

About the Experience in the Implementation of Joint Educational Programs at the Ural Federal University

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ABSTRACT

The priority activities of the Ural Federal University and integration into the international and domestic educational environment, in particular, are described. The experience of the university in the development and implementation of joint educational programs and their value to the university, which is the main supplier of highly qualified personnel at the regional scale, are considered. The necessity of creation of internal regulatory system of the university, regulating all aspects of interaction between the partner universities in the process of development and implementation of joint educational programs, is grounded. The main trends and educational interaction partners, as well as the basic conditions for the implementation of this type of programs, such as distance learning technologies and electronic educational resources, are described. The main problems, arising in the implementation of joint programs, as well as their solutions, are described.

Keywords: Joint Educational Program, Internationalization of Educational Activity, International Educational Environment JEL Classifications: I230, I280, I210

1. INTRODUCTION

The process of creating federal universities in Russia pursued the ultimate goal of enhancing the effectiveness of socioeconomic development of the regions in the federal districts and of the innovation economy of the country as a whole, reducing out-migration of the population from the strategically and geopolitically important regions of Russia, as well as preserving the population in the regions with the provision of high quality and accessible education. The orientation of federal universities on regional interests does not preclude the entry of this type of universities into the international educational environment. An obvious fact is the fact that up to date the international cooperation has become a priority strategic activity of many universities of Russia and the Ural Federal University, in particular. In the contemporary world, the international cooperation takes on new, non-political importance. According to experts, by the beginning of the 21st century, the international academic mobility has increased by more than 300% compared to the indicators of the last century (Brunch and Barty, 1998). The academic mobility is essential for personal and professional development of students, who have to face the need to solve various professional and life situations constantly, analyzing them in terms of their own and "alien" culture. The competition in education also creates the preconditions for including various international aspects in research, teaching, educational and administrative activity. According to Knight's definition, the internationalization of higher education is "the process of integrating international, intercultural and global dimensions into the purposes, functions and processes of higher education" (Knight, 2012). Each higher education institution should implement its approach to this process based on clearly articulated objectives and expected results (Inozemtseva, 2014). It should be noted that the internationalization of education is one of the key strategies of the majority of European universities (Sursock and Smidt, 2010).

To establish the international cooperation in the Ural Federal University a Program to improve competitiveness, which sets out measures, performing of which will allow the Ural Federal University by 2020 to enter in the top 100 universities in the world, has been developed and is being implemented. Currently the Ural Federal University takes the 77th place in the ranking of higher education institutions in BRICS countries published by the QS Agency. The values for the indicators, related to the number of foreign students and teachers, have improved by 10% compared to the previous year (http://66.ru/news/hitech/174119), which is a significant condition for the entry of the university into the international educational environment and a possibility of the formation of the university as the "world class universities" (Salmi and Saroyan, 2007).

The Russian institutions of higher education gain greater and greater freedom in the formation of basic educational programs, which certainly increases their abilities to be more responsive to the needs of the labor market, to compete in the Russian and international markets of educational services, at the same time increasing the responsibility of educational institutions for the quality of its educational programs significantly. The federal government standards include the orientation on the results of programs acquisition as mandatory requirements and determine the modular construction of educational programs as a recommendation which fulfills the basic methodological principles of the European higher education environment (Karavaeva and Kovtun, 2013). The practice of the Ural Federal University in the development and implementation of joint educational programs allows the authors of the article to analyze the existing experience and to identify its strengths and weaknesses.

The international experience shows that the own resources of even the best higher education institution may not be sufficient for the effective development of advanced education in the interests of the region or the country (Mednikova and Senashenko, 2014). The public dissatisfaction with the activities of higher education institutions is typical for many countries. The situation in the US is described in the new book "Preparing Universities for an Era of Change" (Weber and Duderstadt, 2014), in which weakening of the partnership of research universities, government and industry is noted. This fact confirms the necessity and relevance of the work of universities for the implementation of joint educational programs.

