# INNOVATIONS REGARDING THE DEVELOPMENT OF MOTRIC QUALITIES IN THE PRIMARY CYCLE

Corbu Vasile<sup>1</sup>, Grosu Bogdan-Marius<sup>2</sup>

<sup>1</sup>Miron Costin Secondary School of Suceava, Romania

<sup>2</sup>Stefan cel Mare University of Suceava, Romania

# Keywords: motric qualities, primary cicle, development, games

#### **Abstract:**

Modern human training implies its multilateral development from a physical, intellectual, ethical, aesthetic point of view, in relation to the exigencies of contemporary and future society, according to real skills, on the basis of which the human person's coordinates are outlined. People tend to his physical, intellectual and moral perfection, in order to transform it from individuality into a personality useful to society.

I chose to study this topic because at the level of primary education the most important acquisitions are happening from a motric point of view, the aim of the discipline of physical education and sport being to develop a physically, motorically and mentally harmonious body.

#### **Introduction:**

It is well known that physical education at both primary and secondary level, high school or university level plays a special role in the child's personal development and development process. Pedagogical specialists recognize the biological, motor, psychological and social formative valences of this discipline.

The child must be prepared for a dynamically developing, the society demands a certain physical, intellectual, moral, civic configuration: a healthy individual harmoniously developed physically, a man with a creative way of thinking with capacity to select, systematize and reorganize information, choose the best solutions and quickly decide on their application in practice.

Starting from the physical development of children, the main form of exercises must remain the game in its different forms. Balancing exercises, crawling, small weight transport, climbing, jumping are recommended as racing games.

**Material-method:** method of literature study, observation method, experiment, test method, statistical methods of data processing.

Through this research paper there were followed the next assumptions: whether the methods and means used in physical education lessons in a series of exercises, games and pathways to primary classes determine to a great extent the development of the motricity of small school children.

Purpose of the paper: using the most effective methods and means in a series of exercises and games in primary classes, within the physical education lessons, for the development of motric qualities.

We conducted this experiment with second grade A from the Miron Costin Secondary School, Suceava, consisting of 20 pupils (10 boys and 10 girls), these students being the experimental group. The control group is represented by the second grade E belonging to Miron Costin Secondary School, Suceava.

The training took place for a period of 1 year (October 2015 - May 2016), where the venue was the gymnasium outdoor playgrounds, but also in the gym and as appropriate materials we had: mattresses, balls, medical balls, jaloons, jumping ropes.

## **Recording and interpreting the results:**

Table 1. Results recorded by boys in the experimental group

Name	Height (cm)		Weig	ht (kg)	runi	eed ning n (s)	run	ong ining nin)	Long jump (cm)		Motric test (s)	
	T.I.	T.F.	T.I.	T.F	T.I.	T.F.	T.I.	T.F.	T.I.	T.F.	T.I.	T.F
Average	131, 1	136,8	31,2	32,6	6,14 8	5,92	2,1 6	2,46	118, 4	131,8	24	22,2
Standard deviation	3,93	2,49	5,39	4,06	0,07	0,08	0,0 8	0,06	3,72	2,74	2,3 1	2,15
Variability coefficient	3,00	1,82	17,2 8	12,4 6	1,21	1,27	3,8 2	2,28	3,14	2,08	9,6 2	9,68

Table 2. Results recorded by boys in the control group

Name	Height (cm)		Weigh	nt (kg)		eed ning n (s)	run	ong ning nin)	Long jump (cm)		Motric test (s)	
	T.I.	T.F.	T.I.	T.F	T.I.	T.F.	T.I.	T.F.	T.I.	T.F.	T.I.	T.F.
Average	130,9	136,5	32,4	33	6,1 4	6,11	2,1 7	2,27	118, 2	120,5	23, 9	23, 2
Standard deviation	4,07	2,80	4,72	4,50	0,0 8	0,10	0,0 6	0,03	2,82	4,95	1,6 0	1,5 5
Variability coefficient	3,11	2,05	14,5 6	13,6 3	1,2 9	1,60	2,7 7	1,54	2,39	4,11	6,6 7	6,6 8

