

**"The effect of educational program by Keller strategy
(Individualization Education) upon the level of learning outcomes and
cognitive achievement of volleyball's certain basic skills**

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Introduction and research problem**

Individualization

Education is a style of modern methods in learning process where it works to get out with teaching positions from the Public into Individualization which takes care of each learner as an independent entity among the congregation also it takes care of each individual educational as distinctive information which has allocated in the context of the classroom .

The teacher has a new and major tasks under the individualization in addition to the technology,

which is through educational situations designs according to the individualized education strategy so as to be enforceable, the teacher became a designer and programmer in addition to being a teacher,

the changing role of the learner and he also became the educational process axis and positive in the interaction. (12: 292) (74: 1)

The Keller strategy is considered one of individualized instruction methods where based on the study of the learner to the educational unit accordance with her capabilities,

and it divided the scientific subject scheduled into a series of small units which are dealt with separately, and each unit includes specific educational objectives and must meet the learner's specific level of efficiency and gets the promotion of self-enforcement the learner must not be punish when se fails in the test unit and she is allowed to re-enter the test again, as is the case in volleyball. (193: 3) (28:11)

It's also an Educational system direction which is clearly cared with goals , focuses on the feedback self-regulation of educational progress steps and sequential evaluation for each educational unit and each learner had to absorb the good and his mastery of each module and

skills concepts before moving to the next unit,

use of software in education has an important role in the face of individual differences to suit the learner's capabilities. (199: 4)...

And both of Helmy Ahmed Alwakel and Hussein Bashir (1999) that the modern trend in teaching methods is moving towards individual learning and the most error of the teachers is to explain the lesson in a way

which fit the capabilities of the average learner while this is not commensurate with the capabilities of the educated people with weak or higher level which invites us to pay attention to individual learning (6: 52-53)

It is noteworthy by Abdel Azim Ferjany (2000) that teacher has a new and major tasks under the individualization as well as the technology which represented on the design of educational situations according to individual learning strategy so as to be enforceable the teacher became a designer and programmer in addition to being a teacher,

and the changing role of the learner he has also become an educational pivot and positive process axis in the interaction with the elements of the educational situation and make a lot of activity (65:12)

According to some studies that dealt with education using of the Keller strategy for individualized instruction to the importance of such a strategy in the education of physical skills and from such study, Sally Mohammed Abdul Latif (2005) (9)

Nevin Abdul Khaliq study (2005) (23) and the study of Mervat Samir (2003) (25) they have found the results of these studies to the effectiveness of using Keller strategy to teach some basic skills.

Keller strategy is considered one of the most individualized education systems (self-learning) famous and known as "Keller plan" it's focus on the learner as the primary axis of the educational process and is based on the consideration to each learner as an individual

who learns, and that all learners can master of education if each of them is

suitable for learning conditions they had ,

As a type of technology that include people and content of educational and regulations in exchange for heavy technology that include machines such as educational TV and in educational computer, where it is used self-learning system (PCI) principles and foundations of the behavioral sciences,

which require educated responses active repeatedly followed boosters, learners may take different time times and using different approaches to achieve mastery of the educational business. (15: 330)

And founder of Keller strategy style pursuit of perfection and development of elements or features of the strategy in the light of this objective, and can be viewed a Keller strategy as Education for strategy Mastering Strategy. (13: 115)

The volleyball game one of the most popular games to self-studying physical education which do not require large areas to exercise and allow practice opportunities for all ages and both sexes, making it the most popular games in Egypt and the world where

include many skills can practitioners from all use,

or some of them, " Subhi Hassanein indicates "(1997) that the mastery of basic skills in volleyball performance one of the most important factors that achieve the victory, which means that the success of team depends on the extent to which all the players perform the basic skills of different kinds from superiority and the least amount of errors (19: 155) .

And consistent with above both Saad Hammad Kassab (2004), Marwan Abdul Majeed (2001) volleyball games need to learn with a high degree of precision ,

focus and it's importance in giving the information in a timely manner and after mastering the skill in performance skill scroll from top and bottom which one of the basic requirements in the learning process in volleyball, as this game is based on the basic skills are important as a base to offer whether it's on the level of education or training,

Through the work of the researcher as a Lecturer in collective Games and teaching volleyball- she is noticed a decrease in the level of

performance of the basic skills in volleyball sport with the students in first year in faculty

Where the students' performance is marred a lot of mistakes in spite of the availability of follow scientific steps in teaching volleyball where the instruction and technical aspects which may be due to weak performance skills to the style of oral explanation and Applied scheduled to college students without the active participation of students in the classroom.

