

THE IMPACT OF SPECIALIZED EXERCISES ACCORDING TO THE LANDA MODEL IN LEARNING THE SKILL OF SERVING FROM THE BOTTOM IN VOLLEYBALL FOR STUDENTS

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ABSTRACT

The researchers also attributed this to the educational units created by him, which had a significant impact on demonstrating the differences in his units' diversity, this information had a direct effect on increasing the students' desire and excitement while learning and developing skills without any form of boredom, this information had a positive effect on the teaching profession in regards to serving from below in the sport of volleyball.

The researchers believe that Landa's educational philosophy is derived from the concept of continued interaction between the student and the teacher during the lesson. This interaction increases the students' capacity to participate in the conversation, which in turn increases their confidence.

Through the results that were exhibited, the scientists concluded that follows:

- 1. The two experimental groups (Landa's) that employed the Landa model had a positive effect on motor coordination and the learning of the serve from below in volleyball, however, the effect was different for each.*
- 2. The variety of educational endeavors participated in the students' acquisition of pertinent information.*

In view of the conclusions of the current study, the researchers make the following recommendations:

- 1. Introduce specialized exercises based on the Landa model for students of the Faculty of Physical Education and Sports Sciences at the University of Kirkuk to improve some down-serve techniques in volleyball, as they play an effective role in improving the variables studied.*
- 2. Pay attention to the application of new models, including methods based on behavioral theories, which can help improve students' level and improve the educational process.*

KEYWORDS: *Special exercises, Landa model, learning, serving skill and volleyball.*

INTRODUCTION

Educational models are a source for processing information and experiences for the learner, as they modify their behavior and increase their social interaction according to specific strategies. The Landa model is the model that adopts teaching methods of exploratory organization of knowledge and breaking down methods into small primary processes that serve the levels of all students. It depends on a set of strategies that are unified in a sequential manner from basic procedures that are implemented in an organized manner under planned conditions in order to solve problems after identifying them and then describing their organizational processes. It depends on the structural sequence where the student spontaneously moves to the subsequent educational process after mastering the first process.

Volleyball is one of the basic subjects in the faculties of physical education and sports sciences, as this game depends on basic skills as an important base on which it is based. To advance in this game, it is necessary to control and master all its skills. Mastering some skills, due to their extreme importance, is the first step towards advancing to reach a high level in the game. Therefore, it is very important to direct the first attention towards teaching these skills, by making the appropriate effort and the requirements for learning these skills for both the learner and the teacher in order to master them. In light of the above, the importance of the research in conducting this study comes to be a practical addition to the studies that sought to search for the best modern educational models and strategies in the teaching and learning processes and to facilitate teaching the technical steps of the skill of serving from below.¹

The researchers sought to present this research by using (Landa's model), which represents one of the modern studies to be a new step to achieve a result in the educational process. The question remains: What effect does the Landa model-based special practice have on students' learning of volleyball serve ability?

THE RESEARCH OBJECTIVES

1. Prepare special exercises based on the Landa model to help students learn the technique of serving from below in volleyball
2. Determine the effect of special exercises based on the Landa model to help students learn the technique of serving from below in volleyball

THE RESEARCH HYPOTHESES

1. There is a statistically significant difference between the pre- and post-tests.
2. There is a statistically significant difference between the pre- and post-tests in the students' volleyball serve ability.

RESEARCH FIELD

- Humanities: Second year student Physical Education college.
- Temporal field: from 10/15/2024 to 12/25/2024
- Spatial field: Al-Sulaf Sports Club Hall

RESEARCH METHODOLOGY AND FIELD PROCEDURES

1. Research methodology

The researchers used experimental methods that they believed met the research norms and achieved the research objectives.

2. Research community and sample

The research team was formed by the students of the Department of Physical Education and Sports Sciences at the University of Kirkuk during the second semester of this academic year (2024-2025). It included (91) students who were organized into (2) classes. The researcher intentionally chose the research population by omitting the students who are late, students who are absent, and players. (A) department was chosen as the control department and (B) department as the experimental department. The number of students in each department was (15). The experimental sample that was exploratory (number (5)) was excluded from the complex's sample.

