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COMPETENCE-BASED APPROACH AS THE BASIS OF MODERN EDUCATION

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Abstract

Using the example of educational programs of the Medical Institute of the Chechen State University, the article examines principles of developing educational programs, analyzes the continuity of competencies in the context of continuous education. The programs for development and modernization of higher professional education determine the need to create an information and educational environment that would contribute to the development of information technology culture and social competences of both teachers and students by stimulating and developing their creative activities. The social order as a person-centered, competence-oriented paradigm of education has set a number of complex tasks for universities: 1) development of a creative personality, ability to self-development and self-improvement; 2) development of creative activities and emotional-value relationships with people and oneself; 3) development of professional, social, informational competencies; 4) technological readiness of teachers and students to use modern and traditional educational technologies, including information and communication technologies. Higher medical education pays attention to the competence-based approach, since assessment of the effectiveness of training is based on the assessment of knowledge, skills and abilities determined for various medical specializations. Despite the need to reform higher education, the problem lies both in understanding the methodological nature of the competence-based approach and its practical implementation.

Keywords: Competence-based approach, educational program, higher education

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1. Introduction

Education is a leading resource and factor that ensures the stable development of civilization and humanity as a whole by forming the intellectual, cultural and spiritual potential of society. The system of modern high-quality education, as the basis for solving socio-economic problems, development of science, culture, industry and technology, attracts attention of researchers.

In modern higher education, significant changes are associated with the adoption of federal standards of a new generation, social transformations and scientific and technical modernization. Modern technical renewal, computerization and expansion of communication channels and flows contribute to dynamic changes in social needs, levels and quality of professionalism of modern workers.

The competence-based approach as a methodological basis of modern education, including higher professional education, is represented in many modern sources and legal documents. The competence-based approach focuses on the result of education rather than the amount of information acquired, the ability to act in various situations, including problematic and non-standard ones. The newest dictionary of foreign words and expressions defines "competent" (from Latin Competens, competentis) as knowledgeable in a certain area; who has the right to do or decide something, judge something based on his knowledge or authority (Khatskevich, 2007).

Some scientists define the level of competence as a characteristic of results of educational practice for an individual. Otherwise, competence determines what a particular person claims or has achieved (Okhotnikova & Surtaeva, 2002).

Kibanov (2003) defines the concept of competence as “characteristics necessary for successful activity; in other words, it is a set of knowledge, skills, abilities, efforts and stereotypes of behavior” (p. 23).

Bolotov and Serikov (2003) consider competence as a product of education, self-development of the individual, personal growth rather than technological one, a result of self-organization and generalization of personal experience. Being a way of existence of knowledge, skills, education, contributing to personal self-realization, competence contributes to the characterization of education as highly motivated and personality-oriented, ensuring the demand for personal potential, recognition of a personality by others and awareness of own significance.

The world educational practice considers the concept of competence as a "key" concept. This is the combination of intellectual and skill components of education; embeddedness in the concept of competence of the ideology of interpretation of the content of education; possession of a key competence of an integrative nature, which incorporates homogeneous or closely related skills and knowledge related to a wide range of culture and activities (information, legal, etc.) (Pinsky, 2001).

2. Problem Statement

The Medical Institute of the Chechen State University has identified lifelong vocational training as the main objective in line with the needs of the national health system and scientific and technological progress. Continuing education in medicine is mandatory throughout the entire professional activity in

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accordance with the Federal Law of November 21, 2011 No. 323-FZ "On the basics of protection of health of Russian citizens " (RF legislation, 2011).

3. Research Questions

According to the federal educational standard, the result of mastering a specialty program is formation of general cultural, general professional and professional competencies. The expected results of training are descriptors to know, be able to, own, corresponding to the goals, content, conditions and technologies of the educational process.

The models of educational programs implemented at the institute are classical, competence-oriented, linear, based on academic disciplines, organs, clinical problems and diseases, integrated. Moreover, integration implies the interconnection of all disciplines.

4. Purpose of the Study

The curriculum contains basic general medical disciplines, behavioral and social disciplines, and specialized clinical disciplines, which are divided into basic and optional ones (compulsory disciplines and optional disciplines). Disciplines are mastered in the form of lectures and seminar classes, practical / laboratory works. Disciplines provide students with general cultural, general professional and professional competencies.

All disciplines are included in the curriculum. The discipline is presented by contact and independent work; hours are allocated for control in the form of exams.

5. Research Methods

Consider, for example, the implementation of the educational program 05/31/01 "General Medicine". The logical sequence of disciplines in the curriculum is integrated horizontally and vertically, with a progressive complication of theoretical information and practical skills. Horizontal integration is clearly presented through the links between disciplines: "Biology" – "Histology, Cytology, Embryology" – "Microbiology, Virology" – "Human Anatomy", "Biochemistry" – "Normal Physiology" – "Pathophysiology, clinical physiology"; social and humanitarian disciplines: "Medical Psychology" – "General care of the sick"; basic biomedical and clinical disciplines: "Pathophysiology, clinical physiology" – "Pathological anatomy, pathological clinical anatomy" – "Pharmacology" – "Propedeutics of internal diseases"; social, humanitarian and clinical disciplines: "Bioethics" – "General care" – "Propedeutics of internal diseases"; and within the clinical disciplines: "Obstetrics and Gynecology" – "Fundamentals of Neonatology" – "Pediatrics". Vertical integration implies a spiral model: for example, the discipline "General patient care" taught in the first and second years includes the basics of clinical education and forms skills of interaction with patients. In the third year, competencies are deepened within the disciplines "Propedeutics of Internal Medicine, Radiation Diagnostics" and "General Surgery, Radiological Diagnostics", knowledge and skills acquired are necessary for the successful study of

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clinical disciplines in the fourth-sixth years: Faculty therapy, Faculty surgery, Hospital therapy, endocrinology, Hospital surgery.

