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IMPROVEMENT OF INFORMATION AND METHODOLOGICAL SUPPORT FOR PHYSICAL EDUCATION OF STUDENTS

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ABSTRACT

The article reveals the urgency of improving the information and methodological support for general physical education of students in the university, which is due to the change in educational standards and their focus on improving professional training, and in addition, new requirements for modern didactic resources. Textbooks, manuals and other educational tools today should not only be sources of information, but also motivators and organizers of cognitive activity of students, which make them independent in mastering the values and essential foundations of physical culture. They as well as the educational and methodological complexes used by teachers should be filled with specialized didactic means that promote the development of all components of physical fitness: cognitive, value-semantic, activity components. The results of a survey of students on the identification of their interests and the level of competence in the field of physical culture are presented, as well as the results of a practical study demonstrating that the mentally and emotionally positive attitude of students to physical exercises can significantly improve the efficiency of physical training and development. The requirements for the design of didactic means that promote the enhancement of the physical culture competence of students and the content of the procedural and technological part of the educational resources that provide, among other things, the formation of the value-semantic component of the physical culture of the individual are specified: a clear formulation and recording of personally significant goals; list and orientation of diagnostic procedures and tests; thematic units and methodological recommendations for studying specific topics; road map for the entire period of study; task systems and algorithms for their implementation; ways to manage cognitive activity of students and means of feedback to the teacher; references to available literature and open electronic resources with specific guidance on their use; presentation material, made in the form of slides and including motivational elements; control and measuring tools (questions for self-preparation, practical tasks, tests on topics, standards of physical and technical preparedness, questions for offset), providing evaluation of learning outcomes, as well as other components.

INTRODUCTION

The transition to a competitively-oriented model of higher education, including the field of sports education for students (which provides for the strengthening of the activity component of the learning process and, accordingly, the practice-oriented focus of the knowledge) requires that all the elements of the implemented didactic system – the goals, principles, ways of organizing and maintaining education, as well as methods and means of teaching – should meet this model.

The means of instruction are important pedagogical tools that must be prepared in such a way as to ensure a given quality of education. Therefore, for the implementation of competent-oriented education, there is a need to design and appropriate didactic tools of a new generation, including those aimed at promoting the formation of a value-semantic component of physical culture competence which influences the emotionally positive attitude of students towards teaching and training occupations and their motivation to organize systematic independent physical exercises on the basis of the concept: "I am my own trainer". Training activities at this level are impossible without the need for it, without persistent convictions of its necessity, and also requires a certain degree of formation of practical skills to creatively use the theoretical and methodological knowledge received in the educational process in accordance with personal goals: health improvement, physique correction, physical perfection and others.

At present, a large number of educational literature is published in all disciplines of higher professional education, but its content does not fully correspond to modern pedagogical requirements, since the prevailing monographic type of textbooks fulfills the function of transmitting information to a greater extent, not contributing to the activation and cognition of students' knowledge at the level of skills of implementing them in practice.

This dictates the need for the creation of modern didactic tools designed to implement the learning process in the framework of the system-activity, axiological and competence approaches that provide students with the opportunity to effectively apply the acquired knowledge to solve educational, professional and life problems and increasingly adhere to the values of athletic and sports activities [1, 2].

MATERIALS AND METHODS

Physical education in the university is aimed at forming students' competence in this field, and in general – the physical culture of the individual, which is determined by the unity of knowledge, value orientations and practical skills actually embodied in physical culture and sports activities. Therefore, pedagogical influences should be balanced with the aim of forming all the components of physical culture competence – motor, intellectual, motivational and value components.

KEY WORDS

didactic means,
physical culture
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However, it should not be forgotten that the motivational-value component in this system is fundamental, as it provides a conscious, active and emotionally positive attitude of students to exercise, forming a stable need for them, a system of interests that organizes and directs cognitive and practical activities in physical education which in general ensures the effectiveness of both the educational process and the very physical improvement [3, 4].

The purpose of this study was the development and practical testing of specialized didactic tools that improve the informational and methodological support of physical education for students (i.e., the formation of general cultural competence), as well as the design of technology for the implementation of these educational resources at training sessions at the university. The urgency of this is due to the lack of understanding of the advisability of creating such specialized didactic means, their inadequacy for practical use as pedagogical tools, their lack of pedagogical process, and the need for theoretical and practical justification of the effectiveness of such didactic means.

The research used the following scientific methods: the analysis of scientific and methodological literature on the subject of the study, which made it possible to determine the methodological grounds for developing didactic means; a survey of students, which necessitated the improvement of teaching materials, their content and focus; pedagogical observation; statistical methods for processing experimental data.

RESULTS

The research was carried out on the basis of the Naberezhnye Chelny Institute of Kazan (Volga region) Federal University.

Initially, we conducted a written survey of students entering the university to assess the basic level of competence in the field of physical culture, including their interests and motivations for motor activity. The questions and tasks were formulated taking into account the requirements of the educational standard to the level of preparedness in the given subject area within the framework of school education. The testing involved 149 first-year students of three departments. The analysis of its results as well as pedagogical observations made it possible to establish the following.

With regard to the rules of safe behavior in physical education classes and in the prevention of injuries students are well informed: apparently, teachers in schools paid much attention to these questions. Unfortunately, this was not noted in the part of theoretical knowledge (the questions of the questionnaire concerned the means, the basic regularities of physical education, the physiological effects of exercises, the characteristics of physical load, etc.). No one showed a high level of competence (according to the scale developed by us); above average – 6.9% of respondents; the average level is 17.1%; below average – 22.8%; low and mediocre – 40.2%; a complete lack of system knowledge was found in 13%. 36% of respondents could not even identify their anthropometric indicators (height, weight, chest circumference), and functional (pulse, blood pressure, etc.) – 74%.

