



## IDEAS ON THE DEVELOPMENT OF PHYSICAL EDUCATION IN THE ONLINE ENVIRONMENT

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Depriving society of freedom of expression through movement has led to the emergence of situations and possibilities to carry out current activities in completely unique ways, while creating the chance to find new solutions to the need to perform at work, to resist and survive in the economic environment, to have a positive, optimal purpose in the educational act. Affected by this type of freedom, the effects of coercion have not bypassed essential areas of social life, areas whose "end product" contributes to our existence and survival as a species. In this amalgam of changes and adjustments in all fields, the teaching activity was not bypassed by the adaptations required by the general situation, in which the transfer of information from teachers to pupils/students/learners acquires modern connotations, "the classic" reducing, sometimes, the dominant importance it had had until recently. This material aims to express some ideas regarding the development of physical education lessons in the online environment, an environment that will captivate all the attention in the next period.

**Keywords:** physical education; physical effort; online; adaptation; lesson.

Society, as we knew it a few months ago, has undergone profound changes, with obvious effects on the population, on people's behavior both from the perspective of the activities they carried out, in particular, and from that of collective manifestations. The changes that occurred have influenced man mentally, physically, morally and economically, causing extensive changes in our manifestations. The influences generated can be found in all areas of activity carried out by us, the concentration of attention and focus being mainly on the notion of "adaptation". Whether we are talking about the economic environment, whether we are addressing changes that each of us has to make from the perspective of our personal component, it must be acknowledged that society is subject to this notion of "adaptation".

This adaptation and, finally, the re-establishment of the values that define us, includes everything that means human and their existential space, it encompasses everything that means defining them as individuals and distinct entities, apart from the other life forms on Earth. Actually, a multitude of forms of instruction or specialized training contributes to this definition, carried out in different stages of life, especially during tuition, a special moment of life in which the most important

components of the human psyche, intellect and physique are consolidated.

School is the place where we are transmitted useful information in everyday life, we are provided with ideas, concepts, thoughts about the world around us and society, it is the place where new skills and abilities necessary for our existence are created, it is the framework where real possibilities for forming friendships arise, it is the place where the educational act must be completed through the essential contribution of teachers (teachers, professors, educators, instructors etc.), through the unconditional, active participation and conscious involvement of pupils/students/learners in this act. In fact, the quality of the educational act can represent the foundation of our evolution as a society.

The changes to which society has been subjected lately, determined the use of a form of information transmission within the educational act, which, in many respects, has been neglected, has not been developed: the virtual one, the one in the online environment. If in some mainly theoretical didactic activities the transmission of information and the possibility of assimilating them through the online environment, apparently, can take place without too many obstacles, when subjects with mostly practical content must be approached, the transmission, acquisition and application of knowledge will definitely suffer.

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### **Ideas for conducting physical education in the online environment**

One of the teaching activities that contributes to the education of pupils/students/learners is the one that is achieved through movement within a fundamental subject with essential contributions to the health of the individual: physical education. This form of education is a vital component of general education, due to the effects of its real conduct, which will eventually materialize in a good state of health at the level of the entire society. The purposefulness of physical education must be found in the sanogenetic needs of people, in their social interests (integration and relationships), in the need to satisfy motor experiences and achieve valuable goals, in cultivating the idea of spirituality and culture. In fact, in "Terminology of Physical Education and Sports", physical education is presented as "the activity that systematically capitalizes on all forms of physical exercise, in order to increase, mainly, the human biomotor potential in accordance with social requirements"<sup>1</sup>.

In other words, physical education contributes to the formation of motor skills, to the acquisition of knowledge, to the education of human values and attitudes for adopting and maintaining a lifestyle as active and as healthy as possible, to increasing the level of confidence in one's own potential. Encouraging the adoption of a healthy lifestyle, complemented by essential motor activities, both among pre-school children, pupils/students/learners and adults, should be a national priority, especially since the "activities specific to physical education carried out in order to obtain an increased level of physical training, involve a complex, dynamic and long-term process, in which mental and physical factors intertwine and are inter-conditioned"<sup>2</sup>.

A fundamental role belongs both to those who create and apply national development strategies and to those who lead the activity itself: educators, teachers, instructors, specialists in which emphasizing the relationship between theory and practice will promote healthy living, will develop pupils'/students'/learners' interest for the deep knowledge and understanding of this connection and of the applicability of movement on health and will contribute to the development of a positive attitude and well-being of people and, finally, of society as a whole. Conduct for all of them must be under the sign of morality, characterized by

"honesty, loyalty, fairness, objectivity... attachment to those they educate, stimulation, without discrimination"<sup>3</sup>.

