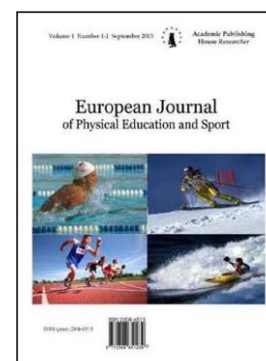


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Processing Determinants of Formation of Pedagogical Technology of Test Control in the Physical Education of Students with Chronic Health Conditions

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Abstract

The implementation of recreational functions requires an effective control system of physical training of students with chronic health conditions. The paper discusses the problems of test control in the physical education of students with chronic health conditions. Is a relevance of the research in this area to the steady increase of the following students. The pedagogical technology is a basis for the construction of the educational process of physical education, its content, form and means aimed at the implementation of its objectives and ensure effective progress of the process at the university. Purpose – the procedural determinants of formation of pedagogical technologies of test control concept in physical training of students with chronic health conditions to identify. Based on the theoretical analysis and compilation of scientific-methodical and special literature with results of previous studies of formation of pedagogical technology of its implementation the identified and systematized procedural determinants. Among identified: the methodological questions, the definition of the indispensable components. requirements of the principles of designing educational technologies; definition of teaching methods of implementing these principles, the pedagogical conditions that ensure the realization of the excellent content of technology in practice. That their use will systemic nature of this process it has been established. The effectiveness of the practical implementation of the directives of the system that ensure the achievement of the goal of the test monitoring of students with disabilities in health, for the effective implementation of the objectives of physical education this will ensure. In incarnation revealed procedural determinants of formation of pedagogical technologies of test control in physical education of students with chronic health conditions do carry out this process specifically to provide high probability of achieving the end result.

Keywords: student, physical education, chronic health conditions, educational technology, procedural determinants.

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1. Introduction

Considering the annual increase in the number of students with chronic health conditions for physical education classes (Blavt, 2016; Koryahin et al., 2019), the state of modern physical education at universities is now a very topical issue. In the context of these issues, the issue of the effectiveness of physical education of students with health disorders is of particular importance (Ayers, 2004; Overton, 2016).

The analysis of the current progress of events in this direction, convincingly prove the importance and point out the necessity and urgency of the work aimed at ensuring a high level of efficiency of physical education of students with chronic health conditions in universities, in accordance with modern educational standards of higher education.

2. Reviews of related literature

The appeal to the theoretical evidence shows that the implementation of the health function of physical education of students with chronic health conditions requires an effective control system (Geoffrey, at al., 2012; Overton, et al., 2016). Leading industry experts (Baghurst et al., 2004; Koryahin et al., 2019) focus on the peculiarities of controlling students with health disabilities. According to the analysis of the available scientific and methodological literature, there are very few recommendations to date for the scientific substantiation and practical implementation of the test control of students with chronic health conditions, both in theoretical and practical perspective. Therefore, despite the accumulation of a considerable amount of theoretical and empirical material on control in physical education (Bassett, 2000; Dinucci et al., 1990; Macleod et al., 2009), its aspects of students with chronic health conditions remain unaddressed by scientists. To date, there is virtually no research on test monitoring of students with health disabilities: there is essentially no reference in the literature to specific scientific intelligence that would highlight perspectives on these issues.

Improved quality control of students with chronic health conditions in physical education, according to reputable scientists, is to make full use of technological potential, which implies qualitative changes in its process (Baghurst et al., 2015; Dinucci et al., 1990; Koryahin et al., 2019). Aspects of the formation of pedagogical technologies are now receiving increasing attention in scientific works (Alfrey et al., 2014; Ayers, 2004; Macleod et al., 2009; Overton et al., 2016). According to scientific intelligence, technology has a strictly defined system of directives that guarantee the achievement of the goal (Cohen et al., 2007). Thus, the introduction of technology provides a reduction in the share of impromptu professionals, aimed at achieving the intended result (Baghurst et al., 2015). The latter was a major factor in conducting research in a specific area.

3. Methods and organization of the research

General Background of Research – is to identify the procedural determinants of the formation of pedagogical technology for the implementation of the concept of test control in the physical education of students with chronic health conditions.

Research methods. The following methods of the theoretical level were used: analysis, synthesis, comparison, abstraction, induction, generalization and systematization for obtaining theoretical and empirical materials, results of ascertaining and forming experiments (Blavt, 2016) and provisions of designing pedagogical technologies (Cohen, et al., 2007).

