

Study on improving the physical education lesson through the use of music in primary school

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Abstract

The starting point in choosing this theme was my personal belief that the use of music during the physical education class is a step towards that assertion, and a deep study of this matter could be an argument for generalizing this methodology. Starting from the fact that music is a method less promoted in the primary school age instructional activity, I believed I should start checking the applicative intervention on a group of 15 female pupils of that school, aged between 9-10 years old. I tried to capitalize the psycho-motor particularities specific to girls of their age, for accomplishing the objectives of the curriculum. The musical accompaniment represents an acoustical-aesthetic component, associated to the motor behavior, with a role in directing, regulating, organizing and constructing movement structures, having a specific importance and interpretation, with implications on the education of rhythmicity and psycho-motor skills.

Keywords: *music, lesson, improving, primary school*

Rezumat

Punctul de plecare în alegerea acestei teme a fost convingerea personală că utilizarea muzicii în lecția de educație fizică se înscrie pe această direcție și un studiu aprofundat al problemei ar putea constitui argumente pentru generalizarea metodologiei. Scopul lucrării a fost acela de a optimiza lecția de educație fizică la nivelul ciclului primar prin folosirea muzicii în anumite momente ale acesteia. Pornind de la faptul că muzica este un mijloc mai puțin promovat în activitatea instructivă la vârsta primară, am considerat ca pentru început să verific intervenția aplicativă la nivelul unui eșantion format din cele 15 eleve ale colectivului clasei cu vârste de 9 – 10 ani. Considerentul s-a bazat și pe valorificarea particularitățile psihomotrice specifice fetelor în sensul îndeplinirii obiectivelor programei școlare. Acompaniamentul muzical reprezintă o componentă acustico-estetică, asociată comportamentului motric specific cu rol în dirijarea, reglarea, organizarea și construcția structurilor de mișcări, având o importanță și o interpretare specifică cu implicații atât asupra palierului educării ritmicității cât și al celui psihomotric.

Cuvinte-cheie: *muzică, lecție, optimizare, ciclul primar*

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Introduction

In today's educational system, Physical Education has a new significance and dimension, substantially modified from the ones promoted by the traditional teaching practices.

Accentuating the formative character of the instructive-educational process imposes giving more attention to the methods, means and forms of organizing the pupils' activity during the class that are capable of stimulating the pupils in becoming more active during the educational action.

Music should be present during gymnastics-themed physical education lessons for the following reasons [1-5].

- it creates a pleasant ambiance during the lesson and it raises the emotional state.
- from a physiological point of view, it creates an optimal excitability for the nervous system, which benefits to the educational process;
- It stimulates, it invites to action, so it is a mobilizing element for movement;
- It helps inducing a state of relaxation, calmness;
- It facilitates the rhythmical performance of movement;
- It eases the internalization of motor skills and abilities specific to gymnastics/rhythmic gymnastics;
- It contributes to the development of memory and distributive attention;
- It stimulates self-expression and creativity;
- It contributes to the musical education of the pupils, if the music they are hearing is good.

The use of music during class is also a great help for the teacher. It imposes the tempo, the rhythm, and the intensity of the movements, thus the teacher is less correcting the exercises performed by the pupils. Also, the teacher could also make the methodical recommendations more easily.

Motor musicality represents the ability to ensure a certain concordance between the motor act and the particularities of the means of expressing music, in pedagogy: beats measurements; duration and particularities of the musical phrase; tempo, intensity, and sound height variations, particularities of the musical piece [6].

A. Luca [2] asserts that the music we use should be in accordance with the pupils' age, with their preferences, but also with their technical training level.

The starting point in choosing this theme was my personal belief that the use of music during the physical education class is a step towards that assertion, and a deep study of this matter could be an argument for generalizing this methodology.

Material and method

The *aim* of this paper was to improve the primary school physical education class by using music during certain parts of it.

The *objectives* of this study, generated by its aim, envisaged:

- identifying certain operational models accessible for primary school age that could be performed with a musical accompaniment,
- improving the physical education class by promoting instructional structures with musical accompaniment,
- verifying and capitalizing the applicative intervention on the primary school pupils.

In developing this research, I started from the following ***hypothesis***:

Presumably, the selection of operational models and applying them with a musical accompaniment for educating the rhythmicity and motor musicality contributes to the improvement of the educational process and, implicitly, to the improvement of the

primary school physical education class.

The research was conducted during the academic year of 2009-2010, at the "Elena Farago" School, in Bucharest.

