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## Formation of Management-Qualitological Competences Amongspecialists in Education Quality Problem

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#### Abstract

The article substantiates the existence of a social contract for highly qualified specialists, professionals in quality management in the HEF. On the basis of the introduced definition "model of professional training of future specialists ineducation quality in HEF", the structural and functional model of the system of professional training of such specialists was developed. The training of quality management professionals is based on the international principles of technical regulation in the fields of education, science and innovation, which determines the application of the ISO standards metric. A two-faceted methodology for organizing the professional training of quality specialists in the HEF is proposed.

**Keywords:** vocational training, quality of education, quality management, institution of higher education, architectonics of the educational and scientific system

#### Introduction

In connection with the development of globalization, transboundary implementation of educational systems of the Foundation of Higher Education (HEF) of Ukraine to the world academic space of education, science and innovation, changes in international and national legal and technical regulation of transformations of organization forms of different types of HEF and trainingof Masters, PhD students and ScD studentsin such institutions, the necessity for continuous degree training in combination with research and innovation, as well as postgraduate study, pro-

longed training for higher qualification leveland practical experience there is a necessity for justification, development, introduction of the new models of the targeted training forthe HEFeducation quality management professionals.

The relevance of the research topic is caused by the contradictions that arise between the social demandfor the highly qualified specialists in the education quality and the imperfection of their vocational training system in the context of globalization and transboundary implementation of HEF educational systems; the necessityofeducational institutions in mobile specialists in the education quality and the lack of scientific, methodological and informational-analytical support for their professional training in higher education institutions; real-world experience of the future education specialists training at HEF and the necessity to develop and substantiate the future professional education training based on the international standards.

### Main part

Systematic analysis of the Bologna Process etiology made it possible to make a theoretical justification for the impact of globalization on educational transformations as a phenomenon of the present time.

In the course of the system-axiological analysis of the Quality Forums, it is established that the means of technical regulation of the quality management of educational and scientific systems is the development and implementation of: theculturalpolicy of the quality management of higher education, its implementation through EU management standards; programs of lifelong learning, creative mechanisms to overcome obstacles in order to achieve the desired quality at the levels of organization of educational and scientific systems - European, national and institutional; measurable parametric metrics for quality control and monitoring, and cyclical diagnostics for predicting and modeling the state and development of educational systems in order to develop quality improvement procedures, a code of academic honor; managing the quality of education in shaping quality and safety of life and employment; modernization of studentcentered learning with social guarantees (education, research, life-long employment); adaptation of specific disciplinary, institutional and national content of the culture of quality for the formation of modernization synergetics of the interaction architectonics between educational and scientific symbiosis, geopolitics of quality and interaction of all interested parties.

As the quality assurance system of education is an abstract blended open, complex, dynamic, active organizational management system, an effective management system is required for its effectiveness. Problem analysis of theoretical and methodological knowledge contributed to the identification of priority principles of management of HEF: humanization, social determination, humanization, scientific fundamentals of the competence approach, information technology, strategic forecasting of the state and development of education systems, science

and innovation, responsiveness, responsiveness, degree and perspective, democracy and centralism, motivation and cohesion, legal priority, financial and eco ohmic rationality, optimization of resource and institutional activity in the field of quality management.

According to the requirements of today, the modernization of the HLS management system should be made using the model of the international standard ISO 9001: 2009, which is based on the principles of quality management and contains universal requirements for the quality system. Training of education quality professionals is also based on the international principles of technical regulation in the field of education, science and innovation, which provide the systematic unity, regulation, methods of measuring the quality of systematic processes of providing educational services. Namely, the metric of ISO standards of technical regulation of international and national measurements is applied: quality management ISO 9001; procedures for improving ISO 9004; social responsibility ISO 26000, SA 8000; requirements for ISO 17025 testing laboratories in conducting research; ISO 27000 information security management; environmental management ISO 14001; OHSAS 18001 Occupational Safety Management; food safety management ISO 22000, HACCP, FSSC; energy efficiency management ISO 50001 (in education and science).

The model of professional training of the future specialists in education quality in HEF is a set of measures, actions, conditions, requirements of organizational-pedagogical, socio-economic, informational-analytical, personnel, material-technical, financial, competent, professional-special and diagnostic aspects, which are aimed at continuity, cross-cutting, continuity and systematic consistency in education (natural-humanitarian, socio-political, socio-economic, vocational-oriented and special theoretical cycles and educational, research, production, technological, institutional and internship practices), providethe formation and development of professional and practical skills, competences, gaining experience of professionally-oriented activities in accordance with the current and future employment requirements and the necessities of society.

