Materials of Conferences

THE FREEDOM OF RESEARCH BY THE HIGHER EDUCATIONAL INSTITUTION AS AN ASPECT OF INTEGRATION PROCESSES IN EUROPE AND KAZAKHSTAN

Arenova A.H.

Esenov Caspian State University of Technologies and Ehgineering, Aktau, e-mail: arssyl31@mail.ru

The article studies the aspect of the forming integration processes during the recent years. It describes an analysis of the development of east-European integration and growth in scientific-technical potential cooperation of countries that finally leads to their mutual dependence and completability. Along with that the article studies an aspect of integration of different types of educational institutions into scientific-educational megacities of continental, inter-region, and state significance. An idea of the importance of part of large international projects and funds in solving problems of the world and European science integration is pointed out.

A characteristic of the higher school of Kazakhstan of the XXI century is given in the article, specifically of its innovative direction. These priorities are described in Kazakhstan national programme documents within the article. Programme measures and events that efficiently use scientific potential of universities and can solve the problem of freedom of scientific researches and integration of European and Kazakhstan science are described.

The article defined the directions of developing integration and freedom of scientific research. Also, it studies barriers against researchers' collaboration with their European colleagues.

Integration processes have been an integral part of geopolitical situation that is being formed in different regions of the world during the recent years. Along with such phenomenons as globalization, regionalization, terrorism, processes of integration obtain a larger scale. Like globalization, for example, integration processes are inevitable, though hard to predict.

Free movement of information and idea provide for destruction of stereotypes that is especially important in terms of modern integration.

As West-European integration develops, scientific cooperation of scientific-technical potential of separate countries and regional complexes grows as well as cooperation of education, training scientific staff, realization of discoveries and inventions, efficiency of their usage that enters an integration (regional) stage in Europe. Integration in Western Europe actively involves scientific area, education, researches by educational institutions, it develops processes of realization of scientific-technical potential of Western Europe. In other words, mutual dependence, completability of countries grows stronger. Thus, it all leads to a development in West-European integration as a dynamic process.

A trend to integrate different types of higher educational institutions (under the aegis of classic university) into scientific-educational metropolises of continental, inter-regional, and state significance can be observed all over the world. Consolidation of universities with industrial complexes takes place in different countries. Thus a base for scientific studies and training unique specialists for modern firms and enterprises is formed [1].

Large international projects and funds obtain certain significance in solving problems of European and Worldwide science integration:

• EURICA, its objective is to carry out coordination of research by countries of Western Europe;

• ESPRIT, a project that implies joining efforts of European universities, scientific-research centers, computer firms in creation of new information technologies;

• EUROPEAN SCIENTIFIC FUND (ESF), as association that unites 68 organizations – members that carry out scientific-organization activity in 24 countries of Europe. European scientific fund coordinates all-European scientific initiatives in order to support scientific research of higher level. European scientific fund supports the following main types of activity: research seminars; scientific networks, European scientific conferences; scientific programmes [2].

In 2009 an international project «Technologies of informational society for open knowledge in countries of Eastern Europe and Central Asia» (ISTOK-SOYUZ) started [3]. Its objective is to reveal new possibilities for scientific cooperation between countries of EU, Eastern Europe, and Central Asia, including Kazakhstan, in the area of ICT.

In these terms we would like to admit that in December 2001 the 20th meeting of the Council of education by Integration Committee EurAsEC took place. Ministers of education of the EurAsEC discussed strategic problems of cooperation between states-members of Eurasian economic community in the area of education and general recommendations in creation of a single Eurasian educational space were produced.

Higher school of Kazakhstan, as an integrator and flagship of the system of continuous education of the country entered the XXI century in state of rapid changes in terms of globalization in field of higher education. Integration of the higher education system into the world educational society is a national priority. Bolognese process was indicated as the vector of its development, according to the

Concept of education development in Kazakhstan Republic.

A strengthening of innovative direction in state scientific-technical policy defines a need for the corresponding transformation of the objectives of international cooperation between Kazakhstan Republic and other countries of Europe in field of science and technology: a transfer of the attention from «classic» scientific-research works towards mainly problem-directed search and applied studies, joint commercialization of the results of scientific-technical activity.

By the day, Kazakhstan Republic and other countries of Eastern Europe and Central Asia, not being members of EU and states, associated in the 7th Frame programme of EU on science and technological development for 2007-2013 (FP7), are included into the membership of partner countries of EU in international cooperation (International Cooperation Partner Country – ICPC) with regard to realization of FP7. Such state allows researchers from Kazakhstan take part in joint scientific projects with their European colleagues and receive grants of EU in FP7 [4].

These priorities find a confirmation in national programmes and documents. In the Concept of development of education in Kazakhstan Republic to 2015 integration into the world education society is defined as an objective for the development of Kazakhstan education for forming a national model of multi-level continuous education that is integrated into the world education space and satisfies need of a person ad society [5]. And further – «the main trend in development of higher education is … providing for innovative development, integration with an intense scientific-research activity, close relations between institutional research and social needs on the foundations of improving educational and information technologies» [5].

The same idea on the necessity of an integration is put into another, no less important document – State programme of education development in Kazakhstan Republic for 2011–2020 that has been confirmed by an Order of the President of Kazakhstan Republic N. Nazarbayev of the 7th of December 2010 № 1118 [6]. Particularly, among the objectives it points out an intehration into the Europen space of higher education through bringing the content and structure of higher education in correspondence with parameters of the Bolognese process.

