Modern aspects of the e-learning usage in the field of physical culture

Andriy Marakushyn
Oleksandr Piddubnyi
Artem Cherednichenko

Simon Kuznets Kharkiv National University
of Economics, Kharkiv, Ukraine

Purpose: *actualize the introduction of e-learning to motivate students to engage in movement activity.*

Material & Methods: *method of generalization and analysis are selected, which was used to study the approaches, definitions and results of the study among different authors on the research topic.*

Results: *generalized and analyzed: approaches to the formation of motivation in students for movement activity; definition of e-learning; results of the introduction of e-learning in the educational process of students from different authors.*

Conclusion: *it is proved that the approaches of different authors on motivating students to movement activity do not include the use of modern e-learning tools; it is established that e-learning can be an excellent complement to the full-time form of education; directions for further scientific research are updated.*

Keywords: *physical education, motivation, e-learning, students, educational process.*

Introduction

The analysis of modern pedagogical studies indicates that the formation of positive motivation for learning is one of the most acute problems of higher education. It is well known that any activity is more effective when it is more motivated [6].

In the physical culture and health work carried out in the university, it is necessary to strive to solve the problems of the level of education, when cognitive interests in the field of physical culture grow into a need for movement, an increase in independent studies [5; 6].

Rapid progress in the field of information technology makes it possible to use personal computers as an effective means of teaching. Automation of the learning process is carried out using computer training programs and electronic textbooks that are used not only with the use of magnetic media (laser disks), but also with the use of local and global computer networks. In the latter case, a specialized information and educational environment is formed, which allows the implementation of modern teaching technologies. To fill the information and educational environment, as well as to effectively use local and global computer networks, it is necessary to develop online high-quality electronic training courses that correspond to the current state of science in this subject area [11].

The overall goal of creating e-learning courses – to increase the efficiency of the learning process and improve the quality of training of specialists. In the system of full-time education, electronic training courses can be used as additional training tools that allow to organize methodically the teacher's independent work of students. Thus, within the framework of full-time education, the gradual introduction of open education technologies, in particular, the e-learning method. At the same time in the open education system, e-learning courses

are a major source of educational information for learners [25; 84]. The authors V. S. Ashanin and V. A. Druz point out in their studies that a special place among the means of information technologies of education is occupied by computer training systems. Such systems enable students to independently study the material by processing it interactively [4; 9].

An analysis of the state of the issue shows that at the present stage, information and communication technologies in the system of physical culture and sports have not yet been properly applied due to objective and subjective reasons **[**14].

The relationship of research with scientific programs, plans, themes

The work was carried out according to the research areas "Formation of motivation for motor activity, healthy lifestyle in the system of physical education of children and youth" and "Innovative methods and technologies in physical education of different population groups" passports specialty 24.00.02.

The purpose of the research

Actualize the introduction of e-learning to motivate students to engage in movement activity.

Objectives of the study:

1. Analyze: the approaches of different authors on the formation of motivation in students for motor activity; Definition of the concept of e-learning.

2. Identify and analyze the results of the introduction of e-learning in the educational process of students in different authors; update the directions for future research.

Material and Methods of the research

To achieve this purpose, a generalization and analysis method was chosen that was used to study the approaches, definitions and results of the study in different authors on the topic of the study.

Results of the research and their discussion

To solve the first task of the study, we studied and analyzed: modern approaches of various authors on the formation of motivation in students for motor activity; the definition of *e-learning.*

We examined the innovations of various authors regarding the components of learning, namely: the means, forms, methods, principles, content and pedagogical conditions.

The analysis made it possible to determine that the majority of authors offer innovations in terms of content, pedagogical conditions, and also the means of training for the formation of motivation for the motor activity of student youth. It can be noted that the proposed innovations do not include the use of modern *e-learning* tools (personal training systems of students – PTS, electronic textbooks – ET, etc.).

From the above analysis of the definition of *e-learning,* it can be noted that this is a learning process using the Internet. They share such common features as the use of information technology in the provision of educational services; the possibility of communication between student and teacher online; remote access to educational materials.

To solve the second task of the study, we studied and analyzed the results of introducing *e-learning* into the educational process of students; we updated the directions for future research.

Table 1
Synthesis and analysis of approaches

No. i/o	Author(s)	Training components					
		Means	Forms	Methods	Principles	Content of training	Pedagogical conditions
1.	Zakharina, E. A. [10]	–	–	–	–	+	+
2.	Romanchuk, S. V. [24]	+	–	–	–	+	+
3.	Boytsova, T. L., Zhukova, O. L. [7]	–	–	–	–	+	–
4.	Mikheeva, T. M., Kholodova, G. B. [17]	–	–	–	–	+	–
5.	Nazimko, V. V. [19]	–	–	–	–	–	+
6.	Nagovitsin, R. S. [18]	–	–	–	–	–	+
7.	Alyeva, Y. V., Popova, N. V. [1]	–	–	–	–	–	+
8.	Bilichenko, E. A. [6]	–	–	–	–	–	+
9.	Tarasova, O. A. [29]	–	–	–	–	–	+
10.	Gruzhevskiy, V. A. [8]	–	–	–	–	+	–
11.	Konkina, M. A. [12]	+	+	–	–	+	–
12.	Konopleva, E. N. [13]	+	–	–	–	+	–
13.	Pantyukhina, L. E., Makhov A. S., Matveev, A.P., Seagull J. Y. [21]	–	–	–	–	+	+
14.	Anokhin, E. M. [2]	+	–	–	–	–	+
15.	Ponomarenko, V. S. [22]	–	–	–	–	–	+

