



## EFFECT OF INSTRUCTIONSCAFFOLDING ON CREATIVE THINKING AND PERFORMANCE LEVEL OF BASKETBALLBASICS FOR BEGINNERS

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### Abstract

**Objective.** Instruction scaffolding makes learning more dynamic and sustained for learners, providing them with enough support to help them understand the content provided and reach their maximum potential degrees of effectiveness, and thus provide scaffolding when necessary and disappear when the evidence exists to reach the levels to be achieved. The aim of this investigation was to explore the effect of instruction scaffolding strategy on creative thinking and learning some basic skills in basketball among students of the Faculty of Physical Education.

**Methods.** The sample of the research was randomly selected among the students of the Faculty of Physical Education- Mansoura University. The total number of the research sample was (60) college students, was conducted in two groups: one experimental group and the other control group. Each group consisted of (30) college students. The researcher conducted the average in High, weight, age and intelligence level.

**Results.** The results showed statistically significant differences:

1. Between post-test for experimental group and control group in creative thinking, the difference for the experimental group
2. Between post-test for experimental group and control group in basic skills of basketball, the difference for the experimental group

**Conclusion.** In conclusion, the development of thinking within the educational units helped students to increase the amount of learning skills of motor better than the control group, which was learning by the method used in the college, and the specificity of the basketball game when learning their skills, especially that their behavior is characterized by diversity and diversity due to the interaction of several elements at the same time, which requires the development and use of thinking when learning these skills in order to help to call the student the appropriate duty and how to perform, which leads to a successful performance of those skills.

**Keywords:** Instruction Scaffolding, Creative Thinking, Basketball.

### Introduction

In the light of the accelerating changes and the current knowledge and technological flow, the educational process is no longer limited to providing the learner with basic knowledge, facts and skills, but rather to develop the abilities of learners to think in different ways.

Education in the current century is moving towards the use of knowledge in the fields of life and the use of information technology, and to achieve many goals that do not depend on indoctrination and conservation but extend and deepen in more effective teaching and learning based on renewable educational theories, which requires educational institutions to re-develop their programs and methods Teaching in order to keep up with the rapid scientific and

technological developments that require a change in the roles of the teacher and the learner in the educational process.

(R. Adel & K. Ali, 2004) points out that change has not only been the role of the teacher and the learner in the educational process, but also extended to the curricula, teaching methods, methods and strategies. These theories have been based on building knowledge among the learners. As well as various teaching strategies that can be used in classroom education in order to build the knowledge of the learners. Moreover, instruction theory is concerned with building the student to know himself and focuses on the learner and his activity during the learning process and emphasizes the meaningful learning based on the They are through the active role

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and active participation of students in activities performed, in order to build their concepts and scientific knowledge.

Physical education is a fertile ground for acquiring and developing different thinking skills using knowledge, facts and mathematical laws. The objectives of teaching sports education in most countries of the world include objectives that emphasize the interest in developing thinking in different types. (K. Sayed 1981)

(A. Nahil 1993) argues that constructivism is a theory based on the idea that the student is an active learner and can create a cognitive environment by linking new information with previous knowledge.

There have been many applications of instruction theory in the field of teaching of physical education, and many strategies have emerged in this regard, such as the form of v, the real model, the instruction analysis model, the detailed teaching model, and the strategies of the social construction theory of Vygotsky. Through which the assistance and support to students at the beginning of learning and according to their needs to master the learning, and then decreases this support to become a student becomes dependent on himself, thus achieving the concept of effective learning sought by all modern teaching strategies. (H. L. Erickson, 2006)

Vygotsky focused on the social interaction in the acquisition of the individual knowledge and stressed that the development of the area of thinking of the learner is through social interaction with an adult or a more experienced spouse, the role of social interactions is also provided by how to acquire knowledge. As an intermediary of the learner's thinking and cultural practice, it is important for the nearby central growth zone as the point of reference between teacher and learner. (M. Inas 2009)

(S.P. Lajoie, 2005) points out that instruction scaffolding makes learning more dynamic and sustained for learners, providing them with enough support to help them understand the content provided and reach their maximum potential degrees of effectiveness, and thus provide scaffolding when necessary and disappear when the evidence exists to reach the levels to be achieved.

(K. Shih, et al. 2010) adds that instruction scaffolding is an extension of instruction theory and one of its applications. However, it focuses on the learner to a great extent, providing the temporary assistance needed by the learner in order to provide him with some of the skills and abilities that enable him to continue.

