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The importance of employing mini-games in activating the learning process during the physical education and sports class from the point of view of intermediate education teachers (A field study on some middle schools in the state of M'sila)

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Abstract:

The study aimed to know the role of mini-games in activating the learning process from the point of view of middle school teachers. To achieve its results, we used the descriptive approach. The sample of the study consisted of about 120 middle school teachers in the state of M'sila in a random manner where we designed a questionnaire in three axes and each axis consisted of 8 phrases. The result of the conducted study showed that the use of mini-games in the physical education and sports class has significantly increased the activation of the learning process, the achievement of most of the cognitive and sensory goals as well as the programmed social-emotional movement. The study also recommended that teachers need to invest in children's love for playing in their implicit inclusion of mini-games within the educational units in order to achieve the objectives of the class and reach the maximum learning levels in the physical education as well as sports class

Keywords: mini-games, learning process, physical education and sports class

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1. INTRODUCTION

Physical and sport education is an integral part of the comprehensive educational system. It seeks to perpetuate the nation's health and social aspirations, just like other meows, by finding safe educational formulas for the upbringing of generations, which makes them active citizens an able to view their roles in all areas of life to the fullest physical education and sports play an effective role is raising young people in all physical, social psychological and mental aspect therefore, it is inconceivable that a modern educational curriculum ignores its great importance. Where the importance of sports in general and school sports in particular is evident in raising the student's readiness, inclinations and ability to interact with educational activities positively and with interest, as well as in improving his self-confidence and abilities, as it contributes to the development of the student's physical, health, psychological and social aspects.(Bin Hajj Djilali Ismail and others,2021, p91)

The lesson of physical education and sports is the small unit in the academic program, and it is the basis of each them education, as it relies on several different methods and means in order to achieve the educational goals underline. Among these important educational methods are mini-games, which are considered of exceptional importance and a new entry point for their association with young people and the formation of a solid base with well-established structure an the provision of all requirements in order to take them award the best to develop their level as well as giving them appropriate opportunities to express their desires, tendencies, an natural needs, as well as having fun. Which they acquire through permanent practice, whether it physical, skillful, psychological or intellectual knowledge. Provide that it is a planned manner that ensures its continuity during the training educational units. In addition,(Jamal Hamadi and Fateh Yaakoubi ,2014, p243)

It is worth noting that the greatest burden rests with teacher of physical education and sport, as he the first and last facilitator of the class(hazloun ahmad, abd raouf ben abd rahman, 2020, p78), as the child finds in play a way to express himself, empty his various motor a psychological represses, and satisfy his needs for fun and pleasure,(Abdelkader Boukhalfa ,2021, p19), so play for the child is very most important factors and means that help in growth in all respects, (sohaib zaghim, belkacem boukiratm, 2022, p97).



2. Research problem:

Activating Learning Is an educational philosophy That relies on the learner's positivity in educational situations. By relying on himself in obtaining information, acquiring values and attitudes, an acceptance that is based on memorization and indoctrination, but rather on developing thinking and the ability to solve problems as required by situations. Where the teacher recruits various experiences, knowledge methods and methods to activate the educational process for its success. Among them is the inclusion and employment of mini-games in various educational situations. The latter, which is among, is the Most important means that distinguish the share of physical education and sports. This is because play occupies a great place in the lives of children in general, through its impact on all physical, social, psychological and mental aspects, which in their entirety from then purposes and foundations of the educational and learning process.

3. General question:

What is the importance of employing mini-games in activating the learning process during the physical education and sports class from the point of view of intermediate education teachers?

3.1. Partial questions:

- Is there any importance to employing mini-games in developing the social and emotional class?
- Is there any importance to employing mini-games in developing the sensory motor aspect in the physical and sport education class?
- Is there any importance to employing mini-games in the development of the cognitive aspect in the share of physical education and sport?

