or drawings that mimic the nature of the situation or topic.

From all of the above, the importance of research lies in experimenting with the analogical thinking strategy, which enables, through the sequence of its steps, the creation and representation of concepts and variables (similarities and differences) and the strengthening of students' potentials and abilities in building knowledge, relying on their stored knowledge environment to reach common solutions. Or individually by students to achieve the goal of the educational unit

The objective of the study :

1_ Preparing an educational curriculum according to the analogical thinking strategy in teaching some offensive and defensive principles in handball to students.

2_ Identifying the effect of the analogical thinking strategy using physical modeling and the method used by the teacher (Al-Amri) in teaching some defensive and offensive principles of handball to students.

3_ Identifying which group is better, the experimental or the control group, in teaching some defensive and offensive principles of handball to students.

Methods and structure of the study

Experimental approach to the problem

The researcher used the experimental method (two equal groups) because "experimentation searches for the cause and how it occurs, and the researcher studies the variables of the phenomenon, creates intentional changes in some of them, and adjusts and controls some other related variables, in order to determine the effect of that on a dependent variable or In other words, arriving at causal relationships between both the independent and dependent variables" (Haider Abdul Razzaq 1:82)

Proximus Journal of Sports Science and Physical Education
Volume 1, Issue 5, May 2024
https://proximusjournal.com/index.php/PJSSPE
ISSN (E): 2942-9943

Participants

The research population was identified in an intentional way, and they are third-year students in the College of Physical Education and Sports Sciences at the University of Basra for the academic year (2022-2023) for the morning study, and they number (305) students, distributed among (10) groups studying the vocabulary of the prescribed handball subject. By the sector, the research sample was selected and divided by lottery (an experimental group, a control group, and a survey sample), where the number of the experimental group reached (35) students representing Division (G), constituting a percentage of (8.19) after (10) were excluded. Students due to absence, while the control group included (30) students representing section (F), constituting a percentage of (8.19) after (5) students were excluded. As for the exploratory sample, it included (25) students representing section (E), constituting a percentage of (4.91). From the sample population after excluding (10) students due to absence, the percentage of the research sample is (21.31)%. As shown in Table (1)

It shows the distribution of the population and the research sample

research community	Experimental	The unlikely	%	The officer	The unlikely	%	reconnaissance	The unlikely	%	percentage
305	35	10	8.19	30	5	8.19	25	10	4.91	21,31

Homogeneity and equivalence were conducted to ensure the normal distribution among the application sample members in (height - age - mass) for the control and experimental groups, as “the closer the coefficient of variation is to (1%), the homogeneity is considered high, and if it exceeds (30%), it means that the sample Heterogeneous (161:6)

Table No. (2)
It shows the homogeneity of the control and experimental groups in the research sample

Variables	measruing unit	mean	standard deviation	coefficient of variation
Height	Cm	161,11	4,87	% 3,039
Bloc	kg	61,02	4,28	% 7,029

Proximus Journal of Sports Science and Physical Education
Volume 1, Issue 5, May 2024
https://proximusjournal.com/index.php/PJSSPE
ISSN (E): 2942-9943

% 4,531	1,02	22,12	year	the age

Procedure

Observation - Personal interviews* - Arab and foreign sources - Expert questionnaire to demonstrate the validity of the educational curriculum - Questionnaire to evaluate the researched skills - Information Network (Internet)
Handball court - 4 handball - laptop calculator - magic chalkboard pens - 3 small blackboards - paper + pens - pictures - illustrative charts - magnetic shapes

Measures

Independent variable: analogical thinking strategy
- Dependent variable: skill acquisition of some offensive and defensive principles of handball
After the researcher presented a set of tests to a group of experts and specialists in the field of handball to demonstrate the validity of the tests that measure the skills under investigation, the researcher relied on the tests that obtained a percentage of (75%) of agreement between the opinions of the experts and specialists (366:5).

Analyses

The statistical program (spss) version 22 was used and extracted 1- Arithmetic mean 2- Standard deviations 3

- **Results**
- Table No. (3)
- It shows the arithmetic mean, standard deviation, and t value calculated for the results of the pre- and post-research variables for the experimental group.
-

Level of significance	Calculated t value	Posttest		Pretest		Variables
		stand	Man	stand	Man	
moral	4,12	0,80	11,50	0,93	5,32	Individual rapid attack test
moral	3,20	1,74	20,55	2,25	12,07	Formation Group Rapid Attack Test (1:2)
moral	4,20	2,65	4,25	0,98	1,43	Short-term defensive moves
moral	3,30	3,20	29,85	3,40	25,78	Various defensive moves with change of direction

Proximus Journal of Sports Science and Physical Education
Volume 1, Issue 5, May 2024
https://proximusjournal.com/index.php/PJSSPE
ISSN (E): 2942-9943

Through Table No. (3), we see that all the values of (t) calculated for all the skills studied for the experimental group are greater than the result of the tabular (t) under the level of significance (0.05) and the degree of freedom (24) and reaching (2.06). This indicates the presence of Significant differences in favor of the post-tests, and this achieves the first purpose

Table No. (4)
It shows the arithmetic mean, standard deviation, standard error, and (t) value calculated for the results of the pre- and post-research variables for the control group.

