## THE ASSESSMENT OF HIGH SCHOOL STUDENT ACHIEVEMENT IN THE DISCIPLINE "PHYSICAL EDUCATION"

# Ion CARP<sup>1</sup>, Parascovia URÎTU<sup>2</sup>,

<sup>1</sup>USEFS, Republic of Moldova, <sup>2</sup>HS M.Berezovschi, Chişinău, Republic of Moldova

Abstract: The present digest aims to increase the efficiency of research in the educational processes of discipline "Physical Education" for high school, where they target educational content focused on psychomotor training skills in physical education classes and the methods of their evaluation.

Key words: evaluation, school results, educational process, curriculum, curriculum content, evaluation of school results, psychomotor training skills, students of high school, physical education classes, items and technical processes.

**Introduction.** Analyzing the basic documents that ensure the organization and conduct of physical education (curriculum. school syllabus etc.), it is obvious that the core focus is on developing motor skills, motor skills training and skills development of students' physical and functional [1, 2, 3; 4, 5; 6]. However, in contrast to other disciplines, considering the level of educational standards, the section on assessing academic achievement in the discipline "Physical Education" is often overlooked.

The research issue is the ambiguous nature of mechanism for assessing performance to high school students in the discipline "Physical Education".

The research hypothesis is the assumed fact that knowledge and practical application of the methodology for assessing school performance in high school students in the discipline "Physical Education" will significantly contribute to increase the effectiveness and quality of the educational process.

The purpose of research is to improve educational outcomes assessment methodology in the educational process of students at the high school discipline "Physical Education".

To achieve the objectives proposed in the paper we used the following research methods: theoretical analysis and generalization of literature data; analysis of the planning documents, evidence and control within the discipline "Physical education" in secondary school; pedagogic observation; Quiz survey method; teaching experiment; indices testing methods of physical training; statistical and mathematical methods.

Inasmuch as the investigations aimed to increase the efficiency of educational discipline "Physical Education" in the HS

"M.Berezovschi" from Chisinau, the content from the most forms of educational activities training in twelfth grade students were targeted. The research was structured in two

In the first phase, 2012-2013 the sociological observation and questionnaires were used in. This phase of the research enabled us to determine the degree of knowledge and use of contemporary assessment methodology, and the views of teachers on the subject of our research.

In the second stage, in the school year 2013-2014 a basic pedagogical experiment was held, in which 204 students were enrolled. Classes included witness (control classes) - 104 students, experimental classes - 100 students. all between the ages of 16-19.

Experimental classes had as contemporary methodological support curricular elaborations published in 2012, focused on the assessment of student's psychomotor skills in the process of physical education. Final testing was conducted at the end of the school year 2013/2014. The results have undergone statistical processing and presented in the Committee Republican teacher certification in the field of physical culture.

One of the specific objectives of the research was to outline the views of experts on the issue of assessing school performance of students in the secondary stage of "Physical Training".

For this sociological survey was organized with specialists in physical culture in Chisinau, which was attended by 97 people with various degrees. The results of academic investigation have been processed and are shown in Figures 1 and 2 as follows:

Thus, the first question of a general nature related to the estimation of learning outcomes assessment level discipline "Physical Education" in Moldova (Fig.1.) The responses are focused on three alternatives: average -37.63%; weak - 33.51%, and very weak -24.74%.

Therefore, 58.5% of those surveyed are not satisfied with the skills assessment of students and only about 41.5% consider it is enough.

#### The Responses to the questions

- "Evaluate please, the level of Assessment of the school discipline
- "Physical Education" in Moldova"

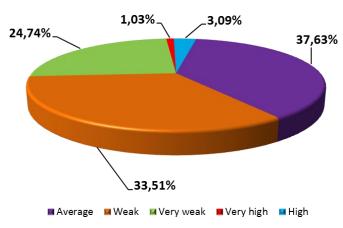


Fig. I

One of the key questions of the sociological survey was whether the experts consider that the evaluation of school results on the subject "physical education" meets the requirements of the curriculum educational reform (fig. II).

### **Answers to the question**

- "Do you consider that the evaluation results in the modern school discipline
- "Physical Education" meets the requirements?"

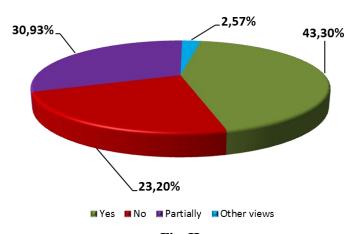


Fig. II

Therefore, analyzing the results of the specialist's inquiry by the sector, we believe that a good many of them support the requirements of the contemporary system of school results assessment on the subject "physical education", but most indicate that they are not sufficiently dealt with in regulations for the organization of physical

education schools, including the high school stage.

According to the survey, the regulations are present in the curriculum, but there are not represented by unique requirements to the property, and no concrete criteria of evaluation at the level of educational standards.

