

MODEL TRAINING OF FUTURE SPECIALISTS IN HUMAN HEALTH TO STRENGTHEN THE USE OF HEALTH TECHNOLOGIES

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Annotation. *Purpose:* develop a model of scientific and methodological training of future specialists in human health to strengthen the use of health technologies. *Material:* processed more than 100 literary sources. *Results:* analyzed the methodological, organizational and educational and training aspects of the training of future specialists in human health. On the basis of scientific modeling, the basic structural components of the model of professional training of future specialists, are characterized by their nature and relationship. Theoretical basis to ensure a high level of training future specialist is an integral concept of professionalization based on the theoretical and methodological basis of its essence. *Conclusions:* it is proved that the effectiveness of training future specialist determined holistic concept of professionalization and relevant scientific and methodological support of the educational process.

Keywords: model, training, experts, health, man.

Introduction

The current process of Ukraine's accession to the European education and research area is associated with increased requirements for the training of future specialists. Global changes that have gradually accumulated, led to a reorientation of the educational direction and formation of a new paradigm of education outcome. A characteristic feature of the current trends in education is a focus on the development of creativity, independence, competitiveness, mobility, future professionals, including human health, on the effectiveness of training which largely depends on the quality of health services.

The training of future specialists in human health should be seen as an integrated system that reflects the objective trends in the development of higher education, vocational patterns of activity, place and role of the expert in her list of functions, for which he is prepared while studying at system of vocational education, the basic requirements for the content knowledge and skills necessary for successful performance of professional duties and further develop important professional and personal qualities. To optimize the training of future specialists in health, we set out to develop appropriate methodological model using the method of scientific modeling, which allows to identify the most significant structural components are based on an analysis of methodological, organizational and educational characteristics of the process of training future of health professionals to use health strengthening technologies.

The study was carried out according to research and development plan of Department of "Human health and physical rehabilitation" of Physical Education Institute of Sumy State Pedagogical University of A.S. Makarenko under the topic "Theoretical and methodological, organizational and methodological problems of health, physical rehabilitation and correctional pedagogy" (№ 0107U002826).

Purpose, tasks of the work, material and methods

Goal: to develop a scientific-methodological model of professional training of future human health specialists for the usage of health strengthening technologies.

Objective: to analyze methodological, organizational and the educational features of the training process of future health specialists; consider the method of scientific modeling in the context of our research; identify key structural components of the model of professional training of human health future specialists for the usage of health strengthening technologies, uncover their essential characteristics and relationships.

Methods of research: theoretical analysis and synthesis of scientific –methodical literature on the study.

Results of the research

As you know, design emerged due to the need of solving tasks that for some reason cannot be solved directly. Some researchers finds in modeling characteristic of theoretical thinking in solving cognitive tasks. In general, the scientific (including educational) literature presented a variety definition of "model" and "modeling" according to the tasks to be solved by any research. Here are some definitions, the meaning of which, in our view, essentially corresponds to our study.

Model - a specific object created to produce and / or store information in the form of a mental image, description by symbolic means (formulas, graphs, etc.) or tangible object that reflects the properties, characteristics and relationships of the object arbitrary nature of the original, which is essential to address the subject (person) of a task [20, p. 186].

M.M. Fitsula's scientific model defines as "semantic material presented and implemented as a system that adequately reflects the purpose of the study (e.g., simulating optimization of the training process, managing the educational process, etc.) arise as a mean of theoretical studies of pedagogical phenomena through an imaginary creation (design) life situations; helps to know the pattern of human behavior in different situations [24, p. 32].

However, any model is formalized structure that will work only if it has semantic content. In the context of our research model, we consider how the image circuits graph of any object, process or phenomenon that is used to simplify it and opens the possibility of transferring information from model to prototype.

The training model of future professionals from health to technology with the usage of health strengthening technologies displays basic conceptual positions and educational technology. The graphic representation of training model of future professionals of human health technology with the usage of health strengthening technologies presents in Figure 1.

Conceptual provisions constitute regulatory requirements for training, methodological approaches, general didactic and specific principles of human health future specialists training.