Obligatory and recommended parameters of the Bolognese process will be fulfilled: a classification of the republic institutions depending on their realized education programmes and volumes of the ongoing scientific-research activity will include: national research universities, national higher educational institutions, universities, academies, and institutes. Conditions for gradual provision of autonomy to institutions will be created. Since 2015 national research universities will receive autonomy, separate scientific-research institutes will be transferred to leading research universities with a right of legal independence. As well, mechanisms will be created to define basic institutions for making the following innovative structures: business-incubators, industrial parks, centers of commercialization of scientific developments and technologies. Since 2016 scientific research within prior branches of economy in order to create highly-technological and science-intensive production will take place, cooperation with partner-universities and foreign scientific centers will be established [6].

As a result, a significant scientific potential of universities will be used more efficiently in order to broaden fundamental and applied research, its complexness and practical results will increase, and, obviously, all these programme measures will solve problems of freedom of scientific research and problems of integration of institutional science of Europe and Kazakhstan.

We can define direction within the studied problem, specifically, development of integration and freedom of scientific research.

1. Broadening of the network of scientific-research unions that are created through uniting the most productive institutional scientific groups and providing them with necessary resources and funding on a competitive basis [7], [8].

2. Participation of institutions in competitions for receiving joint international grants and orders for research and development, providing mutual scholarships, international programmes and projects.

3. Creation, development and prior support of a network of leading research universities as the biggest scientific-educational organizations

Speaking of barriers that complicate researcher's cooperation with their European colleagues, we can outline the following:

1. Negative points that are linked to the present mechanism of coordination in collaboration in scientific research.

2. Differences in classification and terms.

3. Insufficient informational openness of local competence for Europe and necessity of their additional promotion (through networks, technological platforms, and other instruments).

4. Communication problems (language barriers, culture of e-mail communication, mentality, etc), including lack in knowledge of partners' psychology.

5. Differences in procedures of funding projects, and, therefore, – a negative transition of concepts regarding procedures and mechanisms of realizing projects within national model for interaction with European partners.

6. Insufficient development of co-financing mechanisms of joint projects.

7. Insufficient motivation of researcher's to take part in European programmes (advantages of such participation are not always understood).

8. Undeveloped connections with colleagues from European countries [4].

Nevertheless, definite steps are made towards integration into Europe are taken.

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PROFESSIONAL COMPETENCE OF SPECIALIST AS AN INTEGRAL CHARACTERISTIC

Arenova A.H.

Esenov Caspian State University of Technologies and Ehgineering, Aktau, e-mail: arssyl31@mail.ru

The article studies professional competences and their interpretations, for example, mastering knowledge, skills, and abilities; constructs of standards' projecting; efficient usage of abilities, integrated combination of knowledge, skills, and settings; readiness and ability to act reasonably, etc.

Besides, the very isea of academic competence is studied, such competences are also called applied.

Further we provide different approaches of authors towards the understanding the essence of professional competence and its formation. A relation between professional competence and pedagogic skills has been revealed.

Nowadays scientific literature provides definitions of different competences: professional, general and key, academic, special, etc.

Professional competence is defined as:

– mastering knowledge, skills, and abilities that are necessary to work in a specialty with a simultaneous autonomy and flexibility in terms of solving professional problems, developed collaboration with colleagues and professional impersonal environment;

– constructs of projecting standards that represent «elements of competence» that include: activity criterions (measure of quality); area of implementation, required knowledge;

– efficient usage of skills that allow one to carry out professional activity productively according to the requirements of his workplace. In this case competences go beyond the frame of professional triad «knowledge-skills-abilities» and include informal and formal knowledge and know-how (behavior, analysis of facts, making decisions, processing information, etc). [1];

– integrate combination of knowledge, skills, and settings that allows one to carry out professional activity in modern labour environment [2];

– readiness and ability to act reasonably in accordance with requirements of a business, solve problems independently and in an methodically organized way, evaluate the results of his activity [3].

Professional competences are oriented towards a profession.

Some outline academic competences that are defined as mastership in methodology and terms that is typical for a certain areas of knowledge, understanding of its actual system relations, and realizing its axiom limits [4]. These concepts are also called applied, and related skills, correspondent methods and technical means that are typical for subjective areas are referred to them [3].

Pedagogic science studies the idea of «professional competence» as a totality of skills and knowledge that define the efficiency of work; an amount of skills to solve a problem; combination of personal characteristics; vector of profesionalization; unity of theoretical and practical readiness to work; ability to carry out complex, culture-defined types of activity, etc. Such «wide» definition of this concept, as we think, is linked to its integrative characteristic that allows us to transform and study its meaning from different point of view.

Professional competence as a professional readiness and ability of a labour subject to carry out tasks and responsibilities of everyday activity is studied by K.A. Abulkhanova-Slavskaya who pays a great significance to specific-applied knowledge of a specialist, as «they serve as a basis in forming the whole professional competence». Structural components of a competence are also professional positions, for which a person's orientations play an important part. They unite a system of needs – dominants, values, goals, prevailing systems of sense motives that are fixed in life goals, settings, prospects, urges, plans, and active work to achieve them; individual psychological characteristics of a person that define his individuality, way of activity, behavior, ans acmeological invariants of a specialist that, being inner stimulants, define his need for active self-development, productive realization of his creative potential in work and move towards personal peak of professional perfection.

M.A. Choshanov put the following definition of professional competence: «If we try to define the place of a competence in the system of levels of professional mastership, it occupies an intermediate place between routine and perfection. First of all, a competence implies continuous refreshment of knowledge, mastering new information in or-