

MEPDEV 2nd: 2016
Central & Eastern European LUMEN International
Conference - Multidimensional Education & Professional
Development. Ethical Values

**EVALUATION OF “PHYSICAL EDUCATION AND SPORT”
CURRICULAR AREA IN PRIMARY SCHOOL**

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Abstract

The main purpose of the study is the evaluation of the main abilities and competences based on teacher and student options in the research ascertaining stage, which must be performed in the curricular area of Physical Education and Sport in primary education. This scientific approach has led to the organization of an ascertaining pedagogical experiment. Research methods used: study of specialized literature, pedagogical observation, pedagogical experiment, method of tests and control events, statistical-mathematical method. During the study there were applied the test events included in School National System for Evaluation at Physical Education and Sport subject, having predominantly a regulatory role both for students' assimilation activity and for the improvement of didactical strategies. The bi-annual evaluation will include at least three grades resulted from the events of speed, strength, complex of physical development, skill, acrobatic gymnastics and sports games. The results of the research highlight the level of motor skills, of basic motor skills, of elementary athletic skills and the capacity for performance acquired by students after practicing the physical education class. The application of the evaluation system depending on teacher's and student's options during the ascertaining stage of the research will lead to the accessibility and diversification of using the contents of gymnastics in order to improve the curricular area of physical education and sport in primary school.

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Keywords: Abilities, competences, didactical technologies, evaluation system, grades



1. Introduction

The education system in Romania gets at a rapid pace through an extensive restructuring program designed to make it compatible with the requirements of the educational and vocational training system of the European Community. In this context, physical education too should reconsider its role, contents, didactical methodology and students' evaluation system. In the spirit of the programmatic documents aiming at education, developed by the Government of Romania, and those created by the European institutions and agreed jointly, at the present moment the compulsory education should provide students with knowledge, skills and attitudes in the following eight key skill areas. These key skill areas meet the objectives responsible for the development of educational and vocational training systems in Europe (Barcelona-Copenhagen process) and therefore underlie the curriculum for compulsory education. These specific contributions gave the physical education and sport the status of distinct curricular area in the curricula of all cycles of education and they should guide the preparation of physical education syllabus, the methodology for achievement of educational process and evaluation system as well (Dragomir & Scarlat, 2004).

Physical Education and Sport curriculum is an official document that provides - mainly but not exclusively - the contents of the educational process in the various subsystems of physical education and sport. It must meet certain conditions that also constitute the main characteristics (Cârstea, 2000): binding, dynamic, linear and concentric character, with unitary, multilateral and continuously ascending basis; it gives formative priority of education, differentiated treatment, etc.

The curriculum of Physical Education is developed according to a new model of curriculum design, focused on skills. The curriculum construction is carried out so as to contribute to the development of the training profile for primary cycle students. From the perspective of the discipline of study, the orientation of the teaching approach starts from the skills, their purpose and the action dimension in student's personality formation. The structure of curriculum includes the following elements (OMEN, 2013): presentation note, general skills, specific skills and examples of learning activities, contents and methodological suggestions.

The setting goals provided in the curricula of physical education are derived from the specific aims of primary education and the objectives of the two curricular cycles that intersect it, namely the cycle of fundamental acquisitions in the preparatory grades (first and second grade) and the development cycle - third and fourth grade. Didactical design reflects how the teacher, the schoolmaster or the physical education teacher conceives the achievement of the benchmarks for each grade. Depending on the education cycle, some categories of contents covered by the curriculum may constitute learning units such as "organizational capacity", "physical development", some basic or utility-applicative skills (Dragomir & Scarlat, 2004; Potop & Marinescu, 2014).

School National System for Evaluation in Physical Education and Sport is a component part of the reform which has the main objective to determine the effects resulting from the application of the new curricula. The National System aims at assessing the main capabilities and skills needed to be made in the curricular area of physical education and sport. Depending on the hourly schemes adopted, the system is also supplemented with the evaluation of other skills and capabilities stipulated in the curriculum (School National System for Evaluation at Physical Education and Sport subject, 1999).

