

CONSTATATIVE STUDY ON THE BENEFITS OF PHYSICAL EDUCATION HOURS HELD ONLINE FOR GYMNASIUM CYCLE STUDENTS

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Abstract: *This paper refers to the highlighting of the beneficial aspects determined by the development of physical education and sports classes in the online version, aspect imposed by the Covid - 19 pandemic context. Although initially felt as a challenge, the development of online teaching has highlighted (through a pedagogical experiment and the use of a questionnaire) the fact that at the level of a gymnasium school class similar or even better results can be obtained. The overall conclusion was that the emphasis should be on focusing learning on the student and the appropriate use of media resources for ease of learning.*

Key words: *online learning system, physical education, adaptation of teaching methods.*

1. Introduction

The World Health Organization has officially declared a pandemic situation caused by the spread of the Covid-19 virus and since March 11, 2020, and rigorous quarantine measures have been applied to all countries. Thus, due to the start of this pandemic context, abrupt changes in education have emerged, most educational institutions being forced to embrace the idea of further sharing values and knowledge to students through online learning platforms [5], [8].

Thus, new situations appeared in the contemporary Romanian educational space, such as “virtual classroom”, “e-learning” (electronic learning), online education, distance learning. Romania, unlike other more technologically developed European countries in the field of education (such as Austria, Switzerland, France, etc.), has felt very deeply the impact of change as this whole process of moving educational activity in the virtual space occurred suddenly, the rapid implementations performed by the IT department of the online platforms often

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generating loading, connection and / or overload errors. However, adjustments and improvements to online platforms have been made along the way, all converging for the direct or indirect benefit of learners [3], [6], [13].

Regarding the online instructional-educational system in the pandemic context, resources were synthesized and made available to students for class activities, support / help in the students' activity. In addition, teachers were provided with support in the virtual teaching activity, they could use technological resources for the benefit of the instructional-educational process. Thus, various strategies for integrating digital technologies have been addressed and disputed within each educational institution, by the management.

All of them being affected by the stress, confusion and fear generated, by the context of the pandemic, seeing how online education has settled down breathlessly in the lives of teachers and students, on both sides, initially encountering difficulties. The difficulties started from the adaptation to technology (both to devices and to the use of platforms) and reached the differences felt in the use of learning-teaching-assessment means and methods. Thus, two categories emerged, face-to-face education, now called classic, and online, virtual, distance education, now called modern [1], [12].

The online education system is based on the same principles, objectives, rules, contents, strategies and means as the classical education system and pursues the same ideal of school instruction and education [2]. This ideal designates the formation of individuals with as wide a range as possible at the level of "needs,

sensibilities, rationality and own activities, guided by high humanistic values" [14, p. 27]. It also involves the formation of abilities, skills, aptitudes and abilities necessary for each individual [4], [7].

The obligation to transfer teaching in the online environment, due to the pandemic context, has generated the responsibility to use its potential to adapt to new trends, requirements and new digital educational technologies of both teachers and students and indirectly, their parents [10], [11].

The research hypothesis was that the online physical education lesson for 6th grade middle school students will bring significant improvements on class attendance, on the involvement / active participation of students in the lesson and will determine them to adopt an active lifestyle.

2. Material and Methods

As it is about the physical education lessons carried out online, in order for this research to be feasible, it was necessary in the first phase a good internet connection, a computer, a webcam and a microphone.

For the questionnaires, we used the online version of Google Forms to prepare the questionnaire, later distributing it to the subjects through the corresponding link, to each one. The questionnaire used had 21 questions, the answer options being organized as follows: 16 items were available closed answer options, and for the other variants with open answer. The number of respondents was 33 students.

We also conducted an experimental study with 30 student participants, randomly distributed equally in two groups: subjects from the experimental group who followed a program of 5

lessons (hours) with two topics with a favourite focus on strength, and the group control that followed the theme imposed by the teacher according to the school curriculum.

3. Results

Table 1

The dynamics of strength education indices for students included in the pedagogical experiment

Parameters	Experimental group (EG)	N1	Average	Standard deviation	test	meaning
	Control group (CG)	N2	\bar{x}	σ	t	p
Initial testing	EG	15	8.64	0.28	31.3	< 0.001
	CG	15	8.78	0.21		
Final testing	EG	15	10	0	310	< 0.001
	CG	15	9.02	0.28		

Observing the data in the table, it can be noticed that the scores obtained by the students of the experminet group were higher in terms of strength motor quality

education (final testing), although the initial values indicate close values between the two groups of participants.

