



PROFESSIONAL PERSONNEL TRAINING: INSTITUTE OF HIGHER EDUCATION- ENTERPRISE INTERACTION AND DEVELOPMENT OF STUDENTS' PROFESSIONAL CAPACITIES

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Abstract. Improving of professional personnel training according to needs of the modern labour-market demands the enhancement of interaction of universities and employers. The article deals with the possibilities of social partnership "institute of higher education-enterprise" while developing professional capacities of students during educational and practical training. The article deals with the most widespread directions of cooperation among universities' representatives and employers. It's been defined that effectiveness of interrelationship is increasing due to a mechanism transforming partners-employers from the position of wing side spectators and consumers to the position of concerned participants of educational and innovative processes, assisting students in obtaining the complex of professional capacities. The article presents significant tasks facing the universities and employers consisting in formation of called for a labour-market professional capacities during educational and practical training, the experience of cooperation of Belgorod State University with employers is described.

An innovative economy, science and education have top priorities stipulating the national development strategy of the Russian Federation for the period up to 2020 [3]. In this case, the most important task of education is to contribute to the formation of the innovative development of the domestic economy, including the means of quality training and re-training of professional personnel. To achieve this goal it is necessary to improve the management system of the universities' educational activities, focusing it, first of all, to the market and end-users of educational services.

The main external consumers of higher education institutions are employers (companies, organizations, public authorities, etc.), which employ college graduates and expect them to have the complex of professional capacities that meet the requirements of the developing innovative model of economy and society.

In recent years, the system of higher education in Russia has approved the educational paradigm, within the scope of which the quality of modern education as a result of the educational services provision is determined by the level of the graduates' capacities, i.e. the ability to understand the relationships between knowledge and situations and apply the acquired knowledge adequately to solve professional problems. Competence orientation of the Federal State Educational Standard of Higher Professional Education (FSES HPE) aims Russian universities to increase mobility and competitiveness of graduates in the market environment and suggests an intensification of interaction between higher education institutions and employers, carried out on the basis of the Federal Law of 01.12.2007 № 307-FZ "On Amending the certain legislative acts of the Russian Federation in order to provide the employers' associations the right to participate in the development and implementation of state policy in the field of vocational education" [5] and other legal documents.

The system of higher education cannot develop as a closed system today. Universities and employers are the links of one chain. Employers should settle their requirements to the quantity (target order), and to the quality of professional personnel training, and universities should meet the demands.

However, the monitoring of employers' satisfaction with the quality of the National Research University "BelSU" graduates' training [2] and other sociological studies [4] show that many employers, especially in industry, note a low level of a special training in higher education institutions, and complain of lack of practical knowledge and narrow professional view of young personnel.

The main complaint of employers to universities is the isolation of the knowledge obtained by graduates during their practical training, which manifests itself in the inability to deal with the modern high-technology equipment, psychological unpreparedness to the realities of hard working days, to the leadership of subordinates and to the standards of behavior in a business environment. Most employers consider that the way out of this situation is to increase the terms and to extend the content of practical training, to attract experienced practitioners, to strengthen control over the quality of education, to adapt educational subjects to real life. In addition, the monitoring of employers' satisfaction with the quality of the National Research University "BelSU" graduates' training shows that a third of surveyed employers agree that to improve the quality of professional training it is necessary to establish a practice in specific institutions, capable to become a base for the practical training of various kinds.

In general, the respondents from the number of educational services consumers of higher education institutions believe that "the problem of training quality is caused by lack of efficient interaction between university and employers" [2]. In this regard, the organization of employers' participation in the training of professional personnel acquires a special significance now and is objectively necessary for the effective development of the professional capacities of students meeting the requirements of employers.

The solution of this challenging task involves the emergence of new forms of social partnership, new regulations and new types of contracts which, in case of maximum harmonization and implementation of the mutual interests, would contribute universities to train specialists, and businesses - to ensure their staffing needs.

The most popular model of interaction of producers and educational services consumers is a target training of professional staff, which is directly funded by the future employer, and in some cases employers and universities develop jointly educational programs aimed at priority to the needs of a particular company. Among the most widely-spread joint activities of universities' representatives and employers the following are distinguished:

- practical training of students at a real workplace;
- expanding the range of educational services demanded in the labor market and provided by institutions of higher education;
- defining the requirements to training quality, recently the examination of the basic educational programs developed by the structural units of high schools in accordance with the requirements of the FSES HPE, for inclusion in the OOP of additional competencies, taking into account the views of leading regional employers; developing and reviewing training program documentation;
- carrying out training sessions for students, including lectures, seminars, workshops, business games by employers' representatives, practitioners;
- participation of employers in the final state certification of graduates;
- training teachers at real workplace;
- advanced training of employers' representatives in high school;
- participation of employers in the scientific and practical conferences, educational projects, scientific sessions, etc.;
- design integration (joint research, setting up base departments of the university at employers' enterprises, joint small high technology companies, etc.);
- employment of graduates;
- organization and joint participation in regional advisory councils and organizations in order to improve the content of vocational education to meet the needs of specific regions, etc.

