

Distance education in physical education during COVID-19 quarantine in Ukraine

Andriy Kuznetsov^{1*}, Veronika Doroshenko¹, Sergey Chernovsky², Alla Kramarenko³,
Svitlana Malona⁴, Petro Rybalko⁵

¹ Zaporizhzhia National University, Ukraine

² Kyiv National University of Technology and Design, Ukraine

³ Berdiansk State Pedagogical University, Ukraine

⁴ Vasyl Stefanyk Precarpathian National University, Ukraine

⁵ Sumy State Pedagogical University named after A.S. Makarenko, Ukraine

*Correspondence: Andriy Kuznetsov; kuznetsov.a@gmail.com

ABSTRACT

One of the major tasks of the social program of the state is to strengthen and maintain the health of youth. In the context of significant deterioration of the psychophysical readiness of young students, the issue of maintaining their health cannot be considered outside the context of physical education, which is of great social importance in this perspective. Moreover, the quality of higher education is equated with the quality of training of able-bodied professionals. This is ensured by the proper state of their health. In the period of quarantine, the students were forced to spend maximum time only on mental activity via distance mode of learning. An adequate and only possible response to the challenges of today is the use of distance learning technologies for students to effectively implement their physical education in quarantine. At the same time, one of the key problems is the proper organization of physical culture and health activities of students to maintain their health in conditions of extremely limited physical activity.

KEYWORDS

Physical Education; Distance Learning; Self-isolation; Training exercises

1. INTRODUCTION

In the context of technological advancements, distance education holds great importance. In the COVID pandemic, the introduction of quarantine has changed the usual form and methods of teaching across the globe, especially in Ukraine. By virtue of new technologies, the educational system is no more confined by space and time and physical education is no exception. Though the distance education is one of the rapidly growing field in the educational sector, but on the other hand this is one of the key cause of many health related problems among the youngsters. The young generation should be the healthiest part of the society. Though the distance mode of learning is not new but the uncertain and unplanned approach has brought many challenges among parents. Due to increased screen time and work load on the students has most students in recent years have experienced insufficient motor activity, which leads to the development of hypokinesia. This is an important risk factor in development of many diseases. During the global quarantine, when educational institutions switched to the distance learning mode, this situation worsened and a lot of problems were encountered by the students associated with low physical activity (static posture at classes), increased workload, and problems in social and interpersonal communication.

2. METHODS

The methodology of the chosen problem was a systematic approach, as well as dialectical, formal-logical and structural-functional methods and other general scientific research methods, as well as special legal methods: comparative law and formal law. The methodological basis of the present study was theory cognition, with its general method of materialist dialectics. Furthermore, the following methods were used as general scientific research methods: formal-logical and systematic methods.

3. RESULTS AND DISCUSSION

The physical culture is an important part of the general culture of the society. The physical culture of an individual is a process of acquiring knowledge, skills and abilities of educational, health, recreational activities for further use in the process of self-improvement and self-education. In the interests of human improvement, physical culture uses exercise, natural forces, hygienic factors, mode of work, life, nutrition and recreation. It contributes in every way to the overall economic growth of the country, to the spiritual needs of the individuals. It is an effective means of comprehensive harmonious development of the individual.

Scientists have different opinions on the physical culture. T. Yu. Krutsevich distinguished the three aspects of physical culture which included activity culture, subject value and effective culture. The activity culture is a process of rationally organized activity, the main elements of which are physical exercises. Subject-value - physical culture has been described as a set of "objects" that have a certain value to meet social and personal needs. Effective – culture is described as a result of activity. B. A. Ashmarin conducted a study to identify the correlation between health and physical culture. In the formation of a holistic system of education, physical culture is included as one of the most important means of developing a variety of motor skills and is one of the effective means of intellectual, moral and aesthetic education. According to the authors of the study, physical culture plays an important role in Physical in disease prevention, restoration of impaired functions, preservation and enhancement of the body, ie the overall optimization of the physical condition.

Physical culture is one of the areas of social activity in which social activity of people is formed and implemented. It reflects the state of society as a whole, representing its social, political and moral structure. The young generation must participate and engage themselves in physical culture, sports and tourism. The regular physical education helps in continuous improvement of mechanisms that regulate the function of all the organs and systems of the body. Hence the physical education coaches and trainers have huge responsibility to to purposefully educate the younger generation to persistently fight against bad habits, consistently instill the need for physical and moral improvement, cultivate high willpower, courage and endurance and willingness to work. The young age is the age in which an individual is most active in perusing educational and socio-economic functions in their life.

But unfortunately the physical education of student youth is not optimized at present due to many factors which include the lack of classroom and extracurricular physical education classes, low level of motivation for independent physical exercises, insufficient level of knowledge and practical skills in the field of physical culture, lack of use of the latest technologies and modern technical means during extracurricular activities, insufficient financial support, low efficiency of physical education management, which is carried out in higher education institutions (Tomashchuk, Senko, 2018; Seletskaya, 2005).