The research level physical training high school students step aimed to underline the effects of applying the experimental program focused largely on psychomotor assessment of students in high school.

To analyze the dynamics of indices of physical training, remember that within all educational experiment were analyzed as test driving skills and control rules taken from pre-university curriculum in physical education, the high school, both boys and girls. The block test driving contains control standards representing virtually all of physical attributes as: speed (running 60m), mobility (test mobility), strength (push-ups, chin-to horizontal bar) qualities combined power-speed (detention extensions, abdomen) and resistance (running 1000m). The tests were carried out at the beginning of the experiment and at the end thereof in both groups - experimental and control - included in the survey. The statistic is presented in Tables 1 and 2.

Table 1. The Results of physical training of students enrolled in high school (secondary) teaching

experiment stage (girls, the experimental group n = 60, control group n = 62)

| S/n | Test indicators                            | Group | Initial Testing | Final Testing | T    | P      |
|-----|--|-------|-----------------|---------------|------|--------|
|     |  | Gre   | X ±m            | X ±m          |      |        |
| 1.  | Running speed,                             | Е     | 9,22±0,13       | 9,04±0,12     | 1,85 | >0,05  |
|     | 60 m, sec                                  | С     | 9,57±0,15       | 9,41±0,15     | 1,37 | >0,05  |
|     | t; P                                       | E-C   | 1,76; >0,05     | 1,92; >0,05   |      |        |
| 2.  | Push-up, number of times                   | E     | 8,99±0,57       | 10,10±0,33    | 2,69 | <0,01  |
|     |  | С     | 8,21±0,49       | 8,97±0,41     | 2,13 | < 0,05 |
|     | t; P                                       | E-C   | 1,04;>0,05      | 2,14;<0,05    |      |        |
| 3.  | Traction low bar, number of times          | E     | 3,89±0,31       | 4,33±0,26     | 1,90 | >0,05  |
|     |  | С     | 3,13±0,32       | 3,59±0,29     | 1,94 | >0,05  |
|     | t; P                                       | E-C   | 1,70;>0,05      | 1,90;>0,05    |      |        |
| 4.  | Extensions, number of times                | E     | 34,17±1,27      | 37,34±1,15    | 3,36 | < 0,01 |
|     |  | С     | 31,86±1,28      | 33,85 ±1,23   | 2,04 | <0,05  |
|     | t; P                                       | E-C   | 1,28;>0,05      | 2,07;<0,05    |      |        |
| 5.  | Abdomen exercises - 1 min, number of times | E     | 40,62±1,14      | 43,45±0,93    | 3,43 | < 0,01 |
|     |  | C     | 38,31±1,21      | 40,32±1,11    | 2,22 | <0,05  |
|     | t; P                                       | E-C   | 1,39;>0,05      | 2,16;<0,05    |      |        |
| 6.  | Detention, cm                              | Е     | 22,30±0,72      | 24,05±0,35    | 3,26 | <0,01  |
|     |  | C     | 21,26±0,73      | 22,41±0,67    | 2,11 | < 0,05 |
|     | t; P                                       | E-C   | 1,01;>0,05      | 2,17; <0,05   |      |        |
| 7.  | Mobility, cm                               | E     | 7,12±0,35       | 7,97±0,26     | 3,40 | <0,01  |
|     |  | C     | 6,43±0,38       | 7,08±0,35     | 2,28 | <0,05  |
|     | t; P                                       | E-C   | 1,33;>0,05      | 2,04;<0,05    |      |        |
| 8.  | Running resistance 1000 m,                 | E     | 299,70±2,80     | 292,87±2,16   | 3,40 | <0,01  |
|     | sec  | C     | 305,00±3,08     | 300,44±2,92   | 1,95 | >0,05  |
|     | t; P                                       | E-C   | 1,27;>0,05      | 2,08;<0,05    |      |        |
| 9.  | Skills, sec                                | E     | 17,50±0,57      | 16,17±0,44    | 3,25 | <0,01  |
|     |  | С     | 18,56±0,59      | 17,67±0,55    | 2,00 | <0,05  |
|     | t; P                                       | E-C   | 1,23;>0,05      | 2,13;<0,05    |      |        |

The Analysis of the results confirms that school physical education organization, in this case at the high school stage, with a greater share in evaluating the results of psychomotor did not adversely affect the level of physical training of students. In some cases, for example, samples of strength, endurance and skill, both girls and boys in the experimental groups, the results were higher than those of students in the control group, where physical education was organized as usual.