2. METHODOLODY

A methodological ground for the study, conducted by the authors of this article, is general scientific methods of research of sociocultural processes: The analysis of scientific literature (works of Russian and foreign researchers on pedagogy of higher education and sociology of education), as well as the analysis of regulatory documents, both of the state level and developed in various Russian universities and at the Ural Federal University, in particular. The basis of the study is based on the empirical method for describing, representing a cognitive operation consisting of recording the results of the practice of establishing and implementing the joint educational programs at the university.

3. RESULTS

The joint work of the authoring team of this article in 2013 resulted in the approval of a package of documents regulating the procedure of establishing and implementing the joint educational programs at the Ural Federal University named after the First President of Russia Yeltsin. The joint educational program means an educational program suggesting the possibility of its acquisition by using the resources of several organizations, engaged in the educational activity, including the foreign ones, as well as, if necessary, by using the resources of other non-educational organizations. The joint educational programs are developed primarily in promising areas and are usually interdisciplinary in nature. These programs are developed to prepare personnel for large industrial, scientific and other projects and enable to form unique competencies, which are in demand, especially in high developing economic sectors. The "triangle of knowledge production": Education - research - innovations helps to provide a graduate with a good quality, modern and competitive education and thereby ensure that University with a valued role in the educational sphere (Gibbons et al., 1994).

The advantages of joint educational programs are as follows:

- 1. Resource sharing to improve the quality of implementing the educational program. This type involves the use of learning and teaching, material and technical and personnel resources of a partner institution;
- 2. The availability of their own individual learning path by selecting variative modules offered by the partner universities; it is carried out through the academic mobility (in the traditional form or remotely) of teachers and/or students;
- 3. The availability of a period of academic mobility of students, as a rule, of the workload from 15 to 60 credits. Each of the partner institutions hold tests for the corresponding educational subjects and modules mastered by students in another institution;
- 4. An opportunity to get documents on education of two educational institutions. This involves the implementation of educational programs by simultaneous accepting students in two institutions engaged in the educational activity. Each of these institutions holds tests for the corresponding educational subjects and modules mastered by students in another institution. Usually part of the educational program, taught in each partner educational institution, ranges from 40% to 60% of the total workload of the program.

The joint educational program can be successfully implemented only under the condition of openness of the procedures for its development and implementation, as well as the unconditional nature of their implementation by all entities of networking cooperation. A legal basis of the partnership in accordance with article 15 of the Federal law dated 29 December, 2012 No. 273-FZ "On Education in Russian Federation" is a normative-legal base regulating the legal relations of the network participants. The interaction between the University and partner institutions is carried out on the basis of a contract between the educational and other organizations involved in the implementation of the educational program. The process of development and implementation of joint educational programs is determined by such local regulatory documents of the university as "Procedure for the development of educational programs in the form of a network"; "Procedure for the implementation of educational programs in the form of a network"; templates of contracts providing the legal relationship between a variety of partners-participants of the interaction. The experience of international cooperation with the universities of the Commonwealth of Independent States allows concluding the following: The forms of implementation of joint educational programs are extremely diverse and represent a choice of both traditional and more innovative methods of organization of the educational process in the framework of each specific contract with a partner. This explains the variability of the developed at the university templates of contracts on the joint form of implementation of educational programs.

4. DISCUSSION

4.1. The Experience of Creating Joint Programs with Foreign Universities

The development and approval of a package of regulatory documents, regulating the main aspects of cooperation in the establishment and implementation of joint educational programs have become a basis for successful practice of the Ural Federal University in cooperation both with Russian and foreign partner universities. As the researchers note, before all the Russian universities a task of reconfiguring relations of universities, government, private sector and civil society to increase the potential of higher education institutions and to increase their contribution to the national and international development is set (Strongin and Chuprunov, 2014). This leads to the need to improve the quality of education through the increased access of students to modern educational technologies and learning tools available in partner universities, which is very important in the present economic situation in Russia and around the world. Today the university has more than 160 of contracts on cooperation with various universities in Europe, Asia, North and South America, and the activity on implementation of joint educational programs in the framework of such projects as "SCO Network University," "CIS Network University," "TEMPUS," "Club of Ten," etc. is carried out. All the above projects are aimed at the organization and implementation of high quality joint educational programs, strengthening international cooperation in training of specialists of higher qualification and facilitating the exchange of post-graduate students and conducting joint research to prepare master's thesis.

