Appropriate active learning strategies for teaching the content of physical education lessons

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Extract

The study aimed to identify appropriate active learning strategies for teaching the content of physical education lessons. The researcher employed the descriptive survey method, as the study relies on collecting data from various sources, classifying, analyzing, and reporting their status. The original research population included curriculum and teaching methods professors from different Egyptian universities. One of the data collection tools was a questionnaire designed by the researcher.

The key findings indicated that active learning strategies are the most suitable for teaching the content of physical education lessons. The field survey results demonstrated that cooperative learning, microteaching, blended learning, and peer guidance are the most appropriate strategies for delivering lesson content effectively.

The researcher recommended providing intensive training programs for student teachers on how to efficiently implement active learning strategies, generalizing the application of the most effective active learning strategies in practical education courses, and developing feedback strategies and observation lessons to align with educational needs and support teaching performance.

Keywords:
- Strategy.
- Active learning.
- Physical Education Lesson Content.

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مستخلص:

استهدفت الدراسة تحديد استراتيجيات التعلم النشط المناسبة لتدريس محتوي درس التربية الرياضية ، واستخدمت الباحثة المنهج الوصفي المسحي حيث يعتمد البحث على جمع البيانات من مصادر متنوعة ، وتصنيفها وتحليلها وتقرير حالتها ، وكما اشتمل المجتمع الاصلي للبحث علي اساتذه المناهج و طرق تدريس بالجامعات المصريه المختلفه ، ومن أدوات جمع البيانات الاستبيان من تصميم الباحثة ، أهم النتائج استراتيجيات التعلم النشط الأكثر استراتيجيات التعلم النشط المناسبة لتدريس محتوي درس التربية الرياضية، كما أثبتت نتائج الاستطلاع الميداني أن التعلم التعاوني والتدريس المصغر والتعليم المدمج وتوجيه الأقران الاستراتيجيات الأكثر ملاءمة لتدريس محتوي الدرس ، وأوصت الباحثة بتوفير برامج تدريبية مكثفة للطالبة المعلمة حول كيفية استخدام استراتيجيات التعلم النشط بكفاءة، تعميم تطبيق استراتيجيات التعلم النشط الأكثر فعالية في مقررات التربية العملية، تطوير استراتيجيات التغذية الراجعة ودروس المشاهدة لتتلاءم مع الاحتياجات التعليمية وتدعم الأداء التدريسي.

كلمات مفتاحية:

- الاستراتيجية
- التعلم النشط
- محتوى درس التربية الرياضية

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Appropriate active learning strategies for teaching the content of physical education lessons

Introduction and Research Problem:

Education is the cornerstone of the progress of nations; therefore, countries strive to develop their educational systems. Generally, education still relies heavily on traditional methods, where the teacher bears the greatest responsibility, and the learner's role remains largely passive. Consequently, many institutions are working to enhance education by introducing new teaching methods aimed at making learners active and engaged while positioning the teacher as a guide and facilitator.

This is achieved by creating a positive learning environment and implementing modern teaching strategies that require an educational setting rich in stimuli. These approaches contribute to activating the student's role,

encouraging them to participate positively in the learning process rather than adopting a passive, receptive role. (6:30).

Active learning is an educational philosophy that emphasizes the learner's active engagement in the learning process. It encompasses various educational practices and instructional procedures designed to activate the learner's role through hands-on activities, research, and experimentation. This approach enables learners to acquire knowledge independently while also developing skills, values, and attitudes.

Rather than focusing on rote memorization and passive reception of information, active learning fosters critical thinking, problem-solving abilities, teamwork, and collaboration. The emphasis is not merely on acquiring information but on the methods that facilitate the student's acquisition of knowledge, skills, and desired values. Active learning is based on a range of activities that the learner engages in, resulting in behavioral patterns that rely on their active and positive participation in the educational setting. (3:45).

A study by Nettleship (2003) indicated that active learning facilitates the use of critical thinking skills and the development of creative thinking abilities. It also enhances students' academic achievement, strengthens their motivation to learn, increases their attention, and fosters positive attitudes toward both the teacher and the subject matter. Additionally, it promotes classroom interaction and the development of higher-order thinking skills. (11: 61-70).

This is achieved by designing innovative learning environments that encourage learners to engage beyond passive listening and actively construct knowledge. Such environments enhance learners' ability to utilize higher-order thinking skills, including analysis, synthesis, and evaluation. (10:27).

Active learning methods vary widely and include cooperative learning, self-directed learning, peer tutoring, and problem-solving. All these approaches aim to achieve educational and instructional objectives, with their application depending on learners' proficiency levels and requiring careful implementation.

