

10.5281/zenodo.51327

Volume 1 | Issue 2 | 2016

# THE EFFECTIVENESS OF TEACHING STRATEGY WITH GAMES IN THE DEVELOPMENT OF SOME PHYSICAL CAPACITIES AMONG PRIMARY SCHOOL STUDENTS (6-8 YEARS)

Harbach Brahim<sup>1i</sup>, Ouadeh Ahmed El Amine<sup>3</sup>, Djourdem Bendehiba<sup>1</sup>, Mokrani Djamel<sup>1</sup>, Benzidane Hocine<sup>1</sup>, Benchenni Habib<sup>2</sup>

<sup>1</sup>Institute of Physical Education and Sport, University of Mostaganem, Algeria <sup>2</sup>Institute of Physical Education and Sport, University of Oran, Algeria <sup>3</sup>Institute of Physical Education and Sport, University of Tissemsilt, Algeria

#### Abstract:

This study aims to determine the effectiveness of teaching strategy with games in the improvement of some physical and motor capacities and among students at the primary level (6-8 years), where we used the experimental method with two groups experimental and control. Because the teaching strategy with games is one of the best methods to stimulate students' activity and to increase the motives to exercise the session of physical education and sports, because it depends on the dynamics of team games similar to the performance during the session. The research was done on a sample of 32 students representing the experimental sample and 32 students representing the control sample. And a set of tests was implemented to determine some physical and motor abilities, after obtaining the results before and after measurements. After statistical processing of the results, the researchers reach that the effectiveness of the teaching strategy with games has improved some of the physical and motor capacities and among students of the primary level (6-8 years).

Keywords: teaching strategy, games, physical abilities

<sup>&</sup>lt;sup>i</sup> Correspondent author: Harbach Brahim, email: <u>brahim.harbach@univ-mosta.dz</u>, <u>harbachbrahim@hotmail.fr</u>

Copyright © The Author(s). All Rights Reserved Published by Open Access Publishing Group ©2015.

#### 1. Introduction

The Physical Education and Sports has major social importance and represent an essential part in the continuity of civilization between past and present peoples, given that, physical education and sports lesson is included in the educational system. Without doubt, consistent legal and programs rule as the lead in different ways and methods of teaching. This is what we have reached in Afaf Abdul-Karim as saying that "...the successful teaching in which it occurs is a mismatch between what is intended and what is happening in the lesson to reach an agreement" (Afaf Abdul-Karim, 1995).

The teacher must understand a set of standard teaching methods, and in this regard mention Hanifi Awad that: "...in order to have an effective teacher, there must be the interaction of values between the teacher and the learner's in the side of good performance and the response of learners to this performance in the light of the standards Commitment" (Awad, 1999, Page 138). On this basis, the teacher must seek to diligence in the development and discovery of new ways and methods in line with the times and is working to raise the motivation of pupils and increase the production of knowledge, including teaching and games strategy, which considered Yassin, of the most important ways that contribute to the improvement of some of the physical and motor capacities among students (Yasin, 2006, page 98), which was allocated to this strategy frames and educators made significant efforts in middle and secondary schools because the concept of teaching with games, beyond the borders of some games and exercises performed by students once a week under the supervision of a professor, but became his purposes and fundamentals, like the rest of subjects, where the professor of this article must made, especially in the secondary phase; an additional efforts, because the pupil at this stage seem to be very sensitive in his life (adolescence). For this, the researchers discussed the proposed educational units using the teaching strategy by games for the development of some physical and motor abilities of students, and assess its efficacy on the primary school students (6-8 years).

