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THE CONTENT OF THE INTEGRATED EDUCATIONAL ENVIRONMENT IN THE PREPARATION OF MEDICAL STUDENTS FOR PROFESSIONAL ACTIVITY

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Abstract
The article emphasizes the value of the "Technical school-HE" integrated environment in teaching medical science at medical technical schools, the advantages of organizing in the integrated educational environment, and the contents of the various elements that comprise the integrated environment.

Keywords: Pedagogy, integration, innovation, creativity, motivation, competence, non-traditional lesson, binary lesson, dual education, medical education.

Introduction

In order to improve medical education and raise the quality and level of training medical specialists, our nation needs rapid embrace digital transformation. It is necessary to adapt the education system to the digital generation through the mass and effective use of innovative educational technologies and didactic models based on information and communication technologies. Professional educational institutions must widely implement updated, modern forms of instruction in order to establish a person-oriented learning environment. In education, it is necessary to generalize the idea of implementing integrative relations between educational institutions, to solve the problem of ensuring science-education-production integration. The theoretical and practical solution of this problem changes according to the development of society and its social order. In modern education, a system development for implementing teaching in an integrative environment is inextricably linked to the development of the idea of integrative connections.

Integrative communication in medical education should provide a unified approach to solving general educational issues by generalizing knowledge by teachers of various subjects (general professional and clinical subjects). The possibility of such generalizations is growing due to the deepening of the theoretical foundations of education and the improvement of educational programs.

One of the most significant and top priorities of our state policy today is the improvement of educational quality and the training of competitive personnel. Alike all other areas of education, the training of medical personnel is impacted by all educational innovations. One of the key elements that guarantees the nation's progress is public health. Therefore, our Government is developing laws and special programs to improve public health, and they are being consistently implemented.

The main goal of the reforms is to increase educational level of medical professionals and nurses in order to produce competitive, capable, and physically and psychologically fit individuals who satisfy international standards.

Web of Discoveries: Journal of Analysis and Inventions
webofjournals.com/index.php/3

Strengthening professional activity in integration processes and offering organizational and methodological support for the educational process based on networking and the dissemination of successful teaching experiences in the context of modernizing professional education are the primary objectives of establishing an integrative environment between technical schools and higher education institutions. In preparing future specialists for professional activity in medical colleges, it is important to study the essence of integrating knowledge from general professional and clinical modules into a single system and transforming knowledge into competence through practical application.

The large-scale reforms underway in our country are developing a competency system for the development of professional training of future specialists in medical Technical schools, reworking regulatory documents based on competency requirements, and focusing on modular education requirements. To improve the process of preparing for professional activity and boost the effectiveness of the professional education system, training modules are integrated to ensure interrelationships in the content of disciplines.

Nowadays, identifying solutions to socio-pedagogical issues related to a particular degree of training of future experts in vocational educational institutions depends heavily on the methodical application of the integration of science, education, and production.

Integration in science is a complex and dynamic process that involves the generalization, complexity, compression, organization, and development of material from several disciplines of knowledge.

According to M.P. Alpatova, the integrated approach is a progressive vector of growth in the contemporary educational strategy of personnel training. It ensures the strengthening of the knowledge system, strengthens its integration, and also helps to form the competences of students (informational, communicative, personal and value). Integration in medical education can have a synergistic effect by combining students' theoretical knowledge and practical skills, which in the future will allow them to form a holistic idea of the profession, develop critical thinking, and the ability to adapt to the rapidly changing conditions of modern medicine[1].

Medicine is the most precise scientific field in which the integral process is clearly manifested, because in medicine a number of sciences fight for human life: biology and physiology, pathophysiology and anatomy, as well as anesthesiology, resuscitation, hematology and other scientific disciplines.

The unique features of modern treatment are the deciding elements in the integration of medical knowledge. Combining aspects of natural scientific, technological, and humanitarian knowledge into a unified system might help address the unique characteristics of contemporary clinical medicine, the intricacy of its structure and functions, and the methodological and practical issues that arise in the delivery of healthcare.

There are several challenges to optimize the learning process by creating an integrated learning environment in medical education, including:

a) preserved discrete-disciplinary system of education;

b) constancy of the approved nomenclature of sciences;

c) conceptual variable content of academic subjects.

The basis of knowledge integration in medical education is the principles that regulate the explanatory, synthetic and predictive activity of the future secondary medical specialist.

