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THE EFFICIENCY OF USING MOVEMENT GAMES IN PRIMARY SCHOOL IN ATTAINING THE SCHOOL SYLLABUS OBJECTIVES FOR MINI-VOLLEYBALL

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Abstract. *Movement moves into the start-up phase, through the "abc" of the volleyball game, placing a great emphasis on the correct acquisition of technical procedures. Contact with the ball plays a role in stimulating children, developing their skills and forming a lure of complex motor skills.*
Keywords: *mini-volleyball, movement games.*

Sporting games provide the possibility of selecting the means to influence physical development, as well as to form the ability of practicing them in an organized or independent way.

Volleyball – like other sporting games – is acquired by playing. Play develops creativity, imagination, inventiveness, cooperation, fair play. The need to handle the ball in a precise and fast manner forces the children to solve unpredictable, spontaneous situations from various positions. These actions influence the capacity of thinking and making the right decisions [3].

In general, four graders are well-developed physically; they have the basic motor skills and they apply them correctly and in the situations required by the teacher; they like to play, to run, to compete, to win [4].

By selecting the four graders, we win years of training, because the balling school will take place at the level of primary school. It is up to us – the people training them – how we attract them to practice volleyball, how we organize activity and how we conduct it. If we do it all responsibly and reliably, results will definitely come [2]. Play is a physical and mental, spontaneous activity, pursued for itself without immediate utility; it generates fun, pleasure and comfort. The author posits that play – besides the biological and physical aspect – has an intellectual component [5].

Material and method

The purpose of the paper was to select from among the movement games the most efficient ones for acquiring the technical-tactical procedures specific to volleyball in fourth grade, for explaining them during the Physical Education lessons or the optional discipline. The results obtained demonstrated their efficiency in attaining the purposes.

The movement games can contribute to an increase in efficiency, to motivation in acquiring mini-volleyball in fourth grade. If we respect the psycho-physiological particularities of children training, if we use the most efficient means and methods of attainment, a good staging of the training process while dosing the effort, with increased quality in the organization and administration of the activity [1].

I started from the following hypothesis: *the means used for acquiring the mini-volleyball game contribute to the influence of motor qualities and skills of students, indispensable qualities for acquiring any sporting game.*

The choice of the most efficient means for acquiring in conditions as close to a game as possible also allows a better selection of children for performance sport [3].

The research tasks were as follows: topic researching in scientific literature; choosing the research samples; learning the level of motor and mental development of the research sample; determining the research organization and unfolding stages; elaborating the evaluation criteria, conducting the initial and final testing of the research sample; processing the initial and final data, graphic representation.

The research was conducted throughout a school year, at the General School no. 39 Iasi. The enthusiasm shown in the practice of volleyball

determined me to research its acquisition among the students within the fourth grade A (the experimental group), using preparing games to acquire the specific technical-tactical procedures stipulated by the school syllabus.

The fourth grade - A comprises 12 girls and 12 boys, and the fourth grade – B (the witness group) comprises 13 girls and 11 boys. The lessons were conducted both in the school gymnasium and on the sports field, outdoors. The results obtained were analyzed and interpreted, by comparing the initial and the final tests and by recording the progresses o the two groups.

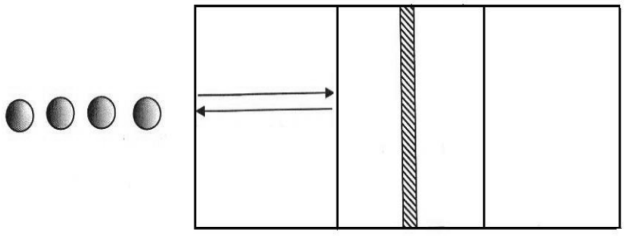
In order to assess the hypothesis, I used three control tests, as follows:

- **passes with two hands up on the wall**

2-3 m from the wall, students execute a pass to the wall. The values obtained by each student are recorded.

