STUDIA UBB EDUCATIO ARTIS GYMN., LXV, 4, 2020, pp. 119 – 130
(RECOMMENDED CITATION)
DOI:10.24193/subbeag.65(4).37

OPTIMIZING THE PHYSICAL EDUCATION LESSONS FOR HARMONIOUS PHYSICAL DEVELOPMENT AT FOURTH GRADE STUDENTS THROUGH DYNAMIC GAMES

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ABSTRACT. Education begins in the moment we are born and continues our entire lives having a crucial part during our school period. This a very important period of time because it is when a child develops forms itself and learns to be conscious that everything contributes to their development as human beings. The approaching methods are very diversified, but between the ages of 7-10 (primary level) are the most appropriate and very handy to complete these tasks. Two of these tasks have the main objectives to develop the motor qualities and the harmonious physical development of children. Through these active games, the objective of Physical Education is completed simultaneously, in an attractive manner, thus helping and shortening the development of these motor skills. The study has been conducted at Baia Sprie Gimnasium School, from Baia Sprie, Maramures county, with a total of forty fourth graders, between the ages of 9-10. The general preparation and result registration of the experiment took place in the school year of 2018-2019. All the tests and measurements were made rigorously during Physical Education lessons. At the beginning of the school year, in September, all the initial tests were made for both class groups. The final tests were carried out in May 1-25. The following research methods were used: observation, experiment, the mathematical and statistical method, the statistical mathematical method.

Key words*: Physical Education, dynamic games, harmonious physical development, the development of motor qualities, Physical Education objectives.*

REZUMAT. ***Optimizarea orelor de educaţie fizică în vederea dezvoltării fizice armonioase a elevilor de clasa a IV-a, prin intermediul jocurilor dinamice.*** Educaţia începe odată cu naşterea fiinţei umane şi se continuă pe tot parcursul vieţii, având o etapa crucială în perioada şcolară, când copilul se formează, învaţă să-şi însuşească tot ceea ce contribuie la formarea sa ca şi om.

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Metodele de abordare în lecția de educație fizică sunt multiple și diferite, însă la vârsta școlară mică cuprinsă intre 7-10 ani (ciclul primar) jocurile de mișcare, jocul in sine este metoda cea mai potrivită și la îndemâna pentru realizarea sarcinilor, precum și pentru realizarea obiectivelor educației fizice, iar doua dintre cele mai importante obiective fiind dezvoltarea calităților motrice respectiv dezvoltarea fizica armonioasa. Prin jocurile de mișcare, aceste obiective ale educației fizice se realizează simultan, într-un mod atractiv, ușurând și uneori scurtând etapele necesare însușirii deprinderilor motrice. Studiul s-a efectuat la Școala Gimnazială Baia Sprie, din localitatea Baia Sprie, județul Maramureș. Subiecții sunt elevi din clasele a IV-a, cu vârste cuprinse intre 9-10 ani, iar numărul total de elevi care au luat parte la acest este de 40. Pregătirea generală și înscrierea rezultatelor, precum și experimentul în sine a avut loc în anul școlar 2018-2019. Testările și măsurătorile pentru clasa experiment cat si pentru clasa control au fost făcute cu rigurozitate, în timpul orelor de educație fizică. La începutul anului școlar 2018-2019, în luna septembrie au fost făcute testările inițiale, iar cele finale în perioada 1-25 mai. Metodele de cercetare folosite au fost: observația, experimentul, metoda matematico-statistică, metoda de prelucrare a datelor.

Cuvinte cheie: *educație fizică, jocuri dinamice, dezvoltare fizică armonioasș, dezvoltarea calităților motrice, obiectivele educației fizice.*

Introduction

Among the other school subjects learned by students, Physical Education plays an important part in the development of their personalities, having a profound and long-lasting imprint. Our daily lives are more and more alert and parents have less and less time to spend with their children in parks or playgrounds. The world is modernizing, television and technology is taking over our lives and replaces physical activities that children should be having at this early age. Children become spectators instead of participants.

During a ten-minute game, children do much more effort than in a regular hour. Therefore, games represent the best method to overcome sedentariness in the shortest time being pleasant, attractive and satisfying the need to move at the same time.