4. Hypotheses:

The hypothesis is defined, as the prior solution to the research problem (Ahmed Amine Fouzi) .An hypothesis is a theoretical relationship between two variables, it is the hypothesized and proposed answer to question posed. It is a temporary or preliminary solution that the researcher imagines to reveal the relationship between the variables of the studied phenomenon

4.1. General premise:

Employing mini-games is of great importance in activating the learning process during the physical education and sport class from the point of view of intermediate education teachers.

4.1.1. Partial premises:

- Employing mini-games is important in developing the sensory motor aspect in the physical and sport education class
- Employing mini-games is important in developing the cognitive aspect of the physical education an sport class.

5. Research importance:

The subject of the research is of great importance by highlighting the importance of employing mini-games in activating the learning process during the physical education and sport class. This is because these games meet the broad social, emotional, motor and cognitive needs of children and invest them in their love of playing. This is on the one hand and on the other hand due to the ease of its practice and the lack of needs for many means and large areas

6. Research aims:

Through this research, we seek a number of goals, the most important of which we summarize in the following points:

Highlighting the importance of employing mini-games in the physical education and sport class

Exploiting mini-games in order to develop the various aspects of the learner's personality, social, emotional, sensory, motor and cognitive.

Investing in children's inclination and love to play by employing these games

Urging teachers of physical education and sport to employ mini-games during classes,

Given their ease and lack of requirement whether in terms of means or space.

7. Define terms and concepts:

7.1. Mini –games:

a. Idiomatic definition: It is a simple organization games that do not require for major skill complexes, where the person in charge of its implementation can specify some of its laws

According to the goal to be achieved. It is also considered one of the means that help in building the physical and skillful capacity of the body, as well as helping the individual to work fruitfully for the benefit of the group (Nasseri Salah, Issam Samir. 2021. P190)



b. Operational definition: These are the simple games suggested by the teacher of physical education and sport during the class. It lays down rules and regulations according to the number of students and the available means in order to employ them to achieve the established educational goals.

7.2. Educational process

a. Idiomatic definition: It came in the tongue of the Arabs (know it, learn it and master it (Ali el fass and Ibn mandhour, 1997, p416)

The last decades of the twentieth century have known a prominent interest in the methodology of teaching materials. Where a number of researches of different specializations devoted themselves to researching issues related to the promotion of teaching methods and analyzing the problems of learning in the various stages of education and schooling. Which resulted in scientific and practical methods of obtaining, acquiring, and un distending, employing and benefiting from information.

b. Operational definition: The process is based on a number of basic elements that are represented by the teacher who is responsible for achieving the learning goals by transferring information, knowledge and facts to the learner by employing all available means.

7.3. Class of physical education and sport:

a. Idiomatic definition:

The physical and sport education class represents the most important part of the group of parts of school program for physical education and educational experiences and materials that achieve the goals of the curriculum, and therefore, it is assumed that all students of the school will benefit from it every week at least .Also ,the teacher of physical and sport education must take into account all considerations related to teaching methods, educational aids, and evaluation so that these goals can be achieved easily (Hossini Abderrazak, Mukhtari yassin°, 2020,p293).

It also means the class in which students practice various sports activities in order to develop the psychological, motor, social, cognitive and moral aspect. (ben sassi radwan, 2022, p143).

b. Operational definition:

It is a set of exercises and sport activities that achieve student balance. It is practiced in the educational institution, under the supervision of a trained and supervised professor using a set of means and equipment in different ways in order to reach the programmed learning goals.

8. Previous studies:

*A study by: (Muhammed Rahmani and Saci Abdelaziz)2016/2017,entitled"The impact of a proposed program with small games" to develop social behavior for second stage pupils of primary education (Maarif Magazine on June 2018,issue 24.Institute of Sciences and Technology of Physical and Sports Activities ,Muhamed Akli oul hadje .University Bouira.

Where the importance of research was evident in studying the effect of proposed program with small games to develop school social behavior, the researcher used the experimental approach; as the study sample included (60) male and female students from primary educational schools. They were chosen randomly for knowing the effect of the proposed program on the social behavior scale, taking into account the scientific foundations of the scale. The results of this research showed that the proposed program effects the development of social competence among the members of the experimental sample in general and positively.

