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## Influence of information communicative technologies on students' sport-oriented physical education interest

**Abstract. Purpose:** determination the influence of information communicative technologies on students' interest in regular exercise of sport-oriented physical education. **Material and Methods:** in the researches were involved 1–5 year basic department students of V. N. Karazin Kharkov National University (n=36402). Methods: analysis of literature sources, formatted pedagogical experiment, sociological research, maths statistics. **Results:** through experimental research we found out that usage of information communicative technologies in authors' model of sport-oriented physical education in high schools had provided increase in amount of students, who engaged in chosen sports (moving activity), by 14,4% (1463 persons). **Conclusion:** the usage of information communicative technologies in educational process promoted increasing of student quantity in the sport-oriented groups.

**Keywords:** student, sport-oriented physical education, information communicative technologies.

**Introduction.** Now the degree of an involvement of students into regular trainings of physical culture and sport becomes the main criterion of preservation of a subject matter “Physical education” and one of the self-determinative factors of functioning of the system of physical education of higher education institutions in connection with the reorganization of the educational process in higher educational institutions (HEI) of Ukraine [5].

The orientation of physical education to the digestion of rigidly regulated material does impossible the perception of a student as a person and doesn't promote the development of his identity. At the present stage the substantial part of the traditional system of physical education of higher education institutions which is constructed on a strict regulation and authoritativeness of the educational process, needs introduction of new directions of the organization of classes in physical culture. The use of traditional approaches to the organization of classes in physical education has no due influence on the aspiration of students to physical activity, sports activities and continuous self-improvement now [4; 5].

In today's conditions tendencies of the development of education assume a transfer of management of the process of training on the new technological level providing the use of information technologies that is an indispensable condition of the improvement of quality of education [2; 3; 9]. However at the present stage there is no uniform approach to the organization in higher education institutions of the sports-oriented physical education (SOPE) with the use of information technologies. The influence of an application of information technologies as on the formation of the sports-oriented educational groups, and on the efficiency of SOPE is investigated insufficiently. In connection with it the research of theoretical and practical components of this aspect is actual and has an essential value for preservation and improvement of the system of physical education in higher education institutions.

The analysis of the last researches and publications showed that now everything is more widely used by SOPE of students in higher education institutions which is based on the principles of a conversion of sports training, a free choice of a kind of sport and promotes the formation of personal physical culture of trainings [4; 8]. Sports activities or different types of physical (motive) activity are an irreplaceable way of the organization of the natural process of maintenance of a homeostasis – a vital condition of formation, strengthening and preservation of physical, spiritual and moral health of a person. The science-based need of integration of systems of physical education served as the reason of creation of the concept of SOPE [1].

The use in physical education of student's youth of the sports-oriented technologies promotes the increase of interest of students in physical culture in the educational space of higher education institutions therefore there is a stage-by-stage increase of the level of their knowledge of physical education and a certain sport, an increase of volume of physical activity in study hours and after hours [4;7].

Most of researchers are convinced that the mass computerization of higher education institutions forms the expediency of work in this direction for what are necessary: in-depth and versatile studies of the educational process on discipline “Physical education” taking into account the purposefulness and the efficiency of introduction of information technologies; the detailed development of concrete techniques and the creation of an essentially new model of the whole process of training in physical education [3; 6; 9].

**Communication of the research with scientific programs, plans, subjects.** The research is conducted according to the Consolidating plan of the research works in the sphere of physical culture and sport for 2013-2014 on the subject “Theoretic-methodical bases of application of information, pedagogical and medico-biological technologies for the formation of a healthy lifestyle” (No. of the state registration is 0113U002003).

**The objective of the research:** to determine the influence of application of information and communication technologies on the level of an involvement of students into regular trainings by physical culture and sport at the sports-oriented physical education.

**Material and methods of the research.** We made the sociological experiment in which interest of students was defined by questioning concerning classes by the chosen sports (physical activity) for the definition of the influence of information and communication technologies on dynamics of the involvement of students of V. N. Karazin Kharkov National University (KNU) in the sports-oriented groups during the period from September, 2005 to May, 2014. Students (n=36402) of 1-5 courses of the main department took part in the questioning.

**Results of the research and their discussion.** According to most of scientists, today an important problem is the

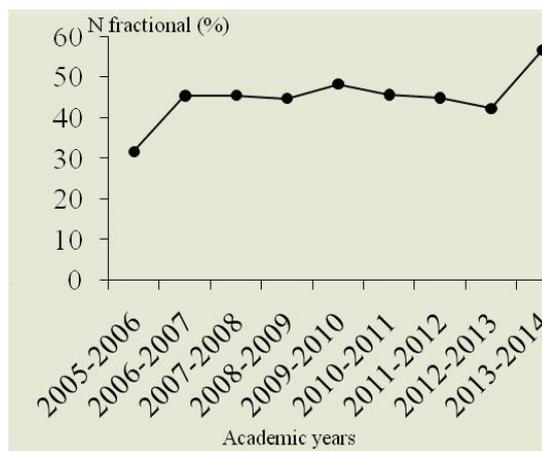
optimization of volume of physical activity of students with the use of various forms of the organization of the educational process for physical education [4; 5; 8].

