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Effectiveness of Utilizing Landa's Heuristic Model on Skill Performance of Selected Basketball Skills and Development of Self-Efficacy Among Students

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Abstract

This study aimed to revealing effectiveness of using Landa exploratory model and method used in performance development skill assessment between pre- and post-tests for some basketball skills and self-efficacy development, Identifying differences in Landa's exploratory model and method used on performance skill level for some basketball skills in post-test, Identifying differences in Landa exploratory model and method used in Developing students ' self-efficacy in post-test. The researchers used experimental method for its suitability and nature search, sample was chosen randomly from two branches from students first academic year in college education physical and sciences sports university Mosul, where it was represented group experimental in section (T), the control group was represented in division (K), homogeneity and equivalence between my collection sample was done, it was approval curriculum private with material basketball for year study first for first academic, the researchers prepared educationally approach, includes educational units according to Landa model, includes 10 educational units for experimental group, the control group studied according to method usual, the researchers used multi educational means and educational technologies necessary for application an experience, the researchers used tools following to obtain on results such an information form, first test skill acquisition, and self-efficacy test. The researchers concluded that students in experimental group outperformed control group in skill achievement, effectiveness of Landa exploratory model and conventional method in skill acquisition, students in experimental group outperformed students in self-efficacy measure compared to control group, effectiveness of Landa's exploratory model and conventional method in measuring self-efficacy. The researchers recommended using educational material prepared according to Landa exploratory model in teaching basketball to second stage in faculties of physical education and sports science.

Keywords: Landa's Heuristic Model, Skill Performance, Basketball Skills, Self-Efficacy, Students.

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Introduction

Need for effective learning arose as a result of several factors, perhaps most prominent of which is state of confusion and bewilderment that learners complain of after every educational situation, which can be explained as a result of new information not being truly integrated into their minds after every traditional educational activity. Effective learning is considered an essential component of system. In educational field, if components of curriculum are objectives, content, teaching and learning activities, and assessment, then we find that teaching is middle ground of these components and it is central point from which they start to achieve objectives, and in light of it form of assessment, its means, methods, and goals are determined (Al-Saadi, 2020).

The researchers have confirmed that there are important foundations that must be taken into account at beginning and during learning process, as well as main principles that are one of most important conditions for learning motor skills. Practice and exercise are not merely a repetition of movement, but rather a repetition accompanied by reinforcement and modification, i.e., appearance of a gradual improvement in performance as a result of correcting mistakes and praising correct performance.

Educators emphasize importance of strategy Landa's exploratory approach to learning different skills, especially with new skills and in early educational stages, has an impact on consolidating mental learning processes in learners. Basketball requires a special effort that goes beyond simply learning technique and being able to play it. It extends to other physical, psychological, and educational aspects. These factors have made game difficult and limited its popularity, especially among students. However, using modern methods and assigning task to educational coaches has proven that these difficulties can be overcome, leading to game's spread and expansion of its base. (Jassim: 2014, 64).

Importance of this study emerged in identifying effectiveness of Landa exploratory model in learning some basketball skills and developing self-efficacy among students. problem addressed by current research is urgent need to improve Methods and models teaching method used in teaching one of fields of knowledge in physical education and sports science, namely basketball, was developed because the researchers encountered difficulties in learning skills of this game during their initial studies. Their experiences with game and its skills, along with their awareness of reluctance to participate, necessitated creation of a model that would facilitate learning these skills and raise level of achievement, goal is to develop students' skills and self-efficacy, and to build their self-confidence. It is known that basketball is not considered a popular sport like other sports such as football and volleyball, and therefore learning its skills is something that students find difficult to master. Hence, idea of researching and finding a model that enables students to master these skills came about. Hence, researchers seek to experimentally verify effectiveness of Landa's exploratory model in teaching basketball to first-year students in College of Physical Education and Sports Sciences.

To define problem, research seeks to answer following question: What is effect of using Landa exploratory model on technical performance of some basketball skills and development of self-efficacy among first-year students in College of Physical Education and Sports Sciences ?