Level of significance	Calculated t value	Posttest		Pretest		Variables
		Stand	Man	stand	man	
moral	3,40	0,60	9,25	0,66	5,75	Individual rapid attack test
moral	5,32	1,52	17,80	2,22	11,02	Formation Group Rapid Attack Test (1:2)
moral	2,45	1,25	2,25	0,80	1,20	Short-term defensive moves
moral	4,12	2,15	27,32	2,92	24,70	Various defensive moves with change of direction

Through Table No. (4), we see that all the calculated (t) values for all the skills studied for the control group are greater than the tabular (t) value under the significance level of (0.05) degree and degree of freedom (24) and reaching (2.06), and this indicates There are significant differences in favor of the post-tests, and this achieves the first purpose

analysis of the results of post-tests on the variables investigated for the two research groups:

Table Figure (5)
It shows the arithmetic mean, standard deviation, standard error, and (t) value calculated for the results of the research variables for the two research groups.

Proximus Journal of Sports Science and Physical Education
Volume 1, Issue 5, May 2024
https://proximusjournal.com/index.php/PJSSPE
ISSN (E): 2942-9943

Level of significance	Calculated t value	Experimental group		Control group		Variables
		Stand	Man	stand	man	
moral	4,09	0,77	11,43	0,62	9,35	Individual rapid attack test
moral	3,29	1,53	20,35	1,54	17,80	Formation Group Rapid Attack Test (1:2)
moral	4,20	2,65	4,25	1,25	2,25	Short-term defensive moves
moral	3,30	3,20	29,85	2,15	27,32	Various defensive moves with change of direction

Through Table No. (5), we see that all the values of (t) calculated for the experimental group for all the skills studied are greater than the value of (t) calculated for the control group under the level of significance (0.05) and the degree of freedom (23) and reaching (2.05), and this indicates There are significant differences in favor of the experimental group in all the skills tests investigated, and this achieves the second purpose.

Discussing tests
Discussion of the pre- and post-tests for the two research groups:
Through Tables (5) and (6), the researcher sees the progress of the two groups in all the skills examined in the post-tests, and the reason for this progress is that learning occurs when practicing any skill or activity, and whenever this practice is under the preparation and supervision of a teacher who has the ability and knowledge in Finding factors to increase the learner's enthusiasm for learning through a clear and sequential educational curriculum, following sequential steps in explanation and presentation, with the use of educational and illustrative models that arouse the desire and motivation of the learner and increase his efficiency and ability to work on practicing and mastering the skill, and this increase is inevitably linked. With the effort made by the teacher.
This is what Qasim Lazam confirmed about this trend, as he believes that the clarity, objectivity, and logical sequence that characterize the educational curriculum that is applied by a teacher specialized in his field of work works to increase learning in the cognitive and skill aspects (56:4).
Zahir Hashim also believes, "When the teacher follows steps based on sound educational foundations, relying on his knowledge of the learner's capabilities and his stored experiences in setting goals that achieve learning, there will inevitably be a desire, drive, and development in their learning process" (102:2)

Discussing the results of the post-tests for the two research groups:

Proximus Journal of Sports Science and Physical Education
Volume 1, Issue 5, May 2024
https://proximusjournal.com/index.php/PJSSPE
ISSN (E): 2942-9943

Through Table (7), we see that the experimental group has made progress in all the post-tests of the variables investigated. The researcher believes that one of the reasons for the progress of this group is due to the philosophy on which the principles and steps of the analogical thinking strategy are based, which is based on the constructivist theory, which is considered one of the theories. Modernity in building the learner's knowledge, building his knowledge, and developing his cognitive perceptions by relying on some of the information stored with the learner and his previous experiences, which are identical or not identical to what is recently learned, and thus comparing what is learned and what has been learned to find some points of difference and The similarity between the two positions

This is confirmed by Zaytoun (2004), who believes that this strategy is consistent with the ideas of constructivist theory, through which learning takes place by constructing knowledge or reconstructing knowledge through the learner's positive interaction in interpreting and formulating learning on the basis of previously existing knowledge and understanding the situation. Educational position in a similar, similar, or contradictory manner to another educational position (23:3).

Conclusions

- The educational curriculum prepared by the researcher has a positive effect on all the variables investigated, as well as the approach followed, but the best was the curriculum prepared by the teacher.
- The educational units provided active participation and departure from the familiar by comparing similarities and contrasts and arriving at applied solutions.
- Adopting teaching strategies based on stimulating the student's thinking and motivating him to stimulate his educational environment.
- Conducting studies based on the analogical thinking strategy to study variables for other skills and activities.

References

1- Haider Abdul Razzaq Kazem Al-Abadi: The basics of writing scientific research in physical education and sports sciences, Al-Ghadeer Printing and Publishing Company 2- Ltd., Iraq, Basra, 1st edition, 2015, p. 82.
2- Zahir Hashem: The interconnected teaching method and its impact on learning and development through spatial organizational tests for the tennis teaching environment, doctoral thesis, University of Baghdad, College of Physical Education, 2002, p. 102.
3- Ayesh Zaytoun: Methods of Teaching Science, Jordan, Amman, Dar Al-Shorouk for Publishing and Distribution, 2004, p. 23.
- Qasim Lazam, Topics in Motor Learning, Baghdad, Al-Jumaa Press, 2005, p. 56.
5- Muhammad Hassan Allawi and Nasr al-Din Radwan: Measurement in Physical Education and Mathematical Psychology, 1st edition, Cairo, Dar Al-Fikr Al-Arabi, 1979, p. 366.
6- Wadih Yassin and Muhammad Hassan Muhammad Abd: Statistical applications and computer uses in physical education research, Dar Al-Kutub for Printing and Publishing, Mosul, 1998, p. 161.