ANALYSIS OF INFORMATION MODELS OF STUDENT'S PHYSICAL READINESS IN HIGHER EDUCATIONAL ESTABLISHMENTS

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The high level of physical fitness and health are important factors in ensuring the effectiveness of the process of student teaching in a higher education institution. A well-prepared physically and having a strong motivation student has the opportunity to build an optimal rhythm of alternation of stress and rest in the small, medium and large training cycles, avoid missing of academic studies because of disease, and have enough time to visit the reserve of additional training courses. All this creates conditions for the formation of a specialist that meets modern high standards of professionalism in the various fields of activity. The aim of this work is to perform the analysis of information models of physical readiness of students of a technical institutions.

The emergence and rapid progress in the development of information technologies have changed the representation of reality and the methods of its research. There has been a qualitative leap in access to, the system analysis and archiving new information. The most significant contribution to the formation and development of information theory introduced by John von Neumann and especially Claude Shannon.

Over the past ten years, information technology has become an integral part of scientific research and the functioning of the higher education system in the world. They allow to rapidly improve the predictive element in the educational process and serve as a powerful tool for optimizing management systems in science and education. Kharkiv National University of Radioelectronics is at the forefront of basic and applied research in the field of information technology and physical education in KNURE is built using the advanced development of biological and social systems management models.

In the literature, which considers practical aspects of physical education in higher education, proved a positive correlation between the quality of the organization of physical education and the effectiveness of training students in the specialty they chose [1, 2].

Our research were undertook at the Kharkov National University of Radioelectronics from 2004 to 2016, shows that there is a steady downward trend in the level of physical fitness of students enrolled in the first course. Without going into the reasons for this negative phenomenon, it should be noted that the majority of students (73%) choose to study on the subject of physical education of martial arts there is an understanding of the need for regular training sessions.

In the process of constructing a system of physical education in high school technical profile widespread use different information models of physical activity and preparedness of students. Modeling processes are also subject to general and applied physical preparation. Comparison of characteristics of individual models with reference models allows to identify the most important areas for correction of training

process. In accordance with the biological laws of adaptation to environmental conditions, method of forming important for the effectiveness of the labor process mental and physical qualities. Analysis of changes in group performance information models for the analyzed period of time allows to make a ranking of the factors affecting the efficiency of the application system of physical preparation and performance of teachers, sports managers and medical and biological workers.

Our research of the synergetic models of sports training and sports readiness [3] show the possibility of allocation of key parameters of the order, changes which characterize significant deviations in the operation of highly complex, non-linear, open, hierarchically ordered systems. Revealed regularities are, for the most part, valid for both high performance sport as well as for the basic system of physical education students. The use of applied modifications proposed by us synergetic method of management in sport (2010), enables efficient management of social systems of different structural complexity in the conditions of dynamic chaos. In the analysis of highly complex systems, information models, considered the entropy, the presence (or possible occurrence) of dissipative structures, as well as the possibility and the necessity of forming a cascade of bifurcations [4].

As a result we can say that for effective management this factors are important and the synergetic paradigm takes into account the unique phenomena, which increases the risk of neglect, studied within the framework of the theory of catastrophes. Given the trend towards increased globalization processes can assume an increase in the value of research methodologies and techniques of modern science postnonclassical.

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