The educators agree that the best way to improve the teaching and development of physical

education and sport can only be through the use of the scientific method based on research and experimentation, the use of mind and knowledge building, and help the learner to interact with all educational situations and this factor is missing in traditional education, The scholars and researchers are interested in thinking about a wide interest as it is the finest mental activity. It is a desired and desired goal that the student cannot do without because it is one of the highest levels of cognitive organization. It is based on cognition and knowledge. (A. Ezzo & A. Yousef 2007)

Mental activity to be more complex and difficult than other activities. Which requires educational institutions to provide appropriate opportunities, tools, strategies and programs that stimulate learners to think and practice in the classroom and classroom activities. (S. Hmelo et al. 2007)

(M. Ziad 2006) points out that thinking is one of the basic factors in human life. It helps to guide life and progress. It also helps to solve many problems and avoid many dangers. In this way, man can control and control many things. Thinking is an excellent mental process that builds and establishes on the outcome of other psychological processes.

The thinking process includes the processes, skills and mental strategies used by the student in his or her tasks. The thinking activities vary according to the nature of the task on the one hand and the ability of the student to carry out these operations and activities on the other hand. Some tasks, for example, are problem solving that requires identifying and developing the problem, And then choose strategy or solution, and finally to try and evaluate that strategy, while some other tasks require the ability of discrimination and identify relationships and processes and the extrapolation and standard and so on.

Thinking is not a simple process or a one-dimensional effort. It is a complex process that involves mental processes, forms of knowledge, and psychological content (such as motivation). Some mental processes represent a low level of thinking such as remembering information, some of which represent a higher and more complex level such as analysis, synthesis, interpretation, Health and calendar. (M. Mohamed 2011)

The educational institutions have to adopt one goal of different dimensions and depths in the stages of education, namely, to enable students to think methods, processes and patterns, through the process of education, according to levels of maturity of students, and requirements of knowledge selected,

and according to the characteristics of communities in which the teaching and education, Interrelationships between the single education community and other contemporary human societies. (M. Shahinaz 2007; E. Umniah & A. Naima 2004)

(A. Haider 2012) points out that thinking and creativity are skills and capabilities that can be learned as any other skill through the preparation of appropriate training programs. Thus, the global interest in the subject of creative thinking increased significantly in the second half of the twentieth century, especially in the eighties, and it represents the interest in many models of thinking, training programs, researches and studies that aim to promote and develop this vital field, in accordance with the principles of education, Especially the students of physical education, and enable them to invest the maximum amount of their abilities and creative energies.

(A. Afaf & M. Nihad, 2008) added that the teacher of physical education does not care much about the intellectual preparation within the educational unit and that the focus is only on the physical and skill aspects.

The researchers noted the difference in the level of learners despite the efforts exerted, which may be satisfied by the researcher that the educational curriculum used in the teaching of basketball does not carry the development of thinking and development, resulting in the phenomenon of weakness of the use of thinking in most students and everyone thinks in a traditional way, Therefore, it is urgent to get out of this type of thinking and try to acquire advanced thinking skills, that is, we need to provide an educational system that is thinking at the highest levels and levels. If the teaching of thinking is successful, we have to pay attention to what will push and release and strengthen the readiness for thinking. The basis for teaching cognition and thus the processing and utilization of information in the practical aspect in order to develop the educational process and obtain better educational results.

The researchers believes that teaching students the skills of thinking may make them able to deal with different knowledge and information positively, in addition to another issue that is very important to teachers to pay attention to the differences between individual learners and the diversity of their levels, especially if we realize that there are different aspects of this Diversity, including differences in the home environment, culture, experience, response to the requirements of study and ways of perception of the world and many other differences and needs and

backgrounds and differentiated learning patterns of students, and undoubtedly the methods and methods of education are the guardian Social conditions and needs. These conditions and needs change and develop as the complexity of social life and the diversity of demands and multiple problems, it has become necessary to change and develop educational methods to suit the development of social conditions and trends.

Through the researcher's knowledge of studies and scientific research and the World Wide Web (Internet), the researcher noted within his knowledge the scarcity of studies that dealt with instruction scaffolding in the field of sports in general and in the field of basketball.

Based on the above, the aim of the research is to identify the effect of instruction scaffolding strategy on creativethinking and learning some basic skills in basketball among students of the Faculty of Physical Education.

#### **Method.**

##### **Participants**

The sample of the research was randomly selected among the students of the Faculty of Physical Education- Mansoura University. The total number of the research sample was (60) college students, was conducted in two groups: one experimental group and the other control group. Each group consisted of (30) college students. The researcher conducted the average in High, weight, age and intelligence level.

##### **Tools.**

##### **Torrance Test of Creative Thinking.**

Contains from four scales:

1. Fluency. The total number of interpretable, meaningful, and relevant ideas generated in response to the stimulus.
2. Flexibility. The number of different categories of relevant responses.
3. Originality. The statistical rarity of the responses.