Starting from the fact that music is a method less promoted in the primary school age instructional activity, I believed I should start checking the applicative intervention on a group of 15 female pupils of that school, aged between 9-10 years old. I tried to capitalize the psycho-motor particularities specific to girls of their age, for accomplishing the objectives of the curriculum. During the experiment, the rest of the class (the boys) accomplished the tasks of a classical lesson, under a directed guidance, using work-shops.

The *research methods* used were: study of the bibliographical material, the observation, the experiment, the tests, the statistical-mathematical method and the graphical representation method.

During the 4th grade physical education classes, I have selected and applied operational models with a specific gymnastics content, in order to improve the educational process for educating the rhythm and motor musicality. For this purpose, I used for warm-

up certain themes and rhythmic games with beats of 2/4, 3/4, and 4/4, for framing the motor actions within the dimensions of the musical phrases, in the musical tempo, and for achieving a concordance between the movement and the sound height.

Also, I used general development exercises, with and without using objects, along with an adequate musical accompaniment, for a selective influence of the musculoskeletal system.

All of these structures were applied in every physical education class during the research, respecting the objectives and the duration of the lessons.

During the 5 months of study, the collected results from the initial and final tests were recorded in the tables below, thus emphasizing the dynamics of the parameters observed during the drills applied for verifying the effectiveness of these methods in solving the primary school physical education class tasks.

Based on the obtained data and calculated statistical indicators, I could make an analysis of the results, seen in the centralizing table below (table I). From these results we can see clearly the difference between the initial tests applied in the beginning of the study and the final ones, applied at the end.

Table I. Centralization of the results after the rhythmicity and motor skills drills

Parameter	Rhythmicity and motor musicality Drill				Coordination Drill	
	percussion		movement		I.T.	F.T.
	I.T.	F.T.	I.T.	F.T.		
Arithmetical mean	8	8.6	8.1	8.8	8.2	8.4
Difference	0.6		0.7		0.2	
Brada Index	7.22%		8.28%		2.40%	

Results

The verification of the rhythmicity education in the studied group was to represent a musical phrase through percussion, during an audition. The average values recorded at the end of the experiment were improved by 0.6 points, which confirms the effectiveness of the methods applied during the study, meaning the rhythmic themes and games aiming at pupils sensing the rhythm expressed through the musical accompaniment.

During the percussion rhythmicity drill, in the final tests, we can see visible progress in all the studied pupils, a higher progress being recorded in A.S., B.I., M.I.

The progress recorded for this drill was confirmed by

the Brada index, with a percentage of 7.22.

A larger increase in value is recorded at the end of the research, during the movement rhythmicity drill, which was about a movement transposition of a 16 beats musical phrase, expressed through percussion.

Following the testing, the experimental group pupils recorded an increase of 0.7 points during the final tests, which proves the role the rhythmic themes play in movement, but also in the general physical development complexes that stressed the moves done on two, four, eight beats of the heard notes.

The Brada index had a percentage of 8.28, confirming the improvement of the values from the end of the research.

