# NUMBER OF HOURS - BASIC INDICATOR IN THE PROGRESS AND PERFORMANCES ACHIEVED BY HIGH SCHOOL STUDENTS 

Luminița-Magda Cazan ${ }^{1}$<br>${ }^{1}$ Technical College "Alexandru Ioan Cuza" of Suceava

## Keywords: number of hours, indicator, progress, performance


#### Abstract

The curriculum represents the official document according to which for each level of education, form into education or profile followed, the number of hours provided for the compulsory and optional subjects is decided. In other words, this document sets the number of hours of each discipline. The curriculum for the physical education and sports subject, high school level provides one hour per week for high school classes, except for the 10th grade real profile and 2 hours per week for vocational education classes. In this study I tried to highlight the need to increase the number of hours (at least two hours / week) for the physical education and sports subject so that the educational process is complete, according to current social requirements, and to evaluate through tests. motor skills, related to the number of hours of physical education and sports in a week, the level of motor development reached by students in a period when this category of individuals reaches the maximum point of somatic development.


Introduction:The educational process of children must be accomplished completely, in accordance with current social requirements and interest to create a strong individual, powerful both physically and mentally. Physical education and sports aims to achieve these performances through its own objectives, but in the last years the curriculum has changed. The only hour of physical education and sports allocated in the common core it is not enough for the satisfactory acquisition of skills that the student should have at the end of high school, to achieve performance and make progress in accordance with the requirements of the school curriculum.[1,4]

If we take into account the fact that the extra hours of physical education and sports (sports ensembles) are not compulsory, no absences are made, no grades are given, there are activities organised outside the school program, we will hardly achieve physical and motor development compatible with social requirements, with the principles of the current context of life, of healthy and educated citizens.

It is also a certainty that while the number of physical education and sports classes has decreased, school curricula have remained the same. It is no longer possible to go through the full content of the curriculum. For many times a revision has been requested, a readjustment of these documents in order to fit the number of hours in the common core, with the psychomotor potential of students that decreases from generation to generation, with the needs and requirements of students.[1,2,4]

The current content of school curricula is inconsistent as it no longer offers the full opportunity for the student to have time to reach the level of knowledge, skills or abilities. Last but not least, the scoring can no longer be uniform, based on the National Evaluation System (SUVAD). The parameters imposed by this evaluation system is almost unattainable, it is for those who have two or even more hours of physical education and sports in a week. It is important that teachers have the opportunity to create their own assessment scale, in accordance with the level of ability of students in a class and a grade based on indicators of progress, regression or performance.

According to Şchiopu Ursula , the age of adolescence is structured in three sub-stages: preadolescence (14-16 years), adolescence itself (1618 years), prolonged adolescence (18-25 years), is related to the acquisition of the status of adult and is characterized by intense personality development, all in the context of the gradual exit from the tutelage of the family and the school. [3]

In terms of motor skills, this age is identified with a more pronounced development of motor skills at boys, motor skills are improved, motricity become a way of integration in different situations. The child gradually matures from a biological, intellectual and moral perspective.In this study, we looked at performance values and progress indicators made by students who have one hour a week, compared to those who have two hours a week, indicators that revealed me which scaling these students are heading. In order for progress and performance to gain numerical value, we used as control tests the speed running on 50 meters with low start, endurance running 800 m girls, 1000 m boys, long jump with momentum in the classes of the lower high school (IX-a and $\mathrm{X}-\mathrm{a}$ ) and throwing the weight at the upper cycle of high school (XI-a and XII-a).[2,4]

## Material and method

Study hypothesis: Achieving outstanding results, recording a motor progress and optimal physical development can be achieved only
through sustained, continuous and rigorously organized work, through a continuous, gradual effort. One hour a week is far too little for high school students to actually meet these requirements.

The purpose of the research: The importance of introducing in the common core to the discipline of physical education and sports of the second hour so that the educational process and the physical development of the students are fully realized.