##### **Procedures.**

After determining the basic variables and tools used, the researcher performed the following:

- Conducting pre- measurements. Measurements included height and weight, identification of the age of time and level of intelligence for each student, and application of the test of creative thinking. Before the test, a mental relaxation session was held at (5) s to explain the concept and purpose of the test.
- Application of the test of basketball skills in the search and before the test to explain the concept of testing and its purpose.

- Start the implementation of instructionscaffolding program for (8) weeks and consists of (16) educational lesson (2) weekly lesson.
- The dimension measurements were carried out in the same previous sequence and compared with tribal measurement using the necessary statistical methods.

**Statistical analysis**

All statistical analyses were calculated by the SPSS statistical package. The results are reported as means and standard deviations (SD). Differences between pre and posttests were reported as mean difference  $\pm 95\%$  confidence intervals (meandiff  $\pm 95\%$  CI). Student's t-test for paired samples was used to determine the differences in parameters. The  $p < 0.05$  was considered as statistically significant.

**Results.**

Table 1 the High, weight, age, intelligence level of the subjects.

Federation	N.	High	Weight	Age	intelligence level
<b>Experimental group</b>	<b>30</b>	177.34 $\pm$ 4.67	74.36 $\pm$ 5.67	19.20 $\pm$ 0.51	122.14 $\pm$ 18.87
<b>Control group</b>	<b>30</b>	175.77 $\pm$ 3.78	75.47 $\pm$ 6.82	19.47 $\pm$ 0.62	124.36 $\pm$ 16.87

Table 1 shows no significant differences were observed in the all characteristics of the subjects.

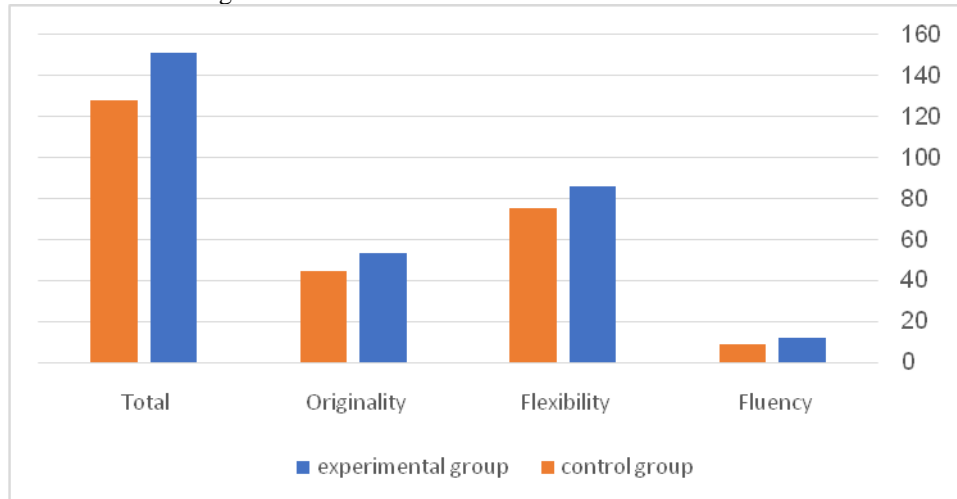


Figure 1. show the differences between post-test for experimental group and control group increative thinking, the difference for the experimental group

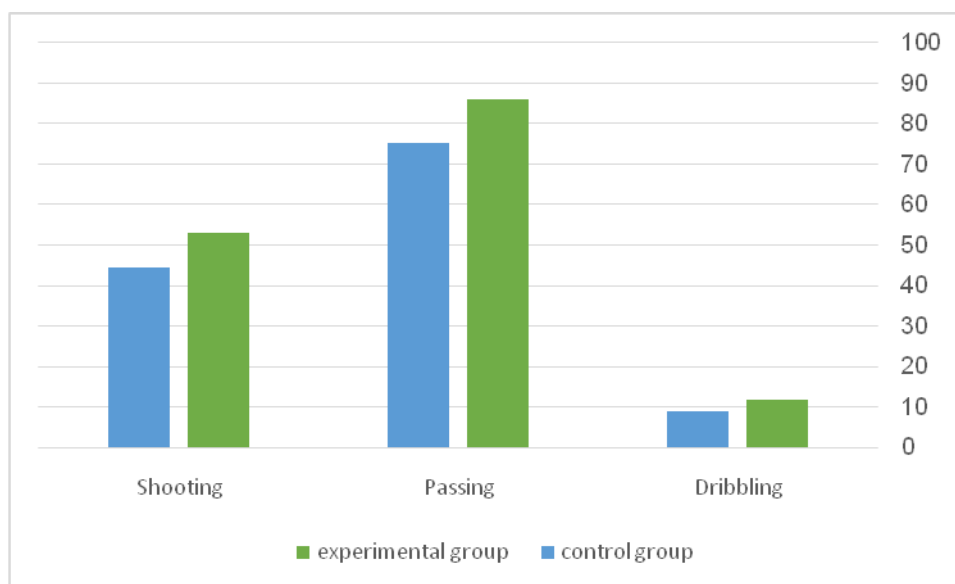


Figure 1. show the differences between post-test for experimental group and control group in basic skills of basketball, the difference for the experimental group

