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EXPERIMENTAL IMPLEMENTATION OF EDUCATIONAL COACHING TECHNOLOGY IN THE SYSTEM OF RESOURCE-ORIENTED TRAINING OF BACHELORS IN THERAPY AND REHABILITATION

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The study defines and elucidates the principles of educational coaching in the system of training bachelors in therapy and rehabilitation: person-oriented interaction, partnership and trust, goal-setting and self-management, reflection and feedback, and the development of strengths and internal resources. A technology of educational coaching for the Resource-based learning system of the Bachelor's of therapy and rehabilitation is proposed, comprising diagnostic-motivational, goal-setting, resource-activational, practical-implementation, and reflective-evaluative stages. The criteria for the effectiveness of educational coaching in the RBL system of bachelors of therapy and rehabilitation have been determined: the level of development of the student's reflexive resource thinking; the dynamics of professional autonomy and responsibility for one's own development; and the quality of partnership interaction "student–coach–environment".

Key words: resource-based learning, bachelor, physical therapy, rehabilitation, occupational therapy, professional training, technology, educational coaching.

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ЕКСПЕРИМЕНТАЛЬНЕ ВПРОВАДЖЕННЯ ТЕХНОЛОГІЇ ОСВІТНЬОГО КОУЧИНГУ В СИСТЕМУ РЕСУРСНО-ОРІЄНТОВАНОЇ ПІДГОТОВКИ БАКАЛАВРІВ ТЕРАПІЇ ТА РЕАБІЛІТАЦІЇ

У статті визначено та розкрито сутність принципів освітнього коучингу в системі підготовки бакалаврів терапії та реабілітації: особистісно-орієнтованої взаємодії, партнерства і довіри, цілевизначення і самоуправління, рефлексії і зворотного зв'язку, розвитку сильних сторін і внутрішнього ресурсу. Запропоновано технологію освітнього коучингу в системі ресурсно-орієнтованого навчання бакалаврів терапії та реабілітації, яка передбачає діагностично-мотиваційний, цілепокладаючий, ресурсно-активаційний, практико-реалізаційний та рефлексивно-оцінювальний етапи. Визначено критерії ефективності освітнього коучингу в системі ресурсно-орієнтованого навчання бакалаврів терапії та реабілітації: рівень розвитку рефлексивно-ресурсного мислення здобувача освіти; динаміка професійної автономії та відповідальності за власний розвиток; якість партнерської взаємодії «студент–коуч–середовище».

Ключові слова: ресурсно-орієнтоване навчання, бакалавр, фізична терапія, реабілітація, ерготерапія, професійна підготовка, технологія, освітній коучинг.

The study is a fragment of the research project "Development of rehabilitation programs by assessing the restrictions on the functioning and vital activity of vulnerable groups of people under martial law", state registration No. 0125U002470.

The modern system of professional training for bachelors in therapy and rehabilitation is undergoing significant transformations as medical education reorients toward competency-based, person-centered, and resource-oriented approaches.

Given the interdisciplinary and interactive nature of the profession, the training of bachelors must go beyond mere knowledge transmission, emphasizing the development of self-regulation skills, the ability to set personally and professionally meaningful goals, make decisions under uncertainty, and build effective team communication. The technology of educational coaching, based on the principles of partnership, active listening, inquiry-based support, and reflection, enables the creation of optimal conditions for individualizing the educational process and realizing the learner's potential. In this context, we believe that creating and implementing educational coaching technology within the bachelor's program in therapy and rehabilitation is particularly important. The problems of professional training of future specialists in therapy and rehabilitation have been studied by several authors, including [1, 2, 6], as well as by many other scholars. In the context of higher education reform, transitioning to a competency-based model, and strengthening the interdisciplinary approach, resource-oriented learning becomes increasingly relevant. On the one hand, it focuses on the learner's strengths, potential, and self-realization; on the other,

it emphasizes the implementation of various learning formats using didactic and digital technologies, as well as diverse educational resources [5].

In medical education, it is crucial to develop teachers' coaching skills, as the processes and tools of educational coaching for future medical professionals contribute to the formation of their professional competence and the establishment of a new evaluation system. At present, teachers provide students with access to clinical environments and opportunities to assess patients. This is followed by role modeling through "teacher–patient" interaction, where the student acts as an observer [9]. Medical coaching represents a long-term supportive relationship between the coach and the student, ensuring continuous feedback and assistance in improving performance [3]. The role of the coach lies in collaboration focused on goal-setting, solution development, goal achievement, independent learning, the creation of new student-centered approaches, and the enhancement of self-awareness and personal responsibility [7]. The analysis of works by Ukrainian and foreign scholars [8, 9, 10, 11] has made it possible to identify a set of principles of educational coaching within the system of resource-oriented learning for bachelors in therapy and rehabilitation: the principle of person-centered interaction, the principle of partnership and trust, the principle of goal-setting and self-management, the principle of reflection and feedback, and the principle of developing strengths and internal resources.