In nine academic years after the introduction of the author's model of SOPE SOFV in the 2005/2006 academic year there were essential changes of an indicator of an involvement and interest of students of KNU by the SOPE directions on 17 sports (physical activity) which were united in three directions: fitness, game sports, single combats (tab. 1).

*Table 1*  
**Distribution of students of the main department in the SOPE directions**

SOPE directions	Academic year								
	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014
Game sports, quantity	1194	1666	1565	1767	2012	1861	1709	1468	1951
Single combats, quantity	403	616	577	455	491	427	365	423	614
Fitness, quantity	1074	1741	2019	2070	2044	1936	1697	1734	2523
Total, quantity	2671	4023	4161	4292	4547	4224	3771	3625	5088
Total number of students of a day form of education	8424	8843	9117	9585	9390	9239	8385	8569	8978

After the transmission of the educational process on physical education on the sports-oriented form of the organization increase of an absolute number of students of a day form of education (tab. 1) and a percentage indicator (pic. 1) of their involvement into regular trainings was recorded by the preferred sports (physical activity). So, the number of students who were engaged in SOPE, increased from 2671 to 4023 people (from 31,7% to 45,5%) in the 2006/2007 academic year in comparison with the previous academic year. For the next three years the increase in number of students from 4161 persons (45,6%) to 4547 people (48,4%) is noted that testifies to the increase of their interest concerning classes in the system of SOPE.



**Pic. 1. Dynamics of a percentage indicator of the involvement of students in the educational groups of SOPE**

For the next 2010/2011, 2011/2012, 2012/2013 academic years we recorded the decrease in interest of students concerning classes of SOPE for 3,4% – from 4224 people (45,7%) to 3625 people (42,3%) that served as the reason of introduction and the use in the author's model of SOPE of information and communication technologies.

In our opinion, just the use of the informational component acts as the integral and leading component of the model of SOPE of higher education institution adapted for present realities at the present stage of reorganization of the system of the higher education of Ukraine which has to give necessary knowledge of the new information environment of the society and form new outlook at trainings. In this regard the need of active development and introduction of information and communication technologies in the process of physical education ripened as the computerization of the educational activity is the objective requirement demanding the manifestation of mobility, initiative and creativity [6]. Therefore the creation of Internet site of the chair of physical education and sport (<http://sport.univer.kharkov.ua>), connected with the page of the chair on the site of KNU ([http://www.univer.kharkov.ua/ua/structure/leisure/sport\\_department](http://www.univer.kharkov.ua/ua/structure/leisure/sport_department)), for the purpose of the increase of efficiency of functioning of SOPE at university, became one of the fundamental directions of the use of the information technologies applied in our research.

During the development and the creation of the site we considered the pedagogical expediency of application in the subject environment of physical education of information and communication technologies which in our case are personally oriented and directed on the educational activity of a student.

By means of the site the work on SOPE in higher education institution is systematized, providing both to students, and entrants opportunity even before entering the university to receive information on an order of the organization of the

educational process, sports constructions on which studies pass. The publicity which distinguishes the cathedral site, makes materials available for perception by students and teachers, gives opportunity to leave comments and to receive feedback from participants of the educational process.

By results of the carried-out analysis of literary and documentary sources, considering basic provisions of the theory of physical education and sport (L. P. Matveyev, 1991; V. M. Platonov, 2004–2013; T. Yu. Krutsevich, 2003–2013) and results of the researches of the practical work of the chairs of physical education of various higher education institutions, we optimized and introduced the author's model of SOPE in the educational process of KNU in the 2013/2014 academic year [7] which contains such key components:

–conceptual – it defines the purpose, tasks, principles of target orientations, pedagogical conditions of management of the educational process at SOPE which are realized by means of forms of the organization and methods of application of IT;

–motivational and activity – it determines a target orientation and educational interaction of information and communication technologies by the directions of SOPE for assimilation by students of the contents of the training program, realization of the purpose and tasks;

–productive – it determines efficiency of the educational process by PE in higher education institutions by the determination of level of an involvement and interest of trainees by regular trainings of physical culture and sport, formations of a healthy lifestyle in the student's environment.

The obtained data testify that, the increase of level of an involvement of trainees into the sports-oriented groups of physical education from total of students of day form of education made 14,4% after the introduction in the 2013/2014 academic year in the educational process of SOPE of information and communication technologies. It was recorded positive dynamics of the general and relative indicators (see tab. 1, pic. 1) of number of the students involved in regular trainings by physical culture and sport at SOPE from 3625 people (42,3%) to 5088 people (56,7%).

**Conclusions.** By results of the conducted researches we recorded that during the period from 2005/2006 till 2013/2014 academic years the number of the students who are engaged in the preferred sports and physical activity at SOPE in V. N. Karazin KNU increased from 2671 till 5088 people. It is noted the increase also not only total of the students who are engaged in SOPE at the university, but also 25% increase concerning an indicator of an involvement of students of a day form of education in SOPE: – from 31,7% in the 2005/2006 academic year till 56,7% in the 2013/2014 academic year.

The ascertaining of increase of the level of an involvement of trainees into regular trainings of the chosen sports and physical activity for 14,4% (1463 persons) became the result of the use of the author's model of SOPE with an application of information and communication technologies, according to sociological researches within one academic year in the educational process of the university.

**Prospects of further researches.** Carrying out researches on scientific justification of an application of information technologies in the sports-oriented physical education of students of higher education institutions is supposed.

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