

FEATURES OF MODELING THE PROCESS OF PROFESSIONAL TRAINING OF FUTURE SPECIALISTS IN PHYSICAL THERAPY

ОСОБЛИВОСТІ МОДЕЛЮВАННЯ ПРОЦЕСУ ПРОФЕСІЙНОЇ ПІДГОТОВКИ МАЙБУТНІХ ФАХІВЦІВ З ФІЗИЧНОЇ ТЕРАПІЇ

The purpose of the article is to study the features of modeling the professional training of physical therapists, an integrative basis for teaching and identifying the didactic conditions for its effective functioning. A physical therapist must be prepared theoretically and practically for the technologization of his professional activity, know and actively apply modern technologies of medicine, pedagogy and psychology in his work. The development of technologization in the vocational education system is carried out through the acquisition of technological competence by students. The implementation of the requirements for the training of future physical therapy specialists depends on the level of technological competence. Changes and continuity of the process should take place in the training system of physical therapists, ensuring the formation of their technological competence both throughout their professional activities and in all areas of professional training in the field of health protection. The developed model of educational technology for training future specialists in physical therapy includes target, meaningful, motivational, procedural, managerial, personality-activity, informational, material-technical, and effective components. The general goal is to prepare future physical therapy specialists for the use of educational technologies in their professional activities. Modeling technology is a promising area of professional pedagogy and determines the nature of the content and process of professional training; modeling of educational technology is carried out on the basis of the principles of consistency, goal-setting, integration and differentiation, manufacturability, problematization, informatization; for the effective functioning of the educational technology model, it is necessary: determination of the orientation towards professional activity, the introduction of new organizational forms, methods, means into the training process of future specialists in physical therapy, the development of scientific and methodological support; the interconnection of information and educational technologies that provide prognostic and educational information that has a significant impact on the level of professional training of students.

Key words: vocational training, physical therapy, vocational education, modeling of vocational training process, development of vocational training model.

Метою статті є вивчення особливостей моделювання професійної підготовки фізич-

них терапевтів, інтегративної основи навчання та виявлення дидактичних умов її ефективного функціонування. Фізичний терапевт повинен бути підготовлений теоретично й практично для технологізації своєї професійної діяльності, знати й активно застосовувати в роботі сучасні технології медицини, педагогіки й психології. Розвиток технологізації в системі професійної освіти здійснюється через опанування студентами технологічної компетентності. Від рівня технологічної компетентності залежить реалізація вимог до підготовки майбутніх фахівців із фізичної терапії. Зміни й безперервність процесу мають відбуватися в системі підготовки фізичних терапевтів і забезпечувати формування їхньої технологічної компетентності як протягом усієї професійної діяльності, так і за всіма напрямками професійної підготовки у сфері охорони здоров'я. Розроблена модель освітньої технології підготовки майбутніх фахівців із фізичної терапії містить цільовий, змістовий, мотиваційний, процесуальний, управлінський, особистісно-діяльнісний, інформаційний, матеріально-технічний, результативний компоненти. Загальна мета – підготовка майбутніх спеціалістів із фізичної терапії до використання освітніх технологій у професійній діяльності. Моделювання освітньої технології є перспективним напрямом професійної педагогіки й визначає характер змісту й процесу професійної підготовки. Воно здійснюється на основі принципів системності, цілепокладання, інтеграції та диференціації, технологічності, проблемності, інформатизації. Для ефективного функціонування моделі освітньої технології необхідно: визначити спрямованість на професійну діяльність, впровадити в процес підготовки майбутніх спеціалістів із фізичної терапії нові організаційні форми, методи, засоби; розробити науково-методичне забезпечення; розглянути взаємозв'язок інформаційних та освітніх технологій, які забезпечують отримання прогностичної та навчальної інформації, що має значний вплив на рівень професійної підготовки студентів.

Ключові слова: професійна підготовка, фізична терапія, професійна освіта, моделювання процесу професійної підготовки, розробка моделі професійної підготовки.

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Problem statement in general form and its relation to important scientific or practical tasks. Improving the quality of education allows us to provide the country's economy with highly competent and competitive personnel. One of the promising directions in the development of vocational education for specialists in physical therapy is technologization, which implies the use of educational technologies for the implementation of ideas of integration, humanization, individualization,

intensification, continuity and multi-level. In this regard, the problem of improving the content and process of training wake-up specialists in physical therapy is urgent [8; 9].

An analysis of recent research and publications. A physical therapist must be prepared theoretically and practically for the technologization of his professional activity, know and actively apply modern technologies of medicine, pedagogy and psychology in his work [3].

The development of technologization in the vocational education system is carried out through the acquisition of technological competence by students [5]. The implementation of the requirements for the training of future physical therapy specialists depends on the level of technological competence. Changes and continuity of the process should take place in the training system of physical therapists, ensuring the formation of their technological competence both throughout their professional activities and in all areas of professional training in the field of health protection [1; 2].

Emphasizing previously unresolved parts of the common problem. It is becoming urgent to develop a model of educational technology for training physical therapists, which is an integrative basis for training, as well as for identifying the didactic conditions for its effective functioning.

Formulation of the article's goals (tasks statement). The purpose of the article is to study the features of modeling the professional training of physical therapists, an integrative basis for teaching and identifying the didactic conditions for its effective functioning.

Presentation of the basic research material. Educational technology is a system of functioning of all components of the pedagogical process, built on a scientific basis, programmed in time and space and leading to intentional results through planning learning outcomes, means, diagnostics of the current state of learning, a set of learning models and criteria for choosing the optimal learning model for specific conditions [5].