Through an extensive review of existing studies, the researcher found a scarcity of research addressing active learning strategies. This gap motivated the researcher to conduct this study to identify the most suitable active learning strategies for teaching physical education lesson content, as these strategies may have a positive impact on enhancing lesson effectiveness.

Research Objective:
The aim of this research is to identify the active learning strategies most suitable for the content of physical education lessons.

Research Questions:
• What are the active learning strategies suitable for lesson planning and classroom management?
• What are the active learning strategies suitable for warm-up activities?
• What are the active learning strategies suitable for general physical preparation?
• What are the active learning strategies suitable for specific physical preparation?
• What are the active learning strategies suitable for the main section (educational activity – practical activity)?
• What are the active learning strategies suitable for the concluding section (assessment – cool-down)?

Study Terminology:
Strategy (Strategy):
Zaitoun (2000) defines it as "the art of using available resources and means in an optimal way to achieve desired goals in the best possible manner, meaning that it consists of specific methods to address a problem, accomplish a task, or employ practical techniques to achieve a specific goal" (279:4).

Active Learning (Active Learning):
Suleiman, Abdul Qader (2006) defines it as "the educational practices followed by the teacher inside the classroom, which primarily depend on the student's activity, effectiveness, and positive engagement, along with their responsibility for their own learning. It involves the learner's ability to make decisions about their learning and encourages them to work

collaboratively to support both their personal and social intelligences" (423:5).

Research Procedures:

First: Research Method:

The researcher used the descriptive survey method, as it is suitable for this study.

Second: Research Population and Sample:

The original population of the study included professors of curriculum and teaching methods from various Egyptian universities. The research sample consisted of two groups:

- **First Group: Expert Sample**

a purposive sample of 10 professors of curriculum and teaching methods in physical education was selected to evaluate the active learning strategies questionnaire suitable for physical education lesson content.

- **Second Group: Main Sample**

    This group was selected from professors of curriculum and teaching methods in various physical education faculties across Egypt. The sample included 32 professors from 9 different Egyptian universities.

Sample Description

Sample	Description	Its role	Number
First Category	Experts	To investigate the opinion about the appropriate Active Learning Methods Survey	10
Second Category	Basic Sample	Conducting scientific transactions and identifying active learning Strategies appropriate to the Content	32

Distribution of Curriculum and Teaching Methods Professors in the Main Research Sample

N = 32

No.	University	Specialization		Number
		Methods	Curriculum	
1	Helwan Island, Helwan Pyramids	9 3	2	14
2	Alexandria Fleming, Alexandria Abu Qir	3 3		6

3	Asyut	1		1
4	Menoufia	2		2
5	Beni Suef	1		1
6	Kafr El Sheikh	1		1
7	Sadat	3	1	4
8	Tanta		2	2
9	Fayoum	1		1

Third: Data Collection Methods and Tools:

A. **Scientific References and Related Studies:**

The researcher reviewed relevant scientific references and studies.

B. **Official Records:**

The researcher referred to the official records related to the students of the Faculty of Physical Education for Girls in Cairo, specifically to gather data about the birth dates of the sample members and the grades for courses on teaching methods and practical education in the third year.

C. **Personal Interviews:**

Several personal interviews were conducted with a group of experts in the field of curriculum and teaching methods in physical education, particularly those responsible for supervising practical education (Appendix 1).

D. **Document Analysis:**

The researcher reviewed the course descriptions for teaching methods (both practical and theoretical) and field training courses to understand the cognitive and skill-based learning objectives and the assessment methods being used.

E. **Worldwide Information Networks:**

The researcher utilized the worldwide information networks, including both Arab and foreign sources, as well as the digital library unit at the central library and the Academy of Scientific Research, which allowed the researcher to access the latest data, information, studies, and research related to the research topic.

Designing the Questionnaire:

The researcher designed an electronic questionnaire to gather the opinions of professors in curriculum and teaching methods of physical education,

particularly those involved in teaching in the education department. The goal was to collect relevant data and information to help identify the most suitable active learning strategies for teaching physical education lesson content (Appendix 2).

The questionnaire aimed to gather opinions on:
- Active learning strategies that are suitable for physical education lesson content.

The questionnaire was shared electronically (Appendix 2) with experts in the field of curriculum and teaching methods in physical education (Appendix 1) via the What'sApp social media platform on 2-6-2024.
The researcher excluded the active learning strategies that did not receive at least 70% agreement from the experts, as this percentage is commonly used in many studies and scientific research in physical education.