Educational quality professionals must have the following concepts in their minds: quality management is a set of purposeful and coordinated and subordinated quality control actions (screening, monitoring, certification, certification, licensing, standardization, accreditation) of institutions and quality management improvement in perspective. Institutional policy in the field of quality management and setting its goals tree involves forecasting, planning, monitoring, strategic management of improvement and modeling of quality assurance; quality policy – a comprehensive goal setting, both systemic and institutional, in the field of quality, formally formulated at the policy level (geopolitics, cross-border policies, regional, national, local policies) with the consent of stakeholders structures; quality planning management is an integral part of quality management, focused on the

goal setting in its sphere and the prolongation of system-management processes on the basis of information-management platforms and adequate resources for management required in the qualitological achievement; quality assurance is a methodological system of beliefs about guaranteeing extended standards of living (including confidence in the quality and safety of lifelong standards with employment, rights guarantees for employees and retirees) that can be fulfilled based on the assurance that the quality conditions will be guaranteed.

The methodology for organizing the professional training of quality specialists in the HEF has been developed. The methodology is formulated in a twofaceted phenomenon: as a system (scientifically substantiated synergetic methods of educational-cognitive, scientific-research, practical-internship, information-logical, predictive-modeling, instrumental and information-program control of the quality of the system's existence status and its transformation; development, functioning, implementation and testing of quality management of educational and scientific systems and systematic analysis of the quality of their condition and development); as a way of organizing the professional training of students, due to the regularities of harmonization and balance of the goals of training, research, internship, formation of specialists and professionals on quality management of educational systems of professional competences to ensure their sustainable development; socio-ecological efficiency, coherence of training processes, academic mobility of training and internship at the future place of employment, mutual exchange of practical experience with employers, noospheric and ideological integrity of the content of training, employment, international mobility of employment in self-employment.

Training of quality education professionals requires the development of scientific methodological directions: 1) methodology for training specialty and vocational disciplines: educational policy, quality policy, academic culture, quality management of educational systems, metrology, standardization, certification (international and national), strategic and management of education, forecasting and modeling of the state and development of educational and scientific systems (cross-border, regional, national and institutional levels), 2) methodological research system management with expert evaluation of relevant results.

The professional activity of a specialist in quality management in the field of education and science is defined by us as a process that involves: possessing a specialist in system-management skills; the readiness of the specialist to perform professional pedagogical, psychological, socio-economic, organizational and management, research, design, control, expert, regulatory, qualitative, educational tasks in the field of quality management of the partial components of the educational space environment and its systems as a whole; professional development of professional and practical competence and normative activity in the course of professional adaptation, formation and advanced training of self-

improvement and employment during life; formation of specialist managerial and qualitative competence.

With the purpose of effective formation of professional-practical managerial-qualitative competence of the future specialists and professionals in quality management in HEF a structural-functional model of their preparation was developed. It is built on the principles of system, program-target, structural-functional, synergetic, system-activity approaches and it is a complete unity of interaction in the following blocks: target, content, theoretical and methodological, organizational-methodological, practical and control-effective.

#### Conclusion

To fulfill reasonably the existing social demandfor highly qualified specialists, professionals in quality management in HEF we developed structural-functional model of the system of professional training of such specialists.

The model verification is carried out according to the certain criteria (motivational-axiological, cognitive activity) and levels (insufficient, sufficient, medium, increased, high) readiness of future specialists to carry out the competent management polyprofile-qualitological activities in the field of education, science and innovation.

The performance of the designed and justified methods of management of system of professional training of the future specialists for quality education in HEFwas experimentally tested in the National Pedagogical University named after Drahomanov and Precarpathian National University named after Vasyl Stefanyk.

#### Literature

Kondur, O. (2019). Quality Management of Educational Systems in the Conditions of Globalization: Theory, Methods of Organization, Practice. Ivano-Frankivsk: NAIR.

Ridei, N. (ed.) (2017). Multimode Principles of Postgraduate Education for Sustainable Development. K.: Drahomanov NPU.

Ridei, N. (ed.) (2018). Management of Postgraduate Education Systems for Sustainable Development. K.: Drahomanov NPU.