*A study by: ben Saci Radwan and El Antari Muhamed Ali (2017),entitled" the effect of a proposed program with mini-games in the development of motor perception among middle school students, during the lesson of physical education and sport; journal of researcher in Humanities and Social Sciences. Issue (25 September 2018), This study aimed to know the effect of mini-games on the development of sensory and motor perception abilities of distance and time (lateral distance, running distance, running time)through the application of a set of mini-games ,during which the researcher applied the experimental approach to an intentional sample of (46) students. Where

the results showed the effect of mini-games in the development of sensory and motor perception of distance and time for the benefit of the experimental sample, and the study recommended teachers of intermediate education to use mini games in the class for individual and group activities because of their importance in the development of sensory and motor perception

*A Study by: Rabouh Salah ,Guergour Muhamed and Youcif Ismail(2016/2017) entitled "A proposed program using mini-games to develop mental abilities(intelligence and attention)among primary school students. Journal of Science and Technology of Physical and Sport Activities, issue seven ,December2019, University of Science and Technology "Muhamed Boudiaf Oran"



The study aimed to identify the extent of the effectiveness of the learning program using mini-games in the development of mental abilities (intelligence and attention concentration) in children where the study was conducted on a sample consisting of (32) children from the primary stage,(16) children experimental sample and (16) control samples. The researcher used the Wechsler scale and results where reached in which the statistical data indicated that there are statistically significant differences between children in the level of intelligence and attention concentration and that the proposed program has affected that.

9. Research methodology and field procedures:

9.1. Exploration study:

The exploration study is a process carried out by the researcher before the beginning of the fieldwork, as well as survey process on the circumstances surrounding the phenomenon that the researcher wishes to study and identify the most important hypotheses that can be developed and subjected to scientific research (Marwan abd elmadjid Ibrahim, 200, P38).

Where we extend through this research to a set of points, including:

- Adjust the list of sources, references and research related to the research topic.
- Connect with and get closer to the research community
- Detection of obstacles and research difficulties
- Adjust the research tool, extend its suitability, and check its psychometric properties'

9.2. Research Methodology:

The study aims to identify the importance of employing mini-games in activating the learning process during the physical education and sports class from the point of view of teachers of intermediate education and in order to diagnose the phenomenon and reveal the relationship between its elements, it has been relying on the descriptive approach and the latter is considered the most appropriate and most used, especially in the field of educational, psychological and social research .Where the descriptive approach is a way to describe the studied phenomenon and estimate it quantitatively by collecting accurate data and information about the problem ,classifying, analyzing and subjecting it to study (Ait Mansour Rabeh Tahin , 2003,p2018)

9.3. Search variables:

9.3.1. Receiver variable:

It is the factor that the researcher wants to measure the extent of its impact on the studied phenomenon and is usually known as the variable of the experimental factor (the receiver), (Abd-el-Kader Mahmouda, 1990, P58).

The receiver variable of research is mini-games.

9.3.2. Dependent variable: It is a variable in which the receiving variable is affected, and its value depends on the effect of the values of changes, as whenever he makes adjustments to the value of the receiving variable, the effect appears on the dependent variable (Muhamed Hussein Allawi,Oussama Kamal Rateb 1999, P129)

The dependent variable of the research is learning

9.4. Community and Research sample:

a. Research community: Determining the research community is one of the main points that the researcher should take into account and give it great attention. Searching for the (330) teachers of intermediate education in the state of M'sila, through our contact with the inspector, Mr. Salah Hussein

b. The research sample: It is considered one of the conditions to ensure the validity of the hypotheses, and it also allows access in many cases to the information to be known, which is a partial group of the study community, chosen in a specific way and conducting the study on it, and then using those results and generalizing them to the entire study community (Muhamed Obaidat and others, 1999, P80). The sample of our research consisted of (120) teachers of physical education and sports in the intermediate education stage, with a rate of (36,36%), where chosen randomly in order to give equal opportunities to all members of the sample.

9.5. Search tools:

In order to answer to the problem posed, we used the following tools.