In Physical Education terminologies (1973), the game is defined as a complex activity, mainly motor and emotional, which takes place spontaneously following pre-established rules, in a recreation a purpose being also adaptable to social reality (Sabau, 2013:11).

Most games have a multilateral challenge over the organism, but there are also games with a specific destination. At this young age, games represent the main factor in the development of the motor qualities (speed, strength, resistance, skill). These games also develop the moral qualities, having an important role in maintaining and strengthening students' health.

Primary school students have a special interest in sport activities. They want to know a lot of things about them and they also prove to be very capable of a conscious and active contribution to the development their own growth coefficient.

Most children are healthy at this age because they are vaccinated against main diseases. Overweight can cause many health risks among children such as high blood pressure, which is becoming more and more frequent. This can be a genetic problem or it can be influenced by external environment. It is easier to prevent than to treat. Many children don't exercise as much as they should, they don't have enough sports activities (Papalia, Wendkos, Feldman, 2010: 318).

Bearing in mind that at his age games play an important part in a child's daily activities, teachers should use them continuously as a main activity during PE lessons. Its main structure should be built in favour of developing and enlarging the group relationships, educating different qualities and also enhance students' skills and moral behavior, taking into consideration their needs.

Perseverance, patience, courage, initiative, taking into consideration the needs of others, modesty, obeying the rules established in the group, are some of the main objectives to be taken into consideration when choosing games for PE lessons. These rules will be made very clear.

According to Piaget, moral development is accomplished through three stages, as children get from the stiff thinking to a more flexible one (Papalia, Wenkos, Feldman, 2010: 318).

Games are means of organising physical exercises in a well-structured pedagogical process. They are characterized by a conscious activity, which takes place in a relatively freedom of action and assures the possibility of manifesting and educating physical and psychological qualities in a creative manner, in an optimistic atmosphere, well-being and pleasure.

Objectives:

- To conduct initial measurements (height, weight, bust, span) and test the level of motor quality development

- To establish the PE lesson contents for the experiment classes through the selection and usage of specific games
- To conduct measurements (height, weight, bust, span) and test the level of motor quality development both for control and experiment classes.
- To prove that using games during PE lessons in primary classes leads to a harmonious physical development and also the development of motor qualities in an attractive and pleasant manner, with an active participation of the students.

Materials and Methods

The research methods used to conduct this study regarding the optimisation of PE lessons for a harmonious development among fourth grader students by the means of dynamic games are:

1- Observation
2- Experimentation
3- The mathematical and statistical method
4- The statistical mathematical method.

The dynamic games used for this study were: The 30 second race, The race on numbers, Hunters and Ducks, The rolling ball relay, Who transports the handcart faster, The medicinal ball relay, Rooster fight, Change the T-shirt, Ball through the tunnel, The islands, Find you half, The two-ball race, Hunting an object, The third one runs, The train, Transporting the balloon, The Pulling fight, The Guardian of the Bridge, 1,2,3... statue, Rhythm dialog etc.

Tests and measurements:

- 30m Speed, Long jump, Baseball throw, Track 1, Track 2
- Height, Weight, Bust, Span

Figure 1. Track 1

Figure 2. Track 2

The study was conducted between the years 2018-2019. Two classes of four graders, between ages of 9 and 10. The tests and measurements were carried out during the Physical Education lessons. The initial tests were made in September 2018 and the final tests were made in May 2019. These tests consisted in: Control Tests (speed, long jump, baseball throw, track 1, track 2) and Anthropometric Measurements (weight, height, bust, span).