3. Methods, devices and tools used in the research:

- Arabic and English sources, the Internet, observations, survey questionnaires, and the assistant work team.
- The researchers used the following devices and tools: Canon EOS4000D camera, Canon 7100 camera, volleyball court, display screen, stopwatch, measuring tape, tape, adhesive, whistle, volleyballs number (15), indicators, sports shirt number (15), paper board.

4. Field research procedures:

4-1 Specifications of skill tests in volleyball:²

- **Send from below test**
- Purpose of the test: Measuring the skill of serving. Tools used: Legal volleyball court, legal volleyballs, leather measuring tape, colored adhesive tape outlining the court as shown in Figure (1).

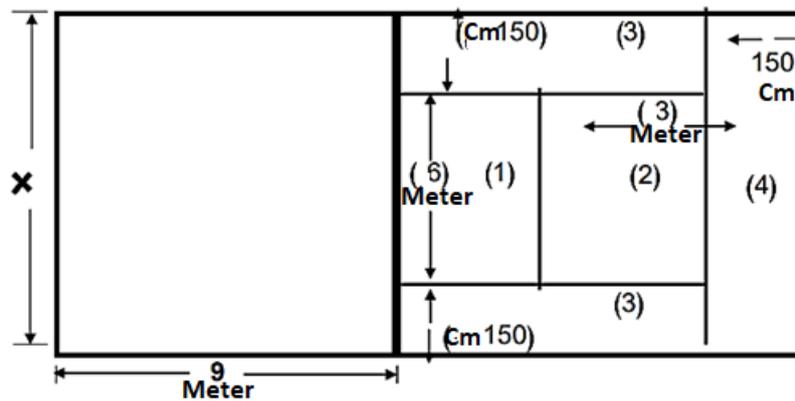


Figure 1. shows the skill of serving

- **Test Specification:** The player will stand at the middle of the court's length, facing the intended half of the court, (9) meters from the net, and serve the ball from below in any manner that allows the ball to bypass the net. The internet goes through the intended half-court route.
- **Conditions:**
 1. Each player has (10) attempts.
 2. If the ball intersects the net and reaches or exceeds the intended duration of play, the player's attempt is considered a success and no points are awarded for it.
- **Scoring:** For each correct serve, the number of the area in which the ball lands is calculated, and the total score for this test is (40 points), and in the event that the ball falls on a dividing line between two areas, the score of the higher area is awarded to the player.

5. Exploratory experiments:

The researchers conducted the first skill exploratory experiment to test the suitability of the student volleyball serve ability test at the Sports and School Activities Bureau on Sunday (10/16/2024) at 8:30 am on time, ensuring that the sample (5) of students from the research group, under the supervision of the researchers and subject teachers, and with the presence of a tutor and assistant work team. The objectives of the experiment were:

1. Figure out how long it will take to do the test.
2. Ensure the organization of the assistance work team.
3. Ensure the difficulty level of the test.
4. Determine the suitability of the equipment and tools.

The basic experiment of the research:

After the researchers determined the ability and fitness tests, they applied them to individuals of the basic research sample, namely, second-level students/(30) students of Kirkuk University in the 2024 academic year (experimental and control groups) - 2025.

6. Pre-tests:

The researchers pre-tested the research sample (the experimental group, the control group) on October 19th and 20th, 2020 for the experimental group, and October 19th and 20th, 2020 for the control group. The skill tests were conducted in the hall of the Solaf Sports Club at the members' expense, with the assistance of a second team of researchers and a helper. The scientists were interested in implementing the following procedures:

- Preparing the hall and test tools.
- A good warm-up for the students before starting to apply the test.
- Organizing time for students' rest periods.