This contrasts with the development in terms of teaching methods which used to improve instruction in the process right now ,

along with the numerical increase in the number of female students during the training process, which in turn increase the performance of individual differences and increase the burden on the existing process of teaching

The importance of the use of Keller strategy in education in the field of sports that it provides an opportunity for the attention of learners at different educational levels

as well as allow the learner to learn by his speed

and self-achievement of the opportunity to learn to master, prompting the researcher to carry out this study to identify the impact of an educational program strategy Keller (individualized instruction) at the level of learning outcomes and the collection of knowledge of some basic volleyball skills.

The aim of this study

"The effect of educational program by Keller strategy (Individualization Education) upon the level of learning outcomes and cognitive achievement of volleyball's certain basic skills

Research hypotheses

- There are significant differences between the averages of pre measurements and post differences in the level of learning some basic skills and cognitive achievement in volleyball with the students in the experimental group.

- There are significant differences between the averages of pre measurements and post differences in the level of learning some basic skills and cognitive achievement in volleyball with the control group.

- There are significant differences between the mean post measurements with the two sets of search experimental and control in the level of learning some basic skills and cognitive achievement in volleyball and in favor of students in the experimental group.

Research Procedures

Research Methodology

To achieve the objectives of research and researcher's proposals she used the experimental method to design the two groups (experimental - control) and the two measurements (pre - post test) ***The research sample***

Sample was selected through intentional random way from first year their number (38), from the total research community they has been divided into two groups, where the experimental group (15 students) and control group (15 students) in addition to (8) students to sample reconnaissance (the research community) and outside the core sample with excluding the following categories: -

- Girls with sick note and Scheduled exempt.
- Irregular attendance.

- Participants of various sports teams.

Means of data collection:

First, equipments and tools.

Second, the tests (IQ test –skill tests - cognitive achievement test)

Third: learning technology program.

First, equipments and tools

1. Rstameter device to measure length in centimeters
2. Medical balance
3. Measuring
4. Stop Watch
5. Form of Experts questionnaire
6. volleyball stadium
7. volleyball balls

Second, physical and skill tests

- Test of scroll from the top / bottom and to measure the level scrolling.

- Test of serve from the highest to measure the level of serve .

Construction of the proposed educational program

- A -Stage of analysis
- B- Educational design phase
- C- The production of programming
- D -Stage of evaluation

A-Stag of analysis

This phase included (several) steps

Determine the educational goals of the program

The researcher determines the general objectives (knowledge - skills) so that the objectives are clear and realistic in order to achieve it.

- A general cognitive goal : to gain an experimental research sample information and concepts associated with cognitive skills and the law of volleyball "under discussion"

- A general skillful goal : to gain an experimental research sample how to perform volleyball skills "under discussion" with speed , precision and mastery

- The translation of the general objectives (knowledge - skills) program for educational and formulated in behavioral procedural image as follows: -

1. Cognitive behavioral objectives.

2. Behavioral objectives footwork.

Determine the scientific content of the educational program

The researcher has access to the scientific literature (9) (10) (14) (28) (29) to determine the associated skills information in question and to determine the educational tools within the educational program (written text - Footage - still images)

The time frame for implementation of the proposed educational program,

The researcher designing a proposed educational program by Keller strategy to individualize instruction of volleyball skills which contains three modules, as follows: -

Unit One:

include scrolling of the highest skill. It was repeated twice a week with a different Applied exercises and tests used the evaluation of the unit during the second day of the repeat unit.

Second unit:

Include scrolling from down skill. It was repeated three times a week with a different Applied exercises and tests used the evaluation of the unit during the second day and third repeat unit.

Third unit

Includes skill of serve from the top. It was repeated four times a week with a different Applied exercises and tests used the evaluation of the unit during the second day of the third and fourth repeat unit.

Show the software on a group of arbitrators

After completion of the

program it has been presented to the Experts "attachment (1)" specialists in the areas of curriculum and methods of teaching physical education and volleyball to explore their views on the proposed application through educational programming expired.

- The appropriateness of behavioral objectives (knowledge - skills) of the proposed program.
- The extent appropriate method to view the content.