Methodical literacy leaves much to be desired. Only 7 people are familiar with the methods of assessing physical performance and health. The majority of respondents (63%) are superficially familiar with the methods of muscle relaxation and the rules of carrying out and the techniques of massage. 28% of the students could not name the exercises with which the flexibility, strength of the person and coordination of movements are assessed, although they participated in general physical fitness competitions during the schooling period.

In the opinion of 71% of students, they are able to create for themselves a program of one exercise or self-study program for a week, but 72% of respondents could not identify exercises for correcting posture, and 23% – to compose a set of elementary hygienic gymnastics [5].

A meaningful attitude to the development of the values of physical culture is formed under the influence of subjective factors. In this part of the test it was revealed that students are motivated to be engaged in activities with a desire to improve physical fitness (29.2% of respondents), the opportunity to correct the figure (53.6%), remove mental stress and increase efficiency (12.4%).

As the most significant factor hampering motor activity, most students (54.6%) noted the lack of free time, and the stimulating factor was named: improving the quality of training sessions (for 28.8% of respondents), their equipping with modern facilities and didactic resources (according to 49.4% of the students); for 40.3% of the interviewed, an equally important condition for increasing interest is the opportunity to be engaged in a selected type of physical activity.

The theoretical analysis and generalization of scientific and methodological literature carried out within the framework of this study made it possible to single out methodological grounds for the development of didactic means that contribute to the formation of the physical culture competence of students.

Some of them formed the grounds that determine the requirements for the design of these tools and their use. Didactic means on these methodological grounds should include the substantive and process-technological parts [6-15].

The substantive one provides for the formation of three components of physical culture competence:

- I. Value-semantic component, which reflects a conscious and motivated attitude of students to motor activity and the use of means and methods of physical education. It is this component that is systemically important and determines the effectiveness of the development of competence in general.
- II. Cognitive component reflecting the level of knowledge of theoretical, methodical and practical knowledge in the field of organization of physical exercises. This component provides an indicative framework for action.
- III. Integral-activity component characterizing ability to use the generated system of knowledge in activity. Specificity of this component in physical culture and sports activity is manifested in the level of development of physical qualities, possession of motor skills, the ability to organize and perform a training process.

The second component is that the procedural and technological part of the didactic means should disclose all the technology of the phased implementation of the educational process, oriented to the formation of physical fitness, beginning with the formulation of personally important goals, and it should contain: the list and direction of the diagnostic procedures and tests; thematic units and methodological recommendations for studying specific topics; road map for the entire period of study; task systems and algorithms for their implementation; ways to manage students' cognitive activities and feedback from the teacher; references to available literature and open electronic resources with specific guidance on their use; presentation material, made in the form of slides and including motivational elements; control and measuring tools (questions for self-preparation, practical tasks, tests on topics, specifications of physical and technical preparedness, questions to offset), providing evaluation of learning outcomes as well as other components.

It means that all pedagogical technology should be equipped with materialized carriers, each of which is intended to help solve a specific educational task – the formation of motivation, knowledge, physical qualities, skills and abilities, and these didactic tools should be sufficiently realizable in real practice.

For some of our university students the power training for the implementation of the standards of the All-Russia Physical Culture Complex "Ready for Labour and Defence" is built on the basis of the implementation of newly developed didactic facilities. They provide a variety of forms of employment – lectures, seminars, methodological and practical training and training sessions. Independent activity of students is also accompanied by auxiliary materials intended for individual use in accordance with personal tasks.

For this purpose, in addition to the generally accepted didactic materials (curricula, programs, course notes, systems for assessing the results of mastering the program material on physical culture, which are posted on the university website), the teachers developed and effectively used several electronic educational courses, video materials, including motivational orientation, manuals, a model of a workbook with a training program in the style of the diary of power training, complexes of used power exercises and methodical methods and recommendations to them, electronic workbooks with fixation dynamics motivation level for classes.

Approbation of didactic resources in the preparation of students for the implementation of power standards is due to the results of a preliminary assessment of their level of physical preparedness, which showed that of all mandatory tests it is the power tests that students perform least successfully. This is typical both for the young men in the exercise "pulling on a high crossbar", and for girls – in the exercise "bending and unbending the arms in an upright position". Approximately 15% of the female students and 50% of the male students fit in the standard [16]. The implementation of the new technology contributed to an increase in this figure within a year by 3 times (in the experimental group of students).

Discussion. The orientation of modern educational standards to improve vocational training, the indicator of quality of which today is not the accumulated volume of theoretical knowledge, but the ability of students to solve practical problems of a different nature with the use of existing knowledge (i.e. physical culture competence), actualizes the need to change approaches to information and methodological support of educational process. Didactic means of the new generation should contribute to the system-activity education, which ensures the students' mastering and design activity – the activities for the independent design of means, methods, loads and other characteristics of their own motor activity. An important factor in the effectiveness and stimulus of such activity is the sensible and interested attitude of students towards the development of values and the underlying regularities of physical culture.

CONCLUSION

Based on the pedagogical observations and the results of experimental activities in the power training of students, it can be concluded that through the practical use of didactic means, taking into account the need for a purposeful development of the motivational and value orientations of the students, the process of the formation of physical culture competence planned and embodied in the descriptions is realized

much more effectively, which is confirmed by the dynamics of physical fitness and creative activity of students.

The means for the formation of the value-semantic component of physical culture competence should take into account the following motivations of students: improving the results of power training in the process of implementing personally oriented training programs, physical development in the process of training (including correction of physique), and the results of competitive activities.

CONFLICT OF INTEREST

There is no conflict of interest.

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