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The current research aims to revealing effectiveness of using Landa exploratory model and method used in performance development skill assessment between pre- and post-tests for some basketball skills and self-efficacy development. Identifying differences in Landa's exploratory model and method used on performance skill level for some basketball skills in post-test. Identifying differences in Landa exploratory model and method used in developing students' self-efficacy in post-test.
Research hypotheses there were no statistically significant differences in mean scores of pre-test and post-test between students in experimental group and control group. Performance development skill of some basketball skills and development of self-efficacy. There were no statistically significant differences in mean post-test scores between experimental and control groups. In performance development skillful in some basketball skills. There were no statistically significant differences in mean post-test scores between experimental and control groups. In developing students' self-efficacy.

Research Methodology
The researchers resorted to using experimental method because it was suitable for nature of study, academic year in College Education Physical and Sports Sciences, University of Mosul for academic year 2025-2026 and author from 14 division study, C, D, E, and (G, H, T, Y, K, L, M, N) where reached their number is 424 students And a female student, and deliberately researchers in choosing this society study because basic skills for material basketball apply in this academic year. It ruled it out researchers section A, B because it especially with female students and adult their number is 62 female students to avoid for a worker Sex, and with this workers be community Search B 362 students.
To determine sample search in picture correct lost use researchers method randomness to choose my set search and distribution of independent variable, and thus workers have identified academic people T, K and adult number students 56, where it included all his people study on 28 students. And exclude researchers number from students two groups experimental and control are: students those did not they are coming tests search adult their number is 6.3 people T,K. Absentee students whose number of absences exceeded two lectures, and their number is 6.3 from sections T, K. And after this exclusion settle number students inside all group 19 students per A group, and for purpose of distribution program on groups research, lost use researchers method randomness also, where it represented section T group experimental model which used Landa's exploratory model, and division k is one of groups control group, which will apply teacher's followed method in current research experiment.

Experimental Design
One of important things that must be done before conducting research is choosing experimental design, the researchers adopted equivalent groups design with pre-test and post-test, as it is suitable for nature, requirements and objectives of research. (Van Dalen, 1985, 366).
Table 1. Experimental Design

Groups	Pre-test	independent variable	Post-test
First	Skills	Landa Exploratory Model	Skills acquisition

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experimental	acquisition self-efficacy		self-efficacy
Second experimental		Method used	

Equivalence of study groups

Equivalence of variables related to anthropometric measurements: Length measured in centimeters. Weight measured in kilograms. Chronological age measured in years.
As shown in Table (2).

Table 2. Shows means and standard deviations of the groups for some variables of age, height, and mass, and calculated value of (t)

Variable	Experimental group		Control group		Calculated (t) value
	Mean	St.d	Mean	St.d	
Age/month	228.72	14.46	229.62	17.49	1.76
Height/cm.	174.87	3.58	176.58	4.06	1.64
Mass/kg.	69.86	5.76	70.46	7.52	1.45

Tabular value of (t) in relation to degrees of freedom (36) and a margin of error of (0.05) = 2.028

Table (2) shows that there are no statistically significant differences between students of two groups in above variables, as calculated t-value was less than tabulated value, which indicates that two groups are equal in these variables.

Equivalence in Physical Fitness Tests

Identifying elements of physical fitness that influence teaching of skills basketball: In order to identify the most important physical attributes that affect basketball skills, and after analyzing content of scientific sources (Hassanin, 1995; Othman, 2005; Al-Janabi, 2019), Appendix (2) questionnaire was designed and presented to a group of basketball, measurement, and evaluation specialists (Appendix (1) to identify physical attributes and elements of physical fitness that affect skill learning. Table (2) shows agreement of specialists regarding identification of the most important physical attributes, which received an agreement rate of (75%) or more. Bloom et al. indicate that "researchers must obtain agreement of (75%) or more from opinions of reviewers," according to order of these attributes. (Bloom et al., 1983, p. 126).

Table 2. Shows percentage of agreement among experts regarding identification of the most important physical characteristics

Physical attributes	Specialists No.	Agree	Percentage
Explosive power of arm muscles	7	7	100 %
Explosive power of leg muscles	7	7	100 %
Agility	7	7	100 %
Power of arm muscles	7	7	100 %
Speed endurance	7	4	57.14 %
Reaction	7	4	57.14 %

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Flexibility of lower limbs	7	3	42.85 %
Flexibility of upper limbs	7	3	42.85 %

Identifying tests for physical fitness components

After analyzing content of scientific sources, necessary tests for measuring selected physical attributes were chosen and put into form of a questionnaire, questionnaire was presented to a group of specialists in measurement, evaluation and basketball (Appendix 1) to determine physical tests for selected physical attributes that serve research objectives. Table (3) shows agreement of opinions of specialists regarding determination of physical tests and their percentages, which obtained a percentage of (75%) or more, according to sequence.