The transmission of information by specialists is based on an educational curriculum, a program that must include elements from branches related to physical education: psychology, hygiene, anatomy, etc., but also information that can develop the communication skills of pupils/students/learners, their creativity, rational but also critical thinking, imagination, etc., in conditions of safety and pleasure. The diversity and flexibility of an educational curriculum in physical education will allow normal knowledge, as it can be a way for advancing in the future towards careers in medicine, psychology, healthcare, occupational therapy, sports, etc.

By synthesizing the ideas that define this study program, real objectives of the physical education subject can be created, anchored in social requirements and that will allow to pupils/students/learners to acquire important knowledge from many more fields, to promote the understanding of the field for a future education or career, to apply the knowledge acquired in order to form an objective decision-making capacity with the aim of planning, organizing, carrying out and assessing sports and recreational activities, to develop their aesthetic sense and confidence in their own possibilities, to acquire concrete habits towards improving personal health, to become responsible, respectable citizens with rational manifestations and desirable behaviors, to develop a normal commitment to the improvement of the quality of personal life and the community to which they belong.

Given the above, in order to achieve the objectives, the intervention of educators, teachers, instructors or specialists is essential, regardless of whether we carry out the teaching activity in a classic way or if it is done in the online environment. If the classic teaching method is well known, the online environment is a real challenge, not only for those who teach physical education, especially since the main goal of the online school is to provide education, not socialization.

The act of teaching the physical education subject in the online environment depends on the use of the type of communication that uses both audio and video resources, simultaneously or alternatively, on devices for transmitting and



receiving data. Moreover, the realization of the educational act in optimal conditions involves access to efficient material resources, a very good quality of the Internet<sup>4</sup>, especially that the information and/or content to be acquired or created is provided through it.

If, in the classic teaching style, the conduct of the physical education lesson and the dynamics of the physical effort is the attribute of the activity leader, entirely, in the case of the online lesson, depending on the type of lesson adopted, there is a distribution of responsibility for the task to be accomplished to pupils/students/learners, also. Deprivation of real interaction and the development of physical education in the online environment can be a plus for self-knowledge, self-control and self-leadership of those involved in the activity.

From my point of view, the physical education class can be theoretical, practical or mixed. In the case of a theoretical physical education lesson, taught in the online environment, the information transmitted must be mainly from this field, but also from other related fields, in which the accumulated knowledge can be capitalized in real life. The content to be transmitted must be very diversified, with multidisciplinary, interesting information, so that the tendency of monotony to be minimized as much as possible, especially in educational institutions that do not aim to specialize in physical education and sports. In support of teaching the theoretical content, the leader of the activity can use a series of technical means that facilitate the transmission of information: video and audio means. A technical element that can contribute to the diversification of the teaching method is the graphic tablet, very useful for the situation where specific knowledge must be explained, but also for the situation where certain movements or exercises must be indicated. This hardware accessory brings a plus to the attractiveness of the class.

Approaching theoretical materials with a definite and applied purpose, is an advantage for arousing curiosity, increasing attractiveness and interest shown by pupils/students/learners in this subject. The interaction between the teacher and the students, in the online environment, ends most of the time without having a feedback from the latter, as they cannot wait for the class to end. Therefore, I consider useful to end a theoretical lesson with a set of questions or an online questionnaire

consisting of a maximum of 10 questions, from the topic addressed during the class, applied through dedicated platforms, to all the participants in the activity. Thus, it will be possible to receive an objective and fast answer, in real time, on the quality of the information transmitted, on the level of assimilation of the content transmitted and even on the interest shown by certain participants in the class.

The second method by which the lesson can be carried out is the practical one, even if apparently it seems abnormal to carry out physical education in the online environment, by performing sets of physical exercises simultaneously with the leader of the activity or using videos recorded by him/her or other specialists. The adoption of this type of lesson with practical content is conditioned by the simultaneous presence of audio and video media in the case of both the teacher and the students, as well as a high quality of data transmission. In these cases, the leader of the activity must make a brief processing of the students regarding data protection, the recordings that can be made and their distribution without the consent of the copyright rightful holder.

For the first situation, a defining element must be considered the preparation of the individual location where the entire motor activity will take place, on the part of both the activity leader and the pupils/students or learners. Also for this method, it is extremely useful for the teacher to use wireless audio headphones with a built-in microphone, through which he/she guide the class during the physical exercises, especially since the teacher and the students will work simultaneously. From the point of view of the content of the practical lesson, it is possible to use simple physical exercises, with a low degree of difficulty, which are performed without exerting great physical effort, in safe conditions, without the need to request external help. Such physical exercises can be specific to sports subjects such as gymnastics, martial arts, athletics, etc. Physical exercises can also be from the basic and utility-application motor skills, as well as from the motor abilities, motor qualities (*they represent qualities of the body, materialized in the ability to perform movement actions with certain indices of strength, speed, dexterity and endurance*<sup>5</sup>). Motor skills are "motor manifestations of human activity, performed voluntarily, which through practice



acquire a higher level of automation or are partially automated and are reflected in obtaining optimal results with minimal energy consumption<sup>76</sup> while motor abilities "seek to capitalize on the intellectual and motor capacity of the subject by adapting them to new motor tasks"<sup>77</sup>.

