

# The effectiveness of using educational scaffolding on learning the skill of the chest pass for the preparatory stage

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#### **Abstract:**

The research aims to find out the impact of using educational scaffolding on learning the skill of the scroll in sports education lesson for middle school pupils.

The researcher used the experimental curriculum with the pilot design of two groups, one experimental and the other a female officer following the tribal and postgraduate measurement of both groups, where the research community included female pupils in the preparatory cycle (second grade preparatory) of the Mohammadiyah School of 300 pupils for the school year 2022/2023 Adults (12 - 13) years and reached the basic sample of research (50) pupils from the original community, They were divided into two groups, one of which was a pilot by 25 His schoolboy used the style of educational scaffolding, and the other was a reality officer. 25 pupils, in addition to 20 pupils as a reconnaissance sample, the results of the research were statistically significant differences between the mediums of tribal and postgraduate measurements of the pilot group's students in the skill performance level of the skills in question in basketball and in the interest of dimensional measurement

#### **Keywords:**

Educational scaffolding, Pectoral Pass, middle school.



# فاعلية استخدام السقالات التعليمية علي تعلم مهارة التمريرة الصدرية للمرحلة الاعدادية

# المستخلص:

يهدف البحث الي معرفة تأثير استخدام السقالات التعليمية علي تعلم مهارة التمريرة الصدرية في درس التربية الرباضية لتلميذات المرحلة الاعدادية .

استخدمت الباحثة المنهج التجريبي بتصميم تجريبي مجموعتين إحداهما تجريبية والأخرى ضابطة باتباع القياس القبلي والبعدي لكلإ من المجموعتين ، حيث اشتمل مجتمع البحث علي تلميذات المرحلة الاعدادية بنات (الصف الثاني الاعدادي) من مدرسة المحمدية والبالغ عددهم (٣٠٠) تلميذة للعام الدراسي ٢٠٢٢ / ٢٠٢٣ البالغين من العمر (١٢ – ١٣) سنة ، وبلغ العينة الاساسية للبحث (٥٠) تلميذه من المجتمع الأصلي ، وتم تقسيمهم الي مجموعتين احداهما تجريبية بواقع (٢٥) تلميذه استخدمت أسلوب السقالات التعليمية ، والأخرى ضابطة بواقع (٢٥) تلميذه، بالإضافة الي (٢٠) تلميذة كعينة استطلاعية ، وكانت نتائج البحث وجود فروق دالة احصائيا بين متوسطي القياسين القبلي والبعدي لطالبات المجموعة التجريبية في مستوي الأداء المهاري للمهارات قيد البحث في كرة السلة ولصالح القياس البعدي ، اهم التوصيات تطبيق البرنامج التعليمي باستخدام السقالات التعليمية لتحسين مستوي الاداء المهاري للمهارات قيد الإعدادية .

### الكلمات المفتاحية:

السقالات التعليمية ، التمريرة الصدرية ، المرحلة الاعدادية .

# The effectiveness of using educational scaffolding on learning the skill of the chest pass for the preparatory stage

### **Research introduction:**

The current era is witnessing a rapid development and growth of technology, as it generally serves all areas that keep pace with the era to facilitate life for individuals, and the integration of technology in the field of education is considered one of the innovations of the twenty-first century. For the learner, its purpose is to achieve ideal learning that achieves goals, raises efficiency, and continuously develops performance. (9:14)



Where educational institutions aims to improving educational productivity and educational outcomes through the use of modern teaching methods in the educational process, at the level of planning, implementation, evaluation, training and development. This leads these institutions to adopt modern teaching methods, and employ them in all various fields of education, and link their use to the needs of learners and the reality of their society to achieve their goals and meet the challenges posed by the information and communication revolution, which made the introduction of modern teaching methods a strategic choice for the advancement of the educational process. (19:17)

One of the strategies presented by the constructivist theory is instruction scaffolding, and it appeared for the first time through the study of Wood Brune and Ross in 1976, that its goal was to reach the role of the teacher in making the beginner learner or the child have the broad ability to solve problems that surpass his individual capabilities. (368:23)

The educational scaffolding strategy is classified as one of the educational applications of the constructivist theory and one of its applications. It is a modern method that helps the learner to understand the educational process. Educational scaffolding is considered a support process provided to learners in order to help them solve problems and complete the tasks assigned to them according to the learner's need. The teacher provides assistance in the form of Supports differ in terms of type and level in order to achieve a greater understanding of the educational content. (22: 18)

