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EUROPEAN STANDARDS ISO 9000 AS THE METHODOLOGY OF QUALITY OF EDUCATION ASSURANCE IN HIGHER EDUCATIONAL INSTITUTIONS

Global trends in the world of educational technology determine the need for the innovative reform of the national system of higher education. This reform should be aimed at the growth of competitiveness of higher education institutions, which, in turn, would provide the economy of the country with experts, able to implement innovative technologies in all spheres of public life; contribute to the growth of cooperation between Ukraine and the international community in the field of education, science, and innovations; would increase the potential of national education in the global market of educational services, including citizens of developing countries.

National and foreign scholars covered the problem of the quality in higher education in their numerous publications. They consider the quality of education in several aspects, such as socio-philosophical, educational, pedagogical, sociological, management. H. Khimicheva [3], V. Bilokopytov [4], K. Morrison [5], I. Musiienko [6], O. Melnyk [8], A. Pochtoviuk [11], N. Kireieva [12] are among these scholars. However, there are many unsolved problems regarding the scientific interpretation of European standards, which are implemented in Ukrainian universities.

The purpose of the article is to define the essence of the well-known international standards ISO 9000, their role, characteristics, and drawbacks as the methodology of quality assurance in higher education institutions. To fulfil its mission as an educational institution, colleges and universities are to ensure quality education to meet the needs of economy and individuals, as well as society in the whole. The solution of the problem of quality depends on the introduction of competence and credit approaches, which make higher education understandable, matching the European occupational qualification

framework for European higher education and lifelong learning, and national occupational qualification frameworks [1].

Together with other countries of the European Community, Ukraine embarked on developing common approaches to quality education common to all countries. On March 4, 2008 in Brussels (Belgium), Ukraine became a full governmental member of the European Quality Assurance Register (EQAR). 18 countries-participants of the Bologna process are the governmental members of the Register. This fact has become an extremely important achievement of Ministry of Education and Science of Ukraine towards quality assurance of European level [2]. H. Khimicheva [3] emphasizes that the demands of the Bologna Declaration require the implementation of a two-stage structure of higher education that should be based on the common system of credit units to establish the volume of training time and European standards for quality of education. High quality training of students is the basis for these transformations. Thus the strategy of development of higher education of Ukraine, as a member of the Bologna process, should absorb global trends of transformation of the essence and methods of modern higher education, contributed to meeting the ever increasing needs of consumers, more fully revealed the creativity of the individual and provided introduction into creating the new information technologies [3, p. 64]. So, for the gradual development of the education system in Ukraine, it is important to consider the experience of other countries regarding the management and quality assurance of higher education in Europe.

As part of the historical and chronological analysis of European policy in the field of higher education V. Bilokopytov [4] singled out eight stages of the assurance of higher education quality (AHEQ):

1. Preparatory (1980th – 1990th, before signing the Bologna Declaration). It involves the development of theoretical and organizational principles of AHEQ process, carried out at national and European level and large-scale pilot experiments of quality assurance processes at national level.

2. Integration of political efforts of subjects of Bologna Process regarding AHEQ (1999 – 2001) – involving all the parties concerned to address issues of quality assurance,

such as governments, international organizations, universities, student unions and businesses.

3. Structural and organizational changes in procedures for quality assurance in higher education (2001 – 2003) – introduction of the European Credit Transfer and accumulation System (ECTS); development of mechanisms for the mobility of students, teachers, researchers and administrators; development of strategies for lifelong learning.

4. Development of a quality culture in higher education (2003 – 2005) – attracting universities to solve problems of AHEQ at the institutional level.

5. Transformation of AHEQ tasks into the priority of European education policy (2005 – 2007) – collaboration of the Group-4, which includes the leading European organizations, representing the interests of all concerned parties in solving AHEQ problems at the regional higher education area; development of European Standards and Guidelines concerning AHEQ.

6. Introduction of the first European Standards of AHEQ (2007 – 2009) – efforts to introduce European standards of AHEQ in the European higher education and monitoring trends in the investigated process.

7. Running on development and introduction of European standards and summing up the preliminary results (2009 – 2010) – gradual involvement of the countries participating in the Bologna Process to the developed standards, evaluation of the obtained results and determination of prospects of the future.

8. Further development of the European higher education area (since 2010) – and process of AHEQ at institutional, national and supranational levels [4, p. 16].

Consequently, the problem of AHEQ occupied an important place in European education policy both before and during the Bologna stages of development of European education policy. No reason not to trust the researcher, so we agree with its author's view on the problem, and focus our attention on the analysis of European standards of quality in higher education ISO 9000.