The educational technology of training future specialists in physical therapy is understood as a pedagogical system of theoretical and practical knowledge that determines the strategy, content, process, management, activities of teachers and students on the basis of the wide use of pedagogical and information teaching aids and comprehensive support of educational, cognitive and professional activities of students [4; 6; 9].

At the same time, the educational technology of training future specialists in physical therapy is considered by us as an autonomous system that has connections with other systems, the totality of which is an "external environment", which includes: educational institutions, the labor market, social and cultural institutions, production, scientific and methodological centers [7].

The purpose of its development is, on the one hand, to ensure the formation of personality (professional competence), on the other, to develop creativity and organizational abilities (expanding the professional field of activity, ensuring the professional orientation of the individual, the interaction of medical, pedagogical, psychological, professional knowledge).

The developed model of educational technology for training future specialists in physical therapy

includes target, meaningful, motivational, procedural, managerial, personality-activity, informational, material-technical, and effective components.

The general goal is to prepare future physical therapy specialists for the use of educational technologies in their professional activities. The basis must be put on those activities of the physical therapist that need to be formed. These include: educational and professional, research, medical design, organizational and technological.

When developing a target component, a number of requirements should be met: translation of didactic goals into learning goals; orientation and professional activities of a physical therapist in the context of technologization of professional activity; Learning objectives should be diagnostic and provided with test materials to verify their achievement.

The target component is associated with motivational, since awareness of the relevance of goals has a great impact on the motivation of the cognitive activity of a physical therapist.

The objectives of the training determine the design of the content of training future specialists in physical therapy in the field of technologies for conducting activities in the field of physical therapy.

When designing a content component, it is necessary to rely on the implementation of the concept of integration of learning content.

General scientific integration is implemented on the basis of the following patterns of content integration: the unity of social, economic, medical, psychological, pedagogical, scientific and technical ideas in the development of educational content; the interconnection of the general scientific, interdisciplinary, intradisciplinary level of generating training content.

Interdisciplinary integration is ensured through the implementation of the following regularities: the unity of the structural components of the educational technology model, the functional dependence of the training content on the goals and objectives of training future specialists in physical therapy, the unity of the content and procedural components.

Intradisciplinary integration is aimed at the implementation of integration processes from general to specific methodological regularities, from the creation of a general model of content to the structure of individual topics, lectures, practical and laboratory classes.

At the same time, the design of the content of educational technology for the training of future specialists in physical therapy is carried out on the following principles: modularity, problemativeness, integration and differentiation.

These principles define the following requirements for their implementation:

- 1) present each dose of content as a module;
- 2) the educational material should be of an activity nature, structured in the form of problem situations;

3) design problem modules of both cognitive and operational type in order to create pedagogical tools;
4) the content of educational training technology should be focused on different levels of professional training.

The procedural component is designed on the basis of the principles of consistency, informatization, manufacturability. To implement the general principles, one should:

1) take into account the level of general cultural and professional competence of students;

2) create a unified educational environment, including the educational environment of the educational institution and the professional field of future activities;

3) develop a comprehensive support for the content and procedural aspects of the vocational training process;

4) ensure the relationship of educational and information learning technologies;

5) use information technology teaching, orienting students to search activities.

The learning outcomes are associated with the efficiency of functioning of the developed model of educational technology for training future specialists in physical therapy.

The evaluation of the developed model was carried out using criteria. These include:

1) qualitative increments in mastering professional activities;

2) qualitative increments of students' knowledge (completeness and depth of knowledge, consistency, efficiency and flexibility).

The effectiveness of the learning process is determined by the criteria and indicators of each component. In this case, the learning outcome is considered as an integral criterion of learning efficiency.

The goals, content, methods, means and organization of training are singled out as the main components of the learning process in order to develop an integral criterion of effectiveness.

Consider a system for assessing the effectiveness of training for each component.

Learning objectives are the diagnostics of learning objectives, validity of goals, structuredness, compliance of target indicators with test materials, as well as the levels of formation of general and professional competencies of future physical therapy specialists.

The content of training is structure, integrity, scientific character of information, breadth and depth.

Teaching methods – the adequacy of the methods to the goals and content of the educational material; the validity of the choice of methods, the variety of methods used and the variability of teaching methods.

Learning tools – functional compliance with goals, content, methods; universal use; the complexity of the application.

For the effective functioning of the educational technology model, it is necessary to implement the following functions:

1) prognostic, taking into account prognostic information to determine the prospects for the continuous development of physical therapy specialists;

2) social, ensuring the formation of professional competence of future specialists in physical therapy, taking into account the needs of people, society, professional education;

3) scientific and technical, realizing the possibility of expanding the professional field of activity of future specialists in physical therapy;

4) communicative, providing the organization of subject-subject relations in the educational process;

5) motivational, aimed at the formation of motivation for the use of health technologies.

The highlighted components of the model of educational technology for training future specialists in physical therapy, their interconnections and functions allow us to assert that the system-forming factor of the model is the professional activity of students, which ensures the focus of the structural components of the model on the integrative learning result, the main assessment criteria of which are the readiness of future specialists in physical therapy to the use of health technologies in professional activities and the level of their professional competence.

Conclusions. The research results make it possible to form the following conclusions: technology modeling is a promising direction of professional pedagogy and determines the nature of the content and process of professional training; modeling of educational technology is carried out on the basis of the principles of consistency, goal-setting, integration and differentiation, manufacturability, problemativeness, informatization; for the effective functioning of the educational technology model, it is necessary: determination of the orientation towards professional activity, the introduction of new organizational forms, methods, means into the training process of future specialists in physical therapy, the development of scientific and methodological support; the interconnection of information and educational technologies that provide prognostic and educational information that has a significant impact on the level of professional training of students.

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