

## РОЗДІЛ ІХ. ПРОБЛЕМИ ІНФОРМАЦІЙНОГО ЗАБЕЗПЕЧЕННЯ ДІЯЛЬНОСТІ ЗАКЛАДІВ ОСВІТИ

УДК 378.147:004:796

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DOI 10.24139/2312-5993/2023.10/380-387

### INFORMATION SUPPLY OF US EDUCATIONAL INSTITUTIONS REGARDING THE EDUCATION OF STUDENTS' PHYSICAL CULTURE

*The article reveals the peculiarities of the implementation of information and communication technologies in the disciplines of physical education in the USA. The purpose of the article is to substantiate the information provision of educational institutions in the USA regarding the education of students' physical culture.*

*The use of new information technologies in the teaching of physical education disciplines is one of the directions of informatization of education and, at the same time, contributes to the formation of information culture as a component of the professional culture of a specialist, the formation of such professionally significant qualities as professional competence, mobility, flexibility, independence. Information technologies open access to information, that is, they provide completely new opportunities for finding professional knowledge and creativity. The use of information and communication technologies in the educational process contributes to its intensification. The creative use of information technologies in the teaching of academic disciplines is based on the integration of pedagogical and information technologies.*

*Informatization of professional physical education raises new requirements for professional qualities and the level of training of specialists. Mastering modern information technologies becomes one of the main components of the professional training of any specialist, including in the field of physical culture and sports, which requires the development and implementation of professionally oriented programs and courses aimed at mastering the basics of the necessary knowledge and accumulation of personal experience of their use in professional activities. Computer technologies, as a part of information technologies, make it possible to form a fundamentally new style of work, which makes it possible to more effectively reveal the creative possibilities and intellectual potential of a person.*

**Key words:** *students of education, physical education, information and communication technologies, physical culture and sports, educational institutions.*

**Introductions.** The processes of informatization of modern society contribute to the intellectualization of various types of activities, determine the evolution of educational technologies, make it possible to create a qualitatively new information environment that ensures the development of the creative potential of each person. Information computer technologies (ICT) are technologies related to the creation, storage, transfer, processing and management of information, which allow

managing information with the help of computers and software, various devices and communication systems.

**Analysis of relevant research.** Aspects of the implementation of modern information technologies in the field of physical culture and sports were of interest to many specialists (A. Andryushchuk, V. Volkov, N. Goncharova, V. Kashuba, N. Naumova, S. Nyankovsky, K. Sergienko, O. Scalia, V. Shandrygosia ) education and sports. After all, their use makes it possible to effectively collect, process and transmit information, qualitatively change the methods and organizational forms of training highly qualified athletes and physical culture and health work with the population, increase the effectiveness of the activities of coaches, judges, teachers and specialists in physical education and sports (Comprehensive School Physical Activity Programs: Helping All Students Achieve 60 minutes of physical Activity Each Day-American Alliance for HEALTH Physical Education, Recreation and Dance, 2013; Fullan, 2000; Каллаур, 2018; Сущенко, 2012).

**Aim of the Study.** *The purpose* of the article is to substantiate the information provision of educational institutions in the USA regarding the education of students' physical culture.

Physical education and sports are of great importance in the formation of a healthy lifestyle, spiritual and mental development of student youth. Physical exercises strengthen health, increase neuropsychological resistance to emotional stress, physical and mental capacity.

Information and computer technologies in the field of physical education in the USA are used (Каллаур, 2018, p. 47):

- as a means of learning and organizing intellectual leisure; for biomechanical analysis of sportsmen's movement technique, creation of models of training and competitive situations and as a means of automating the processes of processing the results of competitions and scientific research;
- for informational and methodological support and management of the educational process in educational institutions, sports institutions and organizations; when organizing monitoring of the physical condition and health of those engaged in;
- as a means of automation of control processes, computer testing of the physical, functional mental and psychological states of those who are involved, and correction of the results of educational and training activities;

➤ in advertising, propaganda and business activities in the field of sports.