4. Results

Pedagogical technology for the implementation of test control is an integrated process, with clearly defined ideas and methods of its organization (Blavt, 2016; Cohen et al., 2007). The process of its formation is determined by the action of determinants. Based on these, test control in the physical education of students with chronic health conditions is organized to facilitate the productive realization of its potential.

First of all, there is no clear interpretation of the definition of "pedagogical technology" in pedagogical theory and practice today. Therefore, this concept is a meaningful generalization of the essence of definitions of different sources. Pedagogical technology of test control on the one hand forms the most rational ways of its implementation, on the other – acts as a system of methods, principles and methods used in the monitoring process. However, it is unambiguous that it is the basis for building a model of educational process of physical education in an educational

institution, its content, forms and means, which are reflected in pedagogical methods of physical education aimed at fulfilling its tasks and which provide the most efficient course of this process (Koryahin et al., 2019).

It is believed that any pedagogical technology is a synthesis of the achievements of pedagogical science and practice, the combination of traditional elements and innovative innovations. The latter may also cover specialized technologies used in other fields of science and practice. In particular, new information technologies, educational, valeological, etc. In general, the monitoring process becomes a technology of test control only when it has been predicted, the final results and ways of their achievement are determined, the conditions for implementation and control are given, and the result obtained is as much as possible expected to be diagnosed. The formation of pedagogical technology for the implementation of test control in the physical education of students with chronic health conditions provides an indicative algorithm that determines the necessary steps in its development and is limited to a number of determinants.

The methodological basis for the formation of test control technology is scientific provisions based on the strongest positions of test theory. Therefore, the following methodological queries should be satisfied in this process:

- conceptualism: the concept of test control is at the heart of pedagogical technology;
- systematic: the presence in the pedagogical technology of all features of the system: the logic of the process, the interconnection of all its parts, integrity;
- controllability, which implies the possibility of variation by means and methods of technology to correct the results;
- effectiveness: pedagogical test-control technology must guarantee the achievement of the intended result of the concept;
- reproducibility, which implies the possibility of applying pedagogical technology in other educational institutions.

The next determinants of the formation of pedagogical technology for the implementation of test control in the physical education of students with chronic health conditions are the determination of its indispensable components. Among the latter: the goal, tasks, architectonics, principles, pedagogical conditions for its practical implementation and the end result. In the structure of architectonics distinguish the following main components:

- conceptual, which reflects the main principles of pedagogical technology;
- meaningful, reflecting the purpose, content of control, methods, forms and means of its implementation;
- procedural, which contain provisions that ensure reproduction of the designed pedagogical technology.

The formation of pedagogical technology for the implementation of test control in the physical education of students with chronic health conditions provides for the mandatory fulfillment of the requirements of the design principles. As the main guiding norms of action, they ensure its effective implementation: the principle of expediency of goal-setting, the principle of integrity of technology of the test process, the principle of reproducibility of technology in a specific pedagogical environment to achieve the goals, the presence of the content of the test process with the initial parameters of students' psychophysical state and the principle of establishing the process of orientation as a set of diagnostic expediency and objectivity of control over its results; the principle adapt to the testing process features a contingent of students with chronic health conditions. The formulated principles of design are fundamental provisions in the development of a model of pedagogical technology for the implementation of test control in physical education of students with chronic health conditions.

To form a pedagogical technology for implementing the content of the concept of test control in the physical education of students with chronic health conditions to ensure the implementation of the provisions of certain principles, methodical methods of their implementation are needed. Thus, the requirements of the principle of feasibility of goal setting give test control a certain content and order of action that should contribute to the achievement of goals. This is reflected in the purpose and objectives as a tool to ensure the implementation of the concept. The appropriate test control objectives should be realistic, specific, and achievable for students, taking into account all the limiting factors of their health.

The principle of the integrity of the technology of the test process involves the unity of its structural and semantic parts. The realization of the requirements of this principle means that during the development of the project of the system of test control of students with chronic health conditions it is necessary to achieve interaction of all its elements. These were ensured by the unity and interconnection of all components of the testing process (organizational, methodological, substantive, evaluative), which is generally a didactic system.

The principle of reproducibility of technology in a specific pedagogical environment in order to achieve the set goals is interpreted as the basis for the invariance of the technological algorithm for the implementation of test control when working with students with chronic health conditions in any educational institution.