In a survey conducted by the authors, it was found that The survey of students indicates the main conditions for increasing motivation to exercise: it is an opportunity to choose a sport or physical activity that is most suitable for those who do. Also, before physical education classes, students are encouraged to engage in modern sports facilities with good conditions for personal hygiene (Iasechko & Zaitsev, 2021).

Over the years a rapid development of modern web technologies, global information networks, has contributed to the emergence of new approaches to teaching in higher education. Hence, the distance learning is not a new educational phenomenon. Distance learning is a promising area of education in the dominance of digital technologies that have provided a modern transformation of classical teaching methods. Distance learning ensures the the continuity of the educational process especially in the extraordinary circumstances during which objectively it is impossible to visit educational institutions. Distance learning ensures this continuity through the use of electronic textbooks and magazines, multimedia presentations, the latest computer programs to control current or final students. Many experts have stated that the distance learning is "the educational system of the XXI century", and today it is at stake. Distance learning opens up many opportunities for building various systems for the lifelong learning and information exchange for a wide range of users, regardless of time and space, age and social status. With distance education one can adequately meet one of human needs - the right to education and information. The new learning environment must be created on grounds of innovative technologies in the form of e-learning (distance, mobile) learning where students can access educational materials at any point of time. e-learning makes the process of learning much more attractive and comfortable and simultaneously stimulates self-learning among the students.

One of the means of information and communication technology that meets these conditions is the Moodle system. Moodle system is a modular object-oriented dynamic learning environment, in which the content can be distributed to the students freely. The Moodle system implements the philosophy of "pedagogy of social constructionism" and focuses primarily on the organization of interaction between teachers and students in the learning process. Moodle system can be used to organize traditional distance learning courses and support full-time and part-time learning as well. Moodle has occupied a common space in the global educational system. At present, Moodle system has been successfully implemented in various government and non-government organizations which include universities, secondary schools, non-profit organizations, private companies, individual teachers and even parents who teach their children independently. In Ukraine, Moodle system has been recommended as the most developed e-learning system with a multilingual interface among the educational institutions. The Moodle system provides an opportunity to organize a full-fledged educational process, including teaching aids, a system of monitoring and evaluation of students' learning activities, as well as other necessary components of e-learning system (Trius, Gerasimenko & Franchuk, 2012).

Distance learning, which combines the benefits of fast-growing computer and telecommunications systems, is at the forefront of the mass education. Its necessity in the educational sphere of physical culture and sports cannot be denied. Since it is difficult to comply group activities among athletic sports hence each student can benefit as per their individual plans. For them, distance learning, especially in theoretical disciplines and electives, as well as the expected transition to a credit system in the educational standard is the only opportunity to obtain basic education through new information technologies.

Experts who are specialized in the field of physical culture and sports are constantly working to expand the environment of distance learning. Problems of information support of the industry are relevant: the number of information products is growing rapidly, resulting in increasing the value of information services, resulting in instant availability of scientific, educational and reference materials, which allows professionals to rely in their practice on the latest scientific information (Sushchenko, 2012). The period of quarantine during the COVID pandemic became the most important duration of innovation and experimentation in the field of education in Ukraine. Based on the statistical data, there are more than 1.3 million students in Ukraine. During the COVID-19 pandemic, most of the students left their dormitories and educational buildings and moved to their homes. Ukrainian universities have the right to teach only remotely during the quarantine period, as required by the government. "Higher education institutions have academic autonomy. They themselves determine the organizational structure and functioning of educational process in the period of quarantine and regarding the use of technologies. Such concise recommendations are given by the Ministry of Education and Science to Ukrainian universities.

"Academic autonomy" has provided a wide field for experimentation to the teachers and students of Ukrainian. The primary motive is to use all the possible means of online communication like Google classroom, zoom, etc. Google Classroom (classroom.google.com) is a free service and application for universities and non-profit organizations. This is one of the most popular educational platforms in the world. Students call it perhaps the most orderly and best suited for home learning.

Zoom is an online video conferencing service. Zoom application works both on a computer and as a smartphone application. Ukrainian educators use all possible messengers and social networks as a medium to communicate with the students. Ukrainian educators have used all possible platforms to broadcast classes. Traditional tools like school website, e-mail, phone remain channels for resolving organizational issues between teachers and students (Solonina, 2020).

Distance learning technologies to test the quality of knowledge acquired by students, using active learning methods. There are several advantages of distance learning, which include flexibility,

modularity, manufacturability, helping to update the role of teacher, increasing motivation for self-organization of students, while learning becomes more interactive, independent. The expediency of introducing distance learning is the subject of research by both domestic and foreign specialists in physical education and sports.