The evaluation is a component of the didactical approach that enables the teacher to objectively determine the effects of the initiated didactical process on the students throughout each learning unit and in the end of these ones. There are three types of evaluation identified in the didactical practice (Dragomir & Scarlat, 2004; Grimalschi & Boian, 2011; Potop & Marinescu, 2014): predictive evaluation (initial), formative evaluation (continuous) and summative evaluation (final).

“The evaluation objective is: student’s skills acquired during school physical education or, more correctly formulated, the students and their skills in bio-psychosocial perspective. In other words, the subject of evaluation in school physical education should not be designed and conducted only by measuring and assessing the results obtained by students but must also take into consideration the morphological (anatomical), physiological, psychological aspects that determine the achievement of the respective results and their social implications as well” (Urichianu Toma, Timnea & Cheran, 2010..

2. Problem Statement

Physical education and sport evaluation systems in force require revisions consistent with the new regulations concerning (Dragomir & Scarlat, 2004; Order no. 3418/ 19.03.2013; Order no. 5003/ 02.12.2014):

- Setting goals, general skills, reference objectives and specific skills stipulated in the revised curricula or the newly developed ones approved by the Ministry of Education and Research;
- Provisions of the revised curricula approved by the Ministry of Education and Research;
- Evaluation of students;
- Integration of the annual averages obtained by the students.

Didactical strategies, design of the didactical activity and evaluation elements for preparatory grades – first and second grade (Order no 3418/ 19.03.2013): progressive construction of knowledge; flexibility of approaches and differentiated path; consistency and inter- and transdisciplinary approaches.

In order to valorise the key skills and to ensure the transferability in educational activity, the didactical strategies used for teaching the Physical Education and Sport subject will focus on coherent and integrated approach. According to the provisions of OMECTS no. 3462/2012, sport teams and sport assemblies can be established in primary education, besides the classes of physical education mentioned in the setting program (Order no. 5003/ 02.12.2014).

3. Research Questions

To assess the main capacities and skills needed to be achieved in “Physical Education and Sport” curricular area in primary education, we should answer the following research questions:

- Will the testing of the anthropometric data of primary school students determine the level of somatic development of both girls and boys and their homogeneity?
- Will the evaluation of “Strength” motor skill learning unit highlight the level of muscle strength development of both girls and boys and their homogeneity in conformity with School National System for Evaluation at Physical Education and Sport subject for primary school students?

Will the application of the evaluation system based on teacher and student options in the ascertaining stage of the research improve the contents of the curricular area of Physical Education and Sport in primary education?.

4. Purpose of the Study

The main purpose of the study is the evaluation of the main abilities and competences based on teacher and student options in the research ascertaining stage, which must be performed in the curricular area of Physical Education and Sport in primary education.

5. Research Methods

The following methods were used in this research: study of specialized literature, pedagogical observation, ascertaining pedagogical experiment, method of tests and control events, statistical-mathematical method for results processing. There were also applied 4 test events with in the School National System for Evaluation in Physical Education and Sport. Tests applied: Test 1 – From supine position, torso raises to sitting position arms up in 30 sec, assessment of correct executions number; Test 2 – From sitting position, with support on arms backwards – pelvis raise in supine support (back) to the horizontal in 30 sec., assessment of correct executions number; Test 3 –Assessment of mobility by bending the torso forwards from sitting position, assessed in cm; Test 4 - general coordination – Motorin test, jump with 360° turn to the right and to the left, assessed in degrees.

The research was conducted from November 2015 to March 2016, with a group of 26 students (14 girls and 12 boys), 6 to 8 years old, from "Coresi" secondary school of Târgoviste. During the classes there were used learning contents from the following fields: organizational elements of motor activity; elements of harmonious physical development; motor qualities; basic and utility-applicative motors skills; locomotion, handling and stability skills; hygiene and personal safety, motor skills specific to sports disciplines; development of personality traits.