9.5.1. Theoretical study: It meant by the use of various references, books and related notes, as well as contacting the subject inspector, focusing in particular on teachers of physical and sports education and mini-games

9.5.2. Questionnaire: we prepared a questioner form for the teacher of physical education and sports for the intermediate stage, as one of the methodological tools for collecting data in the descriptive approach according to the following steps:



A. Building the questioner: A questioner was designed for teachers of physical education and sports for the intermediate stage to find out their view on the importance of employing mini-games in activating the learning process, as it included in its initial form more than 24 phrases divided into three axes, each axis serving one of the research hypotheses.

- The first axis: Through it, we highlight the importance of employing mini-games in developing the sensory-motor side, and it contains 8 questions (from 1 to 8)
- **The second axis:** Through it, we highlight the importance of employing mini-games in developing the social and emotional side, and it contains 8questions (from 9 to 16).
- The third axis: Through it, we highlight the importance of employing mini-games in developing the cognitive aspect, and it contains 8 questions (from 17 to 24)

B. Stability of questionnaire: the stability of questionnaire was verified through the **Cronbach's alpha** coefficient in order to know the extent of stability in the results and not change them in the same circumstances and conditions, where the value of the Cronbach's alpha was (0,937), which is a very high stability coefficient, while the value of the Alfa coefficient for the research axes is represented in the following tables:

Table 1. The results of Cronbach's alpha selection	

	Axes	Alpha value
1	the importance of employing mini-games in	0.914
	developing the social and emotional side	
2	the importance of employing mini-games in	0.944
	developing the social and emotional side	
3	the importance of employing mini-games in	0.846
	developing the social and emotional side	
	Total marks	0.937

9.6. Statistical methods:

- In this study, the use of the statically package system on spss for its version 22
- Cronbach's alpha (α) coefficient for the stability of the questioner according.
- Total observed (frequency expected frequency)/expected frequency
- Degree of frequency: (n-1) where is n the number of answers.
- The significance level = 0, 0.5

9.6.1. Presentation and discussion of results:

A. Presentation and analysis of the first axis data

 Table 2. The importance of employing mini-games in developing the social and emotional side

Statistical conclusion	(a) Scheduled	(u) Calculates	Repetition	Suggestions	Questions
			103	Always	In your opinion, does programming
sign		150,35	14	Sometimes	mini-games increase student's activity
			03	Never	and arise their morale during class?
Sign			98	Always	-Do the students feel comfortable and
		126,95	15	sometimes	happy when the class contains a set of
			07	Never	mini-games?
Sign	5,99		97	Always	-Pupils interact positively with
		123,35	17	sometimes	programmed mini-games ?
			06	Never	
Sign		169,35	107	Always	-Did the programming of the
			11	sometimes	mini-games increase student's interest
			02	Never	and motivation in the class compares to



Sign	_	114,05	95 16 09	Always sometimes Never	the other classes? -Do you think that such mini-games activate group spirit and social interaction among students?
Sign	_	135,45	100 13 07	Always Sometimes Never	-Through your programming of mini-games: the problem of isolation and introversion among some students has been eliminated?
Sign	_	141,05	101 15 04	Always sometimes Never	Mini-games increase student's sense of belonging to the group?
Sign		144,95	102 13 05	Always Sometimes Never	-Did your employment of mini-games during the class help achieve the programmed social and emotional goals?

Analyzing and discuss the results:

According to the statistical analysis and by referring to the critical values shown in the table at the degree of freedom of (N=2) and the level of significance, we find that the calculated value of K ranged between (114,02) and (169,35), which is greater than the tabulated (K=5,99) and it is a statistical function. That between (95) and (107) of the respondents answered with the phrase" always», while between (11) and (17) of the respondents answered with the phrase sometimes, And between (02) and (09) of the respondents answered with the phrase with the phrase "never".

It can be said that the two independent variables affect one always .That is, the use of mini-games by teachers in the physical and sport education has an important role in developing the social and emotional aspect of students.