#### Discussion.

The researcher believes that the instruction scaffolding program is characterized by simplicity and practical and can be used by teachers in a wide variety of methods, in addition to it is characterized by cohesion to remain intact throughout the transition from trainee to another trainee to a teacher to a student. Making learning scaffolds an effective mechanism to help learners expand their learning areas to accommodate the most complex cognitive domains. They also take many different forms and strategies to help the learner achieve the highest level of understanding of the content provided, such as guidance and tools. Knowledge and training vocabulary and questions, with the aim of improving the learning process through these tasks and monitor the progress of the learner and the extent to which the content.

In this regard, (E. Essam 1992) states that the duties of sports training are divided into (educational duties, educational duties). The educational duties consist of physical preparation, skill preparation, planning preparation and intellectual preparation.

In this regard, (A. Amin & A. Mahmoud 1999) point out that the role of the teacher in the field of sports is no longer confined to transferring information and knowledge and informing learners about modern innovations, but it is necessary to accustom students to thinking so that he constantly seeks to develop what he knows especially in the field of learning motor skills. The development of the athlete's thinking helps him to know when to do the duty and assess what works in the performance and

know when to be done and what works after the performance as well as to know why the duty in certain circumstances and know how to call the duty.

This is emphasized by (I. Qais 2000) who believes that it is not possible to prepare and design external programs in the teaching of thinking skills, but must include these skills in the curriculum as a whole so that the teacher focuses on the skills of thinking through the course material. Skills of teaching thinking in all subjects in different stages of education from kindergartens as the thinking and different types of skills are subject to learning and training and is characterized by other skills with their ability to move quickly.

(Z. Hassan & Z. Kamal 1992) emphasize that the development of thinking skills means raising the level of intelligence, increasing the levels of the individual's mental abilities and building sound and proper thinking. (A. Magdy 2003) stressed that training in general and educational practice lead to the development of thinking skills. (K. Suo 2004) emphasized that training in expanding thinking patterns increases mental abilities in the same way as exercise increases body fitness.

The results of the study are consistent with the study of (A. Afaf & M. Nihad, 2008; A. Mohamed 2011; B. Rushall, 2002; F. H. Bikmaz 2010) Improved creative thinking among university students.

Thus, the validity of the first hypothesis is achieved.

On the improvement of basketball skills, the researcher believes that the improvement of the

creative thinking reflected directly on the improvement of some of the skills of basketball in question, and this is attributed to the nature of basketball, where the mental side plays a large role in learning their skills in addition to the player who has the ability to think and innovation Has the upper hand in resolving the competition, and in this regard (B. Afnan 2006) that sports basketball is characterized by high mental abilities of the players idea basketball needs of the players to the kind of control and the ability to justify the error and repair or to install the correct perception of movement through mental abilities in the brain and related to the proper performance through the implementation of capacity Appropriate kinetics.

This is confirmed by (A. Gibboney& L. Allan 1990) indicated that studies indicated that teaching the learning content coupled with teaching thinking skills entails higher skills.

The researcher believes that the development of thinking within the educational units helped students to increase the amount of learning skills of motor better than the control group, which was learning by the method used in the college, and the specificity of the basketball game when learning their skills, especially that their behavior is characterized by diversity and diversity due to the interaction of several elements at the same time, which requires the development and use of thinking when learning these skills in order to help to call the student the appropriate duty and how to perform, which leads to a successful performance of those skills.

The results of the study are consistent with the study of (A. Mohamed 2011; M. Mohamed 2011; A. Nahil 1993; I. Qais 2000; B. Rushall, 2002; M. Shahinaz 2007; K. Shih, et al. 2010; E. Umniah& A. Naima 2004; K. Suo 2004; M. Ziad 2006) that thinking programs in general and educational scaffolds in particular contribute to improved skill performance.

#### **Recommendations.**

- The application of instruction scaffolding program along with the teaching and teaching methods in the faculties of physical education.
- Use of instruction scaffolding as one of the methods used to achieve quality assurance and accreditation in university education.
- Attention to teaching thinking at all stages of education, especially in the faculties of physical education, the importance of this in the creation of personal independent and creative.
- Preparation of studies to implement the instruction scaffolding program through the curricula of

various subjects in all stages of university education in the Arab Republic of Egypt.

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