Many studies have appeared that focused on the educational scaffolding strategy in teaching sports skills, such as: the study (Wael Mabrouk Ibrahim 2021)(19), which aimed to identify the impact of educational scaffolding on learning some defensive skills in the sport of boxing, and the study (Reda Ahmed Abdel Hamid 2019 (9) It aimed to know the effectiveness of educational scaffolding in developing mathematical concepts for first-grade middle school students, and a study (Mohamed Hassan Hassan 2020) (15), which aimed to know the effect of educational scaffolding in learning crawl swimming.



#### **Research Problem:**

Despite the efforts made by the Ministry of Education to develop physical education curricula with all its elements and dimensions, teachers, curricula, teaching strategies, and an educational environment to improve the level of learners in physical education by following many modern methods and strategies, the problem of developing sports skills, physical performance, and skill For students, it is still one of the existing problems in its schools.

Through the researcher's experience in teaching physical education and her observations of the level of skillful performance of students, especially in the preparatory stage, the researcher will develop an educational program using educational scaffolding to develop the skill of the chest pass for the preparatory stage, as it is a modern and interesting strategy for students that has not been used much in the field of physical education. It is a strategy in which the teacher uses supporting activities such as (computers - demonstrations - models and models) as temporary scaffolding and props to help students, then the teacher withdraws these scaffolding and props after the student masters the skill and then leaves to complete the rest of his learning for himself alone, relying on his own abilities.

The study (Ali Shamil Hussein, 2020) (12), and the study (Enas Abu Zaid, 2009) (3) indicated the extent of the impact of the use of educational scaffolding on learning skillful performance and developing skills in the preparatory stage.

The researcher believes that designing an educational scaffolding program is an important and essential thing. It is an interesting and exciting educational entrance for students. Despite the many different advantages of modern technological learning environments such as multimedia computer programs and web-based learning, learners suffer from some difficulties while organizing their learning and receiving information in the form of pictures and videos for that. They need the scaffolding of learning to provide them with the support and assistance that allows them to engage with complex and challenging content and skills more than they could before.

Many studies that used educational scaffolding, such as the study of (Saeed Ahmed Al-Mutawaq 2016) (10), the study of (Mustafa Hassan Alawneh 2015) (16) and the study of (Zambrano & Noriega 2011) (21) confirmed the results



of these studies to the extent of the effectiveness of educational scaffolding in the educational process. Teaching and learning This prompted the researcher to design an educational program using educational scaffolding as one of the technological methods that affect the teaching of the skill of the chest pass in the lesson of physical education and to benefit from the results of the study in developing and modifying the lesson of physical education.

#### **Research Aims:**

The research aims to know the effect of using educational scaffolding on learning the skill of the chest pass in the physical education lesson for middle school students.

# **Research hypotheses:**

- 1- There are statistically significant differences between the pre-measurement and the post-measurement on the skillful performance in the physical education lesson.
- 2- There are statistically significant differences between the pre-measurement and the post-measurement on the physical performance of the chest pass skill in the physical education lesson.

#### search Terms:

# educational scaffolding strategy:

- "Taghreed Saeed" defined it as: a teaching strategy used by the teacher temporarily through which he presents a set of activities and programs that increase the level of understanding of the student to the extent that allows him to continue performing the activities on his own. (5: 24)
- It is defined as a static and visual educational system that is provided to learners, as it provides them with the assistance they need in every step of their learning to develop their skill in designing digital images, which are presented in different styles, and may be static images or educational videos. (1: 24)

# **Research Procedures:**

# **Research Methodology:**

The researcher used the experimental approach with an experimental design of two groups, one experimental and the other a control group, following the pre and post measurement for both groups.



#### **Research community:**

The research community included female students of the preparatory stage, girls (second year of middle school) from Al-Muhammadiyah School, who numbered (300) students for the academic year 2022/2023, aged (12-13) years.

# The Research Sample:

A random sample of middle school students (second grade) at Al-Muhammadiyah Preparatory School for Girls was chosen for the academic year 2022 AD / 2023 AD, the second semester, consisting of (50) students from the original community, and they were divided into two groups, one of which was experimental, with (25) students who used the scaffolding method educational, and the other is a control group of (25) students, in addition to (20) students as a reconnaissance sample.

