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INNOVATION EDUCATIONAL INSTITUTIONS AS A POINT OF GROWTH IN DIGITAL ECONOMY

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Abstract

The subject of the study is the introduction of innovative infrastructure into the system of additional professional education on the example of the Federal Innovation Platform in the field of procurement (hereinafter referred to as the FIP) of the Samara State Economic University from 2013 to 2017. The results of this study are an analysis of the key indicators of FIP on the design of the provision of educational services, the problems of training in procurement. Despite the growing urgency of introducing innovative infrastructure in education, a small amount of research on this topic attracts attention. The results of the research can be used as a basis for the organization of vocational training and retraining, optimization of existing programs of professional development and implementation of innovative projects in these areas. In the Western scientific literature there are no direct analogs of FIP, specialized studies in the Russian literature were carried out only since 2015. At the moment, the Russian Federation law provides for the existence of two categories of innovative sites - federal and regional. In addition, all innovative platforms differ depending on the types (spheres) of activity in which they implement relevant educational projects and programs (for example, in the field of procurement), as well as in educational levels. The results of the research can be used as a basis for the organization of vocational training and retraining, optimization of existing programs of professional development and implementation of innovative projects in these areas.

Keywords: Continuous education, additional vocational education, contract system, innovative infrastructure, innovative platforms.

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1. Introduction

New requirements for education led to the emergence of a new social institution - FIP. The Government of the Russian Federation by Decree of July 28, 2017 N 1632-r "On the approval of the program "Digital Economy of the Russian Federation" laid the basic principles of managing the development of the digital economy and the requirements for the creation of the ecosystem of the digital economy of the Russian Federation, in which data in digital form is a key factor in production in all spheres of social and economic activity and in which effective interaction, including cross-border, business, scientific and educational community, the state and citizens is ensured; necessary and sufficient conditions for the institutional and infrastructural improvement of competitiveness in the global market as the separate branches of the Russian economy, and the economy as a whole.

FIP becomes the institutional base that allows you to train people who can work effectively with the use of new information technologies.

Legislative regulation of this institution, which is new for the Russian practice, is in the process of development and we will give the main provisions governing the activity of FIP at the time of writing this article.

Thus, paragraph 4 of Article 20 of the Federal Law "On Education in the Russian Federation" No. 273-FZ of December 29, 2012 establishes that federal or regional innovation platforms are organizations that implement innovative projects and programs in order to create conditions for the implementation of innovative projects and programs that have essential for the development of the education system. FIP is an innovative infrastructure in the education system.

According to Article 20 of the above-mentioned law, the procedure for the formation and functioning of the innovation infrastructure in the education system (including the procedure for recognizing the organization as a federal innovation platform), the list of FIPs is established by the federal executive body responsible for developing state policy and normative and legal regulation in the field of education.

The status of the federal innovation platform can be assigned to educational organizations regardless of their organizational and legal form, type, departmental affiliation and subordination, their associations, and also to scientific and other organizations that carry out activities in the field of education.

The procedure for the recognition of organizations as regional innovation platforms belongs to the powers of government bodies of the subjects of the Russian Federation.

The activity of FIP and the procedure for selecting FIP on the basis of competitive procedures are regulated by a set of orders of the Ministry of Education of the Russian Federation. These include: Order of the Ministry of Education and Science of the Russian Federation No. 611 of July 23, 2013 "On Approving the Procedure for the Formation and Functioning of Innovation Infrastructure in the Education System", Order of the Ministry of Education and Science of the Russian Federation No. 1819 of May 26, 2011 "On conferring the status of a federal innovation site" and others.

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2. Problem Statement

Though thematic issue of the journal Administrative Consulting (RANHiGS) in 2015 and 2017 (Averina, 2017); was devoted to the study of the status and main aspects of the FIP activity in the field of procurement (Karanatova & Kulev, 2015), where the authors published the results of studies on the activity of the FIP, any other detailed profile studies in the domestic literature on the present time on this topic was not carried out, which is due, in particular, to the fact that the development of innovative infrastructure in the field of education is in the phase of development. In the Western scientific literature there are no direct analogs of FIP, an analysis of existing works of foreign scientists on this topic is given in the publications of the authors (Dmitriev, 2010; Abakumova, 2014; Pecherskaya et al., 2016) among which there are the works of Dufek (2015), Kovács & Paty (2014), Enke, Kraft, & Metternich (2015), Edler & Yeow, (2016) and Shamakhov, Karanatova, & Kuzmina (2017). So, it is crucial to consider and analyze key tendencies and factors that are influencing on innovational educational institutions and FIP, precisely.

3. Research Questions

At present, issues related to the activities of the Federal Innovation Platform, which serve as an example of the integration of science, education and production in the Russian Federation, are becoming especially topical. In the study we focus on innovative infrastructure in additional professional education on the example of the FIP in the field of procurement and the key indicators of training in this sphere, methodological base that proved to be useful in such training and challenges of its implementation, quality management of the educational process.

4. Purpose of the Study

The purpose of the study is analysis of the key indicators of FIP and its role in the the provision of educational services, the problems of training in procurement as a basis for the organization of vocational training and retraining, optimization of existing programs of professional development and implementation of innovative projects. The training challenges observed and eliminated could be considered as a point of growth and an effective tool for training management.

5. Research Methods

In the process of research, methods such as retrospective analysis, statistical, dialectical, analytical methods, content analysis of scientific literature were used. The analysis was carried out in two stages using a combined methodological approach. At first, the legislative base of the Russian Federation was considered in relation to the activity of FIP, as well as the materials of scientific publications, official reports of government research institutions, state agencies, non-profit organizations. Then, as an example of the practical implementation of FIP in the sphere of additional vocational education, FIP was taken in the sphere of procurement of the Center for Business Education of SGEU. In addition to the statistical data obtained, the results of the survey of the participants of the refresher courses on the basis of FIP are

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analyzed, the normative documents of universities and the results of other similar studies in the field of applying innovations in education (Pellegrino & Hilton, 2012; Galanov, 2012; Ermakova, 2013; Dautova, 2013).

6. Findings

The methodological basis for modeling, building and implementing a vocational training system based on FIP can consist of two parts - invariant and variable.

Approaches of the invariant part of the methodological system allow to optimally construct the process of implementation of the training of contract managers. The approaches of the variational part most correspond to the originality of the system being created (Holt et al., 2011; Enke, Kraft, & Metternich, 2015).

In the process of teaching in advanced training courses in the field of procurement (in the contract system), we have identified the conditionality of the formation of readiness for professional activity in the procurement system by the effectiveness of the system of methodological provision of training, interaction of the internal environment of the individual with the external influence of the methodological system (Hadjar & Samuel, 2015).

In our study, when building an innovative vocational training program, we address systemic, synergistic, personality-activity and axiological approaches and emphasize the prognostic aspect when using the monitoring system for learning outcomes at all its stages (intermediate and final results).

The long-term analysis of the questionnaire data of the participants of the advanced training courses under the program "Contract system in the procurement of goods, works and services for provision of state and municipal needs", carried out on the basis of the Business Education Center – FIP of the SSEU for 2014-2017 showed that the most important for the contract manager are the skills of evaluating the applications of the participants in procurement, the ability to conduct contractual work (on the execution of contracts), the possession of information technology.

Knowledge of information technologies plays an increasingly important role in the competence of the contract manager (contract service worker), since from July 1, 2018 all purchases for state and municipal needs are planned to be translated into electronic form. At the same time, strict administrative responsibility is provided for violation of the procedure for working with electronic documents in the sphere of procurement and the terms of their placement. That is why the use of