B. Analyzing and presenting the data of the second axis

Table3. The importance of employing mini-games in developing the sensory andmotor side in the physical and sports education class

Conclusion	(a) Scheduled	(a) Calculates	Repetition	Suggestion	Questions
			109	Always	-Does programming of mini-games
sig		178.85	08	sometimes	implicitly include basic motor
			03	Never	behavior?
Sig			108	always	-Did this help the pupils to improve
		173.45	07	Sometimes	their motor skills?
			05	Never	
Sig			111	always	-Did this contribute to the production
		183.87	05	sometimes	of new movements?
	5,99		04	Never	
sig		159.05	105	always	-Programming mini-games makes it
			11	sometimes	easier for students to perform some
			04	Never	complex and difficult movements?
sig		163.35	106	Always	The improvement in programmed
			07	Sometimes	sensory motor skills is due to the mini
			07	Never	games more than the physical exercises.
sig			110	Always	-Mini-games affect pupil's
		183.95	07	Sometimes	neuromuscular coordination?
			03	Never	
sig			103	Always	Mini-games work to achieve different
		149.85	13	Sometime	sensory motor responses.
			04	Never	
sig			112	Always	Your employment of mini-games



194.45	05	sometimes	during the class helped to achieve the
	03	Never	programmed sensor-motor goals?

Analyzing and discuss the results: According to the statistical analysis and by referring to the critical values shown in the table at the degree of freedom of (N=2) and the level of significance, we find that the calculated value of K ranged between (149,85) and (194,45), which is greater than the tabulated (K=5,99), which is statistical function. Whereas, between 103 and 112 of the respondents answered with the phrase always, while between 5 and 13 of the respondents answered with the phrase sometimes, and between 3 and 7 of them answered with the phrase never.

It can be said that the two independent variables affect one another that is the teacher's employing of mini-games during the physical education and sports class; it has an important role in developing sensory and motor said on the students.

C. Analyzing and presenting the data of the third axis

Table 4. The importance of of employing mini-games in developing the cognitive aspect in the physical and sports education class

Statistical conclusion	(α) Scheduled	(α) Calculates	Repetition	Suggestions	Questions
			95	Always	Do the programmed mini-games
Sign		113.75	15	Sometimes	simulate different exercises?
			10	Never	
Sign			93	Always	Do we apply the rules to students
		106.35	18	Sometimes	when using mini- games?
			09	Never	
Sign			97	Always	Students make fewer mistakes
		126.67	16	sometimes	when applying the rules in mini-
	5,99	,99	07	Never	games?
Sign		149.45	10	Always	Do your inclusions in mini- games
			3		enable the students to know the
			12	sometimes	stadium and places in where they

			05	Never	play?
Sign	1	78.85	10	Always	Mini- games pave the way to learn
			9		the laws of games?
			08	sometimes	
			03	Never	
Sign			98	Always	Does this reflect positively on the
	1	26.6	14	sometimes	cognitive side when students
			08	Never	perform?
Sign			10	Always	Developing the cognitive side of
	1	35.05	0		students is more through mini-
			11	sometimes	games in physical exercises?
			09	Never	
Sign			11	Always	Employing mini-games during the
	1	94.45	2		class helped to achieve the
			13	Sometimes	programmed cognitive goals?
			05	Never	

• Analyzing and discuss the results:

According to the statistical analysis and by referring to the critical values shown in the table at the degree of freedom N=2 and the significance level S=0,05,We find that the calculated value of k ranged between 10635 and 19445,which is greater than the tabulated (K=5,99), which is statistical function. Whereas, between 93and 112 of the respondents answered with the phrase always, while between 5 and 18of the respondents answered with the phrase sometimes and between 3 and 10 of them answered with the phrase never.

It can be said that the two independent variables affect one another that is the teacher's employment of mini games during the physical education and sports class; it has an important role in developing the cognitive aspect the students.

