

## KEY STRATEGIES AND TASKS IN THE PROCESS OF PROFESSIONAL TRAINING IN MODERN EDUCATION

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**Abstract:** The creation of an innovative educational environment will help prepare a new type of specialists who have competencies that contribute to the positive development of their professionalism with a focus on personally significant areas of their self-education and self-education. The article reveals the modern content of the concept of "professional education", filling it with a new meaning caused by the development of new technologies, the widespread use of technology. It is shown that today vocational education is a purposeful way of human socialization. The influence of the national research university, the most important element of the national innovation system, on the socio-economic development of the regions in frames of nation-states, specialized industries and the vocational education system is considered. The main directions of the development of the market for higher education services as one of the main resource-forming segments of the state's economy on the scale of global trends have been investigated. It is shown that the system of higher education of the countries of the world represents the state social capital.

**Keywords:** Professional education, Research University, Social capital, Specialist.

### 1 Introduction

Socio-economic innovations and new technologies have radically changed our lives in recent years. This has become one of the main prerequisites for revising the education system, which is a strategically important sphere of human life, ensuring its economic growth and competitiveness. In the knowledge economy, vocational education began to acquire a priority value, which was transformed into a commodity and became an important factor in the progress of society. As many researchers rightly point out, education in many countries is undergoing a profound internal transformation. Not only its methodological base that has developed over the centuries is changing, but also the role of education in the modern world, the attitude of people towards it are changing, value accents within education are shifting [19]. The objective process of commercialization (consumerization) of education cannot be stopped. In this regard, increased requirements are imposed on knowledge, which has become an important source of competition, because, as a commodity, they have their own value.

The commercialization of modern vocational education in the context of market relations in educational sector continues. One should agree with the opinion of many experts that this process has a lot of disadvantages, the most important of which are the following: the value of technical knowledge increases due to the devaluation of humanitarian knowledge; there is a demand for knowledge that can be applied 'here and now', bringing quick results, solving specific applied problems. In this regard, it should be said about the exteriorization of knowledge, when, in the conditions of informatization of society, computers and machines influence education, which leads to the standardization of any knowledge.

Meanwhile, the strengthening of global processes, the transformation of society, constantly accelerating scientific and technological progress are contributing to the change in the requirements for vocational education. Instead of a narrow specialization, a requirement for broad professionalization is being formed, which should be carried out at a high general

education and polytechnic level. Significant changes in the sphere of material production, caused by the development of new technologies in our knowledgeable age, the widespread use of information technology, will dictate their requirements for the vocational education system. The modern production process is constantly becoming more complex, thereby causing the growth of the intellectual saturation of the labor activity of workers and other specialists. The vocational education system is not just a channel for training highly qualified specialists, but it is designed to take into account the prospects for the development of various sectors of the country's economy, respond to the growing requirements for the personal and professional qualities of specialists and reflect them in the content and forms of education. In this context, N.V. Nalivaiko rightly notes that "the task of any education is to familiarize a person with the cultural values of science, art, morality, law, economic relations, etc., necessary for a person in his social development" [2, p. 32].

The main goal of professional (vocational) education is the preparation of a qualified employee, a specialist of the appropriate level and profile, competitive in the labor market, competent, responsible, fluent in his profession and oriented in related fields of activity, capable of effective work in his specialty at the level of world standards, ready for permanent professional growth, social and professional mobility. The defining trends in the modern development of the vocational education system, which will allow a future specialist to be competitive in the labor market, are continuity, integrativity, diversification, standardization, democratization and pluralization of education and its fundamental nature, as well as humanization, regionalization, and integration with production and science [21].

However, the existing system of vocational education has come into certain contradictions with changes in the social, economic, technological, and educational guidelines of modern society. In this regard, the need arose for new approaches to modeling the system of primary and secondary vocational education, providing the training of qualified specialists who meet the modern requirements of production, economy, and society. A successful transition to a knowledge-based economy and society must be accompanied by a process of continuing education, interpreted as "a comprehensive learning activity" carried out on an ongoing basis with the aim of improving knowledge, skills and professional competence. Namely high professional training becomes a factor in the social protection of a person in the new economic conditions. The task of vocational education is not only the formation of knowledge, skills and abilities, but also the development of the ability to adapt to changes in technology and labor organization.

