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Innovative models of the university education system (international practices)

Based on the theoretical and methodological principles of the university education system modeling, a scientific discourse of global conceptual models of university education was conducted according to goal orientation, differences of organizational-and-pedagogical structures and the essence of innovative content. The scientific analysis resulted into defining the fundamental idea of the Innovation University of the 21st century: the formation of a personal and professional development of a specialist capable of self-affirmation and demonstration of decision-making abilities under difficult management conditions; prepared for lifelong learning through integration of education, science and production.

Topicality of the research.

The educational system, like any open, dynamic system, which has its own architectural structure, forms the corresponding achievement of its main goal – the success of the overall positive result in the education, upbringing and development of the individual, thereby confirming that “a harmoniously developed person has to be the main goal and content of the whole system of education” [1, p. 13]. Proceeding from the fact that the ways of reaching the main goal may be different, the analysis of innovative models of organizational-and-pedagogical system of university education and the search for ways to ensure their effectiveness remain relevant for both psychological and pedagogical science.

For centuries, different forms of higher education have been developed and they continue to evolve in accordance with the principles and provisions laid down in them. The idea of the university, presented by the very name (Universitas – totality) in the organizational aspect was the result of combining different types of higher education institutions, whose main objective was to create the intellectual potential of the country. The second name of the university – alma mater (Latin – natural mother) has long been perceived as the center of learning, symbolizing the organic integrity of the science itself, where scientific knowledge was transferred to the next generations; spiritual and cultural values were incorporated; and the educated person received appropriate upbringing and psychogeny.

Proceeding from the fact that science is constantly in development, generating new branches of knowledge, no university in the world is able to achieve the completeness of scholarly knowledge. Therefore, the main task of the university should be to maintain productive interaction of researchers from all branches of knowledge, aimed at achieving a common goal, where the main principles that are inherent in the university, regardless of the historical era and the nature of its development, will be considered: the completeness of the proposed scholarly knowledge of the university; the spirit of creative freedom in the process of teaching and learning; the ability of the university to self-update through training teachers and scholars.

Subject matter of the research.

According to the formulated goal of the study, we will do a discourse analysis of the scientists' achievements on the problem of typologies of university models, based on their goal orientation, the specifics of the dominant content, organizational and pedagogical differences and the effectiveness of training. To do this, we will highlight the main factors that, in our opinion, will affect the formation of new requirements for the methodological foundations of the university education system modeling. The first factor due to the emergence of a knowledge-based society initiates the growth of the role of systemic, interdisciplinary human knowledge necessary for rational and meaningful operation with endless streams of information and knowledge to solve ambiguous situations and problems. In this society the analytical skills of a specialist are given priority along with his ability to seek and find the necessary information, the ability to spot certain regularity in the data sets in the process of the solution of interdisciplinary problems. The second factor, which is stipulated by the development of the world's economies on the basis of a combination of production, education and business into a single innovation model of the country, forms the need for a specialist who has thorough knowledge of market innovation mechanisms and their practical application.

Thus, the defined factors while formulating the appropriate tools for harmonizing the university system of education, stipulate new approaches to the modeling of the university system of education, namely: updating the structure and content of the educational system by incorporating managerial, economic, and legal interdisciplinary knowledge into advanced educational programs with in-depth study of the latest informational technologies, the basics of intellectual technologies, the bases of intellectual property; the use of creative learning technologies, the main idea of which is the principle of "self-formation" instead of "copying somebody else" approach to problem-oriented methods of knowledge formation; development of reliable diagnostic tools for assessing the success of academic achievements.

Proceeding from the fact that the traditional (classical) model of the university education system, representing the academic system of the structured transfer to the students of the universal elements of knowledge, culture and achievements of science was oriented towards training a perspective, highly educated and cultural individual for the future of society, the basic principles of the classical education system of universities was their broad autonomy; self-management of departments with an emphasis on the free nature of research without a narrow practical orientation. However, at the time when the University of Berlin (1809) was established, the reformer Wilhelm von Humboldt proved that the new classical university, contributing to the consolidation of society and performing a unifying, state-building function, must concentrate on the spiritual life of the nation, the achievements of its culture "through its educated, spiritually enriched, responsible, scientifically and universally trained pupils", reflecting, thus, the idea of a classical university in the form of four principles: "Integration of teaching and scientific research. Integration of study – research and education. Integration of study – research and general education ... Integration of sciences, centered at the university" [2, p. 87].

