

Adaptive physical education and health protection analysis methodology

Elena Popova^{1*}, Anastasia Popova², Vladimir Bazelyuk¹, Aleksandr Demin¹

¹South Ural State University, 454080, Челябинск, Россия

²Ural State University of Physical Culture, 454091, Челябинск, Россия

Abstract. From the standpoint of methodological analysis, an algorithmic representation of educational management effectiveness in the field of adaptive physical education and health protection is presented in the article. Special attention is paid to the innovative aspect of educational activity in the University of physical culture. It determines students' psychophysiological attitude to personal life safety in self-knowledge coordinates.

1 Introduction

The research problem relevance is associated with the creation of such conditions for adaptive and health-improving physical education. They would contribute to the timely and comprehensive development of all aspects of students' studying at the University of physical culture personality [4]. This is primarily due to the fact that the Law of the Russian Federation On Education assumes a person's universal values of life and health priority (including an athlete studying at a University of physical culture).

Updating our research topic, we also note that the problem we are considering arose together with a reasonable person birth [8]. The need for health preservation (its preservation, strengthening and restoration) is the destiny of any person from the standpoint of safe behavior and environmental safety [7]. Innovations in this regard, of course, play an important role, especially in the framework of the rehabilitation process carried out at the University of physical culture, aimed at the student's knowledge of the essence of their own «I» and their place in future sports and adaptive educational activities.

2 Materials and methods

Within the framework of this section of the article, first of all, we will point out the main concepts of educational pedagogy used by us in the course of research. It is understood by the authors as: the University of physical culture students' system of value orientations formation; the management of personal development process of the related direction.

Key principles of education are as follows: educational influences unity, personal approach, social orientation, humanistic psychology of communication.

Content aspect is: readiness to be a subject of one's own life (from the point of view of personal culture of life safety forming).

Educational process regularities are: the student's activity in relation to the environment; education and upbringing unity, as well as the teacher's (coach's) declared social attitudes and real actions.

Methods of education are: stimulating and psychophysiological; activities organization and consciousness formation. It is also important to diagnose the level of education based on specific criteria (indicators of various personal qualities formation level in the field of health preservation, health strengthening and restoration).

We also point to the goal of «pedagogy of education», and namely: to provide conditions for individuality manifestation, to promote the individual's mental, moral, emotional and physical development, to reveal its creative possibilities of innovative orientation.

3 Results and discussion

The innovative aspect of this research work is defined by the following algorithm: the basic components of adaptive physical education and health-protection personal education-modeling new paradigm - a conceptual representation of the phenomenon under study – the system of adaptive physical education of children with Down syndrome.

3.1. Basic components of the new paradigm of personal education

* Corresponding author: 73519045153@yandex.ru

Currently, most innovations in this regard were linked to that of education as a process, based on the help in young person's personal development from the standpoint of a deeper understanding (discovery) of self (personal «I»). In other words, it is a process of self-actualization, learning process with the use of role games and situations' analysis in educational and recreational facilities. At the same time, the evaluation of the results of these — targeted - actions on the part of the teacher of this institution.

The educational effectiveness should be organically linked with the national doctrine of education, the education of patriots of Russia, citizens of a legal, democratic state, capable of socialization in a civil society, respecting the individual's rights and freedoms, having high morals and showing national and religious tolerance, respect for other peoples' languages, traditions and culture [3].

To ensure the development of the individual and pedagogical goals implementation, a system of education is created that forms the student's worldview (morality, law-abiding, patriotism, desire for a healthy lifestyle) and motivates him to study and work. At the same time, education is the process and result of assimilation and active reproduction of social experience by a young person.

The work of L. E. Pankratova [6] is devoted to the new paradigm of education, according to it education is not just a process of transferring social experience. This approach to this complex socio-economic phenomenon is «impersonal (hidden individual and personal meanings motivating a person to work), normative, and claims to be universal. Conversely, the cultural context of individual activity becomes the new paradigm main core». And we can not disagree with this, because, indeed, the teacher should be engaged in education not in general, but an individual in a specific situation. And the importance of this activity type is increasing as never before. The requirements for the subject of education in the framework of educational and health institutions are also increasing.

In accordance with the new educational paradigm for our country, presented in the form of creating conditions for a free person's self-development, there are three components of education.

This means (in relation to the University of physical culture):

- moral person education;
- creative personality education;
- practical personality education. It is this aspect of it that is most related to the topic of our research. It includes hard work, entrepreneurship, independence in decision-making, professional and social activity, and a healthy lifestyle. It is this basic component of the named paradigm that determines the essence of the further content of this work.

3.2. Adaptive physical education and health protection modeling

The most attractive in this regard for the majority of Russian teachers is the humanistic model of education (with the ideal of an independent, critically thinking, creative and at the same time highly moral, adapted personality) [2]. We associate this type of model with a healthy lifestyle (its development, strengthening and recovery). The modeling process has the following form (Figure 1).