7. Preparing special exercises according to the Landa model

It encompasses creating special exercises that are part of educational units (according to the Landa model), this is accomplished by implementing the educational stages of the model. The researchers utilized some resources, investigations and scientific research regarding this subject in the creation of the educational units. The skill of serving was taught to the students from below, following a detailed description by the teacher regarding each step in the educational system's educational unit. The knowledge of the skill was also incorporated into the practical portion of the educational regimen and the students utilize the skill.³

8. Implementing special exercises according to the Landa educational model

After completing the implementation of the pre-test on the members of the basic research sample, the researchers applied the special exercises according to the Landa educational model on the members of the experimental group at a rate of two educational units per week. The first educational unit was implemented on 10/20/2024, the first introductory unit for the students, and it included an explanation and understanding of the meaning of the model for the students. The sample members targeted the experimental group and the number of units was (6).

9. Post-tests

After completing the curriculum implementation of the Landa Education Model, the researchers conducted a post-test on the basic research sample of two groups (experimental group and control group) under the same conditions and procedures as the pre-test. December 18, 2024. The researchers...

The two tests were prepared with the same pre-test conditions in terms of test time, test location, test administration sequence, and the same tools.

- **Validity:** "Validity is one of the basic conditions for judging the validity of the test, as the test is considered valid if it measures what it was designed to measure and distinguishes between individuals".⁴
- **Reliability:** "Reliability means that the individual's relationship does not change substantially with the repetition of the test, and it is expressed statistically as a correlation coefficient between the individuals' scores between different times of conducting the test, meaning that the test's reliability means that the test is reliable and dependable".⁵

RESULTS

Research results, presentation, analysis and discussion:

- **In two research groups, experimental group (teaching method using Landa teaching model) and control group (method following:**

Table 1: Shows the means and standard deviations in the post-tests of the selected variables, the control and experimental groups, the calculated (T) value and the statistical error rate

Groups		N	Mean	STD	(T) value	Error rate
tennis ball test	Experimental	15	14.000	0.756	4.773	0.000
	Control	15	12.400	1.056		
Serving	Experimental	15	28.933	1.223	15.760	0.000
	Control	15	22.067	1.163		

DISCUSSION

Discussion of the retest results of the experimental group (special exercises based on the Landa education model) and the control group (method used):

The table shows that there is a significant difference between the control group and the experimental group in favor of the experimental group. The researchers attributed the difference between the control group and the experimental group in favor of the experimental group in the post-test to the variable Landa education model and its effect retrospection, which played an effective and obvious role in the demonstration and improvement of the students (experimental group samples) in learning the volleyball serve technique teaching skill level,⁶ as it increased the excitement and suspense of them during the lesson, the Landa educational model prioritized making the student the focus of the educational process and giving him the opportunity to express his opinion without fear or hesitation. This is what confirmed the importance of caring for the learner and making him the focus of the educational process and having the capacity to discuss his thoughts without concerns or restrictions.⁷

Additionally, the members of the experimental group participated in special exercises in a diverse manner and with new methods, this led to the acquisition of the skill performance in volleyball, and that the qualitative and intriguing exercises in the educational units had a positive effect on the members' technical performance of the skills, as "the utilization of qualitative and purposeful exercises had a positive effect on the improvement of the skill performance."⁸ The researchers attributed the increase in the experimental group's progress to the Landa educational model's use of discussion, debate and the standard paper on participation, all of which lead to the correct performance of the fundamental skills of volleyball, unlike the method employed, which was based on the explanation, presentation and performance of the skill without the participant's participation. Additionally, the use of illustrated and animated models that demonstrate the proper

performance of the volleyball technique (serving) and the steps that follow the performance of the skill and the capacity to utilize information and connections between them, this is reflected in the level of improvement in performance and decrease in errors. It's important to note that the educational units contained a comprehensive description that had a significant impact on the student's participation in the discussion of ideas, this increased the students' capacity to comprehend the new information, which in turn increased their knowledge and increased their capacity to process the new information, all of which contributed to an increase in their knowledge and increased their capacity to process the new information."⁹

Other than the fact that the utilization of various educational activities contributed to the creation of an educational atmosphere that was filled with activity and had a motivation and interaction between them, additionally, the prepared educational units are based on modern scientific principles that utilize methods and models that are in line with the current trends in the teaching process and facilitate education. Someone typically perceives the whole thing before the parts, and the process of acquisition is based on the perception, attention, advice, readiness and motivation, and the process is associated with the teaching method that involves the receiving and recording of concepts.