Duration and subjects of the research: The study was applied in the 2018-2018 school year to a number of 12 classes, 6 classes that have in the common core 2 hours / week and 6 classes with one hour per week at the Technical College "Alexandru Ioan Cuza" of Suceava.

Control tests used: running speed on 50 m with low start for; endurance running 800 m girls and 1000 m boys; long jump with momentum of $11 / 2$ steps; throwing the weight with added steps.

Research methods: study of specialized literature; observation; the experiment; data collection; interpretation and graphic representation.

## Results and discussions:

Through the tests applied to the ninth grade, the following specific competencies and contents were taken into account: the use of specialized terminology in the transmission of messages; application of specific methods to develop motor qualities; dosing the motor activity according to the reactions of one's own body to effort; analysis of the evolution of their own morphofunctional indices; speed of reaction to auditory stimuli; travel speed in rectilinear direction; segmental dynamic force; muscle tonicity.[5,6]

Following the application of the initial tests (TI) and then the final ones (TF) after the end of each thematic cycle related to the learning units pursued in the ninth grade, 2 hours / week and one hour / week, the following values were recorded:

| Class a <br> IXth | contents <br> Evaluated | TF 1 hour / <br> week. |  | TF 2 hours / <br> week |  |
| :---: | :--- | :---: | :---: | :---: | :---: |
|  |  | Mark | Index | Mark |  |
| Girls | Speed | 9.0 | 7 | 9.0 | 9 |
|  | Endurance | 4.40 | 6 | 4.40 | 7 |
|  | SLElan | 2.80 | 7 | 2.80 | 7 |
|  | Speed | 7.8 | 8 | 7.8 | 10 |
|  | Endurance | 4,15 | 8 | 4.15 | 9 |
|  | SLElan | 3.65 | 8 | 3.85 | 9 |

Graphic representation of the results obtained by the ninth grade students at TF


Measures to improve the results obtained：Poor results in terms of motor quality－speed and endurance but also long jump with momentum in girls，requires the programming of constant links in physical education lessons，as well as the development of appropriate programs that can be achieved by students and outside of physical education and sports classes．

Scoring in the ninth grade was done according to the following scoring scale：

|  | Grades |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { 它 } \\ & \text { 首 } \end{aligned}$ | $\frac{\mathscr{U}}{\underset{\sim}{\pi}}$ | Girls | 9 ＂6 | 9＂5 | 9 ＂4 | 9＂3 | 9 ＂2 | 9 ＂1 | 9＂ 0 | 8 ＂9 | 8＂ 8 | 8 ＂7 |
|  |  | Boys | 8＂ 5 | 8 ＂4 | 8＂ 3 | 8 ＂2 | 8＂ 1 | 8 ＂0 | 7＂ 9 | 7 ＂8 | 7＂ 7 | 7 ＂6 |
| $\stackrel{\text { 哥 }}{\underset{y}{E}}$ |  | Girls | 4， 90 | 4.80 | 4.70 | 4.60 | 4.50 | 4.40 | 4.30 | 4.20 | 4.05 | 3.55 |
|  |  | Boys | 4.85 | 4.75 | 4.65 | 4.55 | 4.45 | 4.35 | 4.25 | 4.15 | 4.00 | 3.50 |
|  |  | Girls | 2.10 | 2.20 | 2.30 | 2.40 | 2.50 | 2.60 | 2.80 | 3.00 | 3.15 | 3.30 |
|  |  | Boys | 2.60 | 2.70 | 2.80 | 2.90 | 3.00 | 3.20 | 3.40 | 3.65 | 3.85 | 4.10 |

## Analysis of test results

Through the tests applied to the 10th grade，the following specific competencies and contents were taken into account：use of specialized terminology in the transmission messages；application of specific methods to develop motor qualities；speed of reaction to auditory stimuli；
travel speed in rectilinear direction; segmental dynamic force; muscle tonicity.