Teaching has become a body of expertise and teaching skills planned by the teacher and run in order to help students achieve certain goals. And so that teaching is achieved by games, it has to be an interaction values between teacher and pupils inside of sincere performance and the response of pupils to this performance in light of the standards commitment (Hanifi Awad. 1999, p. 138) and seek to help his disciples to switch from negative to positive and inertia to effectiveness through various approved instructional use optimizations appropriate means of teaching, and the use of teaching playing strategy. But the reality now teaching is the opposite, it has become completely

what should be the fact that, despite the evidence of the great importance of these skills (experience) teaching on the practice of teaching work in a scientific manner and systematic, but many of the teachers working in the field of education, they are still on about the lack of knowledge and how to apply them because their understanding of the process of teaching is still and so far limited to some individual privacy. And Muston and others is noteworthy that this method does not help and understanding that, the process of interaction between teacher and pupil behavior always reflect a certain pedagogy, and special education and behavior that result from such behaviors is to reach to achieve the goals. (Hassan Shehata, 1998, P 15) and in this area confirms Zaki Mohammed and others (1993) "...that teaching improvisational or authoritarian non-studied and which does not depend on the basics of effective teaching, be the result of limited progress and quickly is limited". (Mohammed Zaki , 1993, P 98), in parallel with the current reality of teaching and based on direct interviews, and field visits completed, the researchers believe that the teaching work in this field is based on the continuous use of imperative method, which included, in essence, some of the peculiarities of teaching; random, authoritarian and spontaneity in teaching without a trace to send a strategy of teaching interaction and cooperation between the parties to the stimulus and the teaching process, and therefore we decided in this research to ask the following question: "Did the use of the teaching strategy by games influenced the improvement of physical capacities and motors capabilities of the primary school students (6-8 years)?"

# 2. Methods

Researchers have used in this study, the experimental method as the most appropriate approaches, due to the nature of the research problem and to achieve its objectives and will enable them to get a high degree of objectivity results.

# 3. Areas of research

# 3.1 The human sphere

The research sample included in the exploratory study was 8 male students. While the research sample in Applied study included 64 pupils distributed as follows experimental sample consists of 32 pupils and represent the sample on which we applied the proposed modules in several events, and the control sample consists of 32 pupils and represent the sample left for the exercise of the share of physical education with according to their teacher and the ministerial program.

#### 3.2 The time domain

The field study carried out by researchers conducted tests with respect to tribal 08/01/2015 and applied in educational units from 15/01/2015 until 05/03/2015. The posterior tests have been applied in 03/12/2015 where the same work in the pre-test.

### 3.3 Spatial field

The field study was conducted with regard to the control and experimental groups in the secondary school (Bouhamidi Tahir) - Ouled Mimoun - Tlemcen.

#### 3.4 Search tools

The researchers used the following tools: Sources and references, Arab and foreign as well, as skill tests and physical tests, and were as follows:

- sit, lie test within 45 s;
- test bend the torso forward from standing;
- test ran 30 meters high start of the movement;
- test throws Medicine Ball 3 kg;
- vertical jump of stability;
- test ran 60 meters slowly start;
- test ran 5 Min.

# 4. Results

#### 4.1 Presentation and discussion of the pre-test results for samples of research

The purpose of objective judgments about the nature of the homogeneity between the samples of the research; control and experimental, through the results of the total tribal tests, the researchers worked to address the total grades of crude obtained and using the significance of differences "T", which offers us a way statistically appropriate to compare the averages of the results and then making judgments about the significance of differences.

Statistical	A control Experimental		Т	Statistical		
measures	sample		samp	ole	calculated	significance
Tests	X1	Y1	X2	Y2		
Test sitting from lying down	32.59	4.69	32.47	4.33	0.11	Non-significant
45s	52.57	<b>1.</b> 07	52.47	ч.55	0.11	Non-significant
Test bend the trunk of the	17.09	4.03	15.66	4.54	1.32	Non-significant
front of the stand	17.07	4.05	15.00	т.9т	1.02	Non Significant
Test runs winding 30 m high	3.91	0.35	4.10	0.55	1.60	Non-significant
starting	0.71	0.00	1.10	0.00	1.00	i ton significant
Medical Test throws the ball	3.33	0.66	3.17	0.59	1.00	Non-significant
3 kg of sitting	0.00	0.00	5.17	0.07	1.00	i ton significant
Vertical jump of stability	2.74	0.21	2.62	0.21	1.09	Non-significant
Test runs low starting 60 m	9.02	0.40	9.10	0.63	0.65	Non-significant
Test ran 5 min	41569.	83.70	1655.6	78	0.18	Non-significant