### 2 Materials and Methods

The methodological and theoretical foundations of the study were gnoseological provisions on the universal connection and development of phenomena and processes of the surrounding world, a dialectical approach that allows revealing the essence of pedagogical phenomena in their interconnection and interdependence, based on a system of principles (objectivity, unity of historical and logical, theoretical and empirical, personality and activity) and general scientific approaches (systemic, complex, predictive, procedural and functional), and also axiological, comparative, and other methodological approaches used by pedagogical science.

When studying the content of vocational education, it is necessary to take into account the requirements of the country's economic and social development, scientific and technological progress, the goals and objectives of vocational education, and the strategic guidelines of vocational pedagogical education. The process of the emergence and development of new features in the content of vocational education is of no less importance.

The method of theoretical analysis and synthesis allows determining the problem of any research based on the study of the issue in practice and science, to compare the various points of view available on the content of education, to determine which scientific data should be relied on when studying the topic, which scientific facts and provisions and in which areas sciences must be taken into account and taken into account in the conclusions and proposals.

The methodological basis of the study was made up of the following elements: a systematic approach that allows considering a pedagogical phenomenon as integrity and contributing to the construction of the educational process on the principles of continuity and integrity; personality-activity approach, which recognizes activity as the determining condition for the full development and self-development of a person in a professionally oriented educational process; a meaningful approach that requires referring to the content of the phenomenon, identifying its elements and the interaction between them.

The research uses theoretical analysis of scientific materials, systematization and structuring of selected information, generalization of the obtained results, systematization.

Systematization and classification were used for data analysis. A qualitative change in the content of vocational education is an increase in its scientific and theoretical level and the role of professional training in the vocational education system, the relationship between theoretical and industrial training, ensuring the relationship between education, training and industrial activity.

### 3 Results and Discussion

In modern society, a number of contradictions arise between the knowledge and skills that students receive in the learning process, and the requirements that the informational post-industrial society imposes on graduates. This situation did not arise yesterday, but gradually formed under the influence, on the one hand, of the development of society in the second half of the 20th – early 21st century, and on the other, under the influence of the processes of differentiation of the social institution of education in the same period.

Most of the researchers who in the second half of the 20th century created futurological theories of the development of society (Bell, Gelbraith, Toffler, and others) believed that higher education should become the main social institution of the new reality. This theoretical attitude contributed to the formation of a great interest in institutional processes in higher education, the ever-increasing need for which was proclaimed as the main social feature of post-industrial society. At the same time, the very social institution of higher education began to transform, and the processes of differentiation were growing in it. The first wave of differentiation of higher education, which is attributed to the 50-60s of the last century, largely depended on economic needs and the development of new high-tech industries. When it became clear that the development of a new post-industrial society required specialists oriented directly to work in production, the so-called “non-university sector” of higher education was created, which included new types of educational institutions with a shorter period of study [1]. The emerging tertiary education sector offered society broad vocational education programs and trained specialists of a certain qualification level. Orientation to practice made it possible to quickly meet the needs of the economy and society, to which the universities of the mid-20th century could not, but rather did not want to respond. The “non-university sector” quickly fulfilled its purpose: on the one hand, it allowed to quickly adapt to the level of development of society; on the other hand, it promoted social changes within higher education, which has since become widespread.

Based on the characteristics of the “ideal profession”, it can be seen that vocational education should not only form labor professional skills, but also contribute to the awareness of

professional values, ethics, morality, which should help the graduate's integration into a professional group, professional subculture [20].