Table 4. Percentage of expert agreement on definition of physical attribute tests

Measured physical attributes	Physical tests	Specialists No.	Agree	Percentage
Explosive power of arm muscles	Test of pushing a medicine ball forward weighing (3) kg. from a seated position on a chair	7	7	100%
Explosive power of leg muscles	Standing broad jump test	7	7	100%
Agility	Barrow test (3 * 4.5 meters)	7	7	100%
Power of arm muscles	10-second arm flexion and extension test	7	7	100%

After agreeing on selection of tests to measure elements of physical fitness, then conducting an equivalence between two research groups in selected elements of physical fitness, as shown in Table (5).

Table 5. Means and standard deviations of the groups are shown for some variables: age, height, mass, and calculated t-value

Variable	Experimental group		Control group		Calculated (t) value
	Mean	St.d	Mean	St.d	
Explosive power of arm muscles\ M.	3.66	0.64	3.59	0.83	1.64
Explosive power of leg muscles\ M.	2.28	0.39	2.29	0.26	1.82
Agility\ Sec.	10.67	1.37	11.21	1.24	1.47
Speed-strength arm muscles No. \10 Sec.	11.73	1.38	11.09	1.79	1.84

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Tabular value of (t) in relation to degrees of freedom (36) and a margin of error of (0.05) = 2.028

Table 5. shows that there are no statistically significant differences between research groups in variables of elements of physical fitness, as calculated (t) value for physical fitness tests, as in table above, is all insignificant, as all calculated t values are less than percentage of tabulated (t) value, and this indicates equivalence of research sample in elements of physical fitness.

Identifying educational material

To begin implementing experiment, it is necessary to identify skills basketball course, prescribed for first-year students at College of Physical Education and Sports Sciences, University of Mosul, was determined by sectoral committee and basketball instructors teaching first-year course, and skills were defined. Which is part of curriculum for first semester according to sectoral authority's syllabus in light of college's curriculum. After that, an interview was conducted with a number of specialists from teaching staff of basketball, Appendix (1), to agree on validity of tests used for apparent performance of each of skills used in research.

Determining grades of apparent structure sections for some skills basketball

Test consists of performing technical steps of skill, represented by preparatory, main, and final parts of each skill. A technical performance evaluation form has been prepared for each skill. For purpose of evaluating technical performance of skills of research group, form was presented to a group of specialists in basketball, measurement and evaluation, Appendix (1), in order to give a score for each part of skill, and sum of three parts is out of (10).

Scientific basis for a questionnaire to determine scores of apparent structure sections of some skills basketball

Face validity of questionnaire: The researchers presented technical performance evaluation questionnaire, prepared in its initial form, to a group of specialists in field of measurement and evaluation and basketball teachers (Appendix 1) to determine degree of performance and its sections, its suitability for application to sample under study, and whether test actually measures what it was prepared for.

Objectivity: The researchers verified objectivity of judges' measurement of technical performance of skills. Those who evaluated artistic performance of students in research group, through direct evaluation of artistic performance of post-test for students study sample by three referees, Appendix (1), to evaluate artistic performance according to form prepared to identify their objectivity in evaluation process.

The researchers used multiple correlation equation between judges' scores, which was (0.83) between first and second judges, (0.85) between first and third judges, and (0.86) between second and third judges. This indicates that objectivity of evaluators in assessing technical performance is high.

With this procedure, measure of technical performance has met its scientific foundations and is valid for application to current research sample.

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Conducting equivalence tests (pre-tests) for two research groups

Equivalence between two research groups in skills under study was carried out after obtaining students' scores from experts, as shown in Table (6).

Table 6. Shows t-test for the groups equivalence in skill tests

Skill	Experimental group		Control group		Calculated (t) value
	Mean	St.d	Mean	St.d	
Dribbling	3.82	1.26	3.41	1.59	0.94
Free throw	2.03	1.07	2.2	1.94	0.74
Lay-up scoring	2.37	1.58	2.45	1.26	0.83

Tabular value of (t) in relation to degrees of freedom (36) and a margin of error of (0.05) = 2.028

Table (6) shows that there are no statistically significant differences between two research groups in skill test variables, as calculated (t) value, all of which are less than tabulated t value of (2.028). This indicates that there are no differences, and this indicates equivalence of research sample members in above variables.