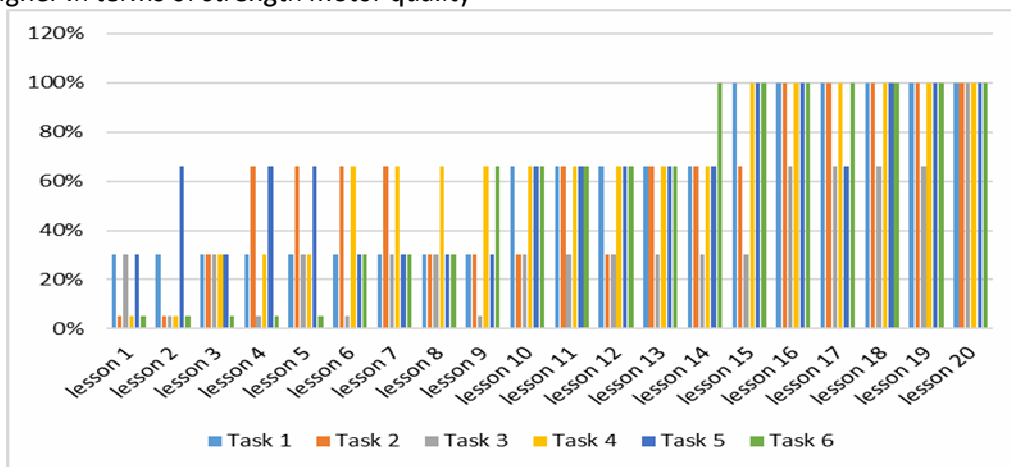


Fig. 1. The share of teaching tasks on a 20-hour cycle of physical education

- Task 1: How many of the students follow the teacher's instructions?
- Task 2: How many students ask questions to better understand?
- Task 3: How many students engage in discussions?
- Task 4: How many of the students are active during the lesson?
- Task 5: How many students respond by activating the microphone?
- Task 6: How many students respond with non-verbal signals to the webcam?

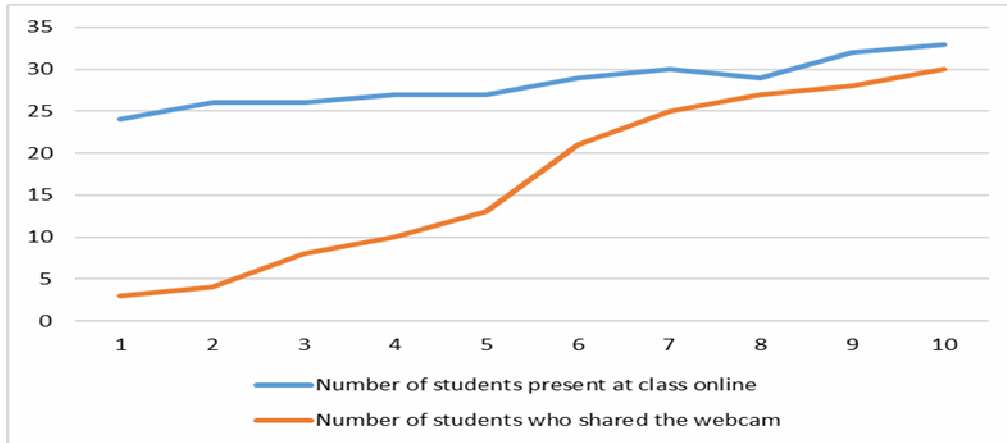


Fig. 2. Dynamics of the number of students present and those who shared the web camera during the 10 weeks of online teaching activity

The analysis of the values objectified in figures 2 and 3 shows an average increase of the active participation of the students in the physical education class from 25% to 100% during the investigated period.

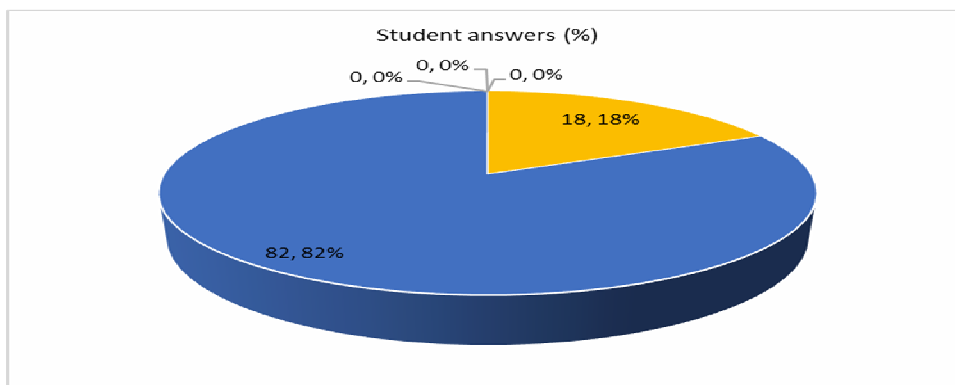


Fig. 3. The students' answers regarding the attraction of the contents of a physical education lesson conducted online

Figures 3 and 4 show on the one hand the attraction of the contents of the physical education lesson for students (for 82.82% of them), and on the other hand that for almost half of them the share of their participation increased.