This scientific approach will contribute to the improvement of curricular area in primary cycle by diversifying the contents of gymnastics means depending on teacher and student options.

6. Findings

The biannual evaluation included at least the remarks resulted from the test events for speed, strength, complex physical development, skill, acrobatic gymnastics and sports game. In this research there were used, for example, only 4 tests for the assessment of abdominal and back strength, mobility of spine and general coordination.

In terms of results of somatic development of the students being investigated ($X \pm SED$), girls' height ($n=14$) – 130.2 ± 1.61 cm while boys' height ($n=12$) – 134.9 ± 1.18 cm, with high homogeneity in both groups of subjects; the weight of girls – 25.03 ± 1.44 kg while the weight of boys is – 26.9 ± 1.43 kg, with low homogeneity for girls and moderate for boys (21% and 18%).

Table 01 shows the results of motor skill development of the primary cycle students regarding the strength of back and abdominal muscles, spinal mobility and general coordination.

Table 01. Results of motor skills development in primary cycle students

Statistical Indicators	Subjects	Test 1	Test 2	Test 3	Test 4 (degrees)	
		(No. of reps)	(No. of reps)	(cm)	right	left
X	Girls	6.5	10.71	31.36	200.7	186.43
	Boys	5.17	7.83	34.08	196.67	204.17
SED	Girls	0.86	0.85	1.93	15.6	15.92
	Boys	0.78	1.03	1.75	18.35	18.84
Cv%	Girls	49.67	29.61	22.98	29.08	31.95
	Boys	52.08	45.49	17.76	32.33	31.98

Note: girls – n = 14; boys – n = 12; X – arithmetical mean; SED – standard error deviation; Cv% - coefficient of variation; Test 1 – abdominal strength; Test 2 – back strength; Test 3 – spinal mobility; Test 4 – general coordination, Motorin test.

As for the results of motors skill development of primary cycle students aged 6 to 8, we observe ($X \pm SED$) at test 1- abdominal strength of girls (n=14) – 6.5 ± 0.86 reps and for boys (n=12) – 5.17 ± 0.78 reps; test 2 – girls’ back strength – 10.71 ± 0.85 reps and boys’ back strength – 7.83 ± 1.03 reps, with poor homogeneity of both tests (Cv% - 29.61-52.08 %); test 3 – spinal mobility from sitting position, girls – 31.36 ± 1.93 cm and boys – 34.08 ± 1.75 cm, with low homogeneity in the case of girls (22.98 %) and moderate in the case of boys (17.76 %); test 4 – general coordination, (Motorin test), turning to the right - girls – 200.7 ± 15.6 degrees and boys 196.67 ± 18.35 degrees; turning to the left- girls – 186.43 ± 15.92 degrees and boys – 204.17 ± 18.84 degrees, with poor homogeneity in both directions and groups (29.08-32.33 %).

The use of didactical technology in learning the acrobatic exercises in primary cycle involves reducing the structure of component elements in accordance with the stages of learning. The development of the linear programming algorithmic scheme of the instruction material for learning the tucked forward rollover, considered as an isolated acrobatic element, allowed its efficient use for learning also other acrobatic elements included in the curriculum (Potop & Urichianu, 2016).

7. Conclusion

The results of the research highlight the level of motor skills, basic motor skills, elementary athletic skills and the capacity for performance acquired by students after practicing the physical education class.

For the achievement of specific skills, there were used examples of learning activities that valorise student’s concrete experience and that integrate didactical strategies appropriate to various contexts of learning.

The application of the evaluation system depending on teacher’s and student’s options during the ascertaining stage of the research led to the accessibility and diversification of using the contents of gymnastics in order to improve the curricular area of physical education and sport in primary school.

Acknowledgments

This paper is part of the doctoral paper of the first author; it is included in the subjects of the research program of the Faculty of Physical Education and Sport of the Ecological University of

Bucharestfor 2015 – 2016. We express our gratitude to professor PhD. Marinescu Susana for the support and help to achieve this experimental study.

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