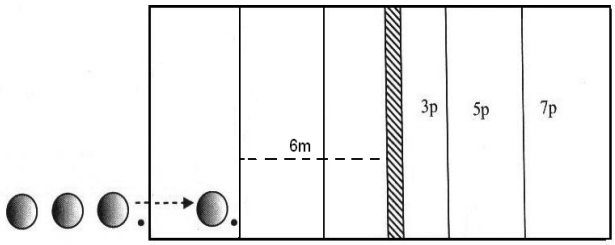
- **speed run**

Running facing the attack line, running backwards to the sideline, while touching the lines with the hand. The movement is done three times forwards and three times backwards. The result is recorded.



- **underhand serve**

The field is divided like in the figure below. Each executes three services from a distance of 6 m from the net. The services value 3, 5 and 7 points, respectively, depending on the area where the ball falls and the results are recorded.



Result analysis

Table 1. Static indicators in the control tests – fourth grade A

Statistical indicator	Speed test 6x6 m		Passes to the wall		Underhand serve	
	initial	final	initial	final	initial	final
arithmetic mean	16.25"	14.66"	7.12	15.2	2.5	8.29
Scattering amplitude	2"	2.8"	7	12	10	23
Median	16.15"	14.9"	6	16	0	7
Module	17"	15"	8	16	0	5
Minimum	15.3"	13"	5	8	0	3
Maximum	17.3"	15.8"	12	12	10	26
Mean deviation	0.51"	0.46"	2.16	3.18	2.7	4.71
Standard deviation	±0.63	±0.6	±1.89	±2.49	±3.06	±6.14
Variability coefficient	3.87%	4.09%	26.54%	16.38%	122.40%	74.06%
Dispersion	0.4	0.36	3.6	6.24	9.41	37.7

Table 2. Static indicators in the control tests – fourth grade B

Statistical indicator	Speed test 6x6 m		Passes to the wall		Underhand serve	
	initial	final	initial	final	initial	final
arithmetic mean	18.02"	17.94"	4.5	4.45	1.91	2.45
Scattering amplitude	2.6"	3.1"	6	5	7	5
Median	18.15"	18.5"	5	5	3	3
Module	18.6"	18.5"	5	6	0	3
Minimum	16.5"	16.7"	2	2	0	0
Maximum	19.1"	19.8"	8	8	7	5
Mean deviation	0.03	0.02	0.06	0.06	0.08	0.07
Standard deviation	±0.72	±0.61	±1.55	±1.44	±2.03	±1.8
Variability coefficient	3.99%	3.40%	0.34%	0.32%	1.06%	0.73%
Dispersion	0.52	0.38	2.41	2.08	4.15	3.24

1. Speed test 6x6 m

The fourth grade B obtained in the initial testing the arithmetic mean of 18.02", while in the final testing 17.94", the progress being insignificant – 0.08".

The fourth grade A obtained in the initial testing the arithmetic mean of 16.25", while in the final testing 14.66", the time improving by 1.59",

which denotes much better physical training in this group.

The values range in the initial testing between 17.3" and 16", while in the final testing between 15.8" and 13", the module being 15". The variability coefficient indicates a scattering of 3.87 in the initial test and 4.09 in the final test, which stand to show very good homogeneity.

2. The test of passes to the wall

The fourth grade B has values ranging between 2 and 8 in the initial testing, whereas in the final test the values are the same, the higher frequency (Mo) comprising 4 successes, the arithmetic mean in the initial test being 4.5, and in the final one 4.45.

As for the fourth grade A, the values range in the initial testing between 5 and 12, and in the final testing between 8 and 20, with an arithmetic mean of 7.12 in the initial testing and of 15.2 in the final testing. The progress is obvious in this group, namely 8.08, compared to the regress of the witness group: -0.05.