Third: Questionnaire for Identifying Active Learning Strategies Suitable for Teaching Physical Education Lesson Content

Table (3):

This table presents the opinions of experts regarding the identification of active learning strategies most suitable for teaching physical education lesson content.

N = 10

No	Physical Education Lesson Sections	Active learning methods									
		Cooperative Learning	Blended Learning	Microteaching	Feedback	Discovery Learning	Observation Lessons	Discussion and Dialogue	Problem Solving	Peer Guidance	Self-Learning
1	Planning and Classroom Management	8	7	7	1	1	8	1	1	7	6
2	Warm-Up	9	6	8	1	1	2	1	1	8	4
3	General Physical Preparation	9	7	7	2	1	1	1	1	7	3
4	Specific Physical Preparation	8	7	9	2	2	3	2	1	8	1
5	Main Section	10	9	8	1	3	3	2	1	8	1
6	Educational Activity	9	8	9	2	4	3	4	3	7	2
7	Applied Activity	7	8	8	1	1	2	3	1	8	2
8	Closing Section	10	9	8	3	1	2	3	1	7	1
	Total	70	61	64	13	14	24	17	10	60	20
	Percentage	87.5%	76.25%	80%	16.25%	17.5%	30%	21.25%	12.5%	75%	25%

Table (3) shows the experts' opinions on identifying active learning strategies suitable for physical education class lesson content as following:

- Cooperative learning received the highest percentage at 87.5%.
- Followed by microteaching at 80%.
- Then blended learning at 76.25%.
- And lastly, peer guidance at 75%.

Based on the experts' opinions, the researcher adopted the following four strategies:

1. Cooperative learning.
2. Microteaching.
3. Blended learning.
4. Peer guidanc

Presentation and Discussion of Results:

Table (4)

The frequencies, percentages, and **K2** values of the opinions of faculty members in the questionnaire survey on the active learning strategies suitable for teaching physical education lesson content.

N = 32

No.	Parts of the Physical Education Lesson	Cooperative Learning Strategy		Blended Learning Strategy		Microteaching Strategy		Peer Guidance Strategy		Chi-square (χ^2)
		K	**%**	**K**	**%**	**K**	**%**	**K**	**%**	
1	Planning and Classroom Management	30	93.75%	2	6.25%	0	0.00%	0	0.00%	*270.00
2	Warm-Up	3	9.38%	24	75.00%	2	6.25%	2	6.25%	*153.00
3	General Physical Preparation	4	12.50%	2	6.25%	25	78.13%	1	3.13%	*141.13
4	Specific Physical Preparation	27	84.38%	2	6.25%	2	6.25%	1	3.13%	*168.63
5	Main Section	3	9.38%	26	81.25%	2	6.25%	1	3.13%	*183.63
6	Educational Activity	7	21.88%	0	0.00%	0	0.00%	25	78.13%	*178.63
7	Applied Activity	27	84.38%	2	6.25%	2	6.25%	1	3.13%	*198.63
8	Closing Section	1	3.13%	1	3.13%	29	90.63%	1	3.13%	*231.75

- **K2 critical value at 0.05 significance level = 5.99**

It is clear from **Table (4)** that there are statistically significant differences in the opinions of faculty members regarding the active learning strategies suitable for teaching physical education lesson content. The significance is in favor of the following strategies, in order:

- Cooperative learning strategy
- Microteaching
- Blended learning
- Peer guidance

The percentages ranged between **75.00%** and **93.75%**.

Classroom Planning and Management:

Cooperative learning received the highest percentage at **93.75%**, reflecting its significant role in improving classroom organization and managing group activities. Collaboration among students helps create a well-structured learning environment, which enhances the effectiveness of the educational process.

This finding aligns with Al-Qahtani's study (2010), which examined the impact of cooperative learning on improving student relationships and classroom organization and management. The study emphasized that teamwork enhances interaction and encourages active student participation.

Warm-Up:

Blended learning received the highest percentage at **75%** in this phase, indicating its importance in integrating digital technologies with physical activity. This approach contributes to creating an interactive learning environment that motivates students more and guides them toward specific objectives.

This finding is supported by Hussein's study (2016), which demonstrated that blended learning enhances interaction between the teacher and students. The study found that integrating technological tools into lessons helps capture students' attention and increases their engagement.

General Physical Preparation:

Microteaching received the highest percentage at **78.13%** in this phase, reflecting its significant ability to enhance teachers' skills through continuous feedback and repetition. This strategy helps improve their teaching performance effectively.

Specific Physical Preparation:

Cooperative learning received the highest percentage at **84.38%**, highlighting its effectiveness in this section. Group learning helps improve physical skills through collaboration among students, along with role distribution and responsibility sharing.