Representatives of the business community also show an interest in the functioning of the social institution of vocational education. They invest in future workers through financial support of institutions of secondary and primary vocational education, updating their material and technical base, providing sites for industrial practice and internships, participating in the preparation and adjustment of curricula. Employers should contribute to improving the content of national and secondary vocational education, raising graduation standards, focusing on the international level of quality. Thus, among the latest requirements for a graduate of vocational schools, competency requirements come first – the increasing role of the employee's analytical function, the ability to introduce and maintain new technologies, and the use of modern methods of product quality control.

Modern higher professional education is significantly different from higher professional education that existed recently. The peculiarities of modern university education make it possible to observe the strengthening of the process of level and profile differentiation of university education, when the university began to draw up its own (author's) curricula and plans, students got the opportunity to implement their own education in different ways: to study simultaneously in two specialties. According to the concept of multilevel training, a person should receive higher education not in a narrow specialty, but within a certain direction. Each direction, on the one hand, is included in one or another area of knowledge, and on the other, it includes a specific set of possible training profiles.

The category “vocational education” has a wide meaning and is used to designate any educational system focused on training, advanced training, and retraining of specialists, regardless of the level and profile of the education received. Receiving vocational education is associated with certain stages or stages [12]:

- The stage of achieving elementary and functional literacy, when initial knowledge, skills and abilities, ideological and behavioral qualities of a person are formed at an accessible, minimum necessary level, which are necessary for subsequent, wider and more profound education;
- The stage of achieving general education goals, at which a person acquires the necessary and sufficient knowledge about the world around him and masters the most general ways of activity (skills, abilities) aimed at cognizing and transforming certain objects of reality;
- The stage of professional competence, which is associated with the formation (on the basis of general education) of professionally significant for the individual and society qualities that allow a person to realize himself in specific types of work, corresponding to the socially necessary division of labor and market mechanisms to stimulate the most productive and competitive functioning of an employee of a particular qualification and profile;
- The stage of mastering a widely understood culture, when a person not only realizes the material and spiritual values that were left to him as a legacy by previous generations, but is also able to adequately assess his personal participation in the development of society, contribute to the continuous culture-forming process of both his own society and civilization in general;
- A stage in the formation of the individual mentality of the person, those stable, deep foundations of the worldview and human behavior that give the personality the property of uniqueness in combination with openness to the continuous enrichment of own mental values and the ability to all-round self-realization in the mental spiritual space of mankind.

Professional education is a purposeful way of socialization of a person, since it involves both obtaining a general, secondary, higher education (bachelor's, master's) and mastering the knowledge and skills of a certain professional activity. At the

same time, vocational education contributes to the development of a person's natural abilities and their subsequent implementation in the chosen field. Vocational education becomes real when it is accompanied by persistent study, obtaining knowledge in a specific subject, as well as the formation of skills in the chosen specialty. Professional education requires a skillful and harmonious combination of education, training, and the acquisition of practical skills. For example, polytechnic education, being a kind of professional one, is focused on acquainting students with the basic principles of organizing modern production, waste-free, ecological and clean technologies, on teaching the skills of working with computer technology and modern tools of mechanized and automated labor.

As it was mentioned above, strengthening global processes, transformation of society, tirelessly accelerating scientific and technological progress contribute to changing the requirements for vocational education. Instead of a narrow specialization, a requirement for broad professionalization is being formed, which should be carried out at a high general education and polytechnic level [10].

Recent attempts to rationalize the study and comprehension of the current theory and practice of university education make it possible to single out some areas of educational activity, which, taken together, create a model of the current state of vocational training. It is clear that it is rather difficult to give an exhaustive picture of such a dynamic system as domestic education; therefore the proposed model cannot be accepted unconditionally. Its main components can be the following:

1. Changing the nature of education itself, which is designed to help a specialist to solve new, non-standard professional, personal and socially significant problems of modern life;
2. Development of new directions for training specialists, opening of new specialties, development of existing programs with a focus on the needs and priorities of the development of society;
3. Close connection with fundamental science, interdisciplinary approach to learning;
4. Early professionalization and specialization;
5. Competitiveness of education;
6. Intensive saturation with the most up-to-date information;
7. The use of the latest technical teaching aids;
8. The use of cognitive and personality-oriented technologies for training specialists, which will lead to the activation of their cognitive and intellectual activity;
9. A variety of didactic tools, allowing correlating the goals of learning and the individual potential of learners;
10. Emphasis on improving the suitability and practical effectiveness of education;
11. Observance of the principle of personal individualization of training, when each student realizes his own needs for knowledge and gets the opportunity to subsequently integrate them in their professional activities.