Self-efficacy scale: Sports Self-Efficacy Scale, developed by Mohammed and Nibras Younis (2008), College of Education for Women, University of Mosul, was used and administered to a sample of players from Mosul, Al-Futuwa, and Tal Afar clubs. scale consists of 30 items distributed across three axes: general self-efficacy, social self-efficacy, and sports self-efficacy. Each item is followed by five response options on a five-point Likert scale : always, often, sometimes, rarely, never. Positive items are scored from 1 to 5, with scoring reversed for negative items, if any variables above.

Equivalence procedure was performed on self-efficacy scale for two research groups

Equivalence was established between two research groups in pre-tests of self -efficacy, as shown in Table (7).

Table 7. Shows test summary pre-test of two research groups on equivalence in self-efficacy

Variable	Experimental group		Control group		Calculated (t) value
	Mean	St.d	Mean	St.d	
Self-efficacy	75.39	8.98	76.75	6.93	0.79

Table (7) shows that there are no statistically significant differences in pre-test, as calculated t-value is less than tabulated t-value, indicating equivalence of two research groups in pre-test of self-efficacy.

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Defining and adjusting research variables

Independent variables are: Six-step model. Method used.

Dependent variables are: Skills acquisition. Self-efficacy scale.

Non - experimental (extraneous) variables:

First: Internal design integrity: Internal integrity is achieved after researchers confirm control over extraneous factors that may influence dependent variable. These factors are: Experimental conditions: Thank God nothing happened that affected course of experiment. Equipment and tools used: This factor was controlled using same tools for both research groups. Experimental extinction: Sample in research groups who were absent for (2) lectures throughout duration of program were excluded, as attached to Table (1).

Second: External safety of design: Interaction of experimental (independent) variable with selection biases: Effect was reduced This factor is achieved by randomly selecting sample and ensuring equivalence between two research groups. Effect of experimental procedures: Educational program was implemented without informing students of research objectives and its purpose, in agreement with subject teacher.

Subject teacher: Basketball instructor at College of Physical Education and Sports Sciences for first academic year applied program's contents to two research groups, after agreeing with on teaching method, in order to avoid difference in factors related to instructor and their reflection on dependent variables.

Time period of experiment: Experiment was equal for research groups, as experiment started on 24/11/2025 and ended on 22/12/2025 for a period of 5 weeks and at a rate of 5 units for each group if time of educational unit reached 90 minutes.

Distributing lecture schedule: Team Games Department, were keen to organize weekly schedule in a way that ensures close time for giving material. In event of a disruption to work or an occasion, lecture is replaced by another lecture in order to give an equal opportunity in number of lectures for two research groups.

Research Requirements

Preparing lesson plans (Educational program): After reviewing scientific sources , previous studies, and relevant research, and through personal interviews with professors of teaching methods and basketball, a questionnaire on teaching plans (Educational program) was designed and presented to a group of specialists in field of teaching methods and basketball teachers in order to express their opinions and observations on teaching plans (educational program) and to approve their validity and suitability for research sample and proposed model. Each model included, in accordance with method, following: Preparatory section (Introduction, General preparation, Specific preparation). Main part (Educational activity, practical activity)

Final part: Teaching plans (educational program) included 10 educational units distributed over two experimental groups, with 5 units for each group, duration of each educational unit was (90) minutes, with one unit per week.

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Pilot study

Pilot study was conducted on 11/17/2025 on a sample of research population similar to research sample and not participating in research groups, and on a part of students of section C whose number is 25 students of first academic year, in order to identify most important obstacles that may face educational program.

One of objectives pilot study was: Ensuring teacher's experiment implementer's ability to implement educational units. To determine suitability of basketball hall for implementing educational units. Possibility of using proposed model and implementing it on sample. Validity and time control components of learning unit. The researchers concluded following: Ability of teacher experimenter to implement educational program. Suitability of hall, equipment, and tools used during lesson. Possibility of using and implementing proposed models on students of academic year First. Ability of research sample to continue performing and not feel bored or tired.

