

## PHYSICAL EDUCATION OF STUDENTS FROM SPORTS-ORIENTED TECHNOLOGIES

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Annotation. In theory grounded and experimentally tested the efficiency of employments on physical education of students on the basis of sporting oriented technologies. In experiment participated 30 students of 3 courses. The improvement of growth of most physical indexes rate is marked: speed qualities (at run on 100 m), power (bending, unbending of hands in support lying), speed-power (broad jump from a place), flexibility (inclination in before from position sitting on the floor). Recommendations are resulted on education of student youth a sense of collectivism; to the persistence, decision, purposefulness; attention and speed of thought; perfections of ability to manage the emotions, to development of physical qualities. It is proved that physical education of students on the basis of sporting oriented technologies positively influences on development of physical qualities, skills and abilities that is necessary for the future specialist.

**Keywords:** physical, education, specialists, sporting, technology.

#### Introduction

On modern stage of technical progress, high rates of industrial production, market economy and great competition on labor market future specialists should have high level of physical conditions, sound health and high workability.

Workability of future specialist, both physical and mental, is determined by his resistance to different kinds of tiredness and is characterized by duration of work's fulfillment with good quality.

However, researches of recent years show that physical conditions, psychic stability and health of modern youth are sharply worsening from year to year [4, 5, 7, 11, 15].

Besides, interest and motivational aspects for systemic physical culture trainings and sports at higher educational establishments, for healthy life style, are also reducing.

Such modern youth's negative attitude to physical culture can be changed with the help of new sport-oriented technologies at higher educational establishments (HEE) of Ukraine.

Sport-oriented technologies, as special branch of physical culture, are directed at: strengthening of health, progress in study, durable creative activity and life activity of modern students. They facilitate growth and perfection of comprehensive and harmonious development and using of acquired motion skills in future labor, domestic and social activity [2, 8, 10, 14].

Modern scientific researches are based on criteria of objectivity, compliance with truth, rest on totality of domestic and foreign scientists' works.

For the first time the problem of physical education at HEEs was studied by scientists D. Kradman and F. Tsarichanskiy. Organizational provision of physical education in higher school was researched by F. Shuvalov, i. Chudinov. From the point of view of organization of students' physical education the works by M. Vilenskiy, V. Ilyinich, V. Masliakov, P. Nazarov, Yu. Okunkov, V. Popenchenko, Yu. Polukhin, V. Protasov are of certain interest. L. Kolokatova, G. Rayevskiy, V. Filenkov, O. Tserkovnaya also paid great attention to professional applied physical training of students.

Analysis of recent researches and publications, connected with physical education, on the base of sport-oriented technologies, shows that this direction was in the field of attention of many known domestic and foreign specialists in the sphere of physical culture and sports.: A. Amelin, L. Baribina, Ye. Biriukh, I. Blinkin, V. Genkin, A. Kozlov, G. Korobeynikov, A. Lotonernko, V. Pashnin, G. Petrov, G. Sirenko, Yu. Smirnov, S. Tanianskiy, V. Temchenko, O. Tserkovnaya, I. Scherbakova, Yu. Yadviga, Ye. Yakhontov [2, 8, 10, 12].

These and other authors regard in their works influence and forms of sport-oriented technologies in organization of physical culture and sports trainings at higher educational establishments; besides, they study influence of motion activity on psycho-emotional state of students in modern study, labor and domestic conditions. Alongside with it the problem, mentioned above, still remains insufficiently studied and requires deeper researches.

The work has been carried out as per plan of scientific & research works of Ministry of education and science of Ukraine "Organizational-pedagogic aspects of students' physical education's optimization on the base of sport-oriented technologies", code « $\Gamma \kappa$ -01-2013»

# Purpose, tasks of the work, material and mehtods

The purpose of the research is to theoretically ground and experimentally test effectiveness of students' physical education on the base of sport-oriented technologies.