The experience of professional education shows that a new alternative to a partial change in the existing system can be the use of mechanisms traditionally developed for the field of business management, in particular, based on the international standard ISO 9001: 2008. As defined by the International Organization for Standardization, a quality standard (ISO 9001) is a defined set of requirements combined to meet the quality assurance needs of a given situation. That is why the methodological basis for assessing quality is formed by state educational standards, which are the standard of minimum requirements for the qualifications of a graduate of a vocational education institution. To achieve success in training highly qualified specialists, it is necessary to establish an effective management system. The ISO 9001: 2008 Quality Management System (QMS) is a practical tool to help an organization determine the path to quality management.

Analysis of modern theories of development allowed us to identify five main relevant principles of the process of sustainable development of an educational institution [16]:

1. The principle of the leader's leadership and consistency in achieving management goals based on an understanding of processes and facts, staff involvement;
2. The principle of collegiality, transparency, professional pluralism in solving problems;
3. The principle of continuous improvement of the educational space of an educational institution;
4. The principle of reflection and focus of the educational process on the formation of a socially mobile, self-organized, self-realized personality of a future specialist, endowed with a culture of professional activity.

The type of university that has emerged in Europe over the past two hundred years basically develops Humboldt's ideas about a research university. The search for truth in the process of research, its transmission and dissemination in the learning process, the formation of a personality with a high intellectual culture in the process of education are the main tasks of the university. All three of these tasks are closely related. At present, the role of knowledge and information in the socio-economic development of civilization has significantly increased, their transformation into one of the key factors of economic well-being and competitiveness, in turn, has caused the rapid growth of information and telecommunication technologies, which make it possible to spread new knowledge at an unprecedented rate, contributing to the globalization of the world economy, causing changes in the labor market. The actively introduced science-intensive technologies qualitatively change the requirements for universities and encourage them, while maintaining their main target orientation, to significantly transform their activities and organizational structures, and master new functions. Now the economy requires not 'faceless', thoughtless performers standing at the assembly line, but creatively thinking, active specialists who constantly replenish their knowledge for the accelerated development of new generations of technology and production processes.

The traditional concept of training and education, based on a simple transfer of the amount of knowledge, skills and abilities, is being replaced by a new one that highlights the formation of an active stock of key competencies of students on the basis of their independent creativity.

Greater cognitive abilities are required from managers and employees, the economy is becoming less and less "machine-intensive" and increasingly more "knowledge-intensive" [3]. The growing economy of the post-industrial era requires highly qualified specialists with versatile skills and enhanced abilities for rapid learning and adaptation, which necessitates not only learning, but "comprehending the learning process itself and adapting and creating again and again" [18].

The main characteristics of the new techno-economic paradigm, called the information-technological paradigm, can be summarized as follows: information as a subject, and not only as a means of labor; the comprehensiveness of the effects of new technologies, their network logic, the flexibility of processes, organizations and institutions generated by the flexibility of information technologies, technological convergence. These naturally lead to the fact that production processes and products in many industries are becoming more complex and high-tech [4, 9]. This means that the process of training a specialist at the university should also 'become information technology', including scientific knowledge and knowledge of production technology.

The importance of scientific knowledge in this process is so great that two previously independent complex systems – "science" and "production" – are combined into a single larger system "science – production" – a complex evolving system with a high intensity of accumulation and application of new knowledge. An important place is given to the task of integrating science, education, and innovation as one of the decisive factors in the development of the economy and society based on knowledge.