The variability coefficient in the fourth grade B is 0.34% in the initial test and 0.32 in the final one; scattering is low, while homogeneity is high. This may be explained by the fact that the number of successes is close to the lower limit: most of them are 3,4 and 5 both in the initial test and in the final one.

In the fourth grade A, the variability coefficient is 16.38%, namely moderate scattering and average homogeneity.

3. The underhand serve test

The fourth grade B has values ranging between 0 and 7 in the initial testing, while the value with the highest frequency is Mo =0; there was an insignificant progress of 0.54. The variability coefficient was 1.06% in the initial time and 0.73% in the final one, scattering being low while homogeneity is high, because most of the students scored between 0 and 3, towards the lower limit.

In the fourth grade A, the values range in the initial testing between 0 and 10, while in the final testing between 0 and 22, the progress accounting for 5.75 compared to only 0.54 in the witness group.

The variability coefficient was over 35% in the initial time and in the final one, indicating high scattering and thus a lack of homogeneity. An explanation is the fact that this test is the most difficult one. Some students obtained a low score – 11 students with 3 and 5 points, while other students obtained a high score – 6 students between 10 and 22 points.

Conclusions

This research was conducted on a regular fourth grade, heterogeneous from the perspective of somatic and motor development. They obtained quite dispersed results in the initial tests. There was quite significant amplitude between the highest and the lowest score, especially in the second and the third test.

The teaching of volleyball using preparing games and applicative tracks stimulated the active participation of students within the activity. This led to an increase in the training level, and the progress was visible in the final testing, for the fourth grade A, especially in the test of passes to the wall (8.08).

Things were quite different for the fourth grade B, where the progress is insignificant between the initial test and the final one.

The positive results of the fourth grade A were determined by the following:

- the use of preparing games for the acquisition of technical procedures specific to volleyball;
- the combination of verbal methods – exposition, explanation, and intuitive methods – demonstration, observation of the execution, as well as practical methods – practice;
- brief, clear and concise explanations;
- global demonstration, followed by a description and demonstration of the movement;
- the selection of captivating, motivating games for students;
- the organization of most games as competitions in order for students to progress, in order to cultivate their wish to be winners;

- outline of the fair play rules and their observance throughout the games;
- the use of a sufficient number of effective teaching means;
- the repetition of games for the acquisition and consolidation of their specific procedures;
- the presentation and monitoring of rules in order to avoid injuries;
- the acknowledgment of any progress recorded by the students and the encouraging of students who show clumsiness;
- the correction of mistakes in the execution of certain procedures by the students;
- the teacher's demonstration, which represents a model to follow by the students, and the desire to execute a movement as accurately as possible.

The acquisition of procedures specific to volleyball was possible by:

- preparing games, themes games, relays;
- observing the correct execution performed by skilful classmates;
- identifying and analyzing the mistakes;
- applying the skills acquired in various game conditions;
- adapting the learning methods to their individual particularities;
- applying the knowledge acquired through various preparing games;
- using a sufficient number of specific materials – volleyballs, pegs, armbands, scarves;
- repeating the games and relays at least twice for each technical procedure.

The fourth grade B failed to obtained significant results because they had a very small number of preparing games.

The findings highlight the progress obtained by the students in the fourth grade A compared to the fourth grade B, and the graphic results are illustrative of this progress. The results are outlined at the end of the preparing period, from both a technical and a motor perspective, which thus confirms the hypothesis of my research.

Consequently, initiation in volleyball may begin at a young age (10 – 11 years old) if we take into account the age and individual characteristics of students. We must also consider the teaching principles; we must select the proper preparing games; the activity planned must be conducted systematically. Teachers must always preserve their sense of responsibility. It is very important for teachers to love their students and their profession.

It may be concluded that even certain overweight students were included within this activity. Having better students as their role models, the overweight students managed to mobilize and to attain two objectives: initiation in volleyball and weight loss, (they managed to obtain a normal BMI for their height and age).

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