

## THE CURRICULAR OBJECTIVES PLANNING AND OPERATIONALIZING IN THE DEVELOPMENT PROCESS OF MOTOR QUALITIES AT THE SECONDARY SCHOOL PUPILS

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**Abstract.** *In the present article is tackled the problem of curricular objectives planning and operationalizing focused on psychomotor skills training in physical education lessons with pupils of secondary schools, whose final product will be the improved indices of development and manifestation of motional skills. In the context of the problem studied, the essence of our study in the curricular education system based on competencies does not deny the objectives but comes to intensify and expand the knowledge, the skills and qualities necessary for the pupil, through the planning and operationalization of the concrete educational objectives oriented for the basic motional qualities development. The results of pedagogical experiment conducted in order to ascertain the level of motional skills development for the pupils of secondary schools based on correct planning and using of curricular objectives within the lessons of physical education had a positive effect on the parameters studied, which we obtained significant similarities between the results obtained in the experimental and control class.*

**Keywords:** *physical education, training process, physical education lesson, didactic planning, curricular objectives, motional skills, motional skills development, pupils from secondary schools.*

**Introduction.** The curricular reform produced fundamental changes of conceptual and methodological type at the entire education system level, including the physical education one, among these changes are listed and new way of thinking early activities of teaching and learning or exposing them as a form of didactic planning of curricular type applicable at the globally, intermediate and operational level.

In this context, the actuality and importance of the addressed problem is to study new planning technology of the operational objectives of the lesson, technologies containing a set of tasks related to the integral formation of competencies – knowledge, qualities, capacities and attitudes of students.

Among the many problems that arise with the implementation of new technology curriculum, teachers, students, parents form their views about the aims and educational objectives of the training process [2].

New approaches of the authors [1, 3, 4, 5] aims the formation at the students of a general and specific skills system needed for further study, with the aim to ensure optimization of social integration and professional perspective.

The essence of our study in curricular education system based on competences do not deny the objectives but comes to intensify and expand the knowledge, skills and qualities level, needed by pupil, through the planning and operationalization of educational concrete objectives oriented to the development of basic motional skills for the secondary schools pupils.

**The purpose of research** – to lay the methodological foundations of planning and operationalizing the curricular objectives in the development process of motional skills for secondary schools pupils.

To achieve the goal and objectives in research we used the following research methods: bibliographical study, observation, conversation, teaching experiment, test and measurement, questionnaire survey method type, statistical methods – mathematical processing and interpretation of data.

**The organization and course of the research.** In order to improve the educational process for the physical education discipline in secondary schools, it was conducted an ascertaining exper-

iment based on planning, operationalizing and course of physical education lesson with specific objectives for the development process of motional skills. The experiment was organized during September-October 2015 in the High School "L. Deleanu" with pupils of V class and it had been worked with two classes (20 students control group, and the experimental group of 20 students).

For this purpose, it was intervened on both the programming and planning activity in physical education classes in secondary school. It have been established tests and trials aimed to highlight the effectiveness of using these curricular projects at the physical education class. To determine the level of motional training of students in secondary school, we selected a series of tests that we have applied to a control group and an experimental group.

In the witness grades the content of teaching activities was designed according to physical education curriculum compartment, keeping the same cycles of activity.

For the experimental class the instructional-educational content was a little changed, with the share of priority for the extracurricular activities and student involvement in the daily practice of various forms of physical exercise. The selected motional samples assumed the measurement and evaluation of motional capabilities: speed, strength, coordination, expansion, skill.

The theoretical analysis and generalization of information obtained from the specialized literature, concerning the operational methodology of curricular objectives in the development of motional skills at the secondary school students within physical education lessons, highlight that this aspect of training requires a further study.

Thus, in addressing this issue, it was started with the premise of a survey among teachers, which may be useful in trying to modernize and streamline the educational process of the physi-

cal education lesson at secondary school level.

The sociological survey had as an objective the determination of the operational methodology of curricular objectives in the development of motional skills at the secondary school pupils which is now used by physical education teachers. The content investigation conducted among teachers focused specifically on the formation of a view regarding the operational methodology for the psychomotor objectives and how it can be implemented in practice.

During the period from September to October it was subjected to questioning 58 physical education teachers from Chisinau municipality. Analysis of the responses submitted by the investigated subjects allowed us to conclude that 33 teachers who constitute 56.83% responded that the share of operational methodology of curricular objectives in the development of motional skills at the secondary school students in improving physical education class is average and 25 teachers, namely 43.17% consider that their influence is high and very high.

Due to the fact that the development of motional skills has been an ongoing concern of specialists in physical education and sport, which has improved and developed continuously, the curricula in all stages of the development process of education have set specific objectives / content, to their development formulating the mandatory requirements achieved through integrative system of lessons.

**The results of research.** The argumentation of initial training of secondary school pupils was intended to highlight the educational values that have the pupils at this age. The performance achieved by pupils and the marks obtained in the various control samples that determines the level of expression of the motional skills provided by the actual assessment and evaluation system may create a general overview over the effectiveness

of methods, means and forms of organizing the physical education lesson.