Table 3. The results recorded by the girls in the experimental group

Name	Heigh	Height (cm)		Veight (kg) running 25m ru		runi	Long running (min)		Long jump (cm)		test (s)	
	T.I.	T.F.	T.I.	T.F	T.I.	T.F.	T.I.	T.F.	T.I.	T.F.	T.I.	T.F.
Average	128,4	132,2	28,5	29,8	6,29	6,03	1,60	2,1 5	115, 1	127,5	26,6 0	24,7 8
Standard deviation	3,06	3,29	1,90	3,01	0,07	0,08	0,22	0,0 5	3,87	4,12	1,50	0,80
Variability coefficient	2,38	2,49	6,67	10,1 0	1,06	1,39	13,5 1	2,4 5	3,36	3,23	5,65	3,21

Table 4. Results recorded by the girls in the witness group

Name	Height (cm)		Weig	ht (kg)	Speed running 25m (s)		Long running (min)		Long jump (cm)		Motric test (s)	
	T.I.	T.F.	T.I.	T.F	T.I.	T.F.	T.I.	T.F.	T.I.	T.F.	T.I.	T.F.
Average	129,7	133, 7	29, 3	30,8	6,3 0	6,25	1,62	1,95	115, 2	120, 7	26,28	25,48
Standard deviation	2,45	2,45	2,1 1	1,99	0,0 8	0,06	0,27	0,32	6,14	5,83	0,97	1,07
Variability coefficient	1,89	1,83	7,2 0	6,46	1,3 1	0,95	16,7 1	16,2 0	5,33	4,83	3,68	4,19

We further graphicaly interpreted the obtained results by the subjects in the experimental group and the control group for the somatic parameter "height".

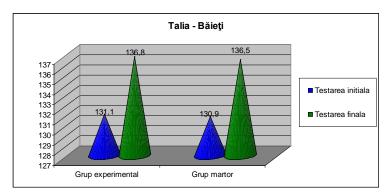
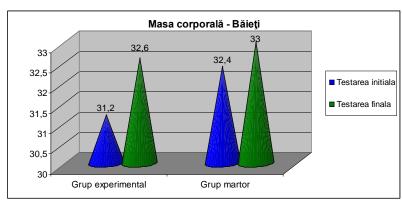


Chart no. 1. Graphical representation of the average values for the height parameter for boys in the experimental and control groups.

From chart no. 1. it can be observed that both the initial and the final testing subjects in both groups (experimental and control) obtained very close values, which shows that they had a similar somatic development rate.



*Chart no.* 2. *Graphical representation of average values for the "body mass" parameter for boys in the experimental and control groups.* 

From chart no.2. It can be observed that the subjects of the two groups, both in initial testing and in final testing, have obtained close values. Thus, in the initial testing, the experimental group obtained an average of 31.2 kg, and the control group obtained an average of 32.4 kg. At final testing, the experimental group recorded an average of 32.6kg and the control group averaged 33kg.

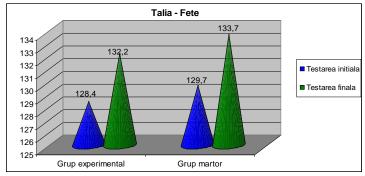
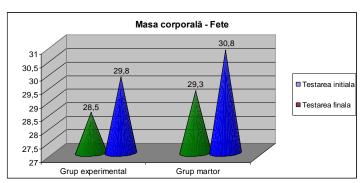


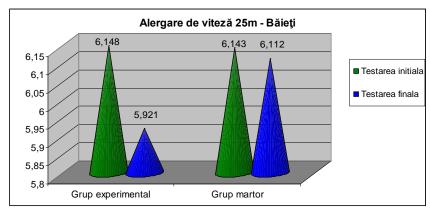
Chart no. 3. Graphical representation of the average values for the height parameter on girls from the experimental and control groups.

From chart no.3. it can be noticed that both the initial testing and the final testing subjects in both groups (experimental and control) have obtained very close values, which shows that they had a similar somatic development rate.