Choose the education strategy

The researcher identifies the individualized instruction methods that achieve agreement with Keller strategy through which the students are going according to their own ability and speed, and the researcher organizes softwares content which designed as follows: -

Part which automatically displays:

The emergence of a Quranic verse

begins, followed by the researcher , function name and continue to offer the screen shows the title search, guidance and instructions to guide the student on how to deal with the software.

- The part that displays by sequentially chosen:
- The student control any skill in terms of speed relay in and out depending on the level segment, consists of educational content for each skill (preface - behavioral objectives (knowledge - skills) -techniques - educational steps (gradient skill) - Video of skill - picture of the skill - special skill training - evaluation questions).

Preparation of educational software scheme (scenario)

The researcher has access to many of the scientific literature

and studies related to volleyball and Keller strategy to individualize education (3) (4) (8) (25) (26) Through these studies, the researcher set up your SOFTWARE scenario.

Reinforcement and feedback

Reinforcement through the screen appears describes the result to answer questions in a test evaluation for each skill of basketball skills under discussion,

correct the answer you hear and see the sound of applause and the result shows that your answer is correct, and if the answer wrong you will hear and see the screams crowd and a baby crying and the screen appears showing that your answer is wrong.

Feedback through evaluation questions displayed at SOFTWARE after the end of each skill rapporteur learned Exposure percentage SOFTWARE upon which is determined by the transition to apply the skill in practice or stay to re-watch program, in the case of a practical skill application,

and at the follow-up skills card is determined by the transition to the study of other educational unit or stay in the same unit for re-examination.

C- Phase of production program

This phase included the following steps:

- The written text:

The researcher took into account the types and sizes of fonts that are easy to read.

- Footage:

The researcher filming volleyball skills in research and training on the development of each skill on video.

- Still images:

The researcher developed a fixed images of volleyball skills under discussion.

D-Phase of evaluation

The researcher introduced the program to a group of experts to determine the suitability and give their opinion on how to use the software and to propose any amendments.

Application of search experience

The experimental group

The researcher applying research to the first year of experimental students in the period from Sunday, 04.10.2011 to Thursday 05/05/2011. The application of the experiment took a month is divided as follows:

- Two units a week for educational skill scroll down.

- Three educational units skill scroll from the top.

- Four educational units skill face to face serve .

And Divided into educational unit and one table inside the school and the rest of the units outside of the basic course schedule. At the end of the school day for students

Were allocated on a week to redo, and took the unit at the end of each week for students rest in the same module for re-programming Keller strategy and also students who passed the program successfully and skill

performance is identical to the parameters required and the Registrar form is the follow-up skills performance where the return on feedback by watching videos and photos photographic skill set back on the computer and re-apply special skill scheduled workouts replay,

upon the arrival of the students to the level of workmanship required to move the following unit the following week, in case there passed repeated replays on the second day before the end of the allotted to each skill week, and allocates each week teaching one skill and time unit (90) s.

Detailing

modules, explaining as follows:

- View educational programming using Keller strategy to individualize education (15) s

- Business management (10) s

- Warm-up (5) s

- Practical application on the skill on the field and allow to view any part of the software(55) s.

- The final activity (5) s. attachment (15) model

for the unity of educational experimental group.

and in order to make student move from an educational unit to another she must has got 80% of the correct answers and by answering four questions and more of the total questions in the Test SOFTWARE evaluation and (0.75) degrees and more in the follow-up skills as a form,

which was allocated for each specific (0.25) degree with a total 1.25 score for each skill which has been certified follow-up inside the unit of measurement and evaluation student, attachment (16) Photos experimental group during the application of the search experience. The researcher relied on not to follow the principle of self-Speed to learn to require every student to learn the skill one week after the completion of the planned dimensional measurements are made for each female students at one time skills.

The control group

The researcher education for the control group in the period from Monday, 11/04/2011 to Wednesday 4/5/2011 verbal -style explanation and offer practical model the same number of modules experimental group and at the same times by educational units a week for skill scroll from the top, three educational modules skill scroll from the top, four educational units fronting skill of serving .

Divided into educational unit and one inside the school schedule and the rest of the units outside the course schedule for basic students, and has been allocated one day a week to restore the unity of education for the students who did not perform the skill required performance level before the end of the allotted to each skill of the week in order to get them to the level of proficiency required and allocates each week teaching one skill.