*The tasks of the researches:* 

- 1. On the base of analysis of pedagogical literature to determine the idea and content of students' physical culture trainings on the base of sport-oriented technologies.
- 2. To study and experimentally tests effectiveness of sport-oriented technologies on the base of comparative analysis of physical features and mathematical processing of the obtained results of physical education department's

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(Kramatorsk) \scientific work.

The methods of the research are as follows: theoretical analysis and generalization of literature sources, pedagogical observation, testing, pedagogical experiment, methods of mathematical statistics.

Organization of the research. For theoretical study of students' physical culture trainings' effectiveness on the base of sport-oriented technologies, we carried out comparative analysis and mathematical processing of pedagogical experiment's results, which was conducted in 2011-2012 in the frames of scientific and research works' plane of of Ministry of education and science of Ukraine "Organizational-pedagogic aspects of students' physical education's optimization on the base of sport-oriented technologies", code « $\Gamma\kappa$ -01-2013» in Donbass state engineering academy (Kramatorsk) at department of physical education.

# Results of the researches

Recent years demand in highly qualified specialists has been growing. With it, requirements to physical conditions, health, mental workability, psycho-emotional stability, general endurance, which are necessary in professional activity of future specialist, are also increasing [6].

With it, the foundation of physical condition, health, mental workability, shall be developed exactly in students' period of life, when conscious reconstruction of all consciousness take place. And the most effectively, these directions can be developed at physical culture trainings with the help of sport-oriented technologies [2, 8].

Sport-oriented technologies are one of means of personality's comprehensive formation, directed on health improvement and increasing of future specialists' physical conditions.

The works by a number of somestic and foreigh researchers L. Baribin, , Ye. Biriukh, I. Blinkin, G. Grtiban,, Ye Karpenko, A. Kozlov, G. Korobeynikov, A. Lotonernko, G. Petrov, G. Sirenko, Yu. Smirnov, S. Tanianskiy, V. Temchenko, O. Tserkovnaya, Yu. Yadviga note that sport-oriented technologies play positive role in health improvement and strengthening of physical conditions; increase students' interest to physical cuilture at HEE; influence on motivation aspect for systemic practicing of sports and for healthy life style [8, 10, 12].

Sport-oriented technologies facilitate formation of students' feeling of collectivism; persistence, decisiveness, purposefulness, control over emotions, development of physical conditions. Sport-oriented technologies are one of the most effective educational means.

In order to theoretically study effectiveness of students' physical culture trainings on the base of sport-oriented technologies, we carried out comparative analysis and mathematical processing of pedagogical experiment's results, which was conducted in 2011-2012 in the frames of scientific and research works' plane of of Ministry of education and science of Ukraine "Organizational-pedagogic aspects of students' physical education's optimization on the base of sport-oriented technologies", code « $\Gamma\kappa$ -01-2013» in Donbass state engineering academy (Kramatorsk) at department of physical education.

The subject of the researches were 3<sup>rd</sup> year students of "Management and organization" specialty (30 girl students) of preparatory department. We organized one experimental group (16 persons) and one control group (14 girl students), who were comparatively equal by their age and physical conditions. In control group trainings were conducted as per program of general physical education (GPE), in experimental group – on the base of sport-oriented technologies (SOT).

Comparative analysis and mathematical processing of pedagogical experiment's results show that increment of physical indicators in experimental group, which was trained by SOT methodic, is higher than in control group, which was trained by GPE program - speed ability 100 m run (4.78 %,  $\tau$ =3.9065, p<0.001); - power abilities – pressing ups in lying position (10.23%,  $\tau$ =4.1256, p<0.01); - power-speed abilities long jump from the spot (4.48 %,  $\tau$ =1.5498,  $\tau$ =0.05); - flexibility –forward torso bending from sitting position (12.38 %,  $\tau$ =2.2651,  $\tau$ =0.01).

Experimental groups, which were trained by SOT program, exceeded control ones, which were trained by GPE program, by increment of speed, power, power-speed abilities, flexibility. These abilities are the most important fort future specialists of any specialty.