**Chart no. 4.** Graphical representation of average values for the "body mass" parameter for girls in the experimental and control group.

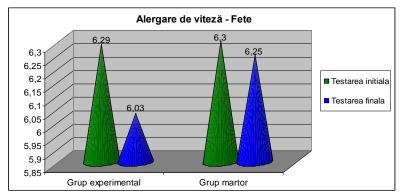
From chart no. 4. it can be seen that the subjects of the two groups, both in initial testing and in final testing, have obtained close values. Thus, in the initial testing, the experimental group obtained an average of 28.5 kg, and the control group averaged 29.3 kg. At final testing, the experimental group recorded an average of 29.8kg and the control group averaged 30.8kg.



**Chart no. 5.** Graphical representation of average values for the "25m speed run" test for boys in the experimental and control groups.

At final testing, the experimental group obtained an average of 5.92 seconds and the control group averaged 6.11 seconds.

The difference between the environments of the groups recorded in the final test is about 0.20 seconds in favor of the experimental group.

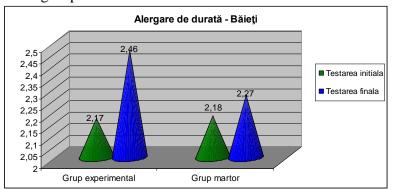


*Chart no. 6. Graphical representation of average values for the "25m speed run" test for girls in the experimental and control groups.* 

Chart no. 6 represents the average values for the "25m speed run" applied test to the girls in the experimental and control groups.

At final testing, the experimental group achieved an average of 6.03 seconds, and the control group averaged 6.25 seconds.

The difference between the environments of the groups recorded in the final test is approximately 0.22 seconds in favor of the experimental group.

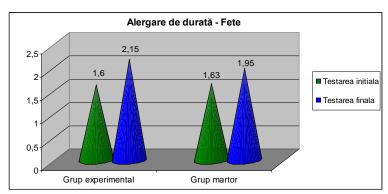


**Chart no. 7.** Graphical representation of average values for the "long run" test for boys in the experimental and control groups.

Chart no. 7 represents the average values for the "long run" test applied to boys in the experimental and control groups.

It can be noticed that in the final test, the experimental group obtained an average of 2.46 minutes and the control group averaged 2.27 minutes.

The difference between group averages recorded in the final test is about 20 seconds in favor of the experimental group.

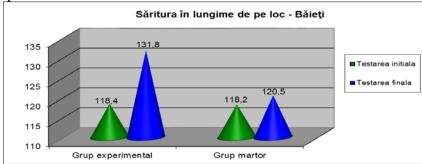


*Chart no.* 8. *Graphical representation of average values for the "long-running" test for girls in the experimental and control groups.* 

Chart no. 8 represents the average values for the "long run" test applied to the girls in the experimental and control groups.

At final testing, the experimental group obtained an average of 2.15 minutes, and the control group averaged 1.95 minutes.

The difference between the recorded groups average values in the final test is approximately 0.20 minutes in favor of the experimental group.



**Chart no. 9.** Graphical representation of the average values for the "standing long jump" test for boys in the experimental and control groups.

Chart no. 9 represents average values for the "standing long jump" test applied to boys in the experimental and control groups.

At final testing, the experimental group obtained an average of 131.8 centimeters, and the control group an average of 120.5 centimeters. The difference between the average test results of the groups in the final test is about 11.3 centimeters in favor of the experimental group.

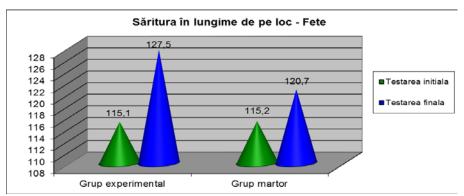


Chart no 10. Graphical representation of average values of "standing long jump" test for girls from the experimental and control groups

Chart no.10 represents the average values of the standing long jump test applied for the girls from the experimental and control groups.