Results and discussion:**First: Results****Table (1)**

Denote the differences between pre and post measurement in the level of some of the physical variables and the level of cognitive achievement among students volleyball experimental research group

N=15

Variables	Measure unit	Pre measure		Post measure		Averages differences	Rate of improvement	T value	Significance rate	
		s	x	s	x					
Skillful performance	Pass from the top of the front	No.	٢.٠٧	٠.٣٢	٣.٩٨	٠.٨٥	٠.٩١	%٢٢.٨٦	*٤.٦٢	Significance
	Passed down by the arms	degree		٠.٨٤	٣.٢٨	٠.٣٦	١.٤٨	%٨٢.٢٢	*٤.٣٥	Significance
	Serve from facing higher			٠.٣٢	٧.١٨	٠.٨٥	٢.٣٤	%٤٨.٤٣	*٤.٣٣	Significance
Cognitive achievement	Degree	١٤.٦٧	٠.٦٦	٢٠.٩٧	٠.٣٢	٦.٣٠	%٤٢.٩٤	*٤.٢٠	Significance	

Value (v) Tabulated at 0.05 level = 2.093

A table (1) showing the presence of statistically significant differences between the two measurements pre and post experimental group in skill tests and the level of

cognitive achievement in volleyball under discussion in favor of posterior, as the value of (T) calculated is greater than the value of (T) Tabulated at the abstract level 0.05

Table (2)

Denote the differences between pre and post measurement in the level of some of the variables and skill level cognitive achievement among students Volleyball research group control

N = 15

Variables	Measure unit	Pre measure		Post measure		Averages differences	Rate of improvement	T value	Significance rate	
		s	x	s	x					
Skillful performance	Pass from the top of the front	No.	٢٠.٩	٠.٣٦	٣.١٠	٠.١٢	١.٠١	%٤٨.٣٢	٣.٦٩	Significance
	Passed down by the arms	No.	١.٧٧	٠.٨٥	١.٩٩	٠.٩٨	٠.٢٢	%١٢.٤٣	٣.٨٤	Significance
	Serve from facing higher	degree	٤.٨٦	٠.٢١	٥.١٦	٠.٥٧	٠.٣٠	%٦.١٧	٣.٣٩	Significance
Cognitive achievement	degree	١٤.٦٥	٠.٤٥	١٨.٦٠	٠.٢٤	٣.٩٥	%٢٦.٩٦	٣.٨٧	Significance	

Value (v) Tabulated at 0.05 level = 2.093

Table (2) and the presence of statistically significant differences between the two measurements prior and subsequent to the control group in the knowledge and

skill tests in volleyball under discussion in favor of telemetric, as the value of (T) calculated is greater than the value of (T) Tabulated at the moral level of 0.05

Table (3)
Indication of the differences between the two groups with telemetric
Find experimental and control at the level of some of the skill level
variables and cognitive achievement THE STUDENTS volleyball

variables		Measure unit	Experimental group		Control group		T value	Significance rate
			s	x	s			
Skillful performance	Pass from the top of the front	No	٣.٢٨	٠.٣٦	١.٩٩	٠.٩٨	٣.٣٦	Significance
	Passed down by the arms	No	٧.١٨	٠.٨٥	٥.١٦	٠.٥٧	٣.٨١	Significance
	Serve from facing higher	degree	٢٠.٩٧	٠.٣٢	١٨.٦٠	٠.٢٤	٣.٢١	Significance
Cognitive achievement		degree	١.٨٨	٠.٦٢	١.٨١	٠.٣٢	٣.٨٤	Significance

Value (v) Tabulated at 0.05 level = 2.093

A table showing (3) There are significant differences between the two measures dimensions with the two sets of search experimental and control in cognitive skills

Discussion of Results

It's had been Shown in Table No. (1) there is a statistically significant differences between the averages of pre measurements and post in the level of some skill variables and the level of cognitive achievement ranged value (t) Tabulated from (4.20) to the variable collection of knowledge to (4.62) for the variable scroll from the top, the largest of Tabulated value at the significance level (0.05) and the researcher attributed

tests in volleyball under discussion for the experimental group, as the value of (T) calculated is greater than the value of (T) Tabulated at the abstract level 0.05

these results to the positive impact of the program Keller strategy educational in the development of knowledge and skills tests in volleyball.