Table 2. The Results of physical training of students enrolled in high school (secondary) teaching experiment stage (boys, the experimental group n = 40, control group n = 42)

| S/n | Test indicators                            | Group | Initial Testing | Final Testing | Т    | P      |
|-----|--|-------|-----------------|---------------|------|--------|
|     |  |       | X ±m            | X ±m          |      |        |
| 1.  | Running speed,                             | Е     | 7,26±0,12       | 7,92±0,10     | 1,95 | >0,05  |
|     | 60 m, sec                                  | С     | 7,28±0,13       | 7,17±0,12     | 1,14 | >0,05  |
|     | t; P                                       | E-C   | 0,11;>0,05      | 0,51;>0,05    |      |        |
|     | Push-ups, number of times                  | Е     | 23,25±1,16      | 26,19±0,95    | 3,50 | <0,01  |
| 2.  |  | С     | 21,11±1,20      | 23,05±1,18    | 2,10 | <0,05  |
|     | t; P                                       | E-C   | 1,28;>0,05      | 2,07;<0,05    |      |        |
|     | Traction low bar, number of times          | Е     | 9,01±0,51       | 10,23±0,37    | 3,35 | <0,01  |
| 3.  |  | C     | 8,16±0,52       | 8,38±0,49     | 2,09 | <0,05  |
|     | t; P                                       | E-C   | 1,16;>0,05      | 2,03;<0,01    |      |        |
|     | Extensions, number of times                | E     | 48,61±1,65      | 52,91±1,44    | 3,55 | <0,01  |
| 4.  |  | С     | 45,82±1,63      | 48,43±1,52    | 2,13 | < 0,05 |
|     | t; P                                       | E-C   | 1,20;>0,05      | 2,14;<0,05    |      |        |
|     | Abdomen exercises - 1 min, number of times | E     | 59,97±2,07      | 65,46±1,91    | 3,54 | <0,01  |
| 5.  |  | С     | 55,94±2,18      | 59,37±2,13    | 2,05 | <0,05  |
|     | t; P                                       | E-C   | 1,34;>0,05      | 2,13;<0,05    |      |        |
|     | Detention, cm                              | E     | 32,40±0,96      | 34,83±0,78    | 3,50 | <0,01  |
| 6.  |  | С     | 30,97±0,99      | 32,47±0,85    | 2,07 | < 0,05 |
|     | t; P                                       | E-C   | 1,47;>0,05      | 2,04;<0,05    |      |        |
|     | Mobility, cm                               | E     | 6,00±0,45       | 7,13±0,31     | 3,52 | <0,01  |
| 7.  |  | C     | 5,35±0,47       | 6,08±0,42     | 2,10 | < 0,05 |
|     | t; P                                       | E-C   | 1,00;>0,05      | 2,01; <0,05   |      |        |
|     | Running resistance,                        | E     | 233,09±2,33     | 225,47±1,86   | 3,34 | <0,01  |
| 8.  | 1000 m, sec                                | С     | 235,00±2,46     | 231,27±2,15   | 2,06 | <0,05  |
|     | t; P                                       | E-C   | 1,16; >0,05     | 2,04; <0,05   |      |        |
|     | Skills, sec                                | E     | 15,63±0,48      | 14,44±0,37    | 3,46 | <0,01  |
| 9.  |  | С     | 16,31±0,49      | 15,56±0,41    | 2,10 | <0,05  |
|     | t; P                                       | E-C   | 0,99;>0,05      | 2,03;<0,05    |      |        |

Analyzing the development of the motoric indicators at the end of the pedagogical basis experiment, we can find out a clear trend of improving results at students in the experimental groups (boys and girls) than in the control group.

The best results were recorded for testing samples of force (traction fixed bar extensions) and skill test, the results of the experimental groups were significantly higher than those in control groups (P < 0.01

In conclusion, we confirm the hypothesis, evaluating the results of psychomotor skills at school under the new curriculum requirements, if given at the secondary stage did not affect negatively the physical training of students.

In some cases, for example, samples of strength, endurance and skill, both girls and boys in the experimental groups, the results were higher than those of students in the control group, where school results in physical education was evaluated traditional.

#### **References:**

- [1].Carp I. Dezvoltarea aptitudinilor motrice prin tratarea diferențiată în lecția de educație fizică din gimnaziu//Probleme actuale privind perfecționarea sistemului de învățămînt în domeniul culturii fizice: materialele conf. știnț. Internaționale. Chișinău: USEFS, 2013. P.129-[2]. Grimalschi T. și colab. Educația fizică: (cl. 10-12): Ghid metodologic pentru profesori/ Min. Educației și Tineretului al Rep. Moldova; Ch.: Univers pedagogic, 2007, 152 p.
- [3]. Rotaru A. Capacitățile motrice factor determinant al eficienței motrice a omului. //Ştiința Culturii Fizice, nr.2. Chișinău, I.N.E.F.S., 2005, p. 64-67
- [4]. Sava P. Educație fizică: Ghid de implementare a curriculumului modernizat pentru treapta liceală.-Ch.: Cartier, 2010. 100 [5]. Лях В.И. Тесты в физическом
- воспитании школьников. Пособие учителя. М.: Издательство АСТ, 1988. 272 стр.
- [6]. Максименко А.М. Теория и методика физической культуры: Учебник / М.: Физическая культура, 2005, 544 стр.