In the second option, that of the transmission of a physical training program in video format, it is essential to mention some aspects that can lead to the successful achievement of the lesson objectives. A first aspect concerns the training program. From my point of view, this program, if it aims to educate a motor quality, must cover the development of all muscle groups, it must follow a comprehensive training of the whole body, the level of difficulty chosen being suitable for the study group. Also, the actual duration of the program must be appropriate for the level of training and allow for preparatory and final activities for those who participate in the training sequence.

The sequence of steps in the case of such a class could be the following: organization of the group (classes) of pupils/students/learners, in which the following actions must be performed: greeting, presentation of topics, processing rules and safety measures to be observed during the meeting and finding out (through questions) about possible changes in the health of the lesson participants, which could prevent the implementation of physical training programs; the transmission of the physical training program by the teacher to the pupils/students/learners; watching the physical training program by the pupils/students/learners; preparing the location where each pupil/student/learner will carry out their motor activity; the preparation of the body for effort must be done by each participant, because "the transition from rest to intense physical exertion requires a certain amount of time to accommodate the body ... and proper warming up allows performers to make advantageous use of their energy reserves, stimulation and acceleration of respiratory and circulatory functions ... warming up muscle mass, removing the possibility of rupture of muscle fibres ... increasing the optimal excitability of the cerebral cortex (A/N – with a role in the process of analysis, synthesis and issuance of correct motor answers in relation to the practical requirement of the lesson)"<sup>78</sup>; individual execution and recording of the work method based on the physical training program received from

the teacher; the transmission to the teacher, at the latest 15 minutes before the end of the lesson, by each pupil/student/learner, of the video recording showing that he/she has fully completed the training program; the video recording will be named as follows: *Homework no. ... efs/last name.first name/group* and it will be uploaded on the platform where the whole teaching process takes place, within the deadline previously established by the teacher; the organized conclusion of the meeting, during which the following actions must be performed: discussion of some aspects on the students' behavior during the respective lesson, recommendations for the future independent activity, communication of a homework, if necessary and the greeting at the end of the lesson.

In order to work safely, it is recommended that pupils/students/learners follow some basic rules: the training programs received in video format are first watched, then they are practically worked within the limits of individual physical possibilities; in case of a physical condition that does not allow the execution of the program without interruption, it is allowed to stop it, take longer breaks, a few extra minutes to recover, and continue the program from the moment it was stopped; everyone will work at its own pace, without speeding up the execution of the motor action; changing the basic working positions should not be done suddenly – for example, when moving from the supine position to the sitting position, it is advisable to go through an intermediate position; sports equipment is mandatory and it must be light and adapted for the exercises to be performed; jumps should not be made directly on the floor without sports shoes, and if one trains barefoot, there must be a soft carpet on the floor or a special one dedicated to fitness activities, useful in the case of physical exercises on the ground, also; work surfaces must be flat, non-slippery, free of obstacles or objects (tables, chairs, beds, other furniture and/or decorations, etc.) which impede the performance of motor actions; it is recommended to practice in a space as large as possible – at least one square with a side of 2 meters; it is not advisable to exercise under support beams, chandeliers or suspended objects; the room must be well ventilated in advance and, when practicing, the door and window must not be left open at the same time; if necessary, different containers with plain water and a towel can be used;



it is not recommended to exercise immediately after a meal, there must be a minimum of 90 minutes before the start of the physical training program; after the end of the program it is indicated to respect the individual hygiene, both the one regarding the body and the one of the sports equipment.

The assessment of the motor activity of each pupil/student/learner can be carried out either in real time, by direct viewing the participants' working method, or by accessing and watching the video files received from them at the end of the class. In the second situation, that of receiving video files, the assessment is made both during the current lesson if the time budget allows it, and at the beginning of the next lesson. The final assessment can follow the same pattern as the one presented above, either in real time or by transmitting a video material, if only the practical component is pursued, in which the final subject requirements can be distinguished, the standards to be met can be clearly observed, according to the documents for organizing and planning the physical education subject. In the case of a final theoretical assessment, the application of a multiple-choice test, created by means of special platforms, with limited answer time for each item, may be an applicable option.

For one working method and for the other, in the situation of approaching certain topics with practical content, I consider that the introduction of physical exercises specific to motion games and motor challenges, which can take place in the space available to each performer, without the use of substantial material resources, contributes to increasing the level of entertainment of the classes, captivating the attention of the participants in these lessons. Professor Epuran M. admits the game as "a free, autotelic (A/N – defined by one's own purpose having an inner aim) manifestation, producing health, joy of movement, physical and mental recreation, good mental tone, a better quality of life, in which the intentionality and pursuit of the specific goals of each type of activity are of multiple interest, theoretical, methodological, psychological, social and methodical, including the concepts of plan, forecast, strategy, decision, control, execution, assessment"<sup>9</sup>.