As a result, the traditional concept of training and education, based on a simple transfer of the amount of knowledge, skills and abilities, is replaced by a new one, highlighting the formation of an active stock of key competencies of students on the basis of their independent creativity [17]. At the present stage of development of society in general and university education in particular, it is not enough to form only knowledge skills, which are too insignificant in themselves and cannot meet the requirements of modern production – to organize and solve the production situation in a mobile and flexible manner. At the moment, it is important not only to have knowledge as such, but to have certain personal characteristics and be able to find and select the necessary knowledge at any time in the huge repositories of information created by civilization [5]. This is possible if the training is carried out by highly professional teachers involved in scientific research in the relevant fields, and this means that the training of specialists, especially of the highest qualifications, should take place not only at lectures in university classrooms, but also during practical work in research departments, innovative firms, manufacturing high-tech products. At the same time, the knowledge gained quickly becomes outdated, and the education process must continue constantly, throughout the entire human life. Higher education can be understood as the initial preparation of a person to participate in modern production activities by equipping him with the appropriate competencies.

Usually, in discussions about higher education, the emphasis is made on the formation of a scientific view based on knowledge of the laws of nature and social development, as well as on professional training [15]. This is how two trends in vocational education, characteristic of the era of transition to a post-industrial society, arose and are developing – the integration of all its levels (initial vocational, secondary vocational, higher vocational, postgraduate vocational training and retraining) and the development of a system of multi-stage vocational education, as well as various forms of production – university training, when during the entire period of preparation or starting from the time of specialization, students alternate between studies and work in the scientific and production departments of the university.

The new quality of education has become the main direction of modernization of the university education system, stimulating universities to intensively search for effective teaching methods and technologies. For higher professional education, society outlined a humanistic paradigm focused on a model of sustainable development, on the self-worth of the individual, on a humane attitude towards human and nature, on the reflection in the educational process of natural tendencies in the development of education: fundamentalization and technologization, strengthening integration and deepening its differentiation. In these conditions, the priority of progressive pedagogical ideas, new teaching models and modern technologies for managing the quality of educational processes, modernization of the university system of vocational education is obvious.

In the process of modernization of education and professional and methodological training of specialists, the educational system is put forward as a methodological and theoretical base, serving the student as a model in solving complex theoretical and practical problems of professional training. For this, various pedagogical innovations are being introduced, the key features of which are: 1) knowledge of the future world and creation of the present; 2) theory of practice; 3) the admissibility of many options when solving educational problems; 4) a plurality of evaluation criteria (correctness, usefulness, safety, efficiency, spirituality) when analyzing the results; 5) harmonious co-development of a person with the world around him [6].

Due to a number of conditions, among which there is the sharply increased cost of full-fledged higher education along with a decrease in its state funding, one of the main directions in solving this problem has become the commercialization of certain types of university activities – part of educational services, applied R&D, etc. This is reflected in the concept of the

so-called “entrepreneurial university”, which is rapidly and widely spread in developed countries. The European Academic Network of Deans holds conferences and projects discussing this issue, the European Consortium of Innovative Universities has been created, etc. At the same time, it is emphasized that an entrepreneurial university is still not a market enterprise [14]. The main thing here is to change the model of organization and management of activities: a transition from relying on state budget funds to multichannel financing based on an independent search for sources of additional funds.

However, in our opinion, it is not worth reducing all the variety of options and directions for reforming the activities and structures of universities in modern society only to their commercialization in the face of a lack of public funding. This process is much broader and has deeper roots, which lie primarily in the change in the nature and dissemination of knowledge, in the change of the dominant paradigms of science and education. The main reason for the profound transformation processes that most civilized countries are going through today is the sharply accelerated progress of knowledge and, as a result, the gradual transition to a new technical and economic paradigm of social development.

We can say that a modern university is not only a higher professional school, focused on the training of highly qualified specialists with deep professional and fundamental training, and a center for fundamental scientific research, but a complex multidisciplinary structure that organically combines educational, scientific and innovative activities and brings a real contribution to increasing regional and national competitiveness.