On the final test the average value of the experimental was 127.5 centimeters, and the control group recorded a average value of 120,7 centimeters.

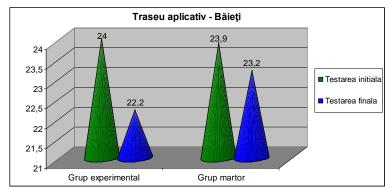
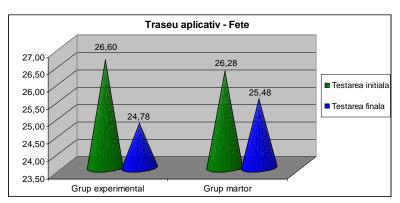


Chart no. 11. Graphical representation of average values for the motric test for boys from the experimental and control groups.

Chart no. 11 represents the average values for the motric test applied for the boys from the experimental and control group.

At the final testing the experimental group recorded an average value of 22,2 seconds and the control group recorded an average value of 23,2 seconds.



**Chart no. 12.** Graphical representation of average values for motric test for girls from experimental and control groups.

Chart no 12. represents the average values for the motric test for girls from the experimental and control group.

At the final testing the experimental group recorded an average value of 24,78 seconds and the control group recorded an average value of 25.48 seconds.

#### **Conclusions:**

- 1. In the case of somatic parameters, both the subjects of the experimental group and the subjects of the control group, girls and boys, had a similar evolution, the differences being not significant, which leads us to conclude that the means proposed to the experimental groups did not significantly influence the somatic development.
- 2. There were no significant differences between the motric applied tests for both experimental and control groups, boys and girls on the initial testing. In the conducted study I tried to select subjects with similar motric performances to reveal the importance of the selected methods applied for the experimental group.
- 3. The proposed methods for the experimental groups have significantly influenced their performance in final testing.
- 4. Based on the conducted study we can state that the hypothesis from which we started was confirmed by the results of the tested subjects.

#### **References:**

1. Brata, M., *Metodica educației fizice școlare*, vol. I. - Editura Universității, Oradea, 1996.

# THE ANNALS OF THE "STEFAN CEL MARE" UNIVERSITY ISSN – 1844 – 9131 Volum X issue 2/2017

- 2. Cârstea, Gheorghe, *Teoria și metodica educației fizice*, Editura Universul, Bucuresti, 1993.
- 3. Coman, Stela, *Educația fizică și metodica predării ei la clasele I-IV*, Editura Tehnică, Chișinău, Editura Spiru Haret, Iași, 1995.
- 4. Dragnea, Adrian, Bota, Aura, *Teoria activităților motrice*, Ed. Didactică și pedagogică R.A., București, 1999
- 5. Lupu, Elena, *Metodica predării Educației Fizice și Sportului*, Institutul European, Iași, 2006

## INOVAȚII CU PRIVIRE LA DEZVOLTAREA CALITĂȚILOR MOTRICE LA CICLUL PRIMAR

Corbu Vasile<sup>1</sup>, Grosu Bogdan<sup>2</sup>

<sup>1</sup>Şcoala Gimnazială Miron Costin Suceava, Romania <sup>2</sup>Universitatea "Stefan cel Mare" Suceava, Romania

Cuvinte cheie: calități motrice, ciclul primar, dezvoltare, jocuri de mișcare

#### **Rezumat:**

Formarea omului modern presupune dezvoltarea lui multilaterală din punct de vedere fizic, intelectual, etic, estetic etc., în raport cu exigențele societății contemporane și viitoare, potrivit aptitudinilor reale, pe fondul cărora se conturează coordonatele personalității umane. Omul tinde spre perfecționarea sa fizică, intelectuală și morală, în scopul transformării sale din individualitate în personalitate utilă societății.

Am ales să studiez această temă deoarece la nivelul învățământului primar au loc cele mai importante achiziții din punct de vedere motric (formarea deprinderilor și dezvoltarea calităților motrice), scopul disciplinei educație fizică și sport fiind acela de a dezvolta un corp armonios din punct de vedere fizic, motric, dar și psihic.