Table 2
The definition of e-learning and its analysis

No. i/o	Author(s)	Definition	Key words
1.	Marc Rosenberg [36]	Use of Internet technologies to provide a wide range of solutions that increase knowledge and productivity.	Internet, learning process, interaction
2.	Allison Rossett [34]	Training using computers that are connected to the Internet.	Internet, learning process, interaction
3.	UNESCO Experts [33]	Training using the Internet and multimedia.	Internet, learning process, interaction
4.	Bykov, V. Y. [35]	A variety of distance learning, according to which the participants and organizers of the learning process perform predominantly individualized interaction both asynchronously and synchronously in time, mainly and principally using electronic transport systems for delivery of training facilities and other information objects, computer Internet networks, media-educational tools and information and communication technologies .	Internet, learning process, interaction
5.	Solovov, A. V. [26]	Technology of learning, based on the use of computer technology and data transmission systems for the presentation and delivery of knowledge, support the interaction of students and teachers, as well as knowledge control.	Internet, learning process, interaction

Table 3
Results of implementation of e-learning

No. i/o	Author(s)	Results of the study	
		Theoretical	Practical
1.	Malinov, M. B., Mochalov, S. P., Tretyakov, V. S. [15]	The functions, structure and interface of the e-learning system are presented. The possibilities of data analysis are described.	–
2.	Toktarova, V. I. [30]	Educational and methodological support was developed and applied, based on the principles and means of e-learning.	–
3.	Mikhailova, N. V. [16]	Specific features of asynchronous interaction between subjects of learning, factors that influence the success of e-learning.	–
4.	Yadrovska, M. V. [31]	The characteristics of distance learning are defined, on the basis of which the classification of distance learning models is proposed; the factors of optimization of distance learning are determined from the point of view of the results of educational and pedagogical communication; the criteria for the design of educational material and the optimization of educational texts are formulated, are included in the content of distance learning.	–
5.	Nizhnik, S. G, Batanina, I. A. [20]	The model of forming the professional competence of e-learning teachers is considered.	–
6.	Akhmedova, A. M. [3]	The main problems of using e-learning tools in practice are considered.	–
7.	Starshina, T. A., Makletsov, S. V. [28]	The problem of information preparation of students is considered.	–
8.	Starychenko, A. E., Sardak, L. V. [27]	The technology of using a document camera during webinars as one of the most common methods of modern distance learning is proposed.	–
9.	Yakusheva, N. M. [32]	Features e-learning, the question of approaches to the implementation of training are considered.	–
10.	Rannikh, V. N. [23]	The examples of the organization of e-learning in the university, as well as the ways of its effective use are considered.	–

From the foregoing we note that many researchers studied e-learning, namely: functions, structure, interface, and ways of effective use; data analysis capabilities; the features of asynchronous interaction of subjects of learning are determined; the model of formation of professional competence of teachers of e-learning, the main problems of the use of electronic teaching aids in practice; innovations for webinars. All of the above research results are of theoretical importance. However, in the available scientific literature, we did not find concrete practical (experimental) results of the introduction of e-learning tools in the educational process of students. We believe that it is in this direction that further research should be conducted.

Conclusions

1. The analysis of the approaches of different authors on the motivation of students to motor activity allowed us to determine that they do not involve the use of modern means of e-learning, which ensure the quality of education through the substantive content of the educational environment, providing equal access to participants of the educational process to the quality of learning and teaching materials, regardless of where they live and form of training, create conditions for the personalization of learning and use of information continu-

ously and communication technologies.

2. Based on the definition of *e-learning,* we note that it can be an excellent complement to the full-time form, as the technologies used in the development of training courses will be a good support for improving the quality and effectiveness of the traditional approach to learning.

3. All the results of studies on the introduction of *e-learning* are of theoretical importance. However, in the available scientific literature, we did not find concrete practical (experimental) results of the introduction of *e-learning* tools. We believe that further scientific research should be conducted in the direction of the experimental introduction of *e-learning* tools in the physical education of students, the analysis of practical results obtained and the optimization of the correlation between the use of traditional and innovative approaches in the educational process of students.

Prospects for further research: it is planned to obtain and analyze some results of the introduction of e-learning tools, and the appeal of users to the content of training courses from the sphere of physical culture; use of interactive tools of personal educational system of students.

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Information about the Authors

Andriy Marakushyn: *PhD (Physical Education and Sport); Kharkiv National University of Economics: Lenin ave. 9a, Kharkiv, 61166, Ukraine.*
ORCID.ORG/0000-0002-9060-5120
E-mail: andrey.marakushyn@hneu.net

Oleksandr Piddubnyi: *PhD (Physical Education and Sport); Kharkov National Economic University: Lenina boulevard 9a, 61001, Kharkov, Ukraine.*
ORCID.ORG/ 0000-0003-0957-2788
E-mail: Oleksandr.Piddubnyi@m.hneu.edu.ua

Artem Cherednichenko: *Kharkiv National University of Economics: Lenin ave. 9a, Kharkiv, 61166, Ukraine.*
ORCID.ORG/0000-0003-2517-3170
E-mail: surz@ukr.net