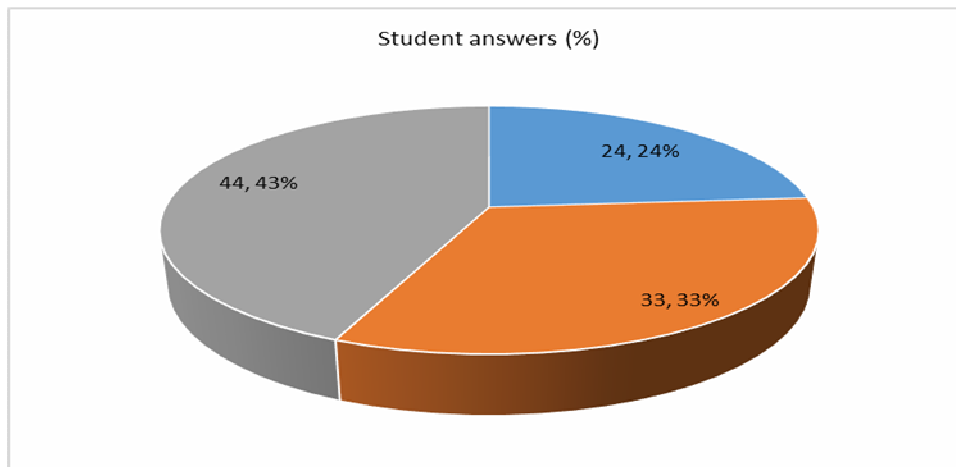


Fig. 4. *The students' answers regarding the improvement of the presence of the present at the physical education class in the online version*

4. Discussions

From the specialized literature, we found out that most of the recently published data indicate that the Romanian educational system was surprised by the rather poorly prepared Covid-19 pandemic context for an online approach. However, it is certain that going through this pandemic context, online education came as a solution, representing the only possibility for the educational process to continue its educational course.

In addition, from the literature we learned the idea that in Romania investments in the digitization of education have accelerated, a first step being the distribution of tablet-type electronic devices through a national program entitled "Home School", carried out in two stages and addressed to students who do not have any electronic device with internet connection. By digitizing education, the provision of devices seeks to enrich, improve, and maybe even modernize the Romanian education system.

From the tests and trials used in the analysis of the benefits of physical education and sports lessons, my conclusions are as follows:

- the results of the experimental research contribute to the confirmation of the hypothesis, namely, by the efficient application of online teaching means, positive individual and collective results were obtained, by successfully increasing the tonicity of the trunk muscles and developing basic motor quality, strength;
- all subjects in the experiment group recorded improved (maximum) results in the final strength test, results due to the exercises chosen in the lessons, where we combined dynamic and static strength exercises (isotonic and isometric);
- students showed more interest and active participation in class, when they found solutions to shortcomings on their own (when they replaced the dumbbells with water bottles or two rolled books; when they had to count

- on their fingers, with them directed towards the room for a few seconds in isometric exercises, when they found solutions to jumping over the gym - replacing the gym with a backpack, or a row of notebooks, etc.);
- due to the way in which the didactic projects were conceived and the way in which we approached the exercises related to the thematic links, there were no injuries;
 - when we allowed the children's creativity to manifest, they had a better performance in the physical education class conducted online and had an enthusiastic attitude, responding immediately to the requirements and making them happy to actively participate in the class;
 - by making students aware of the importance of practicing individual physical exercises, or certain sports, the number of those who opted for an active lifestyle has increased considerably;
 - students understood the importance of physical education and introduced individual physical activity into their daily schedule;
 - students are attracted to the idea of continuing online physical education lessons;

Although the online version was a difficult one, with small and sufficient shortcomings, it was highlighted that through an adequacy of intuitive and verbal means, teaching-learning methods, application of teaching strategies and good teacher-student communication they could be overcome.

We propose to adopt in face-to-face education, from the online system, more indulgence and less rigidity or severity on the part of the teacher's attitude; we

found that this could be an advantage in attracting students to actively participate in the lesson.

We learned through the online observation period related to this research, that teenagers are eager to express their opinions, so that by asking them questions, they meet the teacher with answers, and so we can keep them attentive to the lesson. Therefore, I recommend that we sometimes ask students for their opinion on some aspects of the lesson, of certain exercises and to listen to what they have to say, because we might be pleasantly surprised.

From the experimental program we found out that students like to work more individually [9]. Through this, they manage to self-observe, they are their own critics. We also recommend that we do not neglect to give a smile to students from time to time, along with encouragement.

At the same time, through the conduct of online physical education lessons, we learned that students are self-responsible, and through e-learning platforms, we are easily allowed to distribute multimedia resources (images, videos) or any other useful files and virtual materials that make it more efficient learning. Therefore, we propose that in the face-to-face education system we adopt in the teaching process, the selection of certain multimedia resources and their distribution to students, or the viewing of these resources together with them.

Although there are several ideas above regarding practical-methodical recommendations, one of the basic ideas would be that from the online education system, we can adopt in the face-to-face education system, the attention for each student and the focus on them.

We also propose to provide students with the education necessary to create habits that will lead them to adopt an active lifestyle.

It is also important to emphasize the fine agreement on some exercises chosen by the teacher, because students show an affective component of certain exercises, and teachers should have this aspect in mind.

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