This aligns with Al-Zahrani's study (2010), which confirmed that cooperative learning enhances the development of physical skills and encourages student participation in physical activities.

Main Section:

Blended learning received the highest percentage at **81.25%** in this part, reflecting its effective role in integrating technology with physical activities. This strategy contributes to making lessons more interactive and motivates students to learn better.

Educational Activity:

Peer guidance received the highest percentage at **78.13%** in this part, highlighting its effectiveness in improving learning through the exchange of knowledge among students. This approach enhances group learning and interaction between students.

This is consistent with Al-Duwairi's study (2018), which showed that peer guidance significantly contributes to improving both individual and group learning. It provides students with the opportunity to learn skills from their peers.

Practical Activity:

Cooperative learning received the highest percentage at **84.38%** in this phase, reflecting its significant impact on enhancing the application of physical skills in a group setting. Collaboration among students helps improve practical activities and increases active participation.

This is in line with Al-Zahrani's study (2010), which emphasized that cooperative learning enhances the application of physical skills in sports activities, helping to improve students' performance.

Concluding Section:

Microteaching received the highest percentage at **90.63%** in this part, reflecting the role of this strategy in assessing and improving performance through observations and continuous feedback. Microteaching helps summarize lessons and provide effective feedback.

This aligns with Al-Khawalda's study (2001), which demonstrated that microteaching helps teachers improve their performance through repetition and continuous feedback.

Conclusions:
1. **Classroom Planning and Management:** Cooperative learning received the highest percentage at **93.75%**.
2. **Warm-Up:** Blended learning received the highest percentage at **75.00%**.
3. **General Physical Preparation:** Microteaching received the highest percentage at **78.13%**.
4. **Specific Physical Preparation:** Cooperative learning received the highest percentage at **84.38%**.
5. **Educational Activity:** Peer guidance received the highest percentage at **78.13%**.
6. **Practical Activity:** Cooperative learning received the highest percentage at **84.38%**.
7. **Concluding Section:** Microteaching received the highest percentage at **90.63%**.
8. **Multiple Strategies:** It is possible to use more than one strategy in a single lesson, which contributes to diversifying teaching methods, enhancing student interaction, and increasing the effectiveness of the educational process.

Recommendations:

Based on the findings, the following recommendations are made:
1. Generalize the application of the most effective active learning strategies, such as cooperative learning, microteaching, and blended learning, in practical teaching courses.
2. Provide intensive training programs for student teachers on how to use active learning strategies efficiently.
3. Design sustainable development plans for implementing active learning strategies, considering continuous feedback for adjustments.
4. Expand the use of blended learning to integrate technology with pedagogical approaches, fostering effective learning.

5. Develop feedback strategies and observation lessons to better align with educational needs and support teaching performance.

References
First: Arabic References

1. Al-Duwairi, Jamal Abdullah. (2018). The Effect of Peer Guidance on Improving Group and Individual Skills Among Students.
2. Al-Zahrani, Abdullah Saeed. (2010). The Impact of Cooperative Learning on the Application of Physical Skills in Physical Education.
3. Zamel, Magdy Ali. (2006). Perspectives of Lower Basic Stage Teachers in UNRWA Schools on Their Practice of Active Learning in Ramallah and Nablus Governorates.
4. Zeitoun, Kamal Abdel Hamid. (2000). Teaching Science from a Constructivist Perspective. The Scientific Office for Computers, Publishing, and Distribution.
5. Suleiman, Magda Habashy, et al. (2006). The Effectiveness of Using Some Active Learning Strategies in Developing Creative Thinking and Attitudes towards Science and Mathematics among Primary School Students. First Scientific Conference: Education and Development in New Societies, March 2006.
6. Shaheen, Mohammed Ahmed. (2010). Field Training Problems in the Practical Education Course at Al-Quds Open University from the Students' Perspective. *Al-Quds Open University Journal*, (4).
7. Hussein, Mona Abdel Aziz. (2016). The Role of Blended Learning in Enhancing Student Interaction in Physical Education.
8. Al-Khawalda, Abdullah Mohammed. (2001). The Effect of Microteaching on Improving Teachers' Instructional Performance.
9. Al-Qahtani, Mohammed Abdullah. (2010). The Impact of Cooperative Learning on Improving Student Relationships and Classroom Organization.
10. UNICEF, in collaboration with the Ministry of Education. (2006). Workshop on Developing a Training Guide for Implementing Active Learning Skills in Primary Schools.Second: English References
11. Nettleship, J. (2003). Active Learning in Economics: Mind Maps and Wall Charts. *Economics*, 28(118), 69-71.