In developing the concept, we took into account the provisions laid down in a number of international and national documents such as the Charter of the WHO (1948) Declaration of "Health-21 : Policy Framework Health for All in the WHO European Region" (1998), National Strategy development of Education in Ukraine for 2012-2021, the European strategy "Health and development of children and adolescents" (2005), The Concept of the National Program "Health 2020: Ukrainian dimension" in 2012-2020 years (2011) and others that are crucial for the organization and operation of recreational areas in Ukraine for the long term, taking into account the country's development and international experience.

Methodological approaches include: competency, holistic, synergistic and activity.

Improving the quality of professional education is now one of the issues for the whole world educational community whose solution is associated with the modernization of the content of the pedagogical process and rethinking the purpose and outcome of education. On these grounds was formed *competence approach*, which is now considered in the context of the Bologna process. According to many scientists, educators, the implementation of this approach creates a new vision of the educational content, but also contributes to a reorientation of traditional cognitive tendencies of higher education, its methods and technologies [5; 11; 12].

While scientists debate about the nature and components of professional competence, this concept appears in the regulations that govern the field of higher education in Ukraine. Industry standards of higher education in Ukraine introduced a model of professional competence of the expert, entitled "The educational qualification characteristics" [8]. Thus, a competency approach to education in Ukraine is actually implemented at the state level.

Holistic approach to rights developed in the world of philosophy and medicine since antiquity. Characteristic for new thinking holism (greek "holos" - whole) is not based on detail and on a holistic understanding of the human body, in which everything is interconnected and interdependent. This knowledge in their modern interpretation broaden and deepen the scientific concept of world order conducive to its development complement conception of man as a microcosm, complete, extremely complex and multifaceted, self-organizing bio-energy information system. The whole is always greater than the sum of the parts and the specific characteristics [25; 26].

Health science, studying the processes occurring in the human body, harmonization, summarizes the philosophical perception of the phenomenon of man allows another look at the life and health and to realize that the human body is the most powerful incarnation of all philosophical laws. When the doctor finds the presence or absence of disease only within his competence, psychologist saves mental health and teacher of physical training sees path to health as Sport and Recreation course, occurs an ignore process of the holistic approach to the problem of human health [17].

The essence of the *synergistic approach* in teaching is to control without controlling, gently guide the students in a positive way of ensuring their self-education, self-education, self-development, and self-improvement. The nature of synergistic effect – is an effect, based on its own form and abilities, and therefore, the teacher does not impose its will on the student, and refusing to micromanagement, encourages independence, sees success, supports the initiative, awakens interest in opening themselves, the world, the constant search for their own way to develop their abilities [18].

Activity approach (G.A. Atanov, A.N. Leontiev, V.A. Kazakov and others) consider activity as the main source of identity formation factor and its development, as in the work of the student acquires experience which uses the internal structure of the individual, and therefore, provides professional activities of personal content. In general, the activity approach provides guidance on the development of creative potential, takes into account the age and individual characteristics of each student through the activity that promotes self-fulfillment and personal growth [3].

Professional training of specialists in health education is built according to the *principles*, among which we distinguish general didactic and specific, with appropriate professional guidance.

The process of training future professionals from health to technology for usage of health strengthening technologies becomes efficient only under the conditions of its implementation in the context of technological approach is not to remain only a theoretical construct, the model must include not only the concept and methodology development, and technology and its implementation. *Technology* of future health specialists training is a technology of education, the structure of which stand out: the target component (purpose and objectives); semantic, procedural and diagnostic components.

