

MANAGEMENT STRATEGIES FOR OPTIMISING THE PHYSICAL EDUCATION SYSTEM IN THE PRIMARY AND SECONDARY SCHOOL (GRADES 1 TO 6) WITH SPECIAL REFERENCE TO ATHLETISM

N. TZOUVELEKAS¹

B. G. GRAMATOPOL¹

Abstract: *The nature of physical education is predominantly biological, involving significant features at the social, cultural and educational levels. Like other disciplines, physical education attempts by all ways and means to improve the content of its activity in order to achieve certain immediate and long term goals. It is certain that the traditional curriculum of physical education should be adapted and improved according to social development and new requirements arising and thus teaching old concepts must be reoriented for the purpose of responding to the current social requirements. (Kabitsis, 1990; Avgherinos, 2000; Palej, 1990; cerghit, 1983, Ciorba, 2001; Bradaton, 1993; Chirazi, 1999, Zervas, 1994).*

Nowadays physical education in schools can not be fully achieved through the traditional curriculum, or through the traditional concept of teaching, which has focused on the formation of motor dynamic skills and the development of dynamic qualities. Moreover, the teaching - learning - evaluation activity possesses a reproductive feature, following a pattern and lacking creativity. Within the physical education classes, athletics, through an adequate and well designed teaching, makes a substantial contribution to the fulfilment of this task. (Alexe, 1981, Kleisouras, 2004; Atanasiu, 1988; Georgis, 2004).

Keywords: *physical education, social requirements, athletics, strategy.*

1. Introduction

The pupils, even those in the first grades of primary school, can be introduced to the techniques of athletic tasks as part of playing, practicing almost the same assigns as the adults, but without reaching the same intensity

or technical effort and without spending the same amount of time. On the other hand, there are also differences regarding the dimensions, weights and distances involved. Students combined tasks, in addition to the fact that they provide a multileveled athletic physical training, contribute to

¹ University of Kapodistria Athens Greece.

the formation and development of group relations, team spirit, homogeneity and solidarity, the desire to win and other features of sportsmen and students. Walking and running, jumping and throwing are the main components of athletics which are judiciously integrated into the physical education school lesson.

2. Research Hypothesis

The use during the physical education lesson of the typical means of athletic training, with a multipurpose effect within the instruction process, will have a major positive influence upon optimising the educational and instructive process of physical education, by implementing new approaches typical to the secondary school contents. These will contribute to the following:

- to increase the level of physical and functional training ;
- to improve the capacity to form skills and abilities ;
- the growing interest in the physical education discipline.

3. Purpose of Research

The purpose is to optimise the educational process by the use - during the physical education lesson – of means which are specific to athletics.

4. Objectives of Research

- a. The study and generalization of specialized literature on the problem of improving the educational process at the physical education discipline by the use of means specific to athletics;
- b. Determining the effectiveness of the physical education lesson by applying means specific to athletics;

- c. Determining the content of the means, methods and forms of multileveled instruction focused on the multipurpose athletic training, according to the specificities of the physical education lessons in the secondary school.
- d. Experimental demonstration of the efficiency of applying the methodology of athletic complex training to physical education lessons taught to secondary school students.

5. Organisation of Research

The research was conducted during the physical education lessons taking place at the **Extended Day Programme School in Athens**.

This school possesses a very good material base, satisfactory for conducting a high standard research and adequate for performing an educational activity under optimal conditions. The number of students is large, therefore the segment of students who have been tested and on which the experiment was focused is considered to be relevant. There were formed an experimental group and a control group, each amounting a total of 50 students.

The tests were conducted on the basis of two test batteries containing 6 tasks with morpho-functional indices and 6 tasks with indices of special technical and physical preparation: height, weight, thoracic perimeter and dynamometer measurements (left and right), vital capacity and Ruffier test, running the 600m and 2000m resistance, running speed on the 30m and 60m, throwing the medicine ball (2 kg), lifting the trunk from lying to sitting (abdomen 30 °), commuting or moving game.

Basic research took place between the years 2005 - 2008, in three stages.