The interaction between universities and employers acquires the most intimate and interpenetrative nature in the process of practical training courses being the components of the HPE basic education programs and representing one of the forms of organization of the educational process, which includes professional and practical training of students in a real professional activity. It's practices who provide students with their first professional experiences and thus act as a "leading factor that ensures the effective formation of a high level professional capacities of future specialists" [1, p.6].

Accordingly, the programs of educational and other practical trainings included in FSES HPE should focus on continuous increasing of the students' professional development level, primarily through the integration of their theoretical, practical and vocational, educational, scientific and research activities. However, the experience of the majority of Russian higher education institutes shows that the level of

practical training is not sufficient for students to get the real work experience and master their professional practical and production skills, and acquire advanced labor technologies. The reason for this state of things - the weak, and in the majority of cases, just formal ties between universities and employers, rather than a mutually beneficial partnership in the context of national and regional innovation systems.

Higher education institutes and employers should be interested in creating a system which joins their efforts to develop students' professional capacities in the framework of different practical trainings in accordance with the requirements of the current and predicted labor market. However, employers, being ready to join their efforts with universities on optimizing the components associated with the practical training components of educational programs, still expect proposals on the particular forms of cooperation from the higher education institutes. This fact greatly increases the role of graduate and specialized departments engaged in the organization and teaching guidance of a particular practical training in the implementation of social partnership between universities and employers. They become the catalyst for social dialogue with the external consumers of the educational services of the university and provide the development and strengthening of partnerships with them.

In order to improve the efficiency of interaction with businesses and employers, graduate departments of the university should develop mutually beneficial programs of cooperation and make relevant contracts. The enterprises' authorized representatives at the graduate departments of the university would make up the main pool of experts from among employers engaged on a regular basis in the Basic Educational Program (BEP) examination on the subject of the set of graduate's capacities, and to the formation of the content of learning in general, and to the design competence-oriented practical training programs in particular.

Among the significant tasks, faced by universities and employers, on the formation of professional capacities demanded by the labor market in conditions of educational and on-the-job training, the following tasks are distinguished:

- joining capacities mastered within the BEP with the content of practical training; defining the correspondence of specified capacities with professional activities, executed by students at the workplace during the practical training;
- drawing up a list of professional capacities to be acquired or developed by students in the course of practical training; the maximum convergence of capacities mastered within OOP with capacities demanded by employers - partners of the university;
- coordination of optimum set of pedagogical and production conditions of effective formation of students' professional capacities in the process of practical training considering their individual creativity, professional interests and prospects;
- getting by universities feedback from employers about the levels of professional competence for the purpose of further adjusting and improving the BEP, improving training programs efficiency at the university in whole;
- searching for new forms of practical training to ensure acquisition of important practical work experience by students and facilitate their guaranteed employment on their specialty (for example, by alternating with the theoretical lessons throughout the academic year; employing trainees with remuneration; order to perform course and diploma projects, etc.);
- stimulating creativity and research activity of students and providing them with professional situations and self-testing to master successfully self-promoting technologies and build their own careers, etc.

Social dialogue and partnership of universities and employers developed on its basis are effective means of improving the quality of higher education, creating additional conditions for the formation of competencies included in the BEP the expansion and deepening of practical knowledge of the students, however, they can give the most efficient benefit for the members of such partnership when integration processes are attached to the cooperative ones.

A striking manifestation of this trend in the NRU "BSU" is cooperation of graduating departments of the faculty of Engineering and Physics and the faculty of Chemistry and Biology, and the Centre of General Using of scientific equipment "Diagnosis of the structure and nanomaterials properties" with "Pilot plant" VladMiVa " Ltd (Belgorod), one of the anchor businesses of biomedical cluster in the Belgorod region. Since 2010, on the basis of " Pilot plant VladMiVa" Ltd. an interdisciplinary department of medical and technical systems BSU has been operating, also the project "Creation of production of biocompatible composite and calcium osteoplastic and preventive materials for medicine" has been implemented in pursuance of the

Russian Federation Government Resolution № 218 "On measures of state support for the development of cooperation between Russian higher education institutions and organizations implementing complex projects on creation of high-tech manufacturing ". Within the scope of this Resolution the sales of the innovative products should amount to 28 million rubles by the end of 2013, and by 2017 they will have risen up to 298 million rubles. The small joint stock company "Nanoapatit" specializing in the synthesis of nanocrystalline hydroxylapatite-titanium (Ngapo) used for the production of dental preparations nanoflyuor, apeksdent, fosfudent etc. at " Pilot plant VladMiVa" Ltd was created and now it's dynamically developing.

Summing up, we can say that the efficiency of interaction between universities and employers in the interest of improving the quality of professional training is significantly increasing if higher education institutions manage to transfer their strategic partners from the positions of third-party observers and passive consumers of educational services to the position of interested parties of educational and innovative processes to assist students in mastering the complex of professional competencies that meet the requirements of the modern labor market.

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