10. Discuss the results in light of the hypotheses:

10.1. Discuss the results of the first partial hypothesis:

The first hypothesis indicates that employing mini-games in the physical and sports education class is important in developing the social and emotional side of students .By analyzing the results of the first axis of the questionnaire, it appears to us that the teacher's programming of mini-games during the class has



increased the student's activity through their high morale when performing and their feeling with pleasure, this increased their interest in the class, as the results indicates that this programming worked to cultivate the spirit of the group and the love of belonging to it, and eliminate isolation and introversion among some students, and this helped to achieve the programmed social and emotional goals which is indicated by the study of Mohamed Rahman and Sami Abdul-Aziz (2016/2017),entitled "The impact of a proposed program with small games for the development of social behavior for second stage pupils of primary education. From it, the hypothesis has been achieved.

10.2. Discuss the results of the second partial hypothesis:

The second hypothesis indicates that the use of mini-games in the physical education and sports class is important in developing the sensory and motor aspect of students. By analyzing the results of the second axis of the questionnaire, it appears to us that the teacher's programming of mini-games during the class has helped to improve their motor skills and produce new movements because the mini-games implicitly contain basic motor behavior, where it made it easier for the students to perform some complex movements from the acquired neuromuscular coordination, which works to achieve the sensory motor goals programmed in the class which was indicated by the study of Ben Sami Radwan and ElAntari Muhamed Ali (2017),entitled "The impact of a proposed program with small games to develop sensory and motor perception among middle school students through the lesson of physical education and sports. From it, the hypothesis has been achieved.

10.3. Discuss the results of the third partial hypothesis:

The third hypothesis indicates that the use of mini-games in the physical education and sports is of a great importance in developing the cognitive aspect of students. By analyzing the results of the third axis of the questionnaire, it appears to us that the teacher's programming of mini-games during the physical education class simulates exercise, where all the laws are applied during it, and the measurements and dimensions are recognized. It helps to reduce student's mistakes and thus reflects positively on their cognitive side, which led to researching the cognitive goals programmed in the class in an easy way. This is indicated by the study of Rebouh Salah and others (2016/2017),entitled «The effect of a proposed program using mini-games on the development of mental abilities, intelligence and attention focus among primary school students. So, the hypothesis has been fulfilled.

10.4. Discuss the results of general hypothesis:

By discussing the results in the light of the hypotheses put forward, it was researched to accept the proposed partial hypotheses, which requires us to accept the general hypothesis of the study which recognizes that the use of mini-games is of great importance in activating the learning process during the physical education and sports class from point of view of middle school teachers.

11. General conclusion:

The starting point of our current study came to search for an answer to a general question about the importance of mini-games in the physical education and sports class by including them implicit in the course of the class, as the results of the questionnaire for physical education and sports teachers showed the important space, that these games nave in the life of child in general and the students in particular. It works to develop the various aspects of his social, emotional, sensory-kinesthetic and cognitive personality. It has an important place in the psyche of the child, as his inclinations push him to play with enthusiasm which leads to him interacting on a large scale with his peers and integrating him into the group. So, he influences and is affected by it, and during it, he feels happiness and the sweetness of achievement.

The results also showed that the mini-games push the students to develop their motor skills due to the nature of stimulation in them and the ease of their performance and their rules, unlike the complex and dry exercises.

Finally, we can say that employing mini-games in the physical education and sports class has a great role in developing group spirit, creating enthusiasm among students and developing their motor and cognitive abilities and skills. All of this, in turn helped the teachers to reach the maximum levels of learning and achieve the educational goals programmed with great effectiveness.

12. SUGGESTIONS AND RECOMMENDATIONS:

Based in the results of the study, we suggest the following recommendations:

- Urging the teachers to invest in the love of play among the students by including them in the mini-games during the physical education and sport class because of their great importance



- Teachers should choose many games that take into account the requirements and capabilities of students.
- Selection of mini-games in line with the objective of the session.
- Selection of mini-games that simulate programmed exercise.
- Develop an annual plan for these mini-games in line with the annual programming of the ministerial curriculum.
- Commitment of the principal of safety and not neglecting the entertainment aspect of mini-games.
- Invite article inspectors to conduct educational seminars on the subject
- Invite researchers and academics to diligence on the issue of mini-games and ways to activate educational process.

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