The researcher also attributes that advances in the experimental group that the program educational Keller strategy

(individualized instruction), which created a new learning environment by involving all the senses of the learner and the excitability of

motivation toward learning and help the organizer of scientific thinking and make it go in the educational process,

according to his desire, speed, and abilities, prompting the emerging sense of self and worth and its role in the educational process, which led to accommodated and being aware of the facts and knowledge associated with the serving performance of skill and scrolling in volleyball and learn properly.

The researcher also attributes that advances in the experimental group that this strategy calls and taking into account individual differences among learners and compare the level of the learner on its own and work on their development without fear and compare the level of the collection of the rest of the learners,

Which pays to work automatically do not get frustrated when you are working with people with different levels and the continuity of feedback associated with each step of the performance steps to help increase the odds of success and at the same time reduce the

likelihood of failure and apathy in achieving the goals.

It is noteworthy, "Mustafa Al Sayeh Mohammed" (2011) said that feedback contains four vital functions by learning motor skill which is to provide information to correct performance errors, and enhance (strengthening) skill performance,

and increase the motivation of performance, as well as forbidding the performance of all or parts of the skill fuller behavior (22: 97).

And educated master module according to their level of freedom available through educational programming and some of them began reading education guides first, and some of them began to read the behavioral objectives (knowledge - skills) first,

and some of them began to read the technical aspects and some of them watched the video and the pictures first, it must reach educated to proficiency required and determined

by the evaluation before moving on to the practical application and this makes educated interacting with

Module quick-witted in the discovery of mistakes, and thus try to correct them, but must reach the educated to proficiency required in the application and determined by the performance monitoring parameters skill card form follow-up skills of each student before moving on to the next module, considered is the basis for this strategy,

and in the case of non-mastery allows for students who did not perform the skill required performance to repeat the level the next day. In case of repeated non workmanship allows Day last application ends the specified week of unity educational ago to be learned each week.

The consistent results of a study of both "Mervat Samir" (2003) (23), the study of "Sali Abdul Latif" (2005) (9), and the study of "Nevin Hanafi Abdul Khaliq" (2005) (24) that the use of Keller strategy to individualize education a positive impact on the level of performance skills.

Thus, the first hypothesis has been achieved, which provides for statistically significant differences between the averages of pre and post measurements in the level of

learning some basic skills and cognitive achievement in volleyball with the students in the experimental group.

The Table (2) and the presence of statistically significant differences between the two measurements prior and subsequent to the control group in the knowledge and skill tests in volleyball under discussion in favor of posterior measure , as the value of (T) calculated is greater than the value of (T) Tabulated at the moral level of 0.05

The researcher believes that this result may be due to the provision of a range of progressive workouts from easy to difficult and from the simple to the compound as the researcher correct errors as they arise, as well as repeat skill performance by students all led to learn properly and then positive in skill performance efficiency affects and the learning collectively raises motivation of students to compete with each other to highlight the superiority to each other,

Making them perform the skills the best shape possible and consistent with the results of the study of each of the "Karam Louise

Shehata" (1994) (16), "Mervat Samir Hussein." (2003) (23),

which reached their findings to the traditional method, which relies on verbal explanation and practical performance model led to accommodate the learner psychomotor skills and learning positively.

Including consistent with the results of a study, "" Hsan Reda"and" Zainab Saad "(2009) (5), which reached their findings that the use of the traditional method, which depends on the method of memorization had a positive impact on the level of physical performance and the level of performance skills of the learners.

Thus, the second hypothesis has been achieved, which provides for statistically significant differences between the averages of pre measurements and post differences in the level of learning some basic skills and cognitive achievement in volleyball with the control group.

A table showing (3) There are significant differences between the two measures dimensions with the two sets of search experimental

and control in cognitive skills tests in volleyball under discussion for the experimental group,

as the value of (T) calculated is greater than the value of (T) Tabulated at the abstract level 0.05 which gives a reflection on the educational program strategy Keller (individualized instruction) more effectively than the traditional tutorial affect using a method (explanation and model) on the level of performance skills to the skill of the transmission and scrolling up and down in the volleyball.

Researcher due These differences in favor of the experimental group to the positive impact of the content of the educational program, as this method (individualized instruction) frequently rigidity of traditional manner and increases the learners' experiences where he pays the learners to actively participate in the learning process last actively deeper connection with their interest that appears during learning and this What is not available in the conventional method.