# Table 1: The extent of homogeneity between the control andexperimental sample results in the tribal tests

0.05 level of significance, the degree of freedom (n-2) = 62, T driven 2.00

It has been shown through statistical treatment total crude results tribal of samples of search using test of differences significance "T" and as described in the Table 1 that all the values of T, which fluctuated between 0.11 youngest value and 1.60 as the largest value is smaller than the tabular value and which amounted to the value 2 when the degree of freedom (2n-2=62) and the level of significance 0.05, which confirms that there is no significant difference between these averages that is occurring differences between the averages is not statistically significant and therefore this statistical collection underlines the extent of heterogeneity that exists between samples in terms of symmetry in the level of some of the physical attributes.

# 4.2 Presentation and discussion of the pretest and posttest results for samples of search

After using statistical significance scale of "T" Student and after the employment and statistical treatment process, it's indicated that "T" calculated for the control sample, which amounted to 2.02,1.12, 0.23,1.07,0.61,1.86,1.92 and are smaller than the value of "T" Driven by the value of 2.042 when the degree of freedom (n-1=31), and significance level 0.05.

Since the value "T" calculated for the sample control is smaller than the "T" spreadsheet, the researchers conclude that virtual differences between the mean pre-test and post-test of the sample control results are no statistically significant any that there is no apparent improvement.

Statistical	Pre-test		Post-test		Т	Statistical
Measurements Tests	X1	Y1	X2	Y2	calculated	significance
Test sitting from lying down 45s	32,59	4,69	31.16	3.76	2.01	Non-significant
Trunk bending forward standing	17,09	4,03	16,75	3,38	1.12	Non-significant
The test was the curvy 30m 6 signs	3,91	0.35	3,92	0,40	0.23	Non-significant
Throwing medicine ball 3kg seating	3,33	0,66	3,26	0,66	1.07	Non-significant
The s p g Uncle Woody from a second	2,74	0,21	2,72	0,25	0.61	Non-significant
Test running 60m low start	9,02	0,40	9,12	0,39	1.86	Non-significant
Test ran 5 Min	1659,3	83.7	1646,8	81,54	1.92	Non-significant

 Table 2: Significance of differences between the averages of the results of tests and

 tribal posteriori the control sample

After using statistical significance scale of "T" Student and after the employment and statistical treatment process, it's indicated that "T" calculated for the experimental sample amounted to "T" calculated 7.42, 12.19, 7.59,11.18,7.27,8.00,10.02, and are largest of the values of "T" Driven by the value of 2.042 when the degree of freedom (n-1=31), and significance level. 0.05.

Since the value of "T" calculated experimental sample is greater than "T" spreadsheet, the researchers conclude that virtual differences between the mean pretest and posttest while statistically significant experimental sample for the post-test, and this is due to the extent of the application of the instruction units using the teaching strategy by games.

posteriori tile experimental sample						
Statistical	Pre-test Post-test		Т	Statistical		
measurements	2/4	2/4	2/0	2/2	calculated	significance
Tests	X1	Y1	X2	Y2		0
Test sitting from lying down	32,47	4.33	34.84	3.62	7.42	Significant
45s	02,17	1.00	01.01	0.02	7.12	
Trunk bending forward	15,66	4,54	19.78	3.20	12.19	Significant
standing	15,00	4,04	19.70	5.20	12.17	
The test was the curvy 30m 6	4,10	0.55	3.96	0.54	7.59	Significant
signs	4,10	0.55	5.90	0.54	7.59	
Throwing medicine ball 3kg	3,17	0,59	3.88	0.66	11.18	Significant
seating	3,17	0,09	5.00	0.00	11.10	
The s p g Uncle Woody from	2 ( )	0.01	2.04	0.10		Significant
a second	2,62	0,21	2.84	0.10	7.27	
Test running 60m low start	0.10	0.62	8.98	0.62	8.00	Significant
_	9,10	0,63	0.98	0.62	8.00	
Test ran 5 Min	1655,6	78	1706.8	65.4	10.02	Significant
	1000,0	70	17 00.0	0.5.4	10.02	

Table 3: Significance of differences between the averages of the results of tests and tribal
posteriori the experimental sample

#### 4.4 Presentation and discussion of the post-test results for two samples Search

Table (04) shows significant statistically differences between all research samples (control and experimental) and are for the benefit of the experimental sample in most physical capacity tests where the value of the calculated between 2.48 and 3.93. They are greater than the value of the indexed T estimated 02 at significance level 0.05 and the degree of freedom (2n-2=62), except for the test was the curvy 30m 6 signs and running 60m low start test value calculated 0.37,1.05 which is less than the value of the indexed T.