This integration of scientific theories and multiple methods was intended to improve the quality of work and teaching with the Landa educational model, which is thus considered an integrated model that facilitates the attainment of lesson goals, this led to a significant increase in the development of student education. The researchers also credit the utilization of the steps of the Landa educational model, which focuses on teamwork and cooperation, as well as giving students responsibility, this increases the students' learning by increasing their social interaction, while also raising their awareness, solving problems, and participating in activities. all of the above. The steps of Landa's model follow modern trends in education, and each step has a specific purpose in mind, all of which are connected to the next step."¹⁰

The researchers also attributed this to the educational units created by him, which had a significant impact on demonstrating the differences in what they have of diversity between one unit and another, this information had a direct effect on increasing the students' desire and excitement while learning and acquiring skills without any form of boredom, this information had a positive effect on the teaching profession in regards to serving from below in the sport of volleyball.

The researchers believe that Landa's educational philosophy is based on the concept of continued interaction between the student and the teacher during the lesson, this interaction increases the students' capacity to participate in the conversation, which in turn increases their confidence.

CONCLUSIONS

1. The two experimental groups (Landa's) that employed the Landa model and the control group that learned by following the method had a positive effect on the learning of serving from below in volleyball, but the effect was different for each.
2. The variety of educational endeavors participated in the students' acquisition of pertinent information.
3. The Landa educational model facilitated the association of previous knowledge with new information via the concept map and the additional organizer that augmented the students' interest in the subject.
4. The educational units based on the Landa educational model and the method employed by the teacher had an effect on increasing the students' capacity.
5. The experimental group that followed the Landa model had a superior performance compared to the control group in the acquisition of the knowledge needed to serve from below in the sport of volleyball for students.

RECOMMENDATIONS

1. Adopting the use of special exercises according to the Landa educational model in improving the skill of serving from below in volleyball for students at / University of Kirkuk
2. Paying attention to applying new models and relying on modern methods in acquiring information for students.
3. Conducting similar studies on other subjects.

REFERENCES

- [1] Zayer Saad, Asmaa Turki Dakhil: Modern trends in teaching Arabic, 1st edition, Baghdad, 2015.
- [2] Zainab Muhammad Bayumi Abdul Latif: The effectiveness of using Landa's model in acquiring grammatical concepts by second-year middle school students, Master's thesis, Egypt, Menoufia University, 2002.
- [3] Abdullah Hassan Al-Moussawi: A guide to practical education, Irbid, Modern World of Books, 2005.
- [4] Aqil Jabr: The effect of using Landa's model in acquiring and retaining biological concepts among second-year middle school students, Master's thesis, College of Basic Education, Al-Mustansiriya University, 2012.
- [5] Qasim Al-Mandlawi (and others): Tests, measurement and evaluation in physical education, Mosul, Higher Education Press, 1990.
- [6] Kamal Abdul Hamid and Muhammad Subhi Hassanein and measurement in handball: (Cairo, Helwan University, 1980).
- [7] The World Wide Web, Teaching Methods, Learning and Teaching, 2022.
- [8] Muhammad Adel Jamal: The effect of special exercises according to Karen's educational model on motor coordination and learning some basic skills in volleyball for students, Master's thesis, University of Kirkuk, 2023.

- [9] Majed, S.S.(2022): the effectiveness of the six thinking hats strategy in testing the cognitive achievement of handball basic skills. Sport TK. Revista Euro America and decencies del Deportee.
- [10] Rafeeq, shaheen, ramzi, (2021): organizational activity department from the point of view of the employees in the city of Kirkuk periodical natural of engineering and natural sciences deportee.