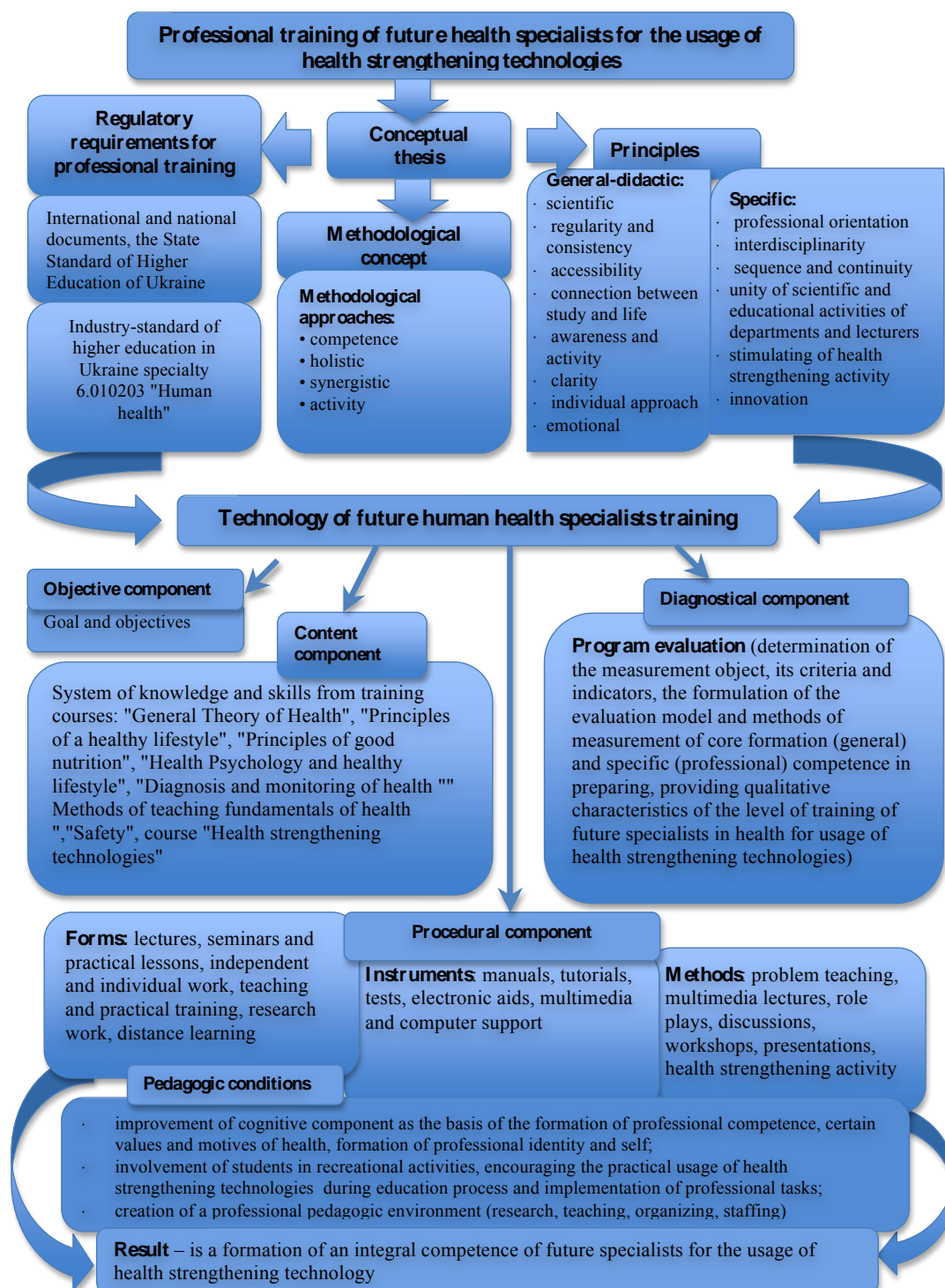


Figure 1. The training model of future specialists of human health for the usage of health strengthening technologies

The goal of training future specialists in human health is integral formation of their competence for usage of health strengthening technologies.

According to goal, we formulated the *tasks* of training of future professionals from health to technology for usage of health strengthening technologies:

- 1) the development of future professionals of health motivational value attitude to activities aimed at restoring human health, its recovery and improvement of overall quality of life;
- 2) mastery of an integrated system of theoretical knowledge, special skills, and practical skills needed to use health strengthening technologies;
- 3) formation of professionally important personal qualities necessary for the application of health strengthening technology in the conditions of social life rapid changes, innovation in the conservation and promotion of health of the human body, retraining and adaptation to new socio-economic conditions of the labor market.

The content component of professional training health industry presented content elements (cycles of disciplines, subjects, themes, software issues, system knowledge and skills, etc.) that are put to ensure the formation of readiness to perform professional duties and necessary qualifications.

For health education, despite its close relationship with the health and physical education, is the problem of determining the actual range of knowledge needed to improve the most skilled, given the specifics of his profession. As the science of health is a relatively young industry, whose development has just begun, during its formation could not avoid some controversy during consideration of specific issues, solution of which is due to the complexity of the subject of the study - human health, because the human body as bio-systems most reflects philosophical laws of existence and therefore demands the dialectical approach. One-tailed understanding of the purpose and objectives of the training of health industry experts raises certain difficulties associated with the selection, adaptation and purposeful practical use of knowledge about health [1; 2; 6; 7; 9; 13; 19; 22].