The researcher believes that the superiority of the

experimental group was due to be applied on them tutorial provided an opportunity for learners to reach the level of proficiency,

According to the speed of the self and the capacity of each learner as well as the skill is divided into small steps in the logical her sequence in an orderly manner and sequential light helped learners to focus attention and understand every part,

and this is what happened during the learning of skill transmission in squash and characterized by this skill, in particular, the difficulty and the importance of access to the degree of excellence in learning and performance,

And this is something that emphasizes the positive and effective Keller strategy in individualized instruction through super media interference in education serve and scroll from the top and from the bottom of the different types of skill.

The researcher pay attention to this progress may be due to the positive impact of software education using Keller strategy to individualize education because they contain content orderly educational

program is helping the students to remember the correct performance skills and the adoption of the student on the same proficiency in cognitive side and move any part of the skill and freedom of repetition and replays education according to the differences individual for each student helped to increase motivation toward learning and achieve high performance levels,

and use more than one sense in learning helps to deepen the information, as well as the use of the 2 factors thrill and excitement provides positive interaction and freedom available for the use of information and identify ways in which the student in order to match the speed of learning in the direction of the ultimate goal of learning this next to the computer's ability to provide reinforcement visual immediate correct answer on a test

after each educational unit and a hint of the answer wrong and give the opportunity for feedback and try again until you reach the correct answer He helped in the survival of the impact of learning among students information and knowledge and be called when

needed her as the computer has helped to gain performance and proper sequence of motor skill form and remember the details, which helps to keep the knowledge and information and increases their motive to learn.

Indicates by "Mustafa al Sayeh" (2011) that, through studies published its conclusion in the period between analysis (2000 - 2010) could be reached that students who learn by computer achieved the best results in tests for those who learn the traditional way (explanation and performance model), and the use of computers in education in different grades helps cognitive learning even more than the creativity of the individual because it is used enthusiastically in his study. (22: 232)

And that the old view in education (the traditional way) see the learner's mind into which information only, and is just receivers The modern outlook in learning (individual learning) looks at the learner as a reactant District object and purpose of growth and maturity and is not intended to save the information, but building a

learner knowledge according processed her.

This result is consistent with the results of a study "Mervat Samir" (2003) (23), " Sally Abdul Latif " (2005) (9)

Thus, the third hypothesis has been achieved, which provides for statistically significant differences between the mean posterior measurements differences among the two groups of search experimental and control in the level of learning some basic skills and cognitive achievement in volleyball and in favor of students in the experimental group.

Conclusions:

In light of the research findings by the researcher to the following conclusions:

- 1 - The use of educational software Keller strategy to individualize education contributed in a positive way in improving the collection of knowledge and level of performance volleyball skills under discussion for students in the experimental group.
- 2 - Using the method of verbal explanation and practical performance model has contributed in a positive way to improve the collection of knowledge and level of

performance volleyball skills of the control group.

3 - Increase the impact of educational software by using the Keller strategy for individualized instruction on the style of verbal explanation and practical performance model in the variables under consideration and that rates have improved the experimental group is better than the control group.

Recommendations:

In the light of the search outcome ,researcher recommends the following: -

1 - The application of educational software by using the strategy Keller to individualize education in learning volleyball skills among students.

2 - Application of educational software using the strategy Keller to individualize education in learning the skills of other sports activities.

3 - Design and production of a variety of educational software to cover volleyball faculties of Physical Education curriculum.

4 - Design and production of a variety of educational software to cover the various faculties of the process of physical education curriculum.

References

1. Abdul Salam Mustafa Abdel-Salam (2000): the basics of teaching and professional training for teachers, Dar AL FIKR AL ARABY , Cairo.

2-Abdul Azim Abdul Salam Ferjany (2000) educational technology positions, Dar Al-Huda for publication and distribution, 1st edition , Minya.

3. Abdel-Fattah Anas Lethy (2010) techniques and technology teaching and learning, the book publishing house, 2nd edtion , Cairo

4. Ahmed Aboul Naga Izz al-Din (2001): Physical education teacher, Shgart AL Dorr library, Mansoura.

5 - Ahmed Helmi alwakel , Mahmoud Hussein Bashir (1999): Recent trends in the planning and development of the first phase of the program, the Dar AL FIKR AK ARABY , Cairo.

6. Ahmed Yousef Hamdan (2011) The effectiveness of the use of interactive video for the development of some deception skills in basketball with the physical education students and sports- in al Aqsa University, Mesopotamia Journal of physical Sciences, Vol. 18, No. (57), Faculty of

Physical Education, University of Mosul.