In the study entitled "Relevance and problems of distance learning", it is determined that distance learning is cheaper than in person learning. Distance learning is appropriate for the underfunded institutions (Samolyuk & Shvets, 2013). Quarantine measures impose certain restrictions on the regular contact educational process in higher education institutions and beyond (Iasechko & Skomorovskyi et al, 2020). Their primary concern to provide education to the students in the remote areas in various disciplines and physical education are no exception. Hence in the same light many departments encountered may difficulties including Faculty of Physical Education. It is impossible to fully master the rational technique of distance movement, even using the latest sports equipment and computer simulators, videos and videos depicting exemplary performance of movement techniques. Although, the new multimedia educational environment is a great helper in learning, but only an experienced teacher (coach) can teach rational motor and tactical actions, reveal the student's personality and set the ideal movement technique (Belikova, 2014).

Distance learning is implemented by the use of various modern learning technologies. The trainers providing physical education training with distance education mode need to put more focus on the development of a qualitatively new personality of the learner, taking into account his/her physical and intellectual individuality at all stages of learning by creating an educational environment that stimulates physical activity of the individual, introducing additional forms of work in the discipline of physical education and formation of resistance to antisocial influences on the emergence of bad habits.

Higher education institutions of all levels of accreditation were forced to move to a distance learning format in a short period of time. Not every educational institution was ready for the same (Iasechko, Stepanenko, et al., 2020), and it has been understood that educational planning and training and its practical implementation under critical circumstances require a creative approach. The introduction of distance learning in the teaching of sports and pedagogical disciplines should take place in in online and offline modes. The online mode can be adopted for theoretical section of the training using both traditional teaching aids and ICT. But the practical training should be given either by the video training or offline demonstration of the lectures for learning technical elements and motor skills.

In the era of new technologies, the organizations should implement new methods of teaching while teaching young generation. The future researches on this will focus on a detailed consideration and analysis of the actual training exercises that can be used in self-isolation. The period of quarantine provided a great opportunity to acquire new professional skills, to clearly organize independent work at home on a corporate platform. Student self-organization is the key component of success during distance learning. Thus, teachers and students are actively working in remote mode with the use of information and communication technologies, providing a full educational process.

4. CONCLUSIONS

The training of physical education is a key component and very important part of the professional training, especially in the field of sports. Unfortunately, in the present situation, its role and place in the training system is almost lost. This discipline is an effective means of disease prevention, preservation and promotion of human health. The lost status of physical education as a discipline, and the reduction of classroom hours have reduced the quality of training for the acquisition of physical culture of the individual. Distance education has the right to coexist with full-time education and to be its logical combination and complementarity. It has significant opportunities in the continuity and regularity of independent work of students, which increases the effectiveness of control over this type of work by the teacher, promotes self-development and self-improvement of teaching skills, improves the quality of theoretical and methodological knowledge, gives students the right to choose the type of physical culture and sports activities and free choice of time for classes, and provides equal rights to involve students with varying degrees of health problems. However, the quality of the distance mode of education completely depends on the self-organization of the student and the desire of the teacher to improve the professional training.

5. REFERENCES

1. Belikova, N. O. (2014). Applied aspects of the use of information and communication technologies in the training of future specialists in physical education and sports. *Bulletin of Chernihiv National Pedagogical University: Physical education and sports*, 118 (2), 21–24.
2. Iasechko S., Stepanenko T., Korolova V., Makovetska N., & Chernetchenko O. (2020). Features of Legal Regulation Transplantations in Ukraine. *Journal of Critical Reviews*, 7(13), 430-432. <https://doi.org/10.31838/jcr.07.13.76>

3. Iasechko, S., Skomorovskyi, V., & Andronov, I. (2020). Features of the subjective civil rights on patent. *Journal of Critical Reviews*, 7(13), 297-299. <http://dx.doi.org/10.31838/jcr.07.13.50>
4. Iasechko, S., & Zaitsev, O. (2021). Granting a compulsory license for patent rights in the context of the covid-19 coronavirus pandemic. *Pharmacologyonline*, 2, 385-397
5. Samolyuk, N., & Shvets M. (2013). Relevance and problems of distance learning. *New pedagogical thought*, 1(1),193–201.
6. Seletskaya, T. G. (2005). *Study of the motives that encourage female students to engage in physical culture and sports*. VIII Scientific Conference of Young Scientists of the Far East, Khabarovsk.
7. Solonina, E. (2020). "University" and quarantine: eight stories of Ukrainian students studying from home. <https://www.radiosvoboda.org/a/30562045.html>
8. Sushchenko, A. V. (2012). Information and communication technologies and teaching aids in the training of future specialists in physical education and sports. *Bulletin of Zaporizhia National University. Series "Physical Education and Sports*, 1(7), 104-111.
9. Tomashchuk, O. G., & Senko V. I. (2018). *Organization of physical education of students of higher education institutions in modern conditions*. Scientific thought of the present and the future: Coll. Articles.
10. Trius, Y. V., Gerasimenko I. V., & Franchuk V. M. (2012). *MOODLE-based university e-learning system*. Methodical manual. Cherkasy.

AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

FUNDING

This research received no external funding.

COPYRIGHT

© Copyright 2022: Publication Service of the University of Murcia, Murcia, Spain.