Thus, the study and implementation of educational coaching in the system of training bachelors in therapy and rehabilitation are of great importance for ensuring professional maturity and readiness to meet the challenges of practical activity in the healthcare field.

The purpose of the study was to develop and implement educational-coaching technology within the framework of resource-oriented learning for bachelors in therapy and rehabilitation.

Materials and methods. The experiment on the step-by-step implementation of educational coaching technology within the system of resource-oriented learning for bachelors in therapy and rehabilitation was conducted from 2024 to 2025 at Poltava State Medical University.

The experiment involved higher education applicants pursuing the first (bachelor's) level of higher education in the specialty 227 Therapy and Rehabilitation, specialization 227.02 Ergotherapy, in the field of knowledge 22 Health Care, with the educational qualification of Bachelor of Therapy and Rehabilitation (specialization 227.02 Ergotherapy) and the professional qualification of Occupational Therapy Assistant (72 participants). Additionally, 12 instructors who teach disciplines within the corresponding educational program of Poltava State Medical University participated in the study.

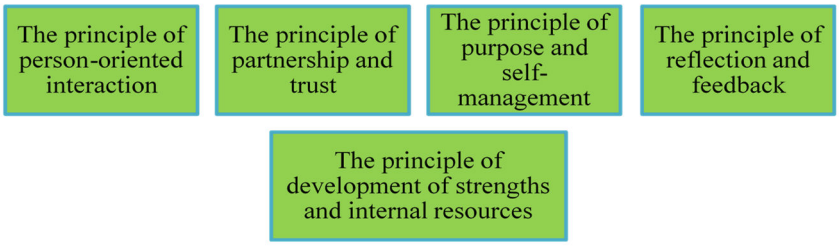

Fig. 1. Principles of Educational Coaching in the System of Training Bachelors in Therapy and Rehabilitation.

Several disciplines were selected for the experiment, including Fundamentals of General Psychology and Pedagogy, Digital Technologies in Health Care, Fundamentals of the Theory of Health and a Healthy Lifestyle, Art Therapy, Imageology, and Media Education and Media Literacy. Students within the framework of resource-oriented learning and the application of educational coaching technology studied these disciplines. The effectiveness of educational coaching in the system of resource-oriented learning for bachelors in therapy and rehabilitation was evaluated based on three criteria: The level of development of reflexive-resource thinking (the student's ability to be aware of their internal resources, assess their dynamics, and set adequate goals for learning and professional development); The dynamics of professional autonomy and responsibility for personal development (the degree of the student's independence in making decisions about their educational path, participation in shaping the learning content, and responsibility for achieving goals); The quality of partnership interaction "student–coach–environment" (the effectiveness of communication between the student and the coach, the creation of trusting and motivationally rich educational relationships, and the ability to collaborate within a resource-based environment).

Evaluation: Each criterion was assessed on a scale of 1–15 points (based on the sum of responses to five questions per group). Interpretation of levels: 13–15 points – high level; 9–12 points – medium level; 5–8 points – low level.

To achieve the research objectives, a comprehensive set of methods was employed, including: analysis, synthesis, comparison, and correlation (to study literature sources, regulatory documents, and experiences of resource-oriented training; to define the principles of educational coaching in the system of

bachelor training in therapy and rehabilitation and methodological approaches to its implementation); pedagogical modeling (to design the stages of the technology); questionnaires, interviews, surveys, narratives, and observation; pedagogical experiment (to test the effectiveness of educational coaching technology in resource-oriented bachelor training in therapy and rehabilitation); and the Spearman statistical criterion for data analysis.

Fig. 2. Stages of Educational Coaching Technology in the System of Training Bachelors in Therapy and Rehabilitation.

To establish a statistically significant correlation between the defined technology stages and the effectiveness of educational coaching within the system of resource-oriented learning for bachelors in therapy and rehabilitation, Spearman's correlation coefficient was used. The relationship between variables was determined using Spearman's correlation coefficient, as recommended, with the independent variable X representing one of the defined stages and Y corresponding to the effectiveness of educational coaching in the system of resource-oriented learning for bachelors in therapy and

rehabilitation. The significance of the stages was evaluated by 12 instructors in an expert survey using a ranking scale (1–10). According to Cheadock's scale, the strength of the relationship between the two variables was determined as follows: 0.1–0.3 – weak; 0.3–0.5 – noticeable; 0.5–0.7 – moderate; 0.7–0.9 – high; 0.9–1.0 – very high.