Following the application of the initial tests (TI) and then of the final ones (TF) after the end of each thematic cycle related to the learning units pursued in the 10th grade, one hour / week and two hours / week, the following values were registered:

| Class $\boldsymbol{X}$ | Contents <br> evaluated | TF 1 hour /week. |  | TF 2 hours / <br> week |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mark | Index | Mark |  |
|  | Speed | 8.8 | 7 | 8.6 | 9 |
|  | Endurance | 4.20 | 7 | 4.10 | 8 |
|  | SLElan | 3.10 | 7 | 3.45 | 9 |
| Boys | Speed | 7.4 | 9 | 7.3 | 10 |
|  | Endurance | 4,00 | 8 | 3.40 | 10 |
|  | SLElan | 3.85 | 8 | 4.25 | 10 |

Graphic representation of the results obtained by the students of the 10th grade at TF


Measures to improve the results obtained: The worst results were recorded by girls who have one hour of physical education per week. It is necessary to supplement outside the hours of physical education and sports in the common core with in-depth activities that lead to increased individual performance.

Scoring in the 10th grade was done according to the following scoring scale:

|  | Grades |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 范 |  | Girls | 9 "4 | 9" 3 | 9 "2 | $9 " 1$ | 9 "0 | 8" 9 | 8 "8 | 8" 7 | 8 "6 | 8" 5 |
|  |  | Boys | 8 "4 | 8" 3 | 8 "2 | $8 " 1$ | 8 "0 | 7" 8 | 7 "6 | 7" 5 | 7 "4 | 7" 3 |
| $\stackrel{\text { تِ }}{\underset{y}{E}}$ |  | Girls | 5.20 | 5.10 | 5.00 | 4.50 | 4.40 | 4.30 | 4.20 | 4.10 | 4.00 | 3.50 |
|  |  | Boys | 5.10 | 5.00 | 4.50 | 4.40 | 4.30 | 4.20 | 4.10 | $\begin{aligned} & \hline 4, \\ & 00 \\ & \hline \end{aligned}$ | 3.50 | 3.40 |
| $\begin{aligned} & \frac{\pi}{\underline{I}} \\ & \frac{1}{I T} \\ & \hline \end{aligned}$ |  | Girls | 2.15 | 2.25 | 2.35 | 2.45 | 2.70 | 2.90 | 3.10 | 3.30 | 3.45 | 3.60 |
|  |  | Boys | 2.75 | 2.95 | 3.05 | 3, 15 | 3.25 | 3.45 | 3.65 | 3.85 | 4.05 | 4.25 |

## Analysis of the results of the initial tests

Through the initial test applied to the 11th grade, the following specific competencies and contents were taken into account: the use of specialized terminology in the transmission of messages; application of specific methods to develop motor qualities; speed of reaction to auditory stimuli; travel speed in rectilinear direction; segmental dynamic force; muscle tonicity.

Following the application of the initial tests (TI) and then of the final ones (TF) after the end of each thematic cycle related to the learning units followed in the 11th grade, one hour / week and two hours / week the following values were recorded:

| Class a XI- <br> $\boldsymbol{a}$ | Contents <br> evaluated | TF 1 hour /week. |  | TF 2 hours / <br> week |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mark | Index | Mark |  |
| Girls | Speed | 8.6 | 7 | 8.4 | 9 |
|  | Endurance | 3.55 | 8 | 3.50 | 9 |
|  | Weightlifting | 4.60 | 7 | 5.00 | 9 |
|  | Speed | 7.3 | 9 | 7.2 | 10 |
|  | Endurance | 3,40 | 9 | 3,40 | 9 |
|  | Weight | 5,80 | 8 | 6,30 | 10 |

lossGraphic representation of the results obtained by the 11th grade students at TF


Measures to improve the results obtained：Increasing individual performance and making progress is required for girls who have an hour of physical education and sports．Creating additional programs differentiated according to their own level of training．