# **Conclusions:**

- preparation of healthy, physically conditioned, educated and intellectually developed future specialists for professional activity- is the task of first priority of students' physical education system in HEE;
- analysis of pedagogical literature of domestic and foreign researchers points at positive role of physical education on the base of SOT in health improvement, development of physical conditions of future specialist, increasing of student's interest and motivation values for systemic physical culture and sports practicing, for healthy life style:
- theoretical study and mathematical processing of test results show at effectiveness of students' physical education on the base of SOT in development of physical conditions, skiils and abilities, which would be required in his future labor activity.

The prospects of further researches are searching of new forms and methods of physical culture trainings on the base of SOT.



#### **References:**

- 1 Amelin A.N. Nastil'nij tenis [Table tennis], Moscow, Physical Culture and Sport, 1985, 185 p.
- 2 Barybina L.N., Cerkovnaia E.V., Blinkin I.Iu. *Slobozhans'kij naukovo-sportivnij visnik* [Slobozhansky scientific and sport bulletin], 2008, vol. 4, pp. 35 37.
- 3 Biriukh E.V. Ritmicheskaia gimnastika [Calisthenics], Kiev, 1986, 120 p.
- 4 Iermakov S.S., Ivashchenko S. N., Guzov V.V. *Fiziceskoe vospitanie studentov* [Physical Education of Students], 2012, vol.4, pp. 59-61.
- 5 Karpenko E.N. Mesto i znachenie sportivnykh igr v sisteme professional'no–prikladnoj podgotovki studentov [The place and importance of sports in the vocational and applied training students]. *Zdorov'ia i osvita ta perspektivi* [Health and education and prospects], Donetsk, DNU Publ., 2004, pp. 398-400.
- 6 Kozlov A.V., Lotonenko A.V., Shcherbakova I.B. *Fiziceskoe vospitanie studentov tvorceskih special'nostej* [Physical Education of the Students of Creative Profession], 2009, vol.2, pp. 54-58.
- 7 Smirnov Iu.N. Badminton [Badminton], Moscow, 1990, 45 p.
- 8 Prusik Kr., Prusik E., Iermakov S.S., Kozina Zh.L. *Pedagogika, psihologia ta mediko-biologicni problemi fizicnogo vihovanna i sportu* [Pedagogics, psychology, medical-biological problems of physical training and sports], 2012, vol.12, pp. 113-122.
- 9 Tanians'kij S., Baribina L., Cerkovna O. Rezul'tati zastosuvannia sportivnikh specializacij u tekhnichnomu VNZ [Results of sports specialization in technical universities]. *Teoretiko-metodichni osnovi organizaciji fizichnogo vikhovannia molodi* [Theoretical and methodological foundations of physical education of youth], Lvov, LNU Publ., 2008, pp. 166-169.
- 10 Temchenko V.A., Sirenko R.R. *Fiziceskoe vospitanie studentov* [Physical Education of Students], 2010, vol. 3, pp. 99-104.
- 11 Iermakov S.S. *Formuvannia zdorov'ia osobistosti v umovakh navchal'nogo zakladu* [Forming of health of a person in the conditions of educational esablishment], Kharkov, KSADA, 2012, 146 p.
- 12 Iadviga Iu.P., Korobejnikov G.V., Petrov G.S. *Pedagogika, psihologia ta mediko-biologicni problemi fizicnogo vihovanna i sportu* [Pedagogics, psychology, medical-biological problems of physical training and sports], 2009, vol. 12, pp. 202-204.
- 13 Iakhontov E.R., Genkin V.A. Basketbol [Basketball], Moscow, Physical Culture and Sport, 1978, 45 p.
- 14 Agergaard S. Sport as social formation and specialist education: discursive and ritualistic aspects of physical education. *Sport, Education and Society*, 2006, vol.11(4), pp.353–367.
- 15 Fielding M. Beyond school effectiveness and school improvement: lighting the slow fuse of possibility. *Curriculum Journal*, 1997, vol.8(1), pp.7–27.



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