Currently, many different programs have been developed and are successfully used in the field of physical education, for example (Сущенко, 2012, p. 104–106):

a) computer program "FITNESSGRAM / ACTIVITYGRAM", developed by the Cooper Institute and the National Association of Sports and Physical Education of the USA (NASPE), which is used to assess the physical condition of children, adolescents and youth;

b) computer diagnostics of the level of health and physical fitness of schoolchildren and students, developed by M. Horobey;

c) computer diagnostic program "Skolyar";

d) automated "Monitoring" system for monitoring the physical condition of school-aged children, etc.

*Monitoring of students' physical health* is a complex information-analytical and prognostic system, which includes monitoring the state of physical health at the level of an individual and a social group, evaluating its results and predicting health in the future for both individuals and social groups, united by territorial feature or nature of activity (Fullan, 2000, p. 53).

Conducting monitoring studies is accompanied by obtaining a large array of information, the analysis of which is impossible without the use of modern information systems. The database, which is formed based on the results of the survey, contains the following information: student's name and surname; date of testing; age, health group and data of medical, morphological and psychological control at the time of testing; test results (indicators of physical development, functional capabilities, motor abilities (qualities), physical fitness, motor activity; comparative assessment in points; recommendations for further physical education activities, etc. (Fullan, 2000; Каллаур, 2018; Сущенко, 2012).

Monitoring is carried out for half a year and a year (current and phased control) according to the obtained indicators based on the results of the work, which makes it possible to intervene in the process of physical education and long-term planning of classes with students in groups, both formed according to the state of health, and individually. The possibility of further additions and changes to it ensures a continuous process of monitoring the health of students, makes it possible to control the level of physical fitness of everyone and make the necessary

corrections for further effective development throughout the entire period of training in physical education (Fullan, 2000; Сущенко, 2012).

In the international space, the development of physical education among students takes place thanks to the creation of educational networks, means of distance education, the activities of well-known international organizations, in particular the European Union, the Council of Europe, UNESCO, UNICEF, OECD, and the contribution of countries such as Great Britain, the United States, France, Germany etc., pupils, students, educators use modern libraries, receive and exchange information on the intercontinental space, study, improve their professional qualifications, monitor the quality of education, and participate in various programs and projects. In the general context of updating pedagogical technologies in the educational sphere, such problems as the introduction of distance education both in Ukraine and abroad, the use of the latest tools for measuring the quality of education by means of ICT are important and interesting (Comprehensive School Physical Activity Programs: Helping All Students Achieve 60 minutes of physical Activity Each Day-American Alliance for HEALTH Physical Education, Recreation and Dance, 2013; Каллаур, 2018; Сущенко, 2012).

Ukrainian education today feels an urgent need to develop and introduce ICT in accordance with the best world models, which is a guarantee of a significant contribution to the development of stability and progress of the national society. No less relevant for Ukrainian education is the practical experience of domestic teachers in the field of introducing modern teaching aids into the educational process. That is why the creation and functioning of the informational educational environment by means of ICT is an important area that today requires special efforts from educators-scientists and practitioners (Каллаур, 2018).

The use of new information technologies in the teaching of physical education disciplines is one of the directions of informatization of education and, at the same time, contributes to the formation of information culture as a component of the professional culture of a specialist, the formation of such professionally significant qualities as professional competence, mobility, flexibility, independence. Information technologies open access to information, that is, they provide completely new opportunities for finding professional knowledge and creativity. The use of information and communication technologies in the educational process contributes to its intensification. The creative use of information

technologies in the teaching of educational disciplines is based on the integration of pedagogical and information technologies (Сущенко, 2012).

The introduction of modern technologies into the educational process follows the following model (Fig. 1).