In the field of educational, scientific and methodological literature on pedagogy health today is a very common term of "health saving technology". To some extent, it has become "fashionable", but analysis of the sources reveals broad and ambiguous range of approaches to its understanding. The concept of "health saving technology" used as a synonym to valeological education, promotion of healthy lifestyles, health culture. It is understood as individual medical and toiletries as sports and wellness technology. As an educational phenomenon, health saving technologies in the works of researchers and educators often is independent of educational technology, but appears as quality characteristic of educational technology, an important part of the educational process, which involves the creation of a safe and comfortable stay in pupils in the school, the implementation of such a relationship between participants of educational process as providing the solution of educational problems, take into account the health status of students with a view to maintaining and, if possible, strengthen [4; 10; 14].

Indeed, the current situation will be a significant achievement if the health of children and adolescents in the study will not be degraded and will (continue) at least at the level with which they come to school. Today it is one of the most important tasks of education. Therefore, in terms of teaching practice in respect of the general process and subject teachers, the term of "health saving" is justified and legitimate. But this is not the case of professional's recreational areas, the main purpose of professional activity which is to improve health, increase its level, increase functional capacity and reserves the protective forces, and strengthen the body.

Health is not permanent and unchanging, it is a dynamic state of human life, which is characterized by the body's ability to regulate and heal itself. Before any chronic disease was seen as a stable entity, able to change the state of the body is only one way - the downside, but the practice has denied such an approach. Much evidence suggests that the disease can reverse or at least stop. Current opinion suggests that pathology should be seen as a process, the direction of which is possible both one and the other way. So, speaking of experts of health, it should be applied the term to capture this dynamic changes in the health of the human body, and, moreover, it is a positive trend. It is therefore most appropriate in this case, in our opinion, is the term "health strengthening technologies" [16].

Analysis of currently existing knowledge about the health of individual components and content targeting health sciences complex allowed among the most important factors to determine that the cause disorder functional state of an ordinary individual, that look just the knowledge of which is determined by the need to explore the features of the professional activity of experts recreational field [15].

Previously, the content of education was associated with verbal learning material. Today it is not only the level and extent of acquired theoretical knowledge but also the activities of students, their emotional attitude to the material being studied. Particular importance is attached to the last position when it comes to improving education specialist areas that cannot grasp without practical creative individual application of theoretical knowledge as to their future careers and in their lives. Therefore, interpretation of the meaning of education given in the dictionary of professional education, most appropriately reflects the nature of most health-education: «The content of education - is a system of scientific knowledge about nature, society, human thinking, practical skills and ways of life, philosophical, moral, aesthetic ideas and relevant behavior that should capture the student, the student in the learning process"[23, p. 117].

Procedural component was developed based on the presence of a close relationship of semantic and procedural aspects of the educational process and foresaw the use of certain features of traditional methods for their use in the implementation of learning technologies [21].

The *diagnostic component* designed to determine the degree of task performance and the goal of training future professionals of health. We have developed a procedure for measuring the level of formation of individual competencies involves the use of a wide range of diagnostic, monitoring and evaluation.

Conclusions

1. The transformation of public attitudes about education and human development, and changing educational paradigms influence the content and organization of higher education.

2. Socio-pedagogical modeling brings out the fact that reality is hidden because of veil of all variety and multidimensionality phenomena opens up new properties and possibilities of improving the process of training future specialists.

3. Preparation of future specialists in health is complex, purposeful, dynamic system, which is the basis set of theoretical and methodological approaches to ensure the training of competent professionals, ready to carry out recreational activities. The theoretical basis of ensuring a high level of professional training of specialist health is a holistic concept of professionalization based on theoretical and practical bases its essence.

Since the proposed model is a theoretical construct, the *prospect for further research* is to improve it by testing and experimental verification.

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Cite this article as: Mikheenko O.I., Kotelevsky V.I. Model training of future specialists in human health to strengthen the use of health technologies. *Pedagogics, psychology, medical-biological problems of physical training and sports*, 2014, vol.9, pp. 41-46. doi:10.5281/zenodo.10127

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Received: 10.03.2014
Published: 05.04.2014