From this point of view, an entrepreneurial university is not a commercial organization that sells educational services and research results, but the main supplier of qualified human capital, scientific and technological solutions, created on their basis by firms – in short, a key element of the innovation system in the emerging knowledge-based economy. Perhaps, for the first time in the entire history of modern civilization, knowledge has turned from a purely spiritual life phenomenon into an effective tool for achieving high economic efficiency and improving the quality of life [7]. Universities, as its main sources and distributors, acquire the functions of the supporting structures of this new economy.

The main thing in the popular today concept of “university complex” is the underlying process of integration, and synergetic combining not only by levels of education, but also by spheres of activity – educational, scientific, innovative. The latter logically provides for close interaction of universities not only with other institutions of general and vocational education, but also with industrial enterprises of their own and other regions. This is especially true for technical universities. Partnerships between universities and industry can develop in the field of training, and in the field of research and development, and in the creation and production of innovative science-intensive products. On the basis of close partnerships of this kind, real educational and scientific-innovative university complexes arise – both in the form of a single legal entity (if innovative enterprises are part of the university as its structural subdivisions), and in the form of an association of legal entities, if the university plays the role of a center, around which industrial enterprises and business structures group in need of qualified specialists, new technologies and developments.

In turn, this provides an increase in the quality of training specialists based on increasing the role of university science, using its results to improve education and the development of new high-tech products, real integration within the university of education, science and innovation. This will increase the level of students' learning through their mastering not only theoretical knowledge, but also research and innovation-entrepreneurial skills, raise the status of the teaching staff through the commercialization of their intellectual developments, use the funds received from this to improve the material and technical base of teaching and science, use the production base of enterprises cooperating with the university for educational and

research purposes, to increase the prestige of the university as a whole as not only a supplier of qualified personnel, but also a developer of high technologies [11].

As a result, such important results are achieved as improving the quality of education based on the integration of educational, scientific, and innovative activities, the concentration of all stages of the innovation cycle within the framework of innovative structures controlled by universities (which reduces development time, reduces costs and increases the profitability of activities), consolidation of efforts of universities, regional authorities and interested enterprises and organizations in enhancing innovative activities in the regions.

The latter seems to be especially important. In the current political and economic situation, universities must actively establish ties with local authorities and the business community, not only in terms of offering their intellectual products, but also in terms of generating demand for them. Forming an innovative culture and incentives is one of the primary tasks of universities as centers for the production and dissemination of knowledge. Namely the higher educational institutions, through their main product – qualified specialists can influence society to the greatest extent, instilling a certain culture and value system.

However, it should be borne in mind that in order to fully implement this task, higher education must itself develop such a culture in itself. The development of the desire for professional and personal self-improvement, creative thinking, breadth and flexibility in the perception of the world in scientific and pedagogical workers is an indispensable condition for the formation of these qualities in students.

#### 4 Conclusion

Consequently, a modern university must meet the basic criteria of a research university, in which teachers and students, in the process of transferring (transfer) knowledge, participate jointly in scientific and project activities, that is, they receive and apply new knowledge.

New knowledge obtained in the course of fundamental and exploratory research is implemented within the stages of a complete innovation cycle along the specific trajectories. In this context, a research university is a university that provides the following [8, 13]:

1. Administrative and structural, regulatory and legal, scientific and methodological, financial, economic and material and technical unity of scientific and educational activities based on innovative principles of organization and management;
2. Development of the structure and infrastructure of innovative activity in the field of science and education adequate to external conditions;
3. Implementation of fundamental and applied research and experimental and design developments in priority areas of development of science and technology, critical technologies at the federal level;
4. The balance and interconnection of the stages of fundamental and exploratory research, applied development, the demand for R&D results and their implementation in production, staffing, marketing and technical support for promoting the final product to the market;
5. Forecasting and active formation in the region or in the industry of labor markets, educational services and high-tech technologies with the aim of advancing personnel, scientific and technical support of the national economy and priority industries;
6. Providing a wide range of variable educational programs and services of various levels, forms and content, including training through the participation of students in research and development;
7. Cooperation and implementation of end-to-end educational programs with specialized educational institutions of various levels;