6. Results

The curriculum specially designed for a multipurpose athletic training with a multilateral effect in the instruction has considered mainly the initiation and organization of cycles of lessons, based on a series of objective and subjective factors,

related to the processes of growth and morpho-functional phenomena of pupils.

The comparative analysis of the arithmetic mean of the two groups in the initial and final stages of the experiment, based on functional as well as physical condition evaluating indices provides the following data in (Fig. 1, 2, 3, 4.5).

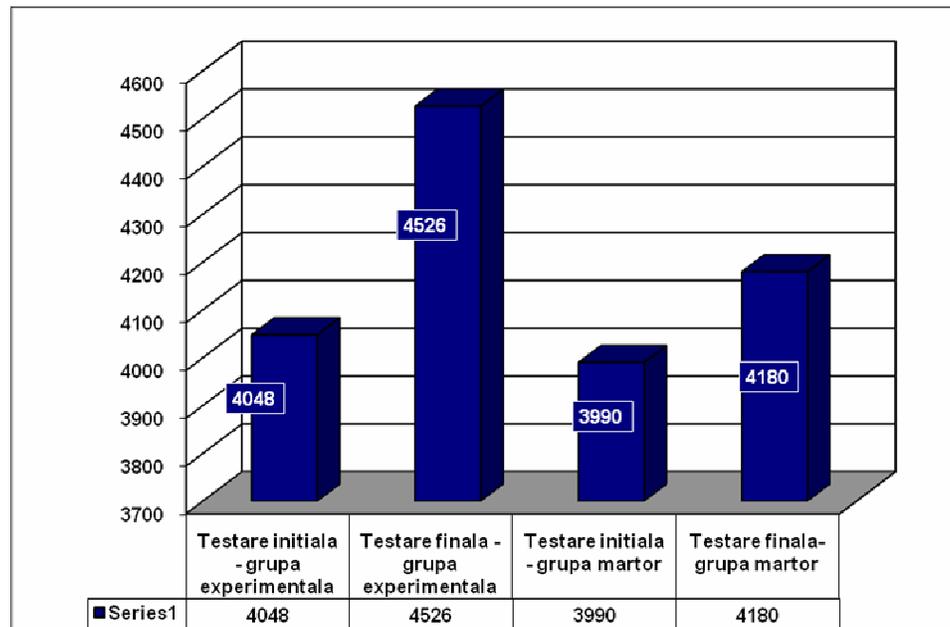


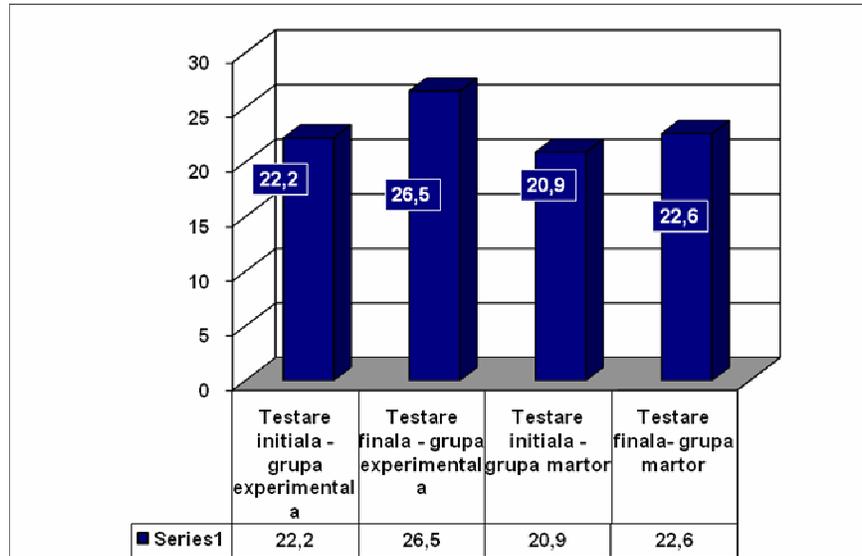
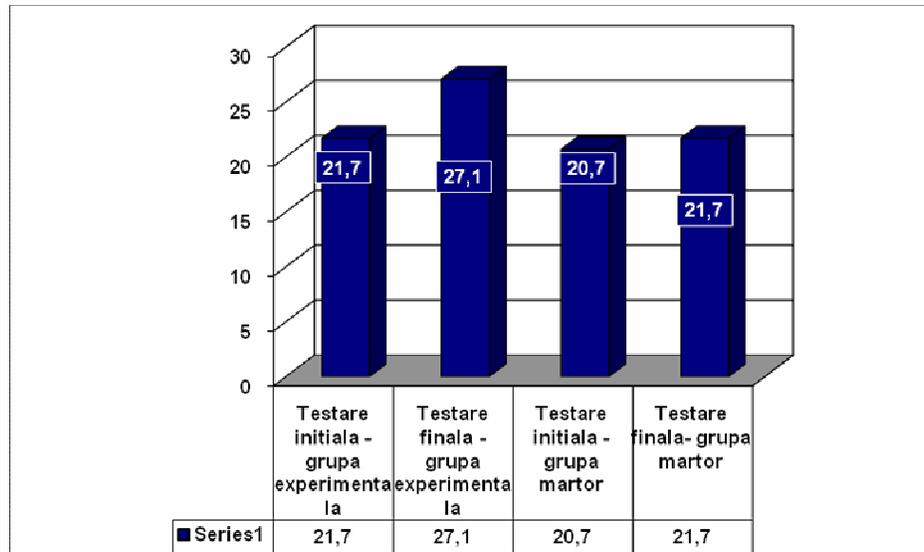
Fig. 1. *Spirometry*