The above-formulated opinion will be traced on several models of universities of that time, the reputation of which was determined not only by the level or completeness of the general idea of the university implementation, but by the differences or peculiarities of the main faculties structures.

Thus, the basic idea of a rationalist model of university education, followed by researchers P. Bloom, R. Garnier, B. Skinner, was to master only those cultural values, knowledge, abilities and skills that allowed the young person to adaptively fit into existing social structures, get the appropriate “behavioral repertoire, which is needed for an adequate life-style in accordance with social norms” [3, p. 70].

Phenomenological model of European university education, prominent representatives of which were A. Maslow, A. Combs, C. Rogers, is oriented on taking into account the individual characteristics of each student, based on “personal attitude to learning, taking into account individual psychological and pedagogical differences of students in the forms of education and own rate of knowledge assimilation” [3, p. 70]. The developmental model of university education, presented by V. Davydov, L. Vygotsky, L. Zankov, D. Elkonin, V. Rubtsov, focused on cooperation of various elements of the educational infrastructure on the provision of educational services of different types and levels, allowing “flexibly considering changing conditions, in which the life and training of the younger generation of different segments of the population will take place taking into account the socio-economic situation of both the family and the region” [4].

In the autonomous model of the University of the Enlightenment period, similar to first universities of the Middle Ages, its own statute is already in place and its own resources are used under the general supervision of public institutions and the actual leadership of the supervisory councils, which include professors, representatives of local authorities and business circles [5, p. 315-326]. Thus, the achievement of the UK's higher education is the Open University, founded in 1969, which became a peculiar model of the university system of education for the whole world of this period, the essence of the educational process of which was the free access to training of everybody willing at a convenient time and without changing life conditions, that is, education becomes, mainly, of a remote type with a large variety of educational programs, which transformed the institution into an international university [6]. The main characteristics of this educational institution include: training for independent and analytical thinking, rapid application of the knowledge gained in practice, the connection of educational institutions with employers – the employment of graduates in different companies, the use of state-of-the-art teaching technologies.

However, due to the spread of the media, the image of the university is becoming more and more difficult to identify and predict, since the purpose of forecasting is not so much in shaping the image of the future university as in assessing the potential of the university as a model of organizational and pedagogical education system. For example, for the University of Fribourg, Switzerland, the bilingual model in the organization of the educational process with traditionally existing two cultures, namely the French-speaking and German-

speaking, was applied; teaching at the University of Bologna, Italy is conducted in three languages – German, Italian and English.

At the same time, the non-institutional model of university education, which was adhered to by such researchers as P. Goodman, I. Illich, J. Goodlede, F. Klein, J. Holt, L. Bernard, V. Khodakov, V. Kudin, was focused on the provision of educational services to non-traditional social institutions that were inherent in universities, by which they meant: the Internet; various forms of distance learning; open universities; various summer schools and other forms of organization of the educational process, including the mass media, increasingly disseminating the unconventional idea of information as an all-inclusive property of matter, which is the same fundamental and objective phenomenon of nature as energy and matter. Thus, one of the models of distance education is the organization of training on the basis of one university with significant professorial scientific potential, which seeks to form their own educational programs, where there is a classical full-time learning. In this way, studying at Oxford and Cambridge University of England, at Sheffield University of Scotland, at the University of Pennsylvania in the University of South Wales, Australia, has been formed.