The principle of the content of the test process with the initial parameters of the students' psychophysical state and the principle of establishing the orientation of the test process as a set of diagnostic expediency and objectivity of control over its results were implemented forming the content of the forms of test control and parameters that characterize the level of psychophysical state of students with chronic health conditions.

The fulfillment of the requirements of the technology tool principle was reflected in the detailed planning of the content of the test control for each nosological group of students with chronic health conditions. This principle also involves the use of innovative technical controls to ensure the accuracy of monitoring information.

The principle of adaptation of the testing process to the characteristics of the students with chronic health conditions contingent was implemented in the formation of the content of the test control system, which involved the development of a complex of test tests and their evaluation systems for individual nosological groups.

Therefore, the formation of pedagogical technology for the implementation of test control in the physical education of students with chronic health conditions, which is termed by methodical methods of implementation of the provisions of the concept. However, the amount of methodological techniques outlined is not subject to strict accounting and regulation, but they largely determine the effectiveness of controls:

- reasonable techniques for determining the strategic goal of technology and its objectives to ensure the achievement of the goal;
- organizational techniques, determine the procedure and sequence of operations of test monitoring;
- techniques that determine the educational and methodological support of the process of test monitoring.

The main features of the formation of pedagogical technology, which determine the effectiveness of its implementation in the practical activity of physical education of students with chronic health conditions, are pedagogical protepsies. Pedagogical protepsy in the context of our study is defined as a system that provides a complete reproductive process of test monitoring, the effectiveness of the organization of control of physical education of students with chronic health conditions in general and its optimal functioning. In fact, they reflect the coherence of the components of pedagogical technology, hierarchical links between its content blocks (Ayers, 2004). Selected pedagogical protepsies are defined as optimal:

- procedural, which are aimed at the optimal choice of means of test control;
- corrective ones, which provide for the implementation of the principles of differentiated approach, accessibility and individualization in the process of test control and evaluation of its results;
- meaningful, for realization of conceptual idea of integrated approach of estimation of investigated parameters in the process of test control;
- variants, which form an invariant content component of the test control system, and implementation of the principles of optimality and optimization;
- a professional, which requires qualified personnel to implement the conceptual idea of improving the quality of staffing;
- orderly, for realization of the basic idea of the concept of improvement of material and technical support of physical education in educational institutions and the principle of dynamism.

Defined pedagogical propsy allow to ensure continuity and consistency of the concept of test control, and therefore bring it to a new level.

5. Discussion

We fully support the scientific approaches of specialists engaged in finding the ways of optimization of physical education results (Alfrey et al., 2014; Ayers, 2004; Baghurst et al., 2015; Dalen et al., 2017; Di Tore et al., 2016; Keating et al., 2009; Macleod et al., 2009). In this context, we are joining the idea that the efficiency of this process can be greatly enhanced by adjusting the control system (Blavt, 2016; Geoffrey et al., 2012; Koryahin et al., 2019).

We agree to our research that an objective estimation of a degree of physical development and of physical fitness has special importance during conducting physical education classes with students of the university's (Alfrey et al., 2014; Baghurst et al., 2004; Bassett, 2000; Cohen et al., 2007; Silverman et al., 2006). Educational assessment of test measurement results of students with chronic health conditions is a leader in ensuring the effectiveness of the physical education (Mercier et al., 2013; Overton et al., 2016).

The obtained results supplement and deepen the information on the control of the physical education students with chronic health conditions university (Blavt, 2016; Koryahin et al., 2019; Macleod et al., 2009; Overton et al., 2016).

6. Conclusion

Effective implementation of the content of test control in the physical education of students with chronic health conditions is provided by the appropriate pedagogical technology, which is presented as a design, strategy, algorithm of the specialist's actions. The formation of pedagogical technology for the implementation of test control in the physical education of students with chronic health conditions is limited by the action of a number of procedural determinants. Among the identified: methodological inquiries, determination of indispensable components, meeting the requirements of the principles of pedagogical technology design; outlined methodical methods of implementation of these principles, pedagogical protespies, which will ensure excellent implementation of the content of technology in practice. The implementation of the identified procedural determinants of the formation of pedagogical technology for the implementation of test control in the physical education of students with chronic health conditions make it possible to carry out this process purposefully to ensure a high probability of achieving the end result.

Further researches are directed on formation of pedagogical technology of realization of the concept of test control in physical education of students with chronic health conditions.

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