Table 1

Results of a survey on the effectiveness of educational coaching

Criteria	Level of development of the student's reflective and resourceful thinking		Dynamics of professional autonomy and responsibility for one's own development		Quality of partnership interaction "student-coach-environment"	
Efficiency levels (in %)	Before the experiment	After the experiment	Before the experiment	After the experiment	Before the experiment	After the experiment
Low	65.28	16.67	52.78	11.11	70.83	29.17
Medium	31.94	62.50	40.28	56.94	22.22	47.22
High	2.78	20.83	6.94	31.94	6.94	23.61
Total teachers	100.00	100.00	100.00	100.00	100.00	100.00

Results of the study and their discussion. The system of resource-oriented learning for bachelors in therapy and rehabilitation, which ensures its integrity, effectiveness, and alignment with modern educational and professional demands, is represented by three components: Personal-Resource Component – aimed at identifying, developing, and activating the student's internal resources (motivational, cognitive, emotional, and volitional); Professional-Practical Component – focuses on the development of applied skills based on a resource-oriented approach to the client/patient; Educational-Coaching Component – provides organizational and methodological support for resource-oriented learning through coaching technologies. In developing the technology of educational coaching within the system of resource-oriented learning for bachelors in therapy and rehabilitation, as well as its stages, we employed a range of methodological approaches, each serving a specific function in substantiating a comprehensive model of coaching support for future medical-rehabilitation specialists. Among the leading approaches are the person-centered, systems, competency-based, acmeological, and resource-oriented approaches.

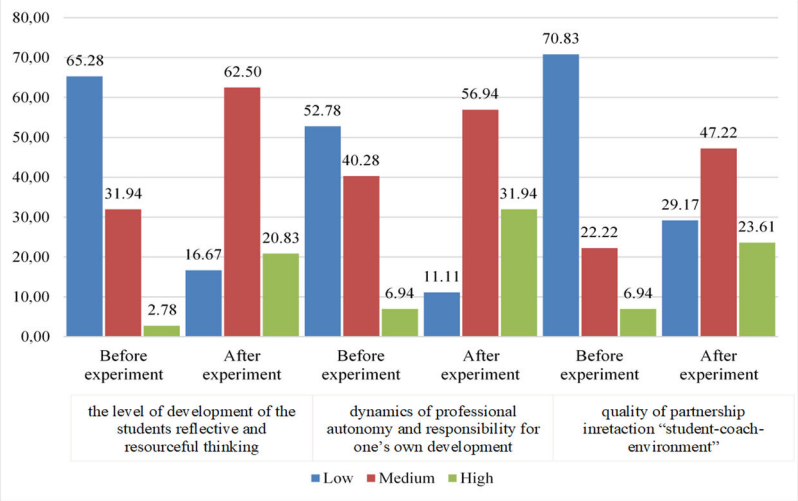

Fig. 3. The effectiveness of educational coaching in the RBL system of bachelors of therapy and rehabilitation (before and after the experiment).

The proposed principles serve as the methodological foundation for educational coaching within the system of training bachelors in therapy and rehabilitation (Fig. 1).

Thus, the combination of these methodological approaches creates a holistic paradigm for developing an effective educational coaching technology that ensures not only academic success but also a profound internal transformation of the future professional in the field of therapy and rehabilitation (Fig. 2).

The educational coaching technology within the system of training for bachelor's degrees in therapy and rehabilitation includes the following stages: diagnostic-motivational, goal-setting, resource-activation, practical-implementation, and reflective-evaluative. The proposed stages form a logically sequential structure of the educational coaching technology, enabling a systematic, flexible, and personally meaningful process of resource-oriented learning for future professionals in the field of therapy and rehabilitation.

The results of the survey on the effectiveness of educational coaching in the system of resource-oriented learning for bachelors in therapy and rehabilitation are presented in Table 1, with 72 students participating.

The dynamics of changes in the effectiveness of educational coaching in the RBL system for bachelors of therapy and rehabilitation (before and after the experiment) are shown in Fig. 3 and Table 2.

Table 2

Changes in the levels of effectiveness of educational coaching in the RBL system of Bachelor's of Therapy and Rehabilitation

Criteria/levels (changes in %)	Level of development of the student's reflective and resourceful thinking	Dynamics of professional autonomy and responsibility for one's own development	Quality of partnership interaction "student-coach-environment"
Low	-48.61	-41.67	-41.67
Medium	30.56	16.67	25.00
High	18.06	25.00	16.67

The results of the pedagogical experiment indicate a pronounced positive dynamic in the formation of effective coaching-type interaction within the system of resource-oriented learning for bachelors in therapy and rehabilitation. All three identified criteria-development of reflexive-resource thinking, professional autonomy and responsibility, and the quality of partnership interaction—demonstrate a decrease in the proportion of students with low levels and an increase in those with medium and high levels.