In the Berlin Communiqué (2003), the ministers of the countries participating in the Bologna Process instructed the European Network for Quality Assurance in Higher Education via its members and in cooperation with the European University Association

and European Association of Universities to develop coordinated standards, procedures, and guidelines on quality assurance. Their research became further known as the international standards ISO 9000 [2].

These standards immediately caught the attention of scholars and administrators of higher education. K. Morrison emphasizes that recently ISO 9000 has been widely used for solving problems of quality education and for the construction and certification of quality management systems of educational services in many countries [5, p. 59]. ISO is an acronym for International Organization for Standardization, an international agency that unites almost 100 member countries. Each country, regardless of its size, has an “equal” vote. The core of ISO 9000 consists of four international standards assisting in the development and implementation of an effective quality management system:

- ISO 9000:2000 establishes principles and fundamental concepts of quality management, describes the content of a series of standards and gives a list of terms and their definitions to be used in a higher educational institution;

- ISO 9001:2000 specifies requirements for a quality management if the university ought to demonstrate the ability in meeting the demands of consumers and authorities;

- ISO 9004:2000 describes guidelines for creating a quality management system which exceeds the requirements of ISO 9001 in order to effectively meet and exceed expectations of consumers of educational services; and

- ISO 19011 provides guidance on planning and conducting quality audits.

I. Musiienko emphasizes that ISO 9000 has differences between the requirements for quality management systems and requirements for the product; ISO concept is the requirements to the standard of management of organization complement the requirements to the quality of product itself. The main products of the university is knowledge, skills, methodological culture, comprehensive training of experts to personal fulfillment in society [6, p. 31].

According to ISO 9000 management of any organization, including universities, should be based on systemic principles [7]. ISO 9000 distinguishes the eight basic principles of quality management, which can be used by the institution’s authorities to increase its efficiency.

1. Focusing on consumers. Higher educational institutions depend on their customers, so they should be aware and understand their current (modern) needs as well as those that may arise in the future; fulfill their requirements and strive to exceed their expectations.

2. The role of authorities. The executives unite the purpose and directions of the development of organization. They should create an internal focus of the organization, which allows employees to be fully interested in achieving corporate goals.

3. Involvement of employees. Employees at all levels form the basis of each organization; their full involvement enables organizations to use their competencies with maximum efficiency.

4. Approach as to the process. The desired result is achieved by the most effective way when certain activity and necessary for its resources are seen and managed as a process.

5. Systematic approach to management. Identification of interrelated processes, their understanding and management as a whole system contributes to the effectiveness and efficiency of the activity of organization in attaining its goals.

6. Continuous improvement. The purpose for continuous improvement of all activities doesn't change.

7. Making decisions based on facts. Effective decisions are based on analysis of data and reliable information.

8. Mutually beneficial relations with suppliers. Organization and its suppliers depend on one another. If their attitude promotes mutual benefit of both parties, their ability to create value increases.

ISO standards were developed to provide organizations of all types and sizes with consultations towards the implementation and maintenance of effective quality management systems. These eight quality management principles are the basis for all management systems of ISO 9000 and form a basis for standardization, certification and evaluation of providing educational services at universities. A. Melnik emphasizes: "ISO 9000 demands execution of each applicable requirement of the standard and that all procedures have been documented appropriately. This leads to the creation of structure that covers the entire

system, effectively connects all activities, and ensures unrestricted distribution of information at universities” [8, p. 10].

The new standard ISO 29990:2010 is intended to provide a general model of professional activity and performance, and to define evaluation criteria of service and their customers in the field of project conception, development and providing non-professional training, education, and development [9]. The standard focuses on the personal activity of those who study, their results in learning, defines various options of development algorithms and increased training to enhance its performance in common.

Many enterprises in Ukraine have been applying international standards of quality. Therefore, we agree with I. Musiienko, that the requirements to the quality of training specialists with higher education articulated within the framework of the Bologna Reforms are more rigorous. This led to the need for certification of quality of educational institutions, including higher education institutions and contributed to the development of management of quality, as one of the components in management of higher education institutions [6, p. 29]. The A. Pochtoviuk’s opinion is very important. The scholar notes: “The international experience shows that it is expedient to begin the analysis of quality management system with a set of criteria formulated in the international standard ISO 9000. Typically, as a result of this analysis one may develop, implement, and possibly certify the quality system according to one of the ISO 9000” [11, p. 225]. Thus, economic and educational activities of higher educational establishments that were founded according to the requirements of international quality standards ISO 9000, involves engagement of the concerned parties identifying their requirements to the product quality, establishment of a system of continuous perfection of activity. This concept is based on the main principles of quality management, including the process approach. Documented management system focused on quality becomes the main toolkit of management. The presented material allows us agree with N. Kirieeva’s view that the European system of education quality assurance is based on European standards and guidelines that are based on the following principles:

- the interest of students, employers, and society in general in high quality of higher education;

– the key importance of the autonomy of schools and institutions, bearing in mind that autonomy brings very serious responsibility with it; and

– the system of external quality assurance must meet its goal and control the work of schools in the degree necessary for the performance of the system and its tasks [12, p. 88].