Applying the main experiment

Upon completing requirements for experimental procedures, including preparing samples, ensuring their equivalence, and identifying previously mentioned scientific material, experiment was implemented on 24/11/2023, as subject teacher research group was taught by instructor to avoid influence of subject teacher and its impact on experimental results. Landa exploratory model was used in teaching experimental group, method used by subject teacher was employed in teaching control group work of groups can be explained as follows:

Experimental Group A: Represented by section T: This group implemented educational program using Landa Exploratory Model according to following steps: Exploratory model is based on giving learners opportunity to explore skill -based solutions. And to arrive at appropriate solutions through observation, experimentation and comparison, with teacher's continuous guidance of learning process. First step: Preparation and stimulation of motor skill problem. Teacher prepares students physically and psychologically to learn skill under investigation, then poses a skill problem related to skill to be taught, such as skill of free shooting, by asking: How can a player shoot accurately when there is a defender in front of him?

Step two: Presenting educational situation teacher presents a learning situation that includes targeted skill, allowing students to observe motor performance and its stages, while directing their attention to basic technical points that skill includes without presenting all solutions directly to student.

Step three: Exploration and kinesthetic experimentation of skill teacher gives students opportunity to try many ways of performing skill, individually or in small groups, and encourages them to discover method that helps them achieve best possible performance. Example: Students practice free shooting from different distances and angles, noting effect of body position and wrist direction on shooting accuracy.

Step four: Observation and comparison teacher asks students to observe and compare results of attempts and performance , and to identify differences between optimal performance and performance that needs correction. Example: Students compare successful and unsuccessful shots, and try to identify factors that contributed to increased shooting accuracy.

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Five: Discovering appropriate solution teacher guides his students to extract basic principles that help improve their performance, through questions, discussion, and experimentation. Repeatedly, leading to choosing the most appropriate method for performing skill.
Step six: Application and calendar teacher asks students to apply skill in various educational situations, and then subject teacher evaluates their performance level according to specific technical criteria, such as accuracy of aiming, correctness of performance and coordination of movements, and provides feedback to address errors.
Control Group : Represented by Division K: This group implemented educational program in teacher's usual style.

Post- test
After completion of educational program, a post- test was conducted for each of research groups on Tuesday, December 29, 2025, in basketball hall – Faculty of Physical Education and Sports Sciences at University of Mosul.

Post- performance evaluation
Where technical skills performance was assessed under review in person by experts on 29/12/2025 Experts conduct evaluation by directly observing student performance using scientific observation methods, each expert individually, based on a performance evaluation form prepared for this purpose. Experts in technical performance of research sample students by giving A grade for each student's artistic performance then Extraction Middle Calculation Between degrees Experts three for obtaining final grade for artistic performance per student.
Conduct a self-efficacy test: This test was conducted on 5/1/2026 by the researchers in agreement with branch coordinator, set a specific date for two research groups to conduct post-test.

Statistical methods
Simple correlation coefficient (Pearson). Test of (t). Spearman's equation is multiple correlation coefficient. Percentage. Mean. Standard deviation.

Results and Discussing

Presentation and discussion of results of first research hypothesis
To verify first hypothesis, the researchers used a (t) test to determine statistical differences between average scores of experimental group students between pre-test and post-test of skills achievement test, as shown in Table (8).
Table 8. Shows means and standard deviations of pre-test and post-test, and calculated t-value for experimental group in skills achievement test

Skills	Pre-test	Post-test	Calculated (t) value

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	M.	St.d	M.	St.d	
Dribbling	3.82	1.26	8.37	0.93	8.82
Free throw	2.03	1.87	7.04	1.12	7.56
Lay-up scoring	2.37	1.98	89.6	1.26	5.83

Tabular value of (t) in relation to degrees of freedom (36) and a margin of error of (0.05) = 2.028

Table (8) shows that there are statistically significant differences between pre-test and post-test scores of first experimental group in some basketball skills. Based on this result, research hypothesis is rejected and alternative hypothesis is accepted. This indicates effectiveness of Landa's exploratory model in developing skill aspect of research sample.

The researchers attribute this result to fact that Landa's exploratory model , with its consistent and well-thought-out steps, met students' skill needs because of teaching steps followed by this model , which received a positive response from most students. They were engaged and enjoyed lecture time, which positively affected improvement of their skill acquisition and understanding, and fulfillment of their requirements in this field. Ausubel emphasizes possibility of improving memory and learning through use and construction of frameworks to organize and store information in a coherent, logical, and meaningful way. Organizing and linking information within skill structure protects new idea from being lost or quickly forgotten, as organized ideas are less prone to being forgotten.