The grade for the 11th grade was made according to the following correction and grading scale：

|  | Grades |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 蒾 | $\begin{aligned} & \frac{\mathscr{U}}{\tilde{N}} \\ & \text { Nun } \end{aligned}$ | Girls | 9 ＂3 | 9＂ 2 | $9 " 1$ | $9 " 0$ | $8 " 9$ | 8 ＂ 7 | 8＂ 6 | 8 ＂5 | $8 " 4$ | 8 ＂3 |
|  |  | Boys | 8＂ 3 | 8 ＂2 | 8＂1 | 8 ＂0 | 7＂ 9 | $7 \times 7$ | 7＂ 6 | $7 \times 5$ | $7{ }^{\prime \prime}$ | 7 ＂2 |
| 啠 |  | Girls | 5.00 | 4.50 | 4.40 | 4.30 | 4.20 | 4.10 | 4.00 | 3.55 | 3.50 | 3.40 |
|  |  | Boys | 4.45 | 4.40 | 4.30 | 4.20 | 4.10 | 4.00 | $\begin{aligned} & \hline 4, \\ & 05 \end{aligned}$ | 3.50 | 3.40 | 3.30 |
| $\frac{\stackrel{\rightharpoonup}{6}}{\omega}$ | 帚 | Girl | 3.30 | 3.40 | 3.50 | 4.00 | 4.20 | 4.40 | 4.60 | 4.80 | 5.00 | 5.30 |
|  |  | Boys | 4.50 | 4，60 | 4.70 | 4.80 | 5.00 | 5.20 | 5.50 | 5.80 | 6.10 | 6.30 |

## Analysis of the results of the initial tests

Through the initial test applie to the 12th grade, the following specific competencies and contents were taken into account: the use of specialized terminology in the transmission of messages; application of specific methods to develop motor qualities; dosing the motor activity according to the reactions of one's own body to effort; speed of reaction to auditory stimuli; travel speed in rectilinear direction; segmental dynamic force; muscle tonicity.

Following the application of the initial tests (TI) and then the final ones (TF) after the end of each thematic cycle related to the learning units followed in the 12th grade, one hour / week and two hours / week, the following values were recorded:

| Class a <br> XII-a | Contents <br> evaluated | TF 1 hour /week. |  | TF 2 hours / <br> week |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Index | Mark | Index | Mark |
| Girls | Speed | 8.5 | 8 | 8.4 | 9 |
|  | Endurance | 4.00 | 7 | 3.45 | 9 |
|  | Weight Loss | 5.00 | 8 | 5.20 | 9 |
|  | Speed | 7.10 | 10 | 7.0 | 10 |
|  | Endurance | 3,30 | 9 | 3,25 | 10 |
|  | Weight | 6,30 | 9 | 6,50 | 10 |

lossGraphic representation of results obtained by 12th grade students at TF


Measures to improve learning outcomes: Poor motor skills - endurance, in girls, requires scheduling constant links and developing appropriate programs that can be performed outside of physical education classes.

The grade in the 12th grade was made according to the following correction and grading scale：

|  | Grades |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 范 |  | Girls | 9 ＂2 | 9＂1 | 9 ＂0 | 8＂ 9 | $\begin{aligned} & \hline 8 " \\ & 8 \end{aligned}$ | 8 ＂ 7 | 8＂ 6 | 8 ＂5 | 8＂ 4 | 8 ＂2 |
|  |  | Boys | 7＂ 9 | 7 ＂8 | $7{ }^{\prime \prime} 7$ | 7 ＂6 | 7＂ 5 | $7 \times 4$ | $7{ }^{\prime \prime} 3$ | $7 \times 2$ | $7 " 1$ | 7 ＂0 |
| 㪼 | $\begin{aligned} & \frac{\mathscr{U}}{\tilde{J}} \\ & \text { Un } \end{aligned}$ | Girls | 4.40 | 4.35 | 4.30 | 4.25 | 4.20 | 4.10 | 4.00 | 3.50 | 3.45 | 3.35 |
|  |  | Boys | 4.25 | 4.20 | 4.15 | 4.10 | 3.55 | 3.45 | 340 | 3.35 | 3.30 | 3.25 |
| $\begin{aligned} & \stackrel{\rightharpoonup}{0} \\ & \frac{1}{6} \end{aligned}$ | $\frac{\text { N゙ }}{\substack{4}}$ | Girl | 4.10 | 4.20 | 4.30 | 4.40 | 4.50 | 4.60 | 4.80 | 5.00 | 5.20 | 5.50 |
|  |  | Boys | 5.10 | 5，20 | 5，30 | 5，40 | 5，50 | 5，60 | 5，90 | 6，10 | 6，30 | 6，50 |