One of the objectives of pedagogical experiment was focused on determining the methodology of planning the curriculum objectives in the development process of motional skills at the secondary school students of 11 to 12 years (V grade). For this purpose were tested 40 pupils from the

mentioned institution (20 girls and 20 boys).

The results of pedagogical experiment conducted in order to ascertain the level of development of pupils motional skills investigated under operational curricular objectives are presented in Table 1 and Table 2.

**Table 1. Comparative analysis of motional skills development indices within the pedagogical experiment (girls:  $n_c=10$ ;  $n_e=10$ )**

Crt. nr.	Tests (girls)	Groups	Medium average (X)	Medium deviation ( $\sigma$ )	Standard deviation (m)	Variability coef. ( $C_{v\%}$ )	Statistic signification	
							t	P
1	Shuttle running 3x10m (s)	M	9,1	0,16	0,05	1,75	2,85	<0,01
		E	8,9	0,19	0,06	2,13		
2	From dorsal lying, vertical trunk lifting, during 30 s (nr. of times)	M	18	1,62	0,54	9	2,40	<0,05
		E	20	1,94	0,64	9,23		
3	Lying down support, hands on the gymnastics bench, press-ups (nr. of times)	M	11	1,62	0,54	14,72	2,40	<0,05
		E	13	1,94	0,62	14,92		
4	Long jump from place (cm)	M	145	3,24	1,08	0,95	2,31	<0,05
		E	155	3,24	1,08	0,95		
5	Sitting on the gymnastics bench, slowly, bending forward (cm)	M	+7	1,62	0,54	23,14	2,40	<0,05
		E	+9	1,94	0,64	19,40		

Note: C – the control group; E – the experimental group.

Analyzing the data summarized in Table 2 it can be observed that the values recorded for the five initial tests of sports trials confirms the close

level of preparedness between the two groups of boys and girls enrolled in the pedagogical experiment.

**Table 2. Comparative analysis of motional skills development indices within the pedagogical experiment (boys:  $n_c=10$ ;  $n_e=10$ )**

Crt. nr.	Tests (boys)	Groups	Medium average (X)	Medium deviation ( $\sigma$ )	Standard deviation (m)	Variability coef. ( $C_{v\%}$ )	Statistic signification	
							t	P
1	shuttle running 3x10m (s)	C	8,4	0,16	0,05	1,90	2,85	0,01
		E	8,0	0,19	0,06	2,37		
2	From dorsal lying, vertical trunk lifting, during 30 s (nr. of times)	C	23	1,29	0,43	5,60	2,32	<0,05
		E	24	2,27	0,75	9,45		
3	Hanging fixed from the bar (grabbed up), chin-ups (nr. of times)	C	5	1,94	0,54	32,4	2,40	<0,05
		E	7	3,24	0,64	32,33		
4	Long jump from place (cm)	C	160	3,24	1,08	2,02	2,37	<0,05
		E	170	3,24	1,08	1,90		
5	Sitting on the gymnastics bench, slowly, bending forward (cm)	C	+6	1,94	0,64	32,3	2,40	<0,05
		E	+7	1,94	0,64	27,7		

Note: C – the control group; E – the experimental group.

As it can be seen in the comparative analysis of the initial results of the motional capacities man-

ifestation for boys and girls in the experimental and control group from Tables 1 and 2, there is

a difference between the indices of all evaluating motional capacity tests.

Statistical significance tests for the motional development of the two groups of pupils shows that there are differences between the control and experimental group tested, which leads to the conclusion that projects are built upon operational objectives focused on developing skills are well defined in the learning units, it can more effectively follow motional capacity, and can greatly affect the performance of the experiment group.

The differences between them appear clearly at the boys tests, for the trials: shuttle running (3x10m (s), chin-ups, long jump from place, at the girls: shuttle running (3x10m (s), press-ups, long jump from place, bending forward.

After analyzing the results, the average value obtained by pupils is lower than the standard model. Thus, we find that the performance achieved by the sample studied is at the middle of the scale to these samples, the schoolgirls' average grade being located at 7.25, the male pupils' average being located at the 8.12 mark.

This result is given by the fact that at the carried tests participated healthy pupils participating in all areas of the curricular and extracurricular physical education activities in accordance with the curriculum.

On the basis of data analysis obtained by applying the initial testing of pupils general physical training in secondary school we considered that it were studied dependent variables in initial

testing by recording school successes situation compared to the current model system of evaluation and assessment of pupils' level educational standards in discipline "physical education".

Through these values, pedagogical research focus is on the establishment and development of modules for pilot projects focused on the application of psychomotor skills operational objectives training of pupils in secondary schools.

Analyzing the results obtained in the experiment ascertaining from a sample of 40 pupils of the initial training of secondary school pupils, compared to the state presented the assessment and evaluation system shows a high average level of development characterizing the 11-12 age years: girls achieved a 7.7 grade average and the boys achieved a 8.3 grade average level.

Upon the conducted study completion we conclude that the correct and well thought planning and operationalization of curricular objectives in the development of motional skills at secondary school students surveyed had a positive effect on the parameters on which we have found significant similarities  $p < 0.05$  between the results obtained from experimental and the control class.

At the five motional trials used within the experiment it highlights the optimal level of qualities development, it is confirmed the literature data regarding the uneven and different in time development capacities for speed and coordination, strength, detention skill.

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