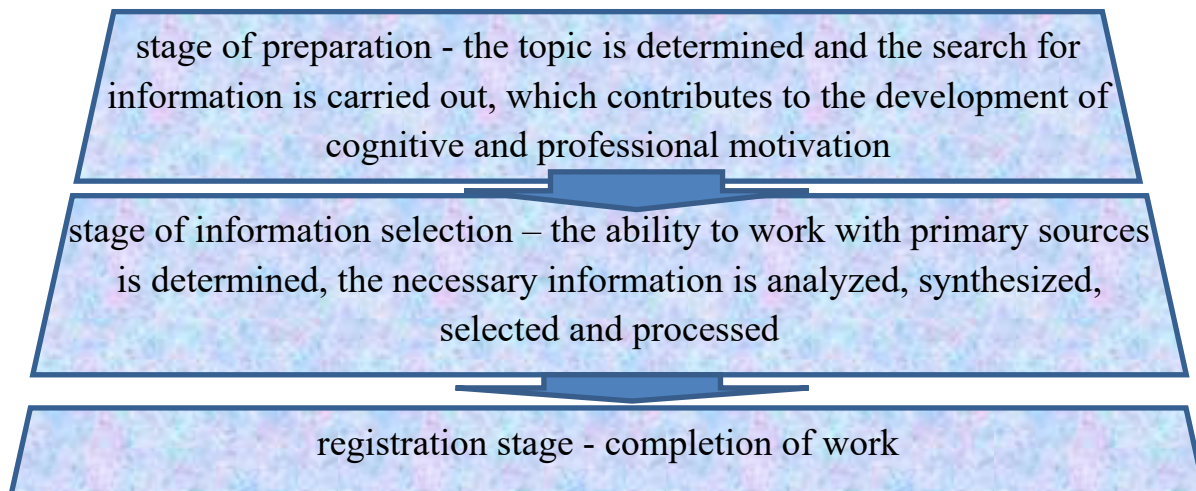


Fig. 1. The model of introducing modern ICT into the educational process

*Educational information* is a certain system that a student must perceive and learn. The main components of the model are specific knowledge, skills and abilities that ensure highly effective functioning of the education system (Fullan, 2000; Каллаур, 2018).

Informatization of professional physical education raises new requirements for professional qualities and the level of training of specialists. Mastering modern information technologies becomes one of the main components of the professional training of any specialist, including in the field of physical culture and sports, which requires the development and implementation of professionally oriented programs and courses aimed at mastering the basics of the necessary knowledge and accumulation of personal experience of their use in professional activities. Computer technologies, as a part of information technologies, make it possible to form a fundamentally new style of work, which makes it possible to more effectively reveal the creative possibilities and intellectual potential of a person. The use of computer programs in the educational process contributes to the development of theoretical and practical thinking of the student. In this regard, the issues of the development of the theory and practice of using computer technologies in the educational process are of certain scientific interest.

Improving the quality of the world in the field of physical culture and sports, ensuring its mobility, attractiveness, competitiveness in the labor market requires further improvement of the organization of the educational process in higher educational institutions on the basis of humanity, person-oriented pedagogy, development and self-development of students and involves: the use of information and computer technologies, interactive teaching methods and multimedia tools; introduction of electronic learning tools (textbooks, manuals, catalogs, dictionaries, etc.), computer training programs (Fullan, 2000; Сущенко, 2012).

The results of the theoretical analysis of the investigated problem indicate the intensification of the interest of domestic researchers in the problems of training specialists in physical culture and sports. The main questions that are the subject of analysis by scientists regarding the research topic are as follows (Comprehensive School Physical Activity Programs: Helping All Students Achieve 60 minutes of physical Activity Each Day-American Alliance for HEALTH Physical Education, Recreation and Dance, 2013; Fullan, 2000; Каллаур, 2018; Сущенко, 2012):

- creation of a degree system for training specialists in physical education;
- development of the psychological foundations of the physical culture teacher's pedagogical skills;
- medical and biological training of physical culture and sports specialists; professional and pedagogical training of sports teachers;
- preparation of the future teacher for search work; career guidance work;
- the use of national traditions in the system of training teachers in physical education.