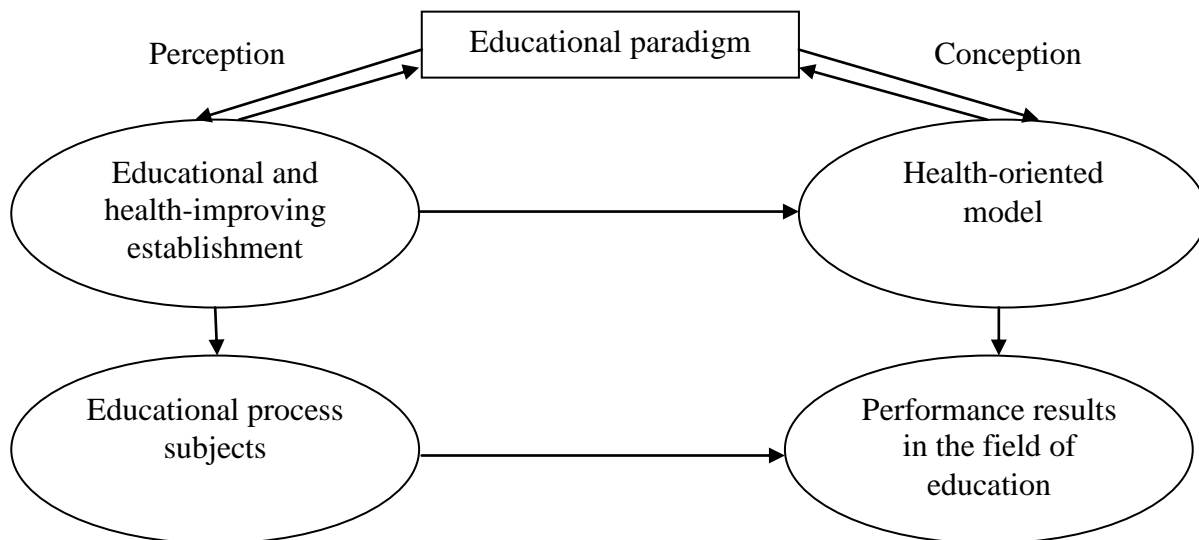


Fig. 1. Health protection modeling (on the example of an educational institution - a University of physical culture, a sports and adaptive organization)

Under specially organized conditions and actions influence, the expected qualitative changes in a young person are achieved – this is the goal of education. It ensures that the requirements for graduates' of an educational and health-improving institution personal and business qualities are met. And here special attention should be paid to a certain concept of the educational process.

3.3. Conceptual representation of the phenomenon under study

The innovative aspect of our work is determined by the psychophysiological concept of personal security in the coordinates of self-knowledge.

It is algorithmically represented as the following blocks: 1) research methodology of personal security in self-knowledge coordinates; 2) stimulation of needs in psycho-physiological aspects self-knowledge of safe behavior; 3) a functional system of cognitive activity in the sphere of safe behavior; 4) pedagogical bases of self-knowledge in the field of the individual student's safe behavior; 5) unconventional ways of safe behavior and health protection psycho-physiological aspects self-knowledge. These are as follows: outsourcing, self-improvement, and yoga (the way of spirit and body unity).

As a generalization, we point out the importance of knowledge about the personal security psychophysiological mechanisms (its behavior in various situations, mentioned above). These mechanisms are divided into objective and subjective, external and internal, as well as primary and secondary ones. It is also important to note that the higher the level of this knowledge (taking into account their certainty), the higher psychophysiological security level is.

Here is Table 1, titled «Athlete's studying at a University of physical culture personal psychophysiology research». It highlights a number of points that reveal the content of the issue we are investigating. By their essence, we can judge the direction of our research in the future.

Table 1. Athlete's studying at a University of physical culture personal psychophysiology research

#	The main focus of the research
1.	Introduction into psychophysiology
2.	Psychophysiology as a science
3.	Psychophysiology subject, objectives and structure
4.	Psychophysiological personal structure
5.	Psychophysiology of activities
6.	Psychophysiology of cognitive processes
7.	Psychophysiology of thinking
8.	Neurophysiology of cognitive functions in sport
9.	Neurological bases of motor skills
10.	Professional athlete: genes and attitudes
11.	Leadership from psychophysiological positions
12.	Athlete's brain functional asymmetry
13.	Stress — situations in high performance sport
14.	Homeostasis and adaptation to environmental conditions in sport
15.	Psychophysiology of personal safety
16.	Psychophysiological wellnss self-understanding
17.	Psychophysiology of self-understanding
18.	Biosocial premises of professional sport
19.	Ways of safe behaviour psychophysiological aspects self — understanding
20.	Health within psychophysiological coordinates

3.4. Adaptive physical education system for children with Down syndrome

Its schematic representation has the following form (Fig. 2).