The second model of distance education aims at organizing learning based on several universities, where university cooperation is driven by ever-increasing demands for the quality of education, namely, each university of such a consortium has attracted the best professors, Nobel laureates, to the preparation of courses unique in terms of level and quality. In this way, training was organized at the Baltic University in Sweden, where more than fifty universities of the Baltic region were united in the consortium; In Australia, the consortium has united nine universities that have created “Open Learning Australia” incorporating 150 academic disciplines. The third of the distant education models is the organization of training on the basis of one specially created university-enterprise. This is how the Open University, which has 305 educational centers in the UK and 42 other countries, is arranged; Californian Virtual University (cyber university), bringing together 95 higher education institutions. As a result, current virtual universities operate in six main models: a university that carries out exclusively distance learning; university of double type; evening university courses; university consortia and universities based on new technologies [7]. Such a widespread practice of team work in the academic disciplines becomes the basis for the transfer of new forms of knowledge to academic teaching, especially in case of the implementation of information and communication technologies, which requires radical restructuring of all fields of activity of universities and investments to create a new infrastructure for the development and presentation of integrated training courses for global distribution not restrained by geographical boundaries.

Thus, the existing types of universities under the conditions of globalization acquire the features of “internationalization”, which promotes the emergence of new phenomena associated with different cultural expectations of students of different nationalities, studying together. The content of the innovative model of the university system of education as a scientific-educational-cultural system, the voluntary association of establishments, institutions and organizations, all interested in the education and upbringing of a new level of the outlook of a free

person – a person of the University of the XXI century, focused on its purpose and mission, namely: the main goal – a harmoniously developed personality; unification of spiritual and cultural values; training and education of a free person in the present: an additional goal – the culture of evaluating all the products of university activity, will enhance the reputation and competitiveness of the young person of the modern world.

Conclusions

1. The idea of an innovative university of the modern world is to educate the responsible attitude of a professional to solve problems under the conditions of uncertainty; transition from quantitative growth to qualitative development of all components of university education in their unity; the introduction of mathematical culture as an innovative form of existence and gaining new knowledge in an innovative organization of personal training that is able to form new tasks throughout life and find solutions to them.

2. The basic principles of achieving the innovative character of university education comprise the organic unity of sciences, which will ensure the breadth of world outlook; the unity of learning and research; the unity of mass training with the individualization of education; freedom of creativity in the process of research, self-update through training scientists-teachers; autonomy supported by sufficient state funding; cooperation training by different types and levels; tolerance and respect for cultural differences displaying the evaluation of culture; transition from research to practical application; free responsible choice; exclusivity, which adds confidence and courage to the most challenging tasks and goals; communication qualities and increased competitiveness.

3. To the main progressive trends in the development of the university system of education we refer the following: “science is taught by the one who goes into it”; the entry of an academic corporation into local legislative bodies; shifting emphasis in teaching from transfer of knowledge to the process of its generation; “only a real personality can train a personality”; recognition of the academic community’s personal responsibility to future generations; payment for quality educational services as a more important condition of high standard of life; forms of gaining knowledge from the open information space; discourse choice and problem situations instead of traditional lectures; attraction of all scientific and cultural resources to the university.

References

1. Кремень В.Г. Система освіти в Україні: сучасні тенденції і перспективи // Професійна освіта: педагогіка і психологія: Польсько-український щорічник / За ред. І.Зязюна, Н.Ничкало, Т.Лєвовицького, І.Вільш. – Вип. II. –К.; Ченстохова: Вид-во «Віпол», 2000. –С. 11-30.
2. Мудрость тысячелетий:Энциклопедия / Автор - составитель В. Балязин. – 435 Сучасні моделі розвитку університетської освіти в Україні. – М.: ОЛМА - ПРЕСС, 2000. – 848 с.
3. Бордовская Н.В., Реан А.А. Педагогика: Учебник для вузов. – СПб.: Питер, 2001. – 304 с. (Серия “Учебник нового века”).

4. Фролов Ю.В., Махотин Д.А. Компетентностная модель как основа оценки качества подготовки специалистов // Высшее образование сегодня. – 2004. – № 8. – С. 34-41.
5. Алексюк А.М. Педагогіка вищої освіти України. Історія. Теорія: Підручник. – К.: Либідь, 1998. – 560 с.
6. Селезнева Н.А. Размышления о качестве образования: международный аспект // Высшее образование сегодня. – 2004. – № 4. – С. 35-44.
7. Гури-Розенблит Сара. Виртуальные университеты: существующие модели и направления развития / / http://www.aha.ru/~moscow64/educational_book/educational_book8/guri-ros.htm.