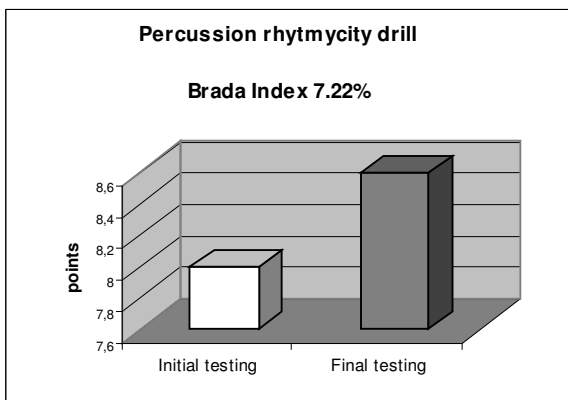


Figure 1. The dynamic of the values for the percussion rhythmicity drill

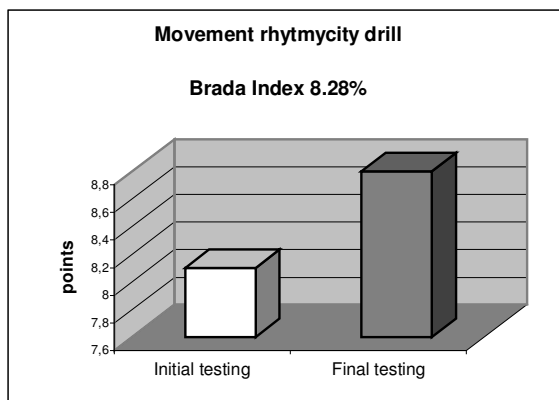


Figure 2. The dynamic of the values for the movement rhythmicity drill

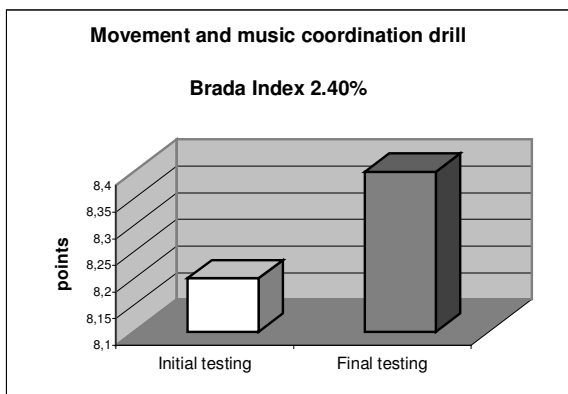


Figure 3. The dynamic of the values for the movement and music coordination drill

During the drill for verifying the concordance between movement and music, the pupils performed a combination of general physical development exercises, on a 16 beats musical phrase, comprising movements of arms and legs.

30 seconds after they heard the musical piece, the pupils had to move accordingly with the tune, in an original way.

Following the analysis done at the end of the study, we could see an increase of 0.2 points, which is justified by the difficulty of the drill and the short time I had for conducting the experiment.

The progression index of 2.40% confirmed the increase in value and the role played by diversified and increasingly complex means in the applied methods. A very important role in educating the coordination was played by the use of carrying objects, such as the cane, the ball, the rope, during the musical accompaniment. According to my observations, the pupils received very well the task of performing the aerobic drills, which are dancing-like by nature.

During the drills that had marks expressed in words, I recorded a progress for most of the subjects. For example, during the musical game "Ball race", for determining the height of the sound, A.S. and C.G. were particularly remarkable, making progress from "satisfying", in the initial tests, to "good", and, respectively, "very good", in the final testing.

During the game of "Guess the tempo", for developing a sense of tempo, the subjects H.A. and I.A. had great results, recording a progress from "good" to "very good".

Conclusions

After conducting this research, we can draw the following conclusions:

1. One of the factors leading to an improvement of the teaching process during gymnastics-themed classes is the use of music. This is not only mentioned in the specialized literature, but also proven by the fact that music had a positive effect on the pupils, regarding the learning of the proposed models, which became more accessible, as we observed during the study. All of these link the following qualities to the music: it creates a pleasant ambiance, it facilitates a rhythmic development of movement, it stimulates the movement, the creative imagination, it facilitates the internalization of motor skills and abilities, it helps overcoming the feeling of fatigue and stimulates emotions.
2. The musical accompaniment was a part of the lesson, helping achieve a permanent concordance between movement and music, a wrong interpretation of this relation being corrected by the teacher.
3. The presence of different musical genres during physical education classes taught also the pupils how to differentiate them, thus being initiated also in musical culture.
4. The suggested models were gradually internalized, starting with simple exercises and finishing with more difficult ones, of great complexity. Combining the models with different tunes was something that helped the pupils also learn easier the other drills in the curriculum.
5. Most tests, both the ones using marks expressed by numbers, and the ones using marks expressed

by words, recorded progresses in the final testing, in comparison with the initial one, which means that the proposed models were effective on the experimented pupils, thus the hypothesis being confirmed.

6. The musical accompaniment represents an acoustical-aesthetic component, associated to the motor behavior, with a role in directing, regulating, organizing and constructing movement structures, having a specific importance and interpretation, with implications on the education of rhythmicity and psycho-motor skills.

7. In parallel with the aim regarding the motor skills, I think the experiment influenced psychological features, such as self-confidence, an improvement in their attention focus and motor memory,

perseverance, self control, and creative behavior, all verified by passing the verification tests given to the experimented pupils.

References

1. Abadne H.H. (1983) *Gimnastica ritmică sportivă*, Ed. Sport – Turism, București;
2. Luca A. (1997) *Gimnastica în ciclul gimnazial*, Ed. Dosoitei, Iași, p.271-273;
3. Constantinescu E. (2002) *Gimnastica ritmică curs de bază*, Fefs, Universitatea Bacău, p.115;
4. Dobrescu T. (1998) *Optimizarea lecției de educație fizică în ciclul liceal prin folosirea muzicii cultura fizică: probleme științifice în domeniul învățământului și sportului*, INEFS, Chișinău, p. 18 – 20;
5. Greder F. (1995) *La musique, source d'atmosphère, de recreation et de comprehension*, Rev. Macolin, nr. 4, p. 9 – 11;
6. Macovei S. (1999) *Gimnastica ritmică de performanță*, Ed. ANEFS, București, p.33.