Continuation of presentation and discussion of results of first research hypothesis

To verify second hypothesis, the researchers used (t) test for linked samples to determine statistical differences between average scores of control group students in skills achievement test, as shown in Table (9).

Table 8. Shows means and standard deviations of pre-test and post-test, and calculated t-value for control group in skills achievement test

Skills	Pre-test		Post-test		Calculated (t) value
	M.	St.d	M.	St.d	
Dribbling	3.41	1.59	6.53	0.96	4.89

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Free throw	2.2	1.94	5.03	1.51	2.62
Lay-up scoring	2.45	1.26	4.75	0.92	3.48

Tabular value of (t) in relation to degrees of freedom (36) and a margin of error of (0.05) = 2.028

Table (9) shows that there are statistically significant differences between pre-test and post-test scores of control group that studied according to method used in some basketball skills. Based on this result, second research hypothesis is rejected and alternative hypothesis is accepted. This indicates effectiveness of method used in developing skill aspect of research sample.

The researchers attribute this development to role of teacher's method in developing students' skills, as it involves a certain type of use. Encouragement from subject teacher, providing them with opportunity to participate actively and express their opinions freely and harmoniously, and reducing impact of fear of failure that may afflict student when presenting information, by using encouragement and providing them with necessary confidence to generate new ideas and choose appropriate alternatives. In addition, this method start from principle of making students use their skills to reach understanding and from there to visual thinking, and this has led to positive results that are consistent with students' abilities and capabilities.

Continuation of presentation and discussion of results of first research hypothesis

The researchers using appropriate statistical methods for results of students' self-efficacy test, and for purpose of verifying research objectives and hypotheses, results were presented, analyzed, and discussed to determine validity of hypotheses and their statistical significance between two research groups, means and standard deviations of tests were extracted, and then paired-samples t -test was used to determine significance of differences between pre- and post-tests of skills for two research groups, paired-samples t -test was also used to process results of pre- and post-tests of two research groups for critical thinking.

Table 10. Shows means and standard deviations of pre-test and post-test for experimental and control groups in self-efficacy test

Groups	Pre-test		Post-test		Calculated (t) value
	M.	St.d	M.	St.d	
Experimental group	75.39	8.98	123.87	13.54	15.73

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Control group	76.75	6.93	95.83	14.73	8.83

Table (10) shows that there are statistically significant differences between pre-test and post-test, in favor of post-test for experimental group. From this result, research hypothesis is rejected and alternative hypothesis, which is a type of directed hypothesis, is accepted.

The researchers attribute these results to fact that: That Landa Exploratory model helped in preparation from one side positive and interactive learning environment among students within educational classroom. Using a model Landa's exploratory approach helped students view material differently from what they were used to, which is from an aspect that is dominated by deep thinking and judgment of what they receive, which led to development of this Their aspects and motivation towards subject matter, thus developing their ability to develop their own competencies. Using a model Landa's exploratory approach in teaching helped students enhance their self -confidence through ability to logically judge details and parts of lesson, and ability to connect and evaluate previous and new educational concepts. This is reflected in increased development of students' self-efficacy.

As for control group, in which statistical differences occurred, and based on this result, the researchers attribute this to fact that teacher's method goes beyond mere thinking, and that teaching method was in accordance with teacher's style, which There was interaction, cooperation, activity, and cooperative groups that allowed students to participate in expressing opinions and engaging in active and serious discussion among themselves. This led to ability to identify problems, provide solutions to each problem, and arrive at outstanding answers, as happened in Landa Exploratory Model. This made level of self-efficacy for students not impossible, and since teacher is focus of educational process, role of students was somewhat good.

Presentation and discussion of results of second research hypothesis

To verify second hypothesis in this research, the researchers used independent samples t-test to determine statistical differences between average scores of students in first experimental group and students in control group on skills achievement test in post-test , as shown in Table (11).