Table (1)
Description of the community and research sample

Ex	The survey sample	The basic sample	The original community
1	20	50	300

The researcher calculated the moderation of the frequency distribution and found equivalence between the experimental and control groups in the variables of age intelligence, cognitive achievement, and some physical abilities (leg muscle strength, arm muscle strength, compatibility, accuracy), and (thoracic pass) skills under study, Tables No. (2),(3) Shows the moderation of the frequency distribution and equivalence between the two groups in the light of the research variables.

Table (2)
The arithmetic mean, standard deviation, median, and modulus of torsion
For the variables in question for the control and experimental groups

n = 50

Variants	coefficient of skewness	Median	standard deviation	Arithmatic mean
The age	-0,30	13,70	0,50	13,61
Leg muscle strength	0,60	1,30	0,07	1,29



Variants	coefficient of skewness	Median	standard deviation	Arithmatic mean
Measuring the muscular power of the arms	0,25	1,85	0,51	1,83
co-ordination measure	0,40	9,00	1,41	8,88
Precision measurement	0,07	11,00	1,43	11,22
Chest pass skill	0,21	22,00	3,01	22,06

It is clear from the previous table (2):

The torsion coefficients for the control and experimental groups ranged between (-0.40, 0.96), that is, they were confined between (+3, -3), which indicates the moderation of the distribution of the sample under study.

Table (3)
The significance of the differences between the two control and experimental groups in the variables under study

n = 50

		Control		Experin	sig .level	
variants	T	standard	Arithmatic	standard	Arithmatic	
-		deviation	mean	deviation	mean	
The age	0,71	0,57	13,56	0,42	13,66	.484
Leg muscle strength	2,10	0,06	1,27	0,06	1,31	.041
Measuring the muscular power	1,11	0,46	1,75	0,56	1,91	.275
of the arms	1,11	0,10	1,73	0,50	1,51	.275
co-ordination	1,00	1,18	8,68	1,61	9,08	.321
measure	,	, -	- ,	<b>,</b> -	- ,	
Precision	1,09	1,29	11,00	1,56	11,44	.282
measurement	1,00	1,20	11,00	1,00	11,	.202
Chest pass skill	0,23	2,88	22,16	3,19	21,96	.817

It is clear from the previous table (3):

There are no statistically significant differences between the experimental and control groups in the variables under discussion, which indicates the equivalence of the two groups.

#### **Data collection methods:**

First: physical exams



Second: skill tests

Third: devices and tools

Fourth: the educational program using educational scaffolding

### First: physical tests:

The researcher determined the physical capabilities under discussion based on scientific references and previous studies, Hatim Saber Khoshnam (2019 AD) (6), Walid Hussein (2012) (20), and these capabilities were put in an appendix survey form (1) and it was presented to a number (5) Nine experts and members of the teaching staff in the faculties of physical education and specialists in the field of curricula and teaching methods, and they have experience of no less than (5 years) Appendix (2) and the physical abilities that obtained a percentage of (80%) or more were selected. These abilities were represented in: The following (compatibility, accuracy, muscular power of the two legs and muscular power of the arms), and Table (4) shows the result.

Table (4)
Percentage of experts' opinions about the physical capabilities
of the skills under study

S	The physical capabilities of the skills in question	Percentage
1	leg muscle strength	90 %
2	Measuring the muscular power of the arms	80%
3	co-ordination measure	100%
4	Precision measurement	89%

#### These tests are as follows:

- 1- Broad jump of stability and the unit of measurement is the centimeter to measure the ability of the muscles of the two legs.
- 2- Pushing a medicine ball to the farthest distance, weighing 3 kg (measuring the muscular capacity of the arms)
- 3- Throwing and receiving the ball test (measurement of compatibility)
- 4- Shooting test on overlapping circles (precision measurement)



# Scientific transactions for physical abilities tests:

The researcher conducted the scientific transactions for the physical abilities tests under study in the period from Sunday 10/2/2022 AD, to Tuesday 10/11/2022 AD.