As the research results discussion, we will point out the essence of pedagogical support in the issue under study. We agree with those authors, pointing out the importance of re-evaluating all components of the pedagogical process, placing in its center a young person, developing within the framework of a health-improving educational institution. At the same time, the measure of this development acts as a measure of the teacher's work and the entire education system as a whole quality.

Pedagogical follow-up is a more meaningful term than «pedagogical support». Here, not only the student is a subject of development, but also his parents and teachers. Thus, support is a joint action of people in relation to each other in their social environment, carried out by them in time, in space and in accordance with their inherent roles (system, process, type of activity).

Pedagogical support implies the ability of the teacher to follow the student, accompanying him in his individual route and progress in teaching, providing support for the positive internal potential of personal development and the continuous nature of system support. Activities aimed at preventing difficulties in the process of adaptive physical education are expected.

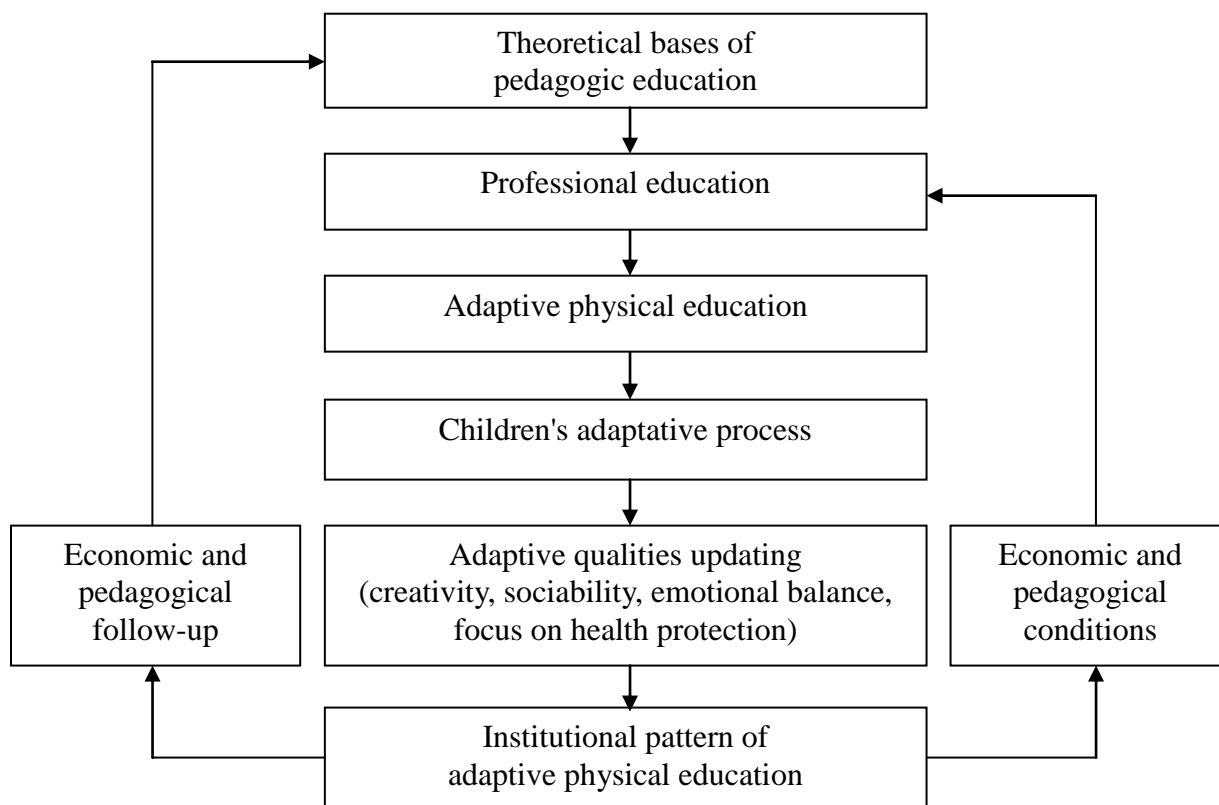


Fig. 2. Schematic representation of children's adaptive physical education system by means of health-improving and educational institutions

4 Conclusions

4.1. We recommend the following methodological support for the system of adaptive physical education: process-meaningful; motivational-semantic; reflexive-evaluative and communicative-expressive. Goal setting in this case should be aimed at health preservation and restoration (within the framework of adaptive physical education).

4.2. The attempt to consider personal safety psychophysiological aspects of behavior in the coordinates of self-knowledge is a very urgent task, especially if we are speaking about those, studying at the University of physical culture. The personal «I» thus opens from different sides. Of particular importance is the active awareness of the role of socioculturation in the knowledge of an active athlete's, studying at a University of physical culture, educational environment safety.

4.3. The analysis methodology in the framework of the issue under study should be understood as the cognitive sphere of adaptive physical education and health protection knowledge essence. The system approach plays a crucial role in this process.

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