An interesting element that we should focus on, as an auxiliary means for conducting physical education classes in the online environment, is the symbiosis between domestic and international

educational platforms, specialty and educational applications and software. Carrying out the teaching activity in these conditions allows the study of such platforms and applications dedicated to the field of physical education, as well as the choice of those providing correct data and information considering specialized books and real research studies, finding the ones that are suitable for each performer and are a real support for personal evolution, discovering what is useful for teachers in this student-teacher relationship – for centralization-records, analysis and assessment. The use of educational software can also be a stimulus, an element of attraction and entertainment among participants in physical education lessons in the online environment.

### Conclusions

Physical education involves a whole range of actions and activities, the purpose of which must be found in the individual or group development, the selection of the means used being a priority, regardless of whether the lessons are conducted traditionally or in the online environment. In the stage of online teaching, the lesson design and conduct, in the conditions of social distance, must encourage and promote participation in this activity. I consider it appropriate that the analytical programs and the other documents for planning the teaching activities be also made for the event in which the classes take place in the online environment. Also, extrapolating the way of conducting online lessons and the experience gained with this form of teaching in the current teaching activity can be considered, for the military environment, conducting career and level courses in the online environment, especially for those that are predominantly theoretical.

Another aspect that needs attention is the assessment, which, in my view, should not be done to create panic or to scare students, but rather to encourage them to practice physical exercises for pleasure, to combat the type of sedentary behavior, in order to improve their functional parameters even in this period of restrictions.

As for physical education teachers, I believe that this way they must establish a different type of connection with students, in the sense of coming close to them and directing them to meet individual, particular, motor requirements. This can be translated into attracting pupils/students/learners to practice physical exercises voluntarily, not as a result of a "legal constraint". Emphasizing



the effects of physical exercises in combating depression, anxiety, stress and uncertainty, can lead to an increase in the level of self-confidence, state of mind and the creation of a beneficial mood among practitioners. The physical and mental health of each pupil/student/learner must be a top priority for each physical education teacher/instructor during the lessons he/she conducts.

The promotion of physical exercises, even if they are practiced at home or in the spaces next to it, within the limits of social distancing, can be based on their prioritization, planning them regularly in the daily rhythm. Another pillar for their practice is the support of family or closest friends. Exercising together is an element of spending free time with them, given that daily activities no longer allow that much this social aspect. Another foundation on which the practice of physical exercises can be based, in these new conditions, is to carry out activities that attract attention, that create pleasure, that contribute to the neuropsychic relaxation of the practitioner regardless of whether it is a voluntary activity or a didactic activity carried out by pupils/students or learners.

#### NOTES:

- 1 \*\*\* *Terminology of Physical Education and Sports*, Stadion Publishing House, Bucharest, 1974, p. 5.
- 2 M. Istrate, *Scientific communications session – Land Forces Tactics and Operational Art*, Faculty of Command and Staff, "Carol I" National Defence University Publishing House, Bucharest, 2020, p. 546.
- 3 A.D. Pelmuș, *Military Physical Education – Past, Present and Perspective*, "Carol I" National Defence University Publishing House, Bucharest, 2020, p. 73.
- 4 "The Internet is the global system of interconnected computer networks that uses the Internet protocol suite (TCP/IP) to communicate between networks and devices. It is a network of networks that consists of private, public, academic, business and government networks of local to global scope, linked by a broad array of electronic, wireless, and optical networking technologies. The Internet carries a vast range of information resources and services, such as the inter-linked hypertext documents and applications of the World Wide Web (www), electronic mail, telephony, and file sharing", <https://en.wikipedia.org/wiki/Internet>, accessed on 03.07.2020.
- 5 I. Șiclovan, *Theory of Physical Education and Sports*, 3<sup>rd</sup> Edition, Sport-Turism Publishing House, Bucharest, 1979, p. 148.
- 6 G.C. Ciapa, *Guidelines and Opportunities for the Physical Training of Military Personnel*, "Carol I" National Defence University Publishing House, Bucharest, 2019, p. 30.

7 A. Dragnea and collaborators, *Physical Education and Sports – Theory and Didactics*, FEST Publishing House, Bucharest, 2006, p. 135.

8 G.F. Băițan, *Admission to Military Educational Institutions within the Ministry of National Defence – Sports Trials*, "Carol I" National Defence University Publishing House, Bucharest, 2020, p. 18.

9 M. Epuran, *Motor Skills and Psychism in Body Activities. Prolegomena to a Meta-Theory of Body Activities*, FEST Publishing House, Bucharest, 2011, p. 189.

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