# **A- Validity:**

The validity of the differentiation was found by applying the test to a distinct group that practices sports activity and others that do not practice sports activity, each of which consists of (20) twenty students from the research community and outside the original research sample. The result:

Table (5)
The significance of the differences between the distinguished and undistinguished groups in the physical variables under study

		40
n	_	411
		711

Variants	Т	distinguis standard deviation	hed group Arithmatic mean	undisting standard deviation	uished group Arithmatic mean	sig .level
Leg muscle strength	8,130	0,10	1,55	0,08	1,32	.033
Measuring the muscular power of the arms	2,211	0,63	2,32	0,59	1,89	.000
co-ordination measure	8,470	0,86	12,70	1,66	9,15	.000
Precision measurement	6,463	0,73	13,70	1,49	11,30	.000

It is clear from the previous table (5) that:

- There are statistically significant differences between practitioners of sports activity and non-practitioners, which indicate the ability of the tests to distinguish between different groups, which indicate the validity of the tests.

# B- stability:

To calculate the stability of the tests, the tests were applied and then reapplied to a sample of (20) twenty students from the research community and from outside the original sample, with a time interval of (10) ten days, and the correlation coefficient was calculated between the first and second applications show the result.



Table (6)
Correlation coefficients between the first and second applications
For the physical test under study

n = 20

Variants	The first application			The second app	, 1 1		
	Arithmatic mean	standard deviation	Arithmatic mean	standard deviation	R	sig .level	
Leg muscle strength	1.32	0.08	1.33	0.08	0.85	.000	
Measuring the muscular power of the arms	1.89	0.59	1.81	0.55	0.93	.033	
co-ordination measure	9.15	1.66	9.70	1.56	0.95	.000	
Precision measurement	11,30	1.49	11.40	1.39	0.90	.000	

It is clear from the previous table (6) that:

The correlation coefficients between the first and second applications in the physical tests in question ranged between (0.84, 0.94), which is a statistically significant correlation coefficient, which indicates the stability of the tests.

### **Skill tests:**

Skill tests were selected by looking at scientific references and previous studies, such as Hatim Saber Khoshnam (2019 AD) (6), Walid Hussein (2012) (20) Appendix No. (3) They were presented to experts specialized in basketball, Appendix No. (2) To ensure the validity and reliability of these tests, the researcher applied them to a sample of the research community consisting of (20) students, but they were from outside the original sample.

#### Statistical coefficients for skill tests:

# A- The validity of the differentiation:

The researcher used the validity of differentiation to find the coefficient of validity of the tests of kinetic skills by applying them to two groups, one of which is (20) twenty students who practice the game of basketball and the second group (20) twenty students who do not practice and the group is similar to the research sample and from outside the original sample, so that the researcher is sure that the kinetic



skills tests distinguish Between the different levels, these tests indicate the distinction for which they were developed and Table (7) explains this.

Table (7)
Significant differences between the two groups, the privileged and the non-discriminatory In the skill variables under study

n = 40

	distinguished group		undistinguished group			
Variants	Arithmatic	standard	Arithmatic	standard	Т	sig .level
	mean	deviation	mean	deviation		
Chest pass skill	22.70	2.85	88.50	11.13	25.606	.000

The tabular value of (t) is at the level of 0.05 = 2.042

It is clear from the previous table (7):

- There are statistically significant differences between basketball practitioners and non-practitioners, which indicate the ability of the tests to distinguish between different groups, which indicate the validity of the tests.

# **B-Stability:**

To calculate the stability of the tests, the tests were applied and then re-applied to a sample of (20) twenty students from the research community and from outside the original sample, with a time interval of (10) ten days, and the correlation coefficient was calculated between the first and second applications. Table (8) shows the result.

Table (8)
Correlation coefficients between the first and second applications
For the skill test in question

n = 20

	The first application		The second application			
Variants	Arithmatic	standard	Arithmatic	standard	R	sig .level
	mean	deviation	mean	deviation		
Chest pass skill	22.70	2.85	23.45	2.86	0.94	.000

The tabular t value is at the level of (0.05) = 0.444



It is clear from the previous table (8):

The correlation coefficients between the first and second applications in the physical tests under study ranged between (0.84, 0.94), which is a statistically significant correlation coefficient, which indicates the stability of the tests.

#### Third: Tools and devices used in the research:

- (Restameter device for measuring tall in centimeters a medical scale for measuring weight in kilograms).
- (Basketball court stopwatch cones Swedish seats handballs measuring tape sticky marks).