"The SCO University" is an international educational program which gives students from Russia, China, Kazakhstan, Kirghizia, Tajikistan and Belarus an opportunity to study the chosen direction in several higher education institutions, members of the SCO University during the whole period of training. Its purpose is joint training of highly qualified personnel on the basis of agreed innovation educational programs in areas of priority interest for the economic and social development of member countries of the SCO. The Ural Federal University is implementing the joint educational programs with Kazakhstan and Tajikistan in the areas of energy, regional studies and ecology.

The Network University of the Commonwealth of Independent States is an interacademic network educational environment of the states-participants of the CIS, the cooperation with which in the field of education is stipulated in the official documents (http:// www.wto.org/english/thewto). The experience of implementing the project "CIS Network University" reveals both the advantages and problems arising in the practice of joint activities. For example, in the world rankings higher education institutions of the CIS countries either take lower places, or are absent. The most popular international rankings do not take into account many competitive features of universities of the CIS. The prestige of higher school of the CIS countries can be enhanced through the active cooperation with colleagues in the world which will raise the ranking of higher education institutions of the CIS countries. The Ural Federal University is a member of the technical consortium of the CIS Network University, teaching students of Armenia, Tajikistan and Kazakhstan in the master's programs. As a rule, the foreign master's students in the framework of the project of the CIS Network University study at the Ural Federal University for the first year and then return to the National Higher Education Institutions.

4.2. The Experience of Creating Joint Programs with Russian Universities

A new stage in the development of the Ural Federal University cooperation is the participation of the university in the "Club of Ten." The club activities are aimed at improving the connectivity of regions of the Russian Federation, as the members of the club – The federal universities are scattered throughout the country, and their cooperation allows making a mutually beneficial exchange of scientific achievements and innovations (http://f-campus.ru/rektory). This is not contrary to the international educational practice. Thus, for example, the European platform of "Smart Specialization" directs higher education institutions to identify competitive advantages and to establish priorities for work in the interests of their region as a source of resources (Report on..., 2014).

During 2013-2015 the university is actively working on conclusion of contracts and joint implementation of master's educational programs. The students from the Ural and Siberian Federal Universities mastered the modules in the framework of the educational program in the direction of "Biology" successfully, as stipulated in the partnership contract on the implementation of the joint educational program. It should be noted that this experience has demonstrated the complexity of the organization of student mobility. This is explained by differences in the internal structure and features of implementation of modular curricula of universities. Nevertheless, the coordinators of joint educational programs found effective ways of implementing student mobility, since it is mastering the modules/subjects in the resource base of partner universities that is a main purpose of this interaction. For example, in the curriculum there is a period of learning in which it will be most convenient for a student to study at the partner university (including the foreign one). Also in the curriculum, there are modules, which a student must master at the Ural Federal University and modules, which he will master at the partner university.

Due to the fact that the universities agree on the need for students to acquire practical experience in the course of study at the university, internships in more attractive terms at an enterprise of the relevant industry sector or in a research lab of the partner university, certainly, appears to be a positive side of this type of interaction, which is typical for colleagues abroad (http://www. onetonline.org/).