The spirometry (Fig. 1) indicates at the initial testing almost equal parameters: 4048 cmc for the experimental group and 3990 cmc for the control group. At the final testing, the experimental group presented an average of 4526 cmc, superior by 346 cmc to the 4180 cmc. of the control group, with a progress of only 190 cmc.

At the dynamometer test (Fig. 2, 3) the experimental group recorded at the initial testing 22,2 kg.f at the right hand and 21,7 kg.f. at the left hand, while the control group had 20,9 kg.f and

respectively 20,7 kg.f. At the final testing the experimental group recorded 4,3 kg.f. at the right hand and 5,4 kg.f. at the left hand on, while the control group recorded 1,7 and respectively 0,9 kg.f.

The abdominal muscle strength (Fig. 4), at a 30" test, recorded 20.4 repetitions at the initial testing experimental group and 20.9 for the control group. The final testing parameters are 26.4 for the experimental group (a progress by 6 repetitions) and 22.6 for the control group (a progress by 1.7 repetitions).

Fig. 2. *Dynamometer test – right hand*Fig. 3. *Dynamometer test – left hand*

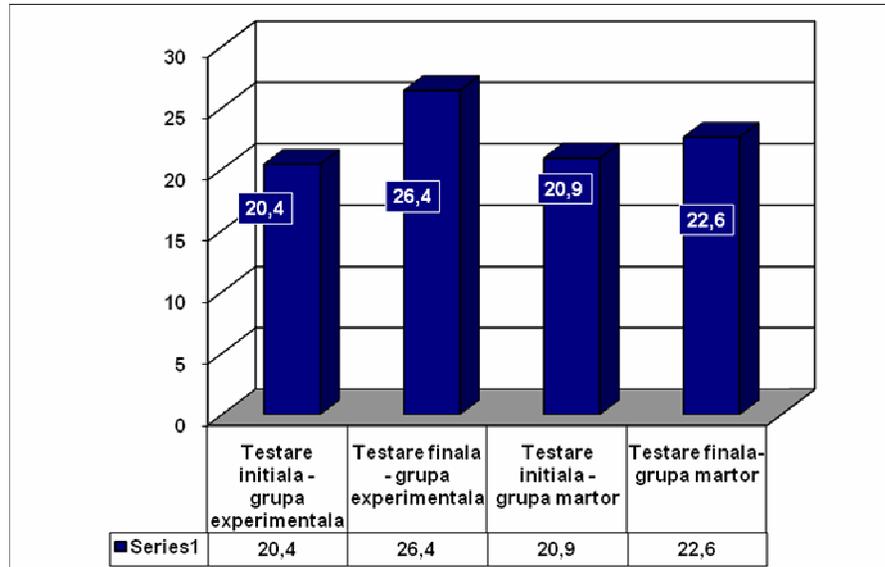


Fig. 4. *Abdomen*

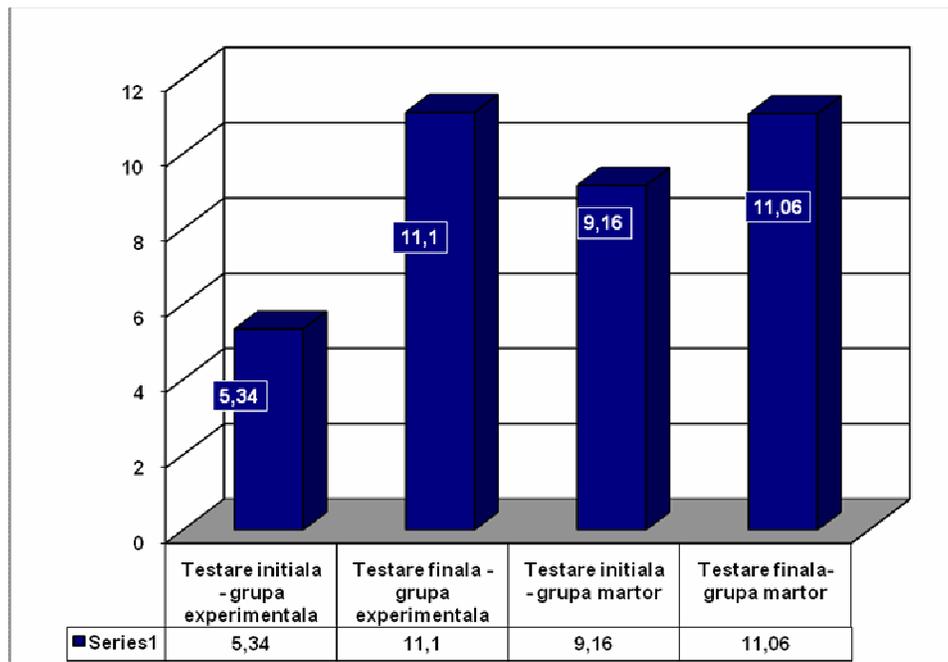


Fig. 5. *Ruffier Test*

The physical condition assessment test (Ruffier) recorded significant increases in the experimental group by 5.76 units between the initial and final testing, in comparison to the 1.90 units in the control group.

7. Conclusions

- i. The study of the theory and practice of the instructive and educational process of physical education in the secondary school, shows that so far school curricula contain general elements and do not a well-defined direction in order to accomplish such an instruction, having very few factual achievements which to allow a progressive evolution of the students' morpho-functional parameters. The consideration of the issues related to the use of such means during the physical education lessons addressing to children aged 11-12, shows that these means contribute to the optimizing of the teaching process, helping the student to develop skills and attitudes consistent with the educational ideal.
- ii. The analysis of the results of research revealed that the content of the school curriculum are partially in favour of the multipurpose instruction of students and that if one considers a multilateral athletic training during a school year, the number of hours corresponding to athletics is insufficient.
- iii. The special multipurpose athletic training curriculum which was conceived and applied to the experimental class, provides knowledge, skills and abilities of the most significant athletic tasks, different at the level of effort, technique and learning methods and also their performance at increased parameters in which movement qualities are concerned.
- v. Morpho-functional and special technical and physical training testing carried out within the educational experiment and also their comparison show that the level of the capacity of effort as well as the recorded parameters stands in a progressive dynamics, the results of the experimental group having been higher while compared to the control group in all tests.
- viii. As a result of the conducted experiment, a draft of a multipurpose athletic training curriculum was conceived, document which can be recommended both to physical education teachers, as well as a study material to students of the faculties in this scientific field.

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