The most significant positive changes were observed in the level of reflexive-resource thinking: a reduction in students at the low level by 48.61 %, an increase at the medium level by 30.56 %, and an increase at the high level by 18.06 %. This indicates the effectiveness of coaching as a tool for self-knowledge, awareness of personal capabilities, and strengthening of students' internal resources. The dynamics of professional autonomy and responsibility also show positive shifts: a reduction in low-level students by 41.67 %, an increase in high-level students by 25.00 %, and an increase in medium-level students by 16.67 %. These results confirm the students' ability to actively participate in planning their educational trajectory, as well as the growth of initiative and involvement in decision-making regarding professional development.

The quality of partnership interaction ("student–coach–environment") exhibited a similar pattern: a decrease in low-level students by 41.67 %, an increase in medium-level students by 25.00 %, and an increase in high-level students by 16.67 %. This demonstrates the effective formation of communicative openness, trust, and support in the educational environment, which are fundamental to educational coaching.

Thus, the identified dynamics confirm the effectiveness of coaching practices within the framework of resource-oriented learning and the professional training of future specialists. Educational coaching demonstrates its value not only as a pedagogical technology but also as a catalyst for students' internal development, facilitating the activation of personal resources and strengthening professional identity. In this context, particular attention should be paid to the development of students' reflexive-resource potential, as it reflects profound qualitative changes in learning motivation, self-awareness, and responsibility for personal and professional growth. The enhancement of this potential indicates a transition from externally driven learning to a more autonomous, conscious, and self-regulated educational trajectory [6].

Overall, the obtained results indicate a high level of effectiveness of educational coaching as a tool for personal and professional development in the field of therapy and rehabilitation. The integration of coaching practices contributes to the development of key professional competencies, including critical thinking, goal-setting, reflective abilities, and readiness for continuous self-improvement, which are essential for future specialists working in patient-centered, multidisciplinary healthcare environments [5].

The study's results also confirm a structural and functional relationship between the step-by-step implementation of educational coaching technology and its overall effectiveness in the context of resource-oriented learning. In particular, the stages associated with resource activation, the practical implementation of acquired strategies, and reflective evaluation of outcomes were found to have the most significant impact on learning effectiveness. These stages ensure the consistency and integrity of the coaching process, allowing students to consciously identify their internal and external resources, apply them in practice, and critically evaluate achieved results. This finding should be taken into account when designing educational curricula, organizing the learning process, and providing targeted pedagogical support to students [4].

Furthermore, the application of Spearman's rank correlation coefficient enabled statistical confirmation of a significant positive relationship between the proposed stages of educational coaching technology and its effectiveness within the system of resource-oriented learning for bachelor students in therapy and rehabilitation, according to the defined criteria. This correlation highlights the importance of a systematic and structured implementation of coaching technology rather than its fragmentary or episodic use in the educational process [1].

In general, the results obtained substantiate the feasibility and pedagogical relevance of integrating educational coaching technology into the bachelor-level training system for medical university students. Such integration contributes to improving the quality of professional training, fostering students' personal maturity, and preparing future specialists for effective professional activity in conditions that require adaptability, reflection, and continuous professional development.

Conclusion

The principles of educational coaching in the system of training bachelors in therapy and rehabilitation have been identified and comprehensively elucidated. These principles include person-centered interaction, partnership and trust between educators and students, conscious goal-setting and self-management, continuous reflection and constructive feedback, and the purposeful development of individual strengths and internal resources. Together, these principles create a supportive educational environment that promotes students' active engagement, responsibility for learning outcomes, and readiness for professional self-development. Based on these principles, an educational coaching technology within the system of resource-oriented learning for bachelors in therapy and rehabilitation has been developed and theoretically substantiated. This technology is structured as a последовательний (step-by-step) process and comprises five interconnected stages: diagnostic-motivational, goal-setting, resource-activation, practical-implementation, and reflective-evaluative stages. Each stage performs a specific function and contributes to the holistic development of students' professional competencies and reflexive-resource potential. The implementation of this technology systematically activates students' internal and external resources, enhances learning motivation, and supports the development of sustainable professional skills relevant to therapeutic and rehabilitation practice. Overall, the study confirms the pedagogical feasibility and effectiveness of educational coaching as an innovative approach to improving the quality of bachelor-level training in therapy and rehabilitation, and its potential for broader application across medical higher education.

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