## Conclusions：

Following the analysis made based on the results obtained by the students who constituted the sample of the study，we could conclude：
－certain aspects of the education system need a fundamental correlation that aims at the instructive－formative finalities of the student．
－the need to correlate the content of the school curriculum with the number of hours allocated to achieve results and achieve motor progress， but also necessary on physical development that can complete the educational process required by the current social development－the individual to be physically，motor，mental．
－allocating one hour of physical education to high school classes is reduced to less long－term expenses．The efficiency of a society is not based on the consumption of medicines but on physically－morpho－ functionally fit individuals，and this fact can be achieved through appropriate work，through appropriate working time．

## Bibliography

［1］BABANSCHI，IK．（1979），Optimizing the educational process，Ed．Didactică şi pedagogică，Bucharest，p．15－22
［2］CÂRSTEA，Physical education and sports，no．10，1989，p． 22
[3]ȘCHIOPU, U. VERZA, E. (1997), Psychology of ages. Life Cycles, Didactic and Pedagogical Publishing House, RA Bucharest, p.11-23
[4]VLĂSCEANU, L. (1979), Decision and Innovation in Education, Didactic and Pedagogical Publishing House, Bucharest, p.23-45
[5] RAŢĂ, E., HAVRIŞ, D., (2012), Alternative exercise in fighting obesity,The Annals of "Dunarea de Jos" University of Galati. Fascicle XV, Physical Education and Sport Management, p.167-171
[6] PASĂRE, D. RAȚĂ, E. (2014) The development of young school children through the psychomotor activity, THE ANNALS OF THE "STEFAN CEL MARE" UNIVERSITY ISSN - 1844 9131, Volum VII issue 1/ 2014, p.90-97

# NUMĂRUL DE ORE - INDICATOR DE BAZĂ ÎN PROGRESUL ȘI PERFORMANȚELE ATINSE DE ELEVII DE LICEU 

Luminița-Magda Cazan
Technical College "Alexandru Ioan Cuza" of Suceava

## Cuvinte cheie: număr de ore, indicator, progres, performanță

Rezumat:Procesul educațional al copiilor trebuie să se realizeze complet, conform cu cerințele sociale actuale și interesul pentru individul puternic, potent atât din punct de vedere fizic psihic cât și motric. Este necesară corelarea cadrului legislativ impus de Planul cadru de învățământ pentru disciplina educație fizică și sport cu nevoile individuale ale elevilor și cerințele sociale actuale prin introducerea celei de-a doua ore în trunchiul comun poate determina îmbunătățirea acestor cerințe. Valorile obținute în urma testărilor inițiale și apoi a celor finale care au vizat calitățile motrice viteza și rezistența precum și săritura în lungime cu elan cu un pas și jumătate (clasa a IX-a și a X-a) și aruncarea greutății (clasa a XI-a și a XII-a) scot în evidență diferența produsă de numărul de ore alocat la clasele de liceu. Se evidențiază clar un progres, o creștere a performanței la elevii care au câte două ore pe săptămână comparativ cu cei care au o singură oră pe săptămână. Așadar, se impune creșterea numărului de ore (cel puțin două ore pe săptămână) alocat disciplinei eductație fizică și sport la ciclul liceal, astfel încât randamentul unei societăți să se bazează pe indivizi apți din punct de vedere fizic-morfo-funcțional.