On the basis of this statistical achievement, we find that winning virtual differences between the average test results for samples of the dimensional control and experimental research statistically significant for the experimental sample for the development of physical abilities. This is due to the effectiveness of teaching by using teaching strategy by games on the experimental sample and the extent of the application of the proposed modules in the development of physical capabilities, while the control sample differences occurring due to privacy influential in the teaching session by supervisor Professor in physical education and sport session.

Statistical	A control Experimental		T	Statistical		
measures		sample sample			calculat	significance
Tests	X1	Y1	X2	Y2	ed	
Test sitting from lying down 45s	31.16	3.76	34.84	3.62	3.93	Significant
Trunk bending forward standing	16.75	3.38	19.78	3.20	3.63	Significant
The test was the curvy 30m 6 signs	3.92	0.40	3.96	0.54	0.37	Non-significant
Throwing medicine ball 3kg seating	3.26	0.66	3.88	0.66	3.70	Significant
The s p g Uncle Woody from a second	2.72	0.25	2.84	0.10	2.48	Significant
Test runs 60m low start	9.12	0.39	8.98	0.62	1.05	Non-significant
Test ran 5 Min	1646.8	81.54	1706.9	65.42	3.20	Significant

Table 4: Comparison	of test results using the	dimensional differences	significance test "T"
			- 0

0.05 level of significance, the degree of freedom (n-2) = 62 T spreadsheet 2.00

#### 5. Discussion

Teaching strategy by games has a positive impact on the physical and motor capacities among students, and to prove this hypothesis, it's clear to us through the table that shows the statistical significance of differences occurring between the mean tribal posteriori the results and samples of the control and experimental research that: The use of the teaching strategy by games with the experimental sample have had a positive impact in the development of some physical and motor abilities, where the respondent found that privacy teaching for the control sample, which was taught under the supervision of the teacher did not have a positive impact in the development of any physical and motor capacity.

It has been shown through statistical treatment described using the significance of differences "T" statistical differences occurring between pretest and posttest on the experimental sample level results statistically significant in favor of the post-test where all the values of "T" reached statistical significance at the level of statistical significance 0.05 and the degree of freedom (31) and this is consistent with the results of Ibrahim Yassin study and Marah El-habib and Ashour Attafi (2006) the theory that there is a positive impact and of great importance to learn and master the basic skills using the approach play, and with the study of Ilmain Amine and Halawa Khaled in (2008), the theory that the proposal modules using some modern teaching methods of teaching them the competitive games has a positive effect in the development of some physical attributes among students in the effectiveness of run barriers and therefore the hypothesis have been achieved.

Teaching strategy by games has a positive impact on the physical capabilities of students, it has been shown by using the treatment of statistical significance differences "T" of statistical developments between the pre-test and post-test on the experimental sample level differences were statistically significant in favor of the post test, reaching all the values of "T" statistical significance at the 0.05 level of statistical significance and degree of freedom. 31, search results agreed with the study, Dr. Ben Si Kaddour Habib, Dr. Ahmed Ben Klaouz Touati and Dr.Boumsadjad Abdel Kader (2010) argument that employ cooperative learning strategy using modern stylistic competition has a positive impact on the development of some capacity kinetics of self-born children of primary education (8-10) years, and agreed with Qahtan Khalil al-Azzawi (2009) study saying that the use of small games has a positive impact in the development of some of the physical capabilities of the goalkeepers in football and therefore the research hypothesis have been achieved.