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In medical education: a) the principle of systematicity allows to consider a person as a complex living system organically included in natural and social reality;
b) the principle of determinism consists in establishing causal relationships in the emergence and development of pathological conditions;
c) the principle of scientific validity is manifested in the use of achievements of scientific and technical development at all stages of medical science development;
d) the principle of theory and practice unity is that the theory as a system of reliable medical knowledge guides the practice direction, and its rules act as regulators of the practical activities of medical professionals, the obtained practical results are returned, and help to correct the cognitive process;
e) The principle of a comprehensive consideration of phenomena and objects is based on interdisciplinary research, which allows for the "integration" of multidisciplinary research, combining results obtained by various methods to solve broad medical problems.

Directions of knowledge integration

Horizontal integration is the integration of elements of the same order: facts, concepts, laws, theories and etc. in an area of medicine.
Horizontal integration in medical education means the unification of disciplines over time, usually involving the unification of separate courses into integral blocks. For example, the unification of anatomy, physiology, and biochemistry in the first year [2].
Vertical integration is the integration of knowledge elements from different areas of medicine (for example, surgery and intensive care). Vertical integration occurs over time and breaks down the traditional barriers between basic and clinical disciplines. Students initially study the basic disciplines, but gradually include clinical education throughout the years of the curriculum.
3. Spiral Integration. Spiral integration represents a combination of horizontal and vertical integration that integrates across time and disciplines. This model provides simultaneous and repetitive learning of basic and clinical subjects. Spiral integration is defined as "the study of basic and clinical disciplines across time and topics." This interactive learning process encourages students to deepen and expand their knowledge [3].
Thus, the analysis of scientific literature allowed us to consider integration as a process and its result. Integration requires: a) separate elements that were previously unrelated to each other; b) systems of connections between them.
The essence of integration is the unification of previously autonomous components, which leads to the emergence of a population characterized by increasing the order of components, strengthening their mutual relationships, and the emergence of new system properties.
Researchers in the subject of integration divide integration into macro and micro levels. In our research, we will study integration at both macro and micro levels. In particular, if we consider the integration between general professional and clinical modules and the integration process of medical knowledge at the micro level, then at the macro level we will explain the content of integration between two systems, that is, the integration of "Technical school-HE".
In the "Technical school-HE" integration process, the following factors can be identified as influencing the development of cooperation:

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-improving educational content, organizing and managing the educational process related to the formation of personal and professional competencies, and developing the material and technical base;
-effectively utilizing the most recent scientific achievements and results for the economic development of scientific and technical development;
-improving educational content, that is, developing or improving educational content (integrated subject programs, qualification requirements, etc.);
-creation of teaching-methodical materials (textbook, study guide, methodical recommendation, samples, etc.);
-development of (instructions, manuals, etc.) for technical school teachers. creation of materials (guidebooks, instructions, etc.) for use by staff members of healthcare institutions (hospitals and polyclinics).

In the process of professional training of future specialists in medical Technical schools, teachers find it inconvenient to use non-traditional teaching formats that create a demand for innovative, interactive forms of education and project work. The “Technical school-HE” cooperation relationship allows for the implementation of training methods with less time and material costs.

Organizing and managing the educational process for the development of professional competencies of future specialists - organizing meetings, roundtable discussions and other events with professors and teachers of higher educational institutions and leading specialists in the field of medicine; conducting master classes and involving them in the educational process as teachers; binary lessons; collaborative learning; dual education; teacher-student; as a tutor (in independent learning, organizing project work, problem-based learning, etc.); monitoring the organizational and management process of the educational process; participating in expert assessment (interim, current and final controls, assessment of project work); assessing the skills and professional and personal qualities of professors and teachers.

The first direction of mutual cooperation between professionals of higher educational institutions and medical technical schools is to establish a conducive atmosphere for communication and information exchange between professors and teachers of higher educational institutions and medical technical schools.

In conclusion, an integrated environment is a structural element that necessitates adherence to the concepts of awareness, regularity, and scientificity. The use of an integrated environment ensures a more complete implementation of the principle of scientificity in the system of teaching subject in the following aspects:

1) to create an idea about the integrated components of scientific knowledge (about systems of concepts and laws as well as theories and complex issues);
2) to demonstrate the modern traditions of subject development under the influence of integration processes (socialization, humanization, theorization, mathematization and etc.);
3) the development of students' comprehension of subject as a system of knowledge and methods;

Additionally, an integrated environment is the result of a purposeful pedagogical process built on the principle of integrativeness. During this process, students mentally convert the knowledge components from different academic subjects into unique, integrated, cognitive-

operational structures that create an integrated system of medical knowledge based on reflection.

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