Results

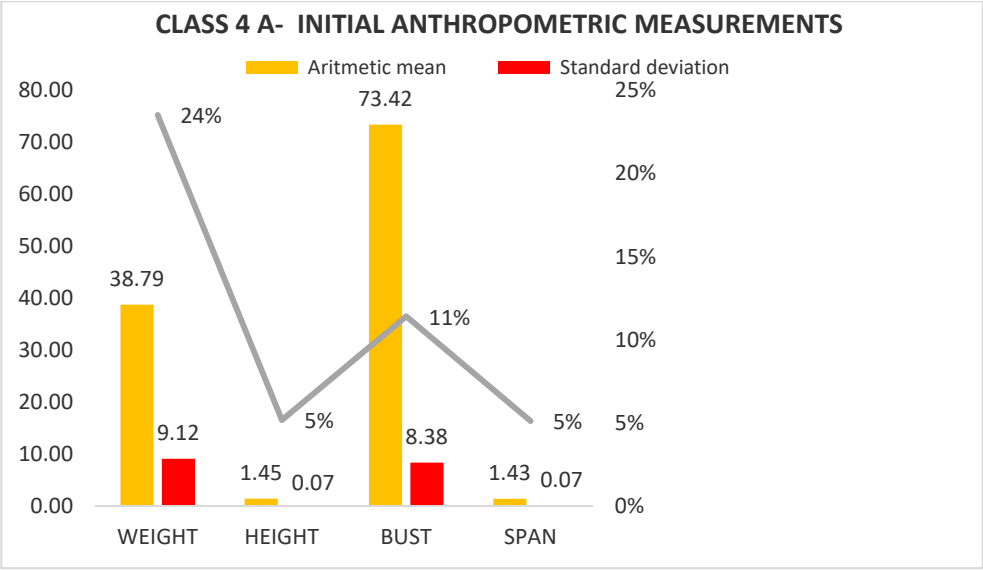

Figure 3. Weight, Height, Bust, Span Control Group A - INITIAL MESUREMENTS

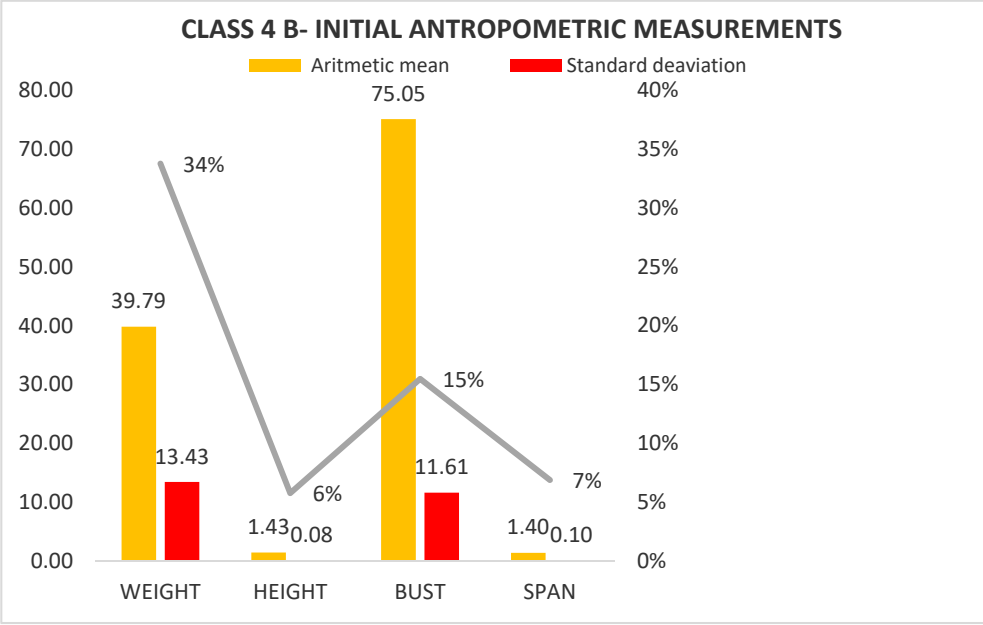

Figure 4. Weight, Height, Bust, Span Control Group B - INITIAL MESUREMENTS

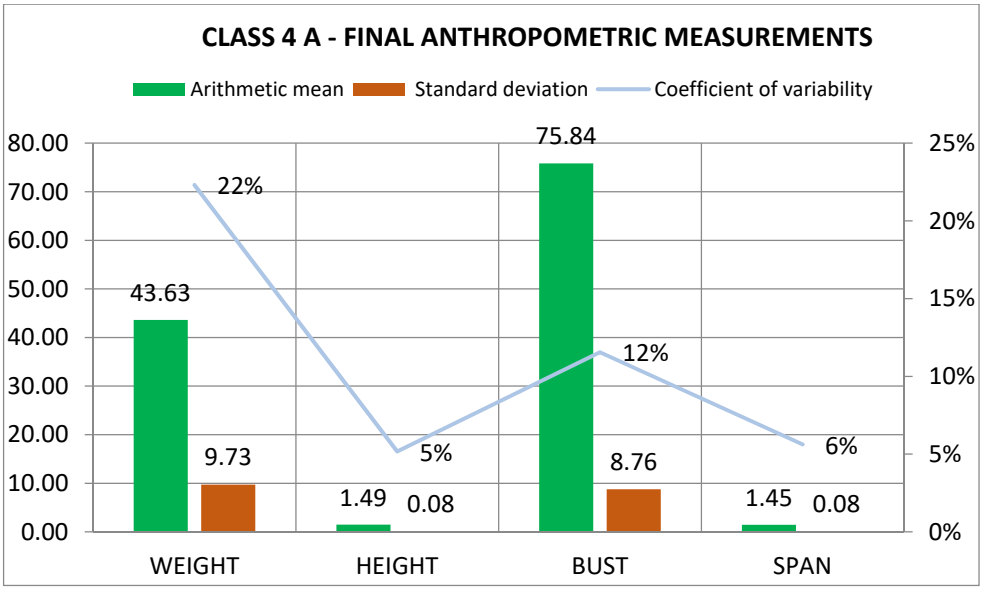

Figure 5. Weight, Height, Bust, Span Control Group A - FINALE MESUREMENTS

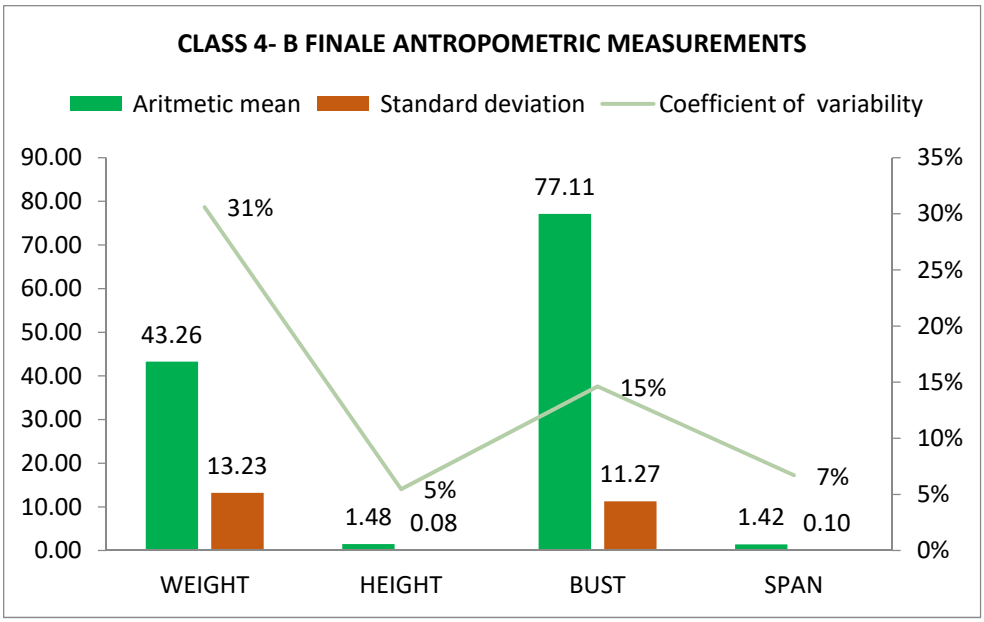

Figure 6. Weight, Height, Bust, Span Control Group B - FINALE MESUREMENTS

The interpretation of the final measurements (height, weight, bust, span)

Control group – class 4B

After conducting the final body measurements showed a heightening with an average of 1.48 cm (five unit higher that the initial tests). The exception standard (0.08) and the variable coefficient (5%) has improved, and the distribution was a significant one.

Weight grew by 3.47 units, from 39.79kg to 43.26 kg. The exception standard of 13.23 and the coefficient of 31% situate the group to a lower means of homogeneity.

The average measurements for the bust were 77.11, the exception standard being 11.27 and the variable coefficient was 15%, showing a good homogeneity.

Regarding the span, the average measurements were 1.42 with an exception standard of 0.10 and a variable coefficient of 7%, results of the group being very good.