# Fourth: the educational program using educational scaffolding:

The researcher looked at some references and studies to identify the steps of designing educational units using the educational scaffolding strategy, and the researcher took the following steps:

# 1- The general objective of the program:

This program aims to teach the students of the second cycle of basic education some basketball skills (chest pass).

# 2- Objectives of the program:

The program seeks to achieve the following objectives:

- A Acquisition of the students how to perform the skill (chest pass) in basketball.
- B- That the students be able to understand and identify the technical stages of the motor performance of the skill under study.
- C- That the students be able to apply the correct performance of the skill in question as they saw it.

# **3- Fundamentals of the program:**

The researcher took into account the following principles:

- A- The logical sequence of the contents of the program should be consistent with its objectives.
- B- The content of the program should challenge the potential and capabilities of the students in a manner that takes into account individual differences and raises their motivation to learn.
- C To provide all students with the opportunity to practice and work at the same time and progress in their learning to achieve the goal in a sequential manner.



#### 4- Content of the educational program:

The researcher determined the components of the educational program based on the content of the targeted course in the light of the general objectives and the specific educational objectives, where the skill (chest pass) was chosen in basketball, and the program was applied through the usage of an educational platform (Google class room), which is a free educational website that aims to Creating an electronic classroom and developing virtual education between the teacher and the student.

# 5- Program implementation capabilities:

The researcher identified the capabilities necessary to implement the program in terms of the place of implementation of the experiment and the tools and devices necessary to carry out the work in the light of the educational program using educational scaffolding.

# 4- The general framework for implementing the program:

The researcher developed the educational units for the skills under discussion according to the physical education curriculum for the second year middle school students, and it was 3 lessons per week, and the time of each lesson was (45) forty-five minutes, at the rate of (12) lessons per month, equivalent to (18) eighteen lessons throughout the period of implementation of the experiment. And as specified in the time plan for the physical education curriculum for the preparatory stage.

- For the control group, they are taught the same learned skill, but with the method used.
- The administrative work, warm-up, physical preparation and closing were carried out in one style, which is the method followed, and with one content for the control and experimental groups, a model for a lesson for the control group and a model for a lesson for the experimental group.

The control group was taught on Saturday, Monday and Wednesday of each week, and the experimental group was taught on Sunday, Tuesday and Thursday of each week, with 3 lessons per week for each group. 6) Six weeks.

# **Exploratory study:**

The researcher conducted the exploratory study for the program units from Saturday 20/11/2022 AD to Thursday 25/11/2022 AD on a sample from the research community and other than the original research sample in order to identify:



How the extent of the program is suitable for the learners' abilities, understanding and assimilation for it.

- Testing the validity of the devices, tools and the place used to implement the program.

Train assistants to apply measurements and record results.

Based on the results of the exploratory study, the researcher made some modifications to the program and the means and how to implement it. It was presented to the experts, and they approved these modifications. Thus, the researcher implemented the actual educational situation for which the program was prepared, Appendix (4).

# **Experimental procedures:**

#### **Pre-measurement:**

The researcher conducted the pre-measurement of the control and experimental groups during the period from Saturday 11/2/2023 to Sunday 12/2/2032.

# The essential experiment:

After the end of the pre-measurement, the researcher applied the proposed educational program using educational scaffolding on the experimental group, and the method used on the control group, during the period from Monday 13/2/2023 to Tuesday 28/3/2023 with 3 lessons per week, lesson time (45) forty-five minutes, for a period of (6) six weeks, with (18) eighteen lessons for each group, according to the physical education curriculum for the preparatory stage.

During the implementation of the experiment, the researcher committed to the following:

- 1- Commitment to class time according to the school schedule.
- 2- Commitment to the content of the basketball curriculum for the preparatory stage.

#### **Post-measurement:**

The researcher conducted the post-measurement after completing the implementation of the experiment for the control and experimental groups in the skill tests under discussion, during the period from Wednesday, corresponding to 29/3/2023 to Thursday, corresponding to 30/3/2023, and all measurements were carried out as they were done in pre-measurement.



#### The statistical method used:

# The researcher used the following statistical equations:

- arithmetical average. -median modulus of torsion
- standard deviation. -Cronbach's alpha coefficient -

T-test for the significance of differences - Percentage change.