8. Deep integration of scientific, technical, educational and innovative activities with specialized industrial enterprises and scientific organizations;
9. Participation of representatives of the specialized industry, branch and academic science in collegial and expert-analytical management bodies of the university;
10. The presence of long-term contractual relations with strategic partners of the university in the main scientific and educational areas of activity: targeted training of specialists and highly qualified personnel, implementation of R&D and their further support at the enterprise, including advanced training of personnel for the development of new product samples or new technologies, the creation of joint structures of scientific and educational or innovative profile, material and technical support for scientific and educational processes;
11. Protection of intellectual property rights in the field of science and education, their commercially beneficial use for all participants in scientific, educational and innovative activities.

The most important task of the research university is the development of mechanisms and infrastructure for contractual and institutional integration of scientific and educational activities with industry and academic research institutes, design organizations and high-tech enterprises. This task can be successfully solved if the research university develops as a multi-structured (in the form of partnerships and infrastructure) scientific and educational (in the main types of activities), innovative (in the type of management) university complex, which includes effectively operating integrated scientific and educational structural units.

A research university, as a leading center for obtaining and disseminating knowledge in an industry or region, should provide services to various social groups of society (applicants, undergraduate and graduate students, students of advanced training and retraining courses, teachers of educational institutions of various levels, employees of partner enterprises, graduates). Consequently, a research university should be a continuing education university providing educational services to various social and age groups of society.

The university needs to track the professional careers of its graduates and, as a constantly developing center of new technologies, to promote their professional and career growth through regular training. By interacting on a long-term contractual basis with large companies – strategic partners, a research university can and should perform the functions of a corporate university, providing targeted training of specialists, including graduates, and their subsequent career growth.

Thus, the National Research University is an innovative university with deep integration and a developed infrastructure of scientific, educational and innovative activities, which ensures sustainable development, quality and demand for higher professional education and scientific research based on the acquisition, application and commercialization of new scientific knowledge.

The successful solution of tactical problems of reforms in the higher education system presupposes the modernization of its leading components: the teaching standard, organizational and managerial structure, content and technology of teaching, quality control of training and profile use of graduates. Changes in all of the listed components in higher education should be carried out taking into account modern requirements and prospects for the development of production, the relevant branches of science, technology, as well as on the basis of accumulated experience, the achievements of theory and practice of higher education with the preservation and development of all positive aspects. This means that the following can be named as the main characteristics of the information technology paradigm of modern university education in terms of the formation of professional competencies:

1. Equal opportunity to receive educational information for everyone and everywhere;
2. Taking into account the individual abilities and the level of pre-university training of the student;
3. Transition from the "student to knowledge" principle to the "knowledge to student" principle;
4. Drawing up an individual educational trajectory, a student's training program by choosing modules of the training course system;
5. Choice of a teacher (preference for the teacher who most potentially meets the needs of the student; this mainly concerns promising models of the organization of the educational process, when training is transformed into educational consulting);
6. High quality of education; introduction of various models of professional education as a prerequisite for adequate development and self-development of a future specialist;
7. The ability to seamlessly integrate with open educational systems;
8. Competitiveness of a graduate in the labor market.

All this will require a qualitative update of the content and technology of teaching students subjects and disciplines with a focus on developing students' competence as the basis of professionalism.

Further research should imply, in our opinion, the program for the implementation of the anthropological approach in the philosophy of education, in which the conceptual foundations of personalistic anthropology should be presented, as well as filling the personalistic methodology in education with modern ideas of phenomenology and hermeneutics.

The limitation of the study is the absence of empirical research. However, we did not set such task when initiating this study. Our aim was to outline the problem, describe state of the art and suggest overall professional and philosophical basis for designing a solution.

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#### Primary Paper Section: A

#### Secondary Paper Section: AM