Control group – class 4A

The final body measurements of this group turned out to be much better than those of the control group. All body measurements have improved, therefore the average results for height was 1.49, with 4 cm more than the initial tests showed. It is the age when children tend to heighten considerably. The exception standard was 0.08 and the variable coefficient of 5% situated the group to very good homogeneity. The values for weight were 43.63, with 5.94 kg more than in the initial test. The exception standard was 0.08 and the variable coefficient was 22%, which shows a good homogeneity of this group.

Regarding the bust, the measurements showed 77.11, the exception standard being 18.76 and the variable coefficient was 12%, the homogeneity being e very good one.

The span measurements were 1.45, with the exception standard of 0,08 and the variable coefficient 6%, resulting in a very good homogeneity of the group.

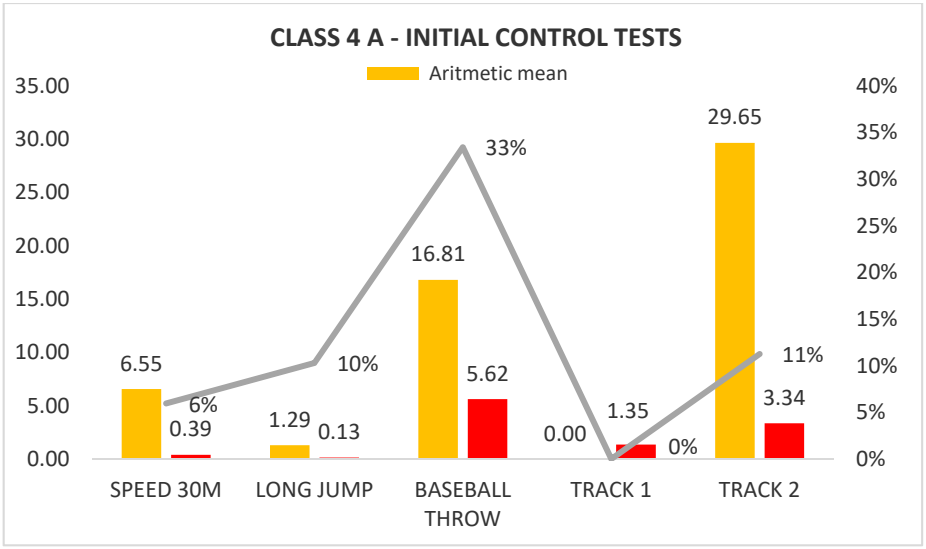

Figure 7. 30m Speed, Long jump, Baseball throw, Track 1, Track 2, Control Group A - INITIAL TEST

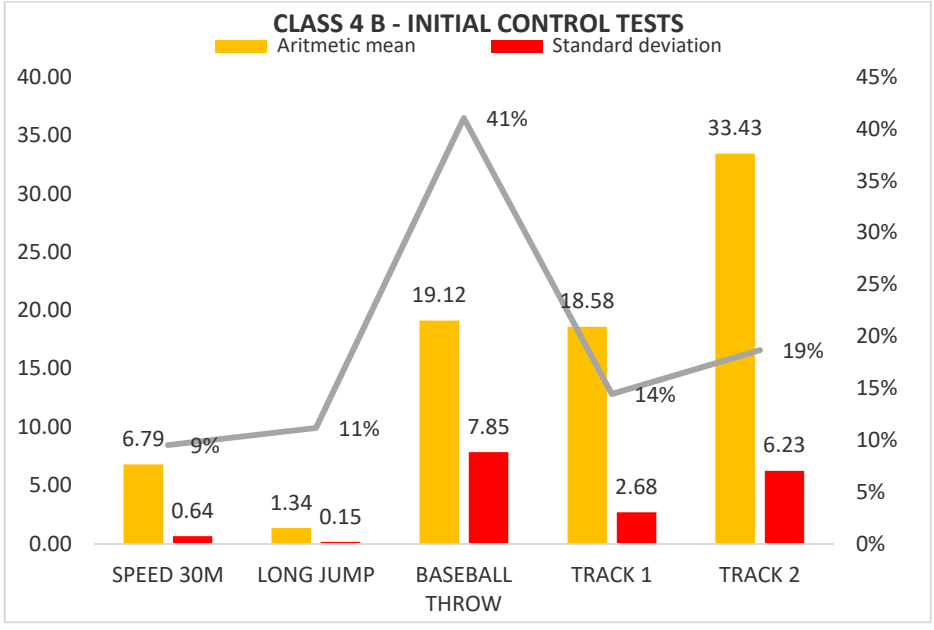

Figure 8. 30m Speed, Long jump, Baseball throw, Track 1, Track 2, Control Group B - INITIAL TEST