Teaching strategy with games positively affect motor abilities of pupils, it was after winning by using the significance of differences "T" statistical treatment show that the statistical differences occurring between the pre-test and post-test on the experimental sample level of statistical significance in favor of the post test, reaching all the values of "T" statistical significance at the 0.05 level of statistical significance and degree of freedom (31). These findings are consistent with Abdullah Ramadan studies and Mukhtar Al-Sidik Abdul Haq (2007) the theory that the proposed program of small games has a positive impact in the development of some elements of the physical attributes (strength, agility, flexibility) with the experimental sample by studying physical education and sport, and therefore hypothesis have been achieved.

# 6. Conclusions

Through the experiment carried out by researchers in the light of information obtained from a personal interview with the Inspector of Physical Education and Sports, and the proposed modules, as well as the applicable tests students in the third year of secondary education reached as follows:

- Physical education teachers avoid teaching activities such as running own endurance (800 m);

- Lack of physical education and sports professors in the teaching effectiveness of athletics and they are not informed about it;

- There are significant differences in the results of the post tests in the development of some physical and kinetic qualities.

Shall the proposed using a teaching strategy by games applied to the experimental sample modules, positively influenced the development of some of the physical attributes and kinetic of maximum strength, flexibility, agility, explosive power, speed transition, endurance.

#### 7. Recommendations

- Attention and care of age group (6-8 years) because it is an important stage to jump to adulthood.

- Employ modern methods and diversify the ways in physical education and sports session in accordance with stage age and procedural goals.

- The teacher has to take into account the physical and motor abilities, development in order to improve the performance of the various sports events.

- The use of alternative means in various activities to achieve the objectives of the teaching process.

- The use of educational methods proposed by the researchers in the teaching process for the development of some physical and motor capacities.

# References

- 1. Ahmed Ata Allah.(2007). Methods and teaching ways in physical education and sports. Algeria: Office of University Publications.
- 2. Buschner, C. (1994). Teaching children's movement concept and shild. Becoming a laster teacher. Champaign. Human kinetics.
- 3. Claude Armand, J. & Clotet, F. (2003) .Décapoussins, tiré janvier 2005. URL : http://gilles.Follereau.pagesperso-orange.Fr/divers/dpoussin.htm#haut
- Edrgarithill Raymond Thomas Jose. (1993). Manual of physical education. Paris. Ed Vigot.
- 5. Gallahue, D. (1989). Understanding motor development: Infants, children, adolescents (2e éd.). Dubuque, IA: Brown.

- 6. Imane Abbas Al-khafaf.(2010). Playing, modern learning strategies. 28. Oman: House curricula for publication and distribution.
- 7. Ismail Mohamed.(2000). Strategic Management General concepts and practical cases. 26. University House: Alexandria Egypt.
- 8. Khaled Nabil (1996). Impact education programmer to develop certain physical attributes and learn motor skills lesson of physical education. Suez Canal University. Faculty of physical education.
- 9. Kasim Lazam.(2005). Topics in motor learning. 90. Iraq: Higher Education Press.
- 10. Mohamed Sobhi Hassanein.(2001). Atlas classification of objects and pattern characterization. 265. Cairo: Dar Al Fikr Al-Arabi.
- 11. Mauston Muska, Ashworth, Sara. (1994). Teaching physical education. Fourth edition. Macmillan College.
- 12. Miller, B. S. Bower. (1981). Developing in athletics through the process of depth jumping. Track and field quarterly. Review. (81)4.
- 13. Mohammed Mustafa Al-chaebi.(1999). Studies in sociology. 176. Cairo: Arab Renaissance Publishing House.
- Moore, Christopher A., and Schilling, Brian K.(2005). Theory and Application of Augmented Eccentric Loading. National Strength and Conditioning Journal, 27(5).
- 15. Saad al-Nahed, and Fahim Nili.(2004). Teaching Methods in Physical Education.33. Cairo: book publishing center.
- 16. Siedentop. (1986) .Physical Education: Strategy of teaching for pupils: 6–12, Ohio, Mayfield pub. Comp.
- 17. Wajih Mahjoub and others. (2000). Theories of learning and motor development.57. Baghdad: National Library and Documentation.