The specificity of physical culture universities is that a significant part of students are active athletes. Acquiring higher education is very problematic for them due to the specifics of their professional activity and distance from training centers. The development of the distance learning system, one of the fundamental principles of which is an open educational space, allows solving the problem of involving a huge mass of athletes in the educational process and thus answering the second principle: education as a responsibility to society, education for personal development and lifelong learning; citizenship is both short-term and long-term social expediency (Comprehensive School Physical Activity Programs: Helping All Students Achieve 60 minutes of physical Activity

Each Day-American Alliance for HEALTH Physical Education, Recreation and Dance, 2013; Fullan, 2000).

New information technologies put forward higher requirements for the quality of work and the level of qualification of pedagogical workers and managers of professional educational institutions. Progress in this direction is largely determined by the level of training of teachers of special disciplines, teachers of professional training, masters of industrial training. Trends in the development of society require an urgent solution to the problem of anticipatory development of the education system based on information technologies, the creation of a unified educational information environment in the country. Informatization implies a significant change in the content, methods and organizational forms of education.

**Conclusion.** Specialists in the field of physical culture and sports work in conditions of constant expansion of the information environment, because sports science is constantly developing. The problems of information provision of the industry are urgent: the number of information products is growing rapidly, as a result of which the value of information services increases, the result of which is the instant availability of scientific, educational and reference materials, which allows specialists to rely on the most up-to-date scientifically based information in their practice. Very often, trying to find the necessary information on their own, scientists in the field face the problem of its ramifications, disparity, poor cataloging, and sometimes its absence. Therefore, it is difficult to find the necessary primary sources, and their use is difficult for the above reasons, especially with the current practice of providing access. The creation of a new competitive information industry puts new demands on both the information support system and information.

Information technologies require specialists in this field to improve their general communicative and informational culture, knowledge and skills to apply these technologies in their professional activities. The direction of further research is the didactic aspect of the organization of distance learning in the system of training specialists in higher physical education.

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### АНОТАЦІЯ

**Лелека Віталій.** Інформаційне забезпечення навчальних закладів США щодо виховання фізичної культури студентів.

У статті розкрито особливості впровадження інформаційно-комунікаційних технологій із дисциплін фізичного виховання в США. Метою статті є обґрунтування інформаційного забезпечення навчальних закладів США щодо виховання фізичної культури студентів.

Використання у викладанні навчальних дисциплін із фізичного виховання нових інформаційних технологій є одним з напрямів інформатизації освіти і, разом з тим, сприяє формуванню інформаційної культури як складової частини професійної культури фахівця, формуванню таких професійно значущих якостей, як професійна компетентність, мобільність, гнучкість, самостійність. Інформаційні технології відкривають доступ до інформації, тобто дають зовсім нові можливості для знаходження професійних знань, творчості. Використання в навчальному процесі інформаційно-комунікаційних технологій сприяють його інтенсифікації. Творче використання інформаційних технологій у викладанні навчальних дисциплін ґрунтується на інтеграції педагогічних і інформаційних технологій.

Інформатизація професійної фізкультурної освіти висуває нові вимоги до професійних якостей і рівня підготовки фахівців. Оволодіння сучасними інформаційними технологіями стає одним з основних компонентів професійної підготовки будь-якого фахівця, у тому числі і в області фізичної культури і спорту, що вимагає розробки і впровадження в навчальний процес вищої фізкультурної освіти, професійно орієнтованих програм і курсів, направлених на оволодіння основами необхідних знань і накопичення особистого досвіду їх використання у своїй професійній діяльності. Комп'ютерні технології, як частина інформаційних технологій, дозволяють сформувати принципово новий стиль роботи, що дозволяє ефективніше розкривати творчі можливості і інтелектуальний потенціал людини.

**Ключові слова:** здобувачі освіти, фізичне виховання, інформаційно-комунікаційних технологій, фізична культура та спорт, заклади освіти.