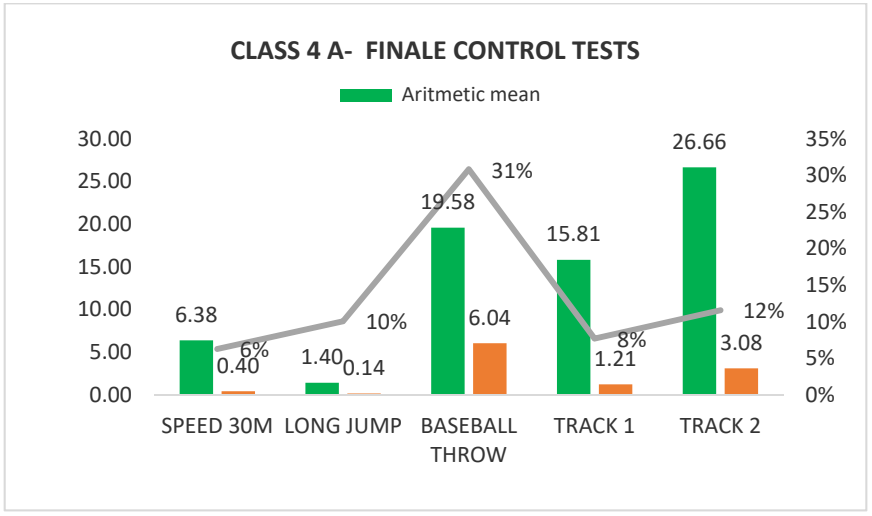

Figure 9. 30m Speed, Long jump, Baseball throw, Track 1, Track 2, Control Group A - FINALE TEST

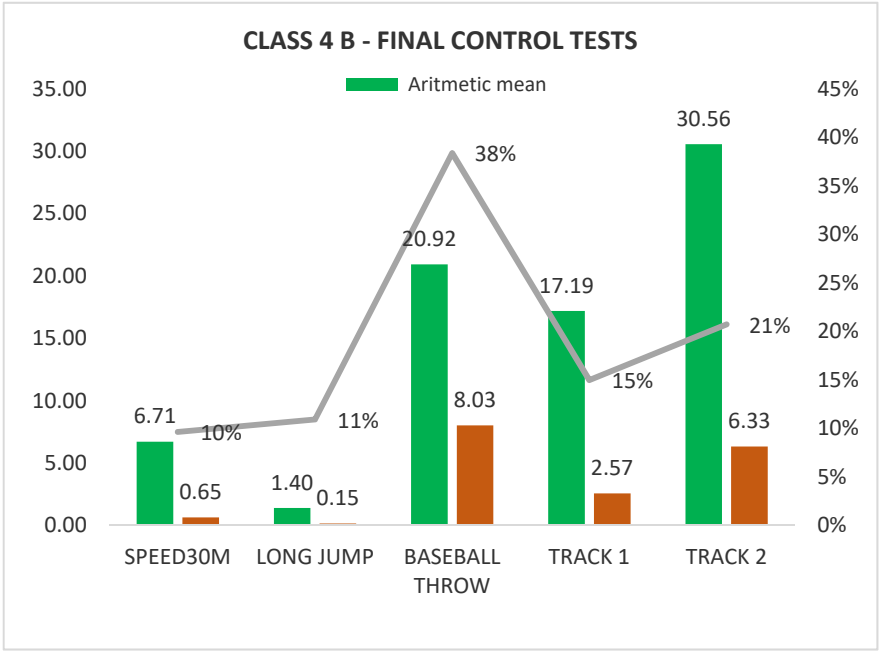

Figure 10. 30m Speed, Long jump, Baseball throw, Track 1, Track 2, Control Group B - FINALE TEST