Table (9)

The significance of the differences between the means of the pre and post measurements of the group Experimental in the physical variables under study

N=25post differences differences pre sig Variants T measurement measurement average deviation .level Leg muscle 1,31 1,55 0,24 0,12 9,97 strength Measuring the muscular 1,91 2,43 0,52 0,60 4,29 power of the arms co-ordination 9,08 12,76 3,86 1,93 9,53 measure Precision 13,64 2,20 11,44 1,89 5,81 measurement

The tabular value of (t) is at the level of 0.05 = 1.711

It is clear from the previous table (9):

- There are statistically significant differences between the means of the pre and post measurements of the experimental group in the physical variables under study in favor of the post measurement.

Table (10)
The significance of the differences between the means of the pre and post measurements of the group Experimental in skill variables under study

					n = 25	
Variants	pre measurement	post measurement	differences average	differences deviation	Т	sig .level
Chest pass skill	21.96	90.04	68.08	11.21	30.38	.000

The tabular value of (t) is at the level of 0.05 = 1.711



It is clear from the previous table (10):

- There are statistically significant differences between the means of the pre and post measurements of the experimental group in the skill variables under study in favor of the post measurement.

#### **Discussion of the results:**

It is clear from the results of Table (9) that there are statistically significant differences between the averages of the pre and post measurements of the experimental group students in the level of skill performance of the skills under discussion in basketball and in favor of the post measurement, as the calculated (T) value is greater than the tabular (T) value at the level of (0.05). This indicates the positive effect of the program under study using educational scaffolding.

The researcher attributes the superiority of the experimental group students as a result of using the educational program using educational scaffolding, as it was designed using pictures, educational films, videos, and written texts coupled with sound effects and music. In the educational process according to their desires and abilities, which prompted the students to feel themselves, their value and their role in the educational process, which led to their absorption and awareness of the facts and knowledge related to the basketball skills under study and correct education.

This is consistent with what was indicated by Bahira Shafiq (2014), where she indicated that learning by educational scaffolding helps to reduce confusion and disorientation and spend more time in practice, discovery and speed of learning, all of which leads to an increase in the speed of skill acquisition (4: 265-266).

It also agrees with the results of the study of Shahinaz Mahmoud (2007) (11), whose results indicated that the use of educational scaffolding had a positive effect on the skills under study.

The researcher attributes this to the educational program using educational scaffolding, which addressed all the senses of the female students, the research sample, and did not rely on memorization and indoctrination, which gave them the opportunity to acquire and understand knowledge and information related to the cognitive aspect of the skills in question. And that the program using educational scaffolding in its display of information and



knowledge related to the skills in question takes into account coordination, organization, linguistic formulation, and the comprehensiveness and integration of knowledge content.

Bahira Shafiq (2014) mentions that educational scaffolding is more positive when it contributes to the learning environment, as it gives learners the content and basis for understanding the new information that will be presented in the lesson (17:265-266).

# Conclusions and recommendations First, the conclusions of the research:

- 1- The educational program using educational scaffolding used with the students of the experimental group has a positive effect on the level of skillful performance of some basketball skills under study.
- 2- The traditional method used with the students of the control group has a positive effect on the level of performance of the basketball skills under study.
- 3- The educational program using educational scaffolding used with the students of the experimental group is more effective than the traditional method used with the students of the control group for the level of skillful performance of some basketball skills under study.
- 4- The percentage change of the experimental group students is higher than that of the control group in the level of performance of the basketball skills under study.

#### **Second: Research recommendations:**

In light of the findings and conclusions reached by the researcher in this research, she recommends several recommendations:

- 1 Paying attention to the use of educational scaffolding in teaching physical education, given the advantages of this strategy demonstrated by the current study and previous studies, and its positive impact on the development of physical education skills, and work to include this strategy in the educational curricula to become an essential part of the educational process.
- 2 Training physical education teachers on how to employ educational scaffolding so that it is implemented and mastered well.



- 3 Work to include specialized courses to prepare teachers for the concept of educational scaffolding and methods of employing it, and preparing them in a way that qualifies them to practice and apply it while teaching physical education.
- 4 Encouraging the use of educational scaffolding in all subjects, and directing educational supervisors to the importance of following teachers to employ educational scaffolding in academic courses.
- 5 The need for teachers to pay attention to modern teaching strategies while teaching physical education.

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