Thus, the development of assurance of higher education quality should consider certain principles to achieve high efficiency of the university, its acceptance by the public and increasing international university status.

According to I. Musiienko, introduction of European standards comes difficult. This is because modern Ukrainian system of education is still a conglomerate of some characteristic features of both the old Soviet system and the new for Ukraine European, Anglo-Saxon system of education. Its introduction is caused by the implementation of the guidelines of Bologna Declaration and transforming of Ukrainian economy to the market principles of management. An intersystem conflict is being formed on this background. It requires a prompt systemic solution because the tension in the labor market correspondingly increases [6, pp. 29 – 30].

Thus, a hard work on creating systems of quality in higher education and implementation of European standards of quality in Ukraine is very significant for all universities. The Berlin Communiqué of the Conference of Ministers of Higher Education pointed out that “according to the principle of institutional autonomy of educational institutions primary responsibility for the quality of higher education lies on each individual institution” [13, p. 46]. Thus, the European zone of higher education recognizes the priority of universities in ensuring the quality of higher education.

This article reveals that, for quality assurance it is necessary to create a comprehensive system of normative documents regulating the educational activities of the university, which includes traditional approaches prevailing in national universities, uses advanced experience of foreign educational systems and is based on the international standard ISO 9000.

The prospects for further study we see in the reviewing the key requirements of standards ENQA.

References

- 1. Bila** knyha natsionalnoi osvity Ukrainy [White Book of National Education of Ukraine]. Gen. ed. Acad. V. H. Kremen. SAPS. Kyiv: *Inform. Systems*. 2010. 342 p. (ukr)
- 2. Standarty** i rekomendatsii shchodo zabezpechennia yakosti v yevropeiskomu prostori vishchoi osvity [Standards and Guidelines for Quality Assurance in the European Higher Education Area]. Kyiv. *Lenvit*. 2006. 36 p. (ukr)
- 3. Khimicheva H. I.** Metodolohiia vprovadzhennia pryntsyviv TQM i vymoh standartu DSTU ISO 9001 u sferu vishchoi osvity [Methodology of Implementation of TQM Principles and Requirements of ISO 9001 in Higher Education]. *Ukrainian Engineering and Pedagogical Academy*. Kharkiv. 2005. No. 11. Pp. 64 – 72. (ukr)
- 4. Bilokopytov V. I.** Diialnist yevropeyskykh orhanizatsii iz zabezpechennia yakosti vyshchoi osvity v konteksti Bolonskoho protsesu [Activities of the European Organizations on Ensuring the Quality of Higher Education in the Context of Bologna Process]. Candidate of Sciences Dissertation in 13.00.01. Sumy. 2012. 20 p. (ukr)
- 5. Morrison K.** Management Theories for Educational Change. London. *Paul Chapman Publishing Ltd*. 2007. 242 p. (eng)
- 6. Musiienko I. I.** Pryntsypovi vidminnosti systemy osvity Ukrainy vid vimoh yevropeiskoho prostoru vyshchoi osvity [The Principal Differences between Type of Education System of Ukraine with European Higher Education Area]. Mykolayiv. *Petro Mohyla Publishing*. 2010. Ed. 135. Vol. 147. Pp. 28 – 31. (ukr)
- 7. DSTU-P IWA 2:2007.** Systemy upravlinnia yakistiu. Nastanovy shchodo zastosuvannia ISO 9001:2000 u sferi osvity (Chynnyi vid 2008-01-01) [DSTU-P IWA 2:2007. Quality Management System. Guidelines on the Application of ISO 9001:2000 in the Education Sector]. Kyiv. *Derzhspozhyvstandart Ukrainy*. 2008. 70 p. (ukr)
- 8. Melnik O. O.** Vprovadzhennia standartu yakosti ISO 9000 u vyshchomu navchalnomu zakladi [Implementation of Quality Standard ISO 9000 in Higher Educational Establishments]. Coll. scien-meth. works. Melitopol. *Taurian State Agrotechnical University*. 2008. No. 12. Pp. 8 – 12. (ukr)
- 9. ISO/DIS 29990:2010.** Learning Services for Non-Formal Education and Training – Basic requirements for service providers. ISO : ISO/TK 232, 2009. 15 p. (eng)