Discussion

50m Speed, Long jump, Baseball throw, Track 1, Track 2

1. In the 50m speed test, the experiment class (4A) had an average result of 6.55 seconds (in the initial test) and in the final test, an average result of 6.38. The progress was 0.17 seconds. The control class (4B) had an average result of 6.79 seconds and in the final test an average result of 6.71, the progress being of 0.08 seconds.
2. In the long jump initial test =, which was in September, the experiment class (4A) had a result of 1.29m and in the final test it was of 1.40m, showing a progress of 11 cm. the control class (4B) had the average results of 1.34 m in the initial test and 1.40 m in the final test, with a progress of 6 cm but with 5cm less than the experiment class.
3. In the baseball throw test, the experiment class (4A) had an average result of 16.81 m and a final test result of 19.58, having made a progress of 2.27 m. the control class (4B) had an initial average test result of 19.12 m with a final average test result of 20.92, with a progress of 1.76m. The experiment class had a 1.8 m better progress that the control class (where students G.M, I. D and D. M had a much better result than the average result of their group).
4. Track 1 results: this track consisted of five stops, where the experiment class had a result of 16.62 seconds, whereas the control class had a result of 18.58 seconds in the initial tests. The final tests showed that the experiment class had a result of 15.81 seconds (with a progress of 0.8 seconds) and the control class had a result of 17.19 seconds (with a progress of 1.39 seconds). Both classes made a considerable progress, but in this case the experiment class had a small advantage due to their initial test results.
5. Track 2 results: this track consisted of seven stops, where the experiment class had a result of 29.65 seconds in their initial test in comparison to the control class, which had a result of 33.43 seconds. In the final test, the experiment class had a result of 26.66 seconds compared to 30.56 seconds, which was the result of the control class. The progress of the experiment class was by 0.02 seconds better than that of the control class.

Conclusions

Dynamic games have several advantages when it comes to other methods used during PE lessons. Besides the fact that they are various and more attractive, they also offer a great density to it, leading to remarkable changes in the harmonious development of a child along with its manifestation of motrical qualities.

This study shows the obvious progress that has been made both on the harmonious physical development and on the motrical qualities of students, because they attend the PE lessons with a lot of enthusiasm, interest and joy.

In a world where temptations and barriers are a constant threat, sports and physical activities are among the few opportunities where students have the possibility to use their imagination, creativity and self-manifestation.
Taking all these into consideration, games during PE lessons educate students' will, the capacity of decision, responsibility within the group, obeying the rules and suppressing their own eagerness. The positive state of mind as well as the spirit of emulation determined by the game leads to the development of the capacity of making maximum effort with favourable results. Games are the way through which children learn to behave, to grow as human beings and learn how to know themselves and the others through game interaction.

Due to age particularities and nonetheless material possibilities, the PE lessons last less time. Students need a thorough preparedness during PE lessons, skills which they will later use in the years to come. These skill developments can be started as soon as 0 graders and gradually making sure that the quality of the educational process is not lost, thus generating healthy, strong and harmoniously developed children.

REFFERENCES

1. Badiu, T., Iacob, I. (1998). *Exerciții, complexe de exerciții și jocuri de mișcare pentru copii*. Iași: Editura Universității "Al. Ioan Cuza".
2. Bangă- Lupu, I., Ionescu, I., Sabău, E. (2008). *Metodica predării educației fizice în ciclul primar*. Craiova: Editura "Gheorghe Alexandru".
3. Cârstea, Gh. (1993). *Teoria și Metodica Educației Fizice și a Sportului*. București: Editura "Universul".
4. Diane E. P, Wendkos S. O., Duskin R. F. (2010). *Dezvoltarea Umana*. Editura "Trei".
5. Dragnea, A. (1984) *Măsurarea și evaluarea în educație fizică și sport*. București: Editura "Sport Turism".
6. Marolicaru, M., Boroș B., I. Gherton, M. (2008). *Jocuri pentru copii mici și copii mari*. Cluj Napoca: Editura "Risoprint".
7. Prodea C. (2009). Ghidul pentru Practică Pedagogică. Cluj Npoca: Editura **"**Casa Cărtii de Știintă**"**.
8. Sabău G. (2013). *Jocuri de mișcare*. Cluj Napoca: "Editura Eikon".