6. Findings

Another example is practical skills developed in real conditions of a hospital in the first or second study years: primary professional skills, professional skills and professional experience. The next turn of the spiral is the clinical internship in the third study year, which provides for an increase in the degree of complexity of practical skills and the level of student independence from " an observer" (first year) throught "the actions under the guidance" (in the second-third study years) and "the actions under supervision "(in the fourth – fifth study years) to" partially independent / independent work" in the sixth year. Another aspect is diversification of the levels of care within which the internship is carried out. In other words, the graduate masters all the existing models of medical care. At the same time, the institute relies on the local, national, regional and global context, ensuring that graduates acquire competencies necessary for practical activities.

Educational programs implemented involve not only the accumulation of knowledge, which may become obsolete in a relatively short period, but provide for continuous education throughout the entire activity. Table 1 shows an example of the continuity of competencies developed by the educational program 05/31/01 "General Medicine" (FSES VO 05/31/01, 2016), which are the basis for universal and professional competencies in training highly qualified personnel in the residency and universal, general professional competencies in training postgraduate students. See Tables 1, 2 and 3 where competences obtained in the course of the study are introduced.

Table 1. An example of continuity of competencies developed by educational program for undergraduate students and residents

As a result of mastering the specialty program, the graduate must possess:	As a result of mastering the residency program, the graduate must possess:
readiness to determine the need to use natural healing factors, drug, non-drug therapy and other methods in patients requiring medical rehabilitation and spa treatment (PC-14);	readiness to use natural healing factors, drug, non-drug therapy and other methods in patients in need of medical rehabilitation and sanatorium treatment (PC-8);
Discipline: Medical Rehabilitation	Discipline Clinical Pharmacology
Specialty: General Medicine	Specialty Obstetrics and Gynecology (training of highly qualified personnel)
ability to provide medical assistance in emergency situations, including medical evacuation (PC-19);	readiness to provide medical assistance in emergency situations, including medical evacuation (PC-12).
Discipline Life Safety, Disaster Medicine	Discipline Emergency Medicine
Specialty General Medicine	Specialty Obstetrics and Gynecology (training of highly qualified personnel)

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Table 2. An example of continuity of competencies developed by educational program for undergraduate and postgraduate students

As a result of mastering the specialty program, the graduate must possess:	As a result of mastering the postgraduate program, the graduate must possess:
Ability to participate in scientific research (pc-21); Discipline preparation for passing state exams Specialty general medicine	Willingness to participate in the work of russian and international research teams to solve scientific and educational problems (uk-3) Disciplines: methodology of scientific research; Practice for developing professional skills and experience (research practice); Research activities and preparation of scientific qualification works (theses) for the degree of candidate of sciences. Direction of training fundamental medicine, ep human anatomy (higher education – training of highly qualified personnel – postgraduate studies)
Readiness to participate in the implementation of new methods and techniques aimed at protecting health of citizens (pc-22) Discipline public health and health care, health economics Specialty general medicine	Readiness to implement methods and techniques aimed at protecting health of citizens (gpc-4) Discipline public health and health care. Direction fundamental medicine, ep human anatomy (higher education – training of highly qualified personnel – postgraduate studies)

Table 3. Examples of assessing competencies of students providing feedback for improving the educational program

Competence	End results for each competency	Learning outcomes assessment
A graduate who has mastered the specialty program must have the following general cultural competencies:		
General cultural competence – 2	Ability to use foundations of philosophical knowledge to form a worldview position	Portfolio
General professional competence – 10	Readiness to provide medical and primary pre-medical health care	Portfolio State final certification Practice diary
Professional competence – 5	Readiness to collect and analyze patient complaints, data from their anamnesis, examination results, laboratory, instrumental, pathological and anatomical and other studies in order to recognize a condition or establish the presence or absence of a disease	Portfolio State final certification Practice diary

7. Conclusion

Thus, the institute ensures the educational process of undergraduate and postgraduate training for specialists in medicine. On the basis of the educational program for specialists, graduates can continue their studies in residency and take postgraduate courses, as well as additional professional courses. Implementation of a competence-based approach into the system of higher professional education is aimed at improving interactions with the labor market, increasing the competitiveness of specialists,

updating the content, methodology and learning environment (Medintseva, 2012). Solving the problem of quality of vocational education, introducing new methods of its assessment into the educational process, one should take into account the personal and professional readiness of university teachers expressed as their competence to implement innovative approaches (Mitrofanova, 2016; Vanchakova, 2015).

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