10. Adler Yu. P. Vosem printsypov, kotoryie meniaiut mir [Eight Principles that Change the World]. *Standards and Quality*. 2001. No. 5 – 6. Pp. 49 – 60. (rus)

11. Pochtoviuk A. B. Yakist osvity suchasnoho vyshchoho navchalnoho zakladu: problemy ta perspektyvy [The Quality of Education of the Modern Institution of Higher Education. It's Problems and Prospects]. *Economic Bulletin of Donbass*. 2012. No. 1. Pp. 223 – 226. (ukr)

12. Kireieva N. Informatsiinyi analiz yakosti vyshchoi osvity: derzhavno-upravlinskyi aspekt [Informational Analysis of Quality in Higher Education: Public-Administrative Aspect]. Coll. sc. works. Lviv. *Lviv Regional Institute of Public Administration of the National Academy of Public Administration under the President of Ukraine*. 2010. Ed. 23. Pp. 86 – 93. (ukr)

13. Bolonskyi protses u faktakh i dokumentakh [Bologna Process in Facts and Documents]. MES of Ukraine. Ternopil. *Ekonomichna dumka*. 2003. 60 p.(ukr)

Кубанов Р. А. Європейські стандарти групи ISO 9000 – методологія забезпечення якості освіти у вищому навчальному закладі

Одним із принципів Болонських реформ є доволі жорсткі вимоги до якості підготовки фахівців із вищою освітою. Споживачі освітянських послуг та посилена конкуренція в цій сфері змінюють вимоги щодо якості їх надання в Україні й у світі. Визначено, що для підвищення якості освіти кожному навчальному закладу треба щоденно працювати над цим та постійно вдосконалювати методи та засоби освітянської роботи. Стандартизація організаційної роботи та роботи з документами може стати основою створення всебічної програми управління якістю надання послуг у галузі освіти. Стандарти групи ISO 9000 дають можливість вищим навчальним закладам значно поліпшити роботу над якістю освіти. У статті розкрито галузі знань і ключові напрямки діяльності у вищих навчальних закладах щодо проектного управління процесами створення системи стандартів, що ґрунтуються на принципах управління якістю групи міжнародних стандартів ISO 9000.

Ключові слова: стандарт, управління якістю, конкурентоспроможність, споживачі, студенти.

Кубанов Р. А. Европейские стандарты группы ISO 9000 – методология обеспечения качества образования в высшем учебном заведении

В рамках Болонских реформ ожесточаются требования к качеству подготовки специалистов с высшим образованием. В статье установлено, что потребители образовательных услуг и возрастающая конкуренция в этой сфере меняют требования относительно качества их предоставления в Украине и в мире. Определено, что для повышения качества образования каждому учебному заведению необходимо постоянно совершенствовать методы и средства работы над качеством образовательных услуг. Стандартизация организационной структуры и работы с документами может стать основой создания всесторонней программы управления качеством предоставления услуг в области образования. Стандарты группы ISO 9000 предоставляют возможность высшим учебным заведениям значительно улучшить работу над качеством образования. В статье анализируются ключевые направления деятельности в высших учебных заведениях относительно проектного управления процессами создания системы стандартов, которые базируются на принципах управления качеством группы международных стандартов ISO 9000.

Ключевые слова: стандарт, управление качеством, конкурентоспособность, потребители, студенты.

Kubanov R. A. European Standards ISO 9000 as the Methodology of Quality of Education Assurance in Higher Educational Institutions

The requirements to the quality of training specialists with higher education articulated within the framework of the Bologna Reforms are more rigorous. The author of the article concludes that the driving force behind these heightened requirements to the quality of education both in Ukraine and the world in general is the new expectations of the consumers of educational services and the increasing competition in this sphere. It is further established that, for the quality of education to improve, each educational institution needs to constantly enhance the methods and means of its work on the quality of educational services.

The standardization of the organizational structure and documents processing can become a basis for the creation of a comprehensive program of the quality management of services in the field of education. ISO 9000 Standards give an opportunity to higher educational institutions to considerably improve the work on the quality of education. In this regard, the article defines the essence of the ISO 9000 Standards, their role, peculiarities, and limitations as a methodology of quality assurance in higher educational establishments. The quality management principles set in these standards define the major directions of the higher educational institution's work on the creation and introduction of its own system of quality standards.

Key words: standard, quality management, competitiveness, consumers, students.

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