Table 11. Shows means and standard deviations of post-test and calculated t-value for first and second experimental groups in post-test of skills achievement

Skills	Experimental		Control		Calculated (t) value
	M.	St.d	M.	St.d	
Dribbling	8.37	0.93	6.53	0.96	4.38

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Free throw	7.04	12 , 1	5.03	1.51	4.63
Lay-up scoring	89.6	1.26	4.75	0.92	3.69

Tabular value of (t) in relation to degrees of freedom (36) and a margin of error of (0.05) = 2.028

Table (11) shows that there are statistically significant differences between experimental group and control group in post-test in some basketball skills, as calculated (t) value for above skills reached a significant level.

Based on this result, third hypothesis of research is rejected, and alternative hypothesis is accepted. The researchers attribute these results to fact that: Landa Exploratory Model helped to create a learning environment with a high degree of positivity and continuous interaction during most of lesson time between students inside classroom, raising their skill performance and raising their skill achievement level. As is known in active teaching methods, teaching according to Landa's exploratory model makes students move from stage of receiving information to joint interaction and group participation, and this makes student focus of educational process in receiving and discovering information. Use of Landa exploratory model in teaching helped to take into account most important thing in modern education, which is to take into account individual differences between students during lesson and performance of skill exercises. Using Landa's exploratory model in teaching helped students enhance and develop their self-confidence, and this is reflected in increased achievement of skill performance.

This is what Novak stated regarding education that makes student focus of educational process, student uses his information to build his new knowledge, and therefore students should be encouraged to build their knowledge themselves, and teacher should help them to make their ideas clear. Students should also be encouraged to carry out activities so that meaningful learning takes place. (Ayesh 2008)

This result can also be attributed to students' continuous experimentation and practice of skill, testing it in multiple scenarios. This gained experience in identifying strengths and weaknesses in their performance, fostering a collaborative environment. Furthermore, roles they played in each lesson, with their assigned responsibilities and duties, increased their sense of accountability. This led to improved performance, especially since desire to act as a problem-solver gave student a significant sense of ownership, making them feel central to newly discovered skill. to reduction fear from mistakes performance before their colleagues which generates they have feeling shyly and hesitation and escape from performance and replacement its place is strengthening trust students by themselves. (James 2005), Evaluating teaching process: what teachers need to know, translated by Mu'ayyad Fawzi, Dubai, University Book House. "Praising results achieved by learner from time to time will serve as new energies motivating them to exert effort and continue progressing." (James 2005)

Presentation and discussion of results of third research hypothesis

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To verify this hypothesis (t) test was used.

Table 12. Shows means and standard deviations of post-test for experimental and control groups in self - efficacy test

Groups	Experimental group		Control group		Calculated (t) value
	M.	St.d	M.	St.d	
Self-efficacy	123.87	13.54	95.83	14.73	12.75

Significant at error > 0.05 and degrees of freedom (0.05). Tabular t-value = 2.028

Table (12) shows that calculated t value is greater than tabulated t value, and this indicates that there are statistically significant differences between experimental and control groups in post-test, in favor of larger arithmetic mean of experimental group . From this result, research hypothesis is rejected and alternative hypothesis is accepted. The researchers attribute this development to what was mentioned by (Al- Mansouri, 2016) that Model Landa's exploratory approach helped students develop ability to express positive or negative opinions in various educational situations, providing convincing reasons and justifications for each opinion presented to them. It also fostered self-efficacy, ability to deal with situations and information through reflective thinking aimed at making judgments or expressing opinions. Here, it is sufficient for individual to have a decision and an opinion on issues they encounter and to support their opinion with convincing evidence and arguments. This is achieved by subjecting information and data to mental and logical tests in order to establish evidence or proofs. Model Landa Explorer helped in developing students' self-efficacy skills and developing their attributes, learner becomes a questioner about everything he does not know and includes it within circle of self- examination, and tries to separate emotional thinking from logical thinking, and explores and imagines alternatives , and knows when he needs more information, and has become open to new ideas, and learner supports his decision with evidence and proofs that make him independent according to his capabilities and each student according to his self- efficacy, which distinguishes him from his peers, and learner has also become a comprehensive view of topics and problems faces. (Al-Mansouri, 2016, 87-94)

Conclusions

Achieved group empiricism first that studied according to Landa exploratory model results better in acquisition and skill for some skills basketball. superiority Landa exploratory model results better in developing self-efficacy for some skills basketball comparison in control group.

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Recommendations

Use Landa's exploratory basketball model. Use methods teaching modern in education sports when she has from effect positive and effective in to learn skills basketball and to lift level acquisition have students.

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