7. Allen Wadih Faraj: (2011) Teacher and volleyball coach and the player Alexandria, Mndat Dar ALMARREF for publication.

8. Akram Zaki Khtaabh: (1996) Encyclopedia of Modern volleyball Oman ball, Dar al fikr for printing and publishing.

9-Basham, K.,(2006). The effects of 3-dimensional CADD modeling software on the development of spatial ability of ninth grade Technology Discovery students. Ph.D Dissertation. Louisiana State University and Agricultural & Mechanical College

10-Erbas, A. & Yenmez, A, (2011) The effect of inquiry-based explorations in a dynamic geometry environment on sixth grade students' achievements in polygons. Computers & Education, 57(4).

11-Essam Abdel-Khalek: (2005) sports training theories - applications, 12th edition MUNSHAT AL MAERRF , Cairo.

12-Hassan Rada and Zainab Saad (2009) the impact of an educational program using a

multimedia approach to learning the skill of jumping inside on your horse device to jump to the students of Physical Education mechanism Tanta University, the Third International Scientific Conference. Towards a future vision for a comprehensive physical culture, Volume II Research, Yarmouk University, Jordan.

13-Hauptman, H., (2010). Enhancement of spatial thinking with Virtual Spaces grade ten, Computers & Education, 54,(2)

14- James, K,;, How to Play soccer, Hamlyn, London ,New york , Sydney.Toronto. 2000

15 - Karam Louise Shehata (1994): "the effective use of Keller's strategy in individualized instruction to teach some basic mathematical skills for students in the first cycle of basic education," Sports Research Journal, Part I, No. IV, Faculty of Physical Education, Asyut University.

16-Marwan Abdul Majeed: (2001) Scientific Encyclopedia volleyball, Warraq Foundation FOR Publishing and Distribution, Amman.

17 - Mervat Sameer Hussain Sayed (2003): "the effectiveness of the educational

program proposal Keller strategy (individualized instruction) using multimedia to learn some volleyball skills for students of the Faculty of Physical Education AL MYNIA university ," PhD thesis unpublished, Faculty of Physical Education, Minia University.

18-Mohammad Hassan Allawi and Mohammed Nasreddin Radwan: (2001): motor performance tests, DAR AL FIKR AL ARBY , Cairo.

19. Mohamed Lotfy Hassanein (2011) techniques tactical performance in volleyball, book publishing center, Cairo.

20 - Mohammed Khamis (2003): Education Technology, Dar al-Kalima Library, Cairo.

21. Mohamed Sobhi Hassanein, Hamdi Abdel Moneim (1997) the scientific basis for volleyball and methods of measurement and evaluation, the book publishing center, Cairo.

22. Mohamed Zaki Hassan (2002) Methods of teaching volleyball (Teaching - Education - application - calendar), Library and TechnicalAL ESHEAA , Cairo.

23 - Mustafa Mohamed Sayeh (2011) research literature in teaching volleyball, Dar Al-

Wafa for printing and publishing, Alexandria.

24 - Nevin Hanafi Abdul Khaliq (2005): Effectiveness of the proposed educational program Keller strategy (individualized instruction) using multimedia to learn some skills obsolete ", unpublished PhD thesis, Faculty of Physical Education, University of Tanta.

25. REFFAT Mahmoud Bahgat: (1998) collective and individual learning, FIRST EDTION , the book world, Cairo.

26. Saad Hammad Kassab: (2004) Volleyball education training Arbitration: Seventh of April University Press, Libya.

28. Sally Mohamed Abdel Latif (2005): "Effectiveness of the proposed educational program Keller strategy (individualized instruction) using hypermedia to learn some hockey skills for students of the Faculty of Physical Education", unpublished PhD thesis, Faculty of Physical Education, University of Tanta.

29-Shirvani, H. (2010). The impact of the use of computer technology on the performance of students low achievement in mathematics. The International Journal of Learning, 17(1).

30. VERDY Perfsal, Henry Ellington (2009) leader in educational technology and modern strategies, translation BY Tariq Mahmood, Scientific Publishing House Foundation and the presses, Riyadh, Saudi Arabia

31-Yuda, M., (2011). Effectiveness of Digital Educational Materials for Developing Spatial Thinking of Elementary School Students, Procedia Social and Behavioral Sciences, 3.