The practice of the Ural Federal University shows that the implementation of joint educational programs is possible only with the use of distance learning technologies and electronic learning (e-learning) (http://arodirossii.ru/). New technologies allow organizing the training of foreign students without their departure from the country of residence in the Russian Federation. For example, the Ural Federal University and Kostanay Socio-Technical University named after academician Zulkharnai Aldamzhar (Republic of Kazakhstan) have concluded contracts on joint implementation of educational programs of a bachelor degree course in "State and municipal management," "Automation of technological processes and production," "Information systems and technologies." Under the agreement, the Kostanay Socio-Technical University, serving as a resource center, assumes the functions of implementing part of the educational program. The Ural Federal University undertakes to provide training on the educational program in general and the classification of learning outcomes for the modules mastered by students at the university-resource center, and also assumes the obligations of the partner university. The implementation of part of the educational program was transferred from the Ural Federal University to the university-resource center. The universities contribute to the information, learning and teaching and consulting provision of joint activity, as well as to maximum openness of the educational program and its parts, ways of assessing learning outcomes and individual achievements of students. Part of the educational program, studied by students at the Ural Federal University, is implemented using distance educational technologies (http://kpfu.ru/portal/docs/). Teaching workload is performed in the mode of videoconferencing on the Adobe acrobat connect PRO platform. The main capabilities, provided by the system, are: Balanced video and audio communication, implementation of a multidrop conference, shared access to the screen or individual applications, availability of an interactive whiteboard, demonstration of presentations, support of many formats of audio, video and bitmap images, monitoring the presence of participants, text chat, moderation of online-meetings and surveys of participants, scheduling meetings and inviting participants, recording of web conferencing and many others (Ignatchenko and Satybaldina, 2014).

5. CONCLUSION

Let's summarize: The process of development and implementation of joint educational programs requires the concentration of

considerable resources, which is possible only by clear defining the priorities of the university development. Since to date the international cooperation is a priority strategic activity of the Ural Federal University and an important condition for the entry of the university both into the Russian and the international educational environment, the concentration of efforts of the faculty and staff of the university in this activity will be increasingly important. It should also be noted that the joint programs form graduates' competencies which contribute to their successful employment in the constantly changing labor market and in the increasing globalization (http://ec.europa.eu/epale/ga/node/).

The conducted analysis also suggests that almost 80-year experience of implementation of engineering educational programs at the Ural Federal University allows us to agree with the conclusion to be noted by the foreign researchers: "The teachers of engineering schools differ from the faculty of professional educational institutions: They usually have few experience or parallel practice in professional fields" (Duderstadt, 2008). In connection with this circumstance, it is necessary to identify one more advantage of joint educational programs - this is an opportunity to interact not only with the partner university, but also with resource organizations providing the practice bases. Thus, for example, joint implementation of master's educational program "Mathematical Geophysics and Geoinformatics" is carried out by four partners: The Ural Federal University (Russian Federation), the Belarusian State University (Belarus), the Institute of Mathematics and Mechanics named after Krasovsky of the Ural Branch of the Russian Academy of Sciences (Russian Federation) and the Bulashevich Institute of Geophysics of the Ural Branch of the Russian Academy of Sciences (Russian Federation). The last two institutions are resource ones with unique equipment. According to the agreement on joint implementation of the educational program these resource institutions provide laboratories, equipment and specialists to conduct practices. The patronage of Belarusian and Russian post-graduate students is of purposeful character, as the master's thesis topic is determined by the specifics of activities in these resource institutions. For research institutions, which are resource institutions in this interaction, working with universities is a way of attracting young talented students who can work in these institutions experiencing a shortage of highly qualified prospective employees.

It should be noted that the joint educational programs, implemented at the Ural Federal University, are developed not only for the international environment but also for domestic educational one. The study and then the use of competitive advantages of the Ural region make it possible to attract an increasing number of students in the educational programs of the Ural Federal University, which is a major supplier of highly qualified personnel at the regional scale. The successful implementation of joint domestic educational programs is facilitated by the participation of the university in the project "Networked Digital Library of Federal Universities." The creation of the technological platform and organizationalmethodical support for the development and use of joint educational programs of federal universities; ensuring commercialization of full-text electronic content of federal universities; ensuring control of extracurricular educational process – all these characteristics of the network project expand students' opportunities for successful acquisition of the educational program.

The authors of the study set their further task to study and to identify the main difficulties encountered in the process of organization and implementation of "windows of mobility" (mastering modules and practices in the partner universities). The findings of this study will form a basis for local regulatory documents of the university, necessary for the organization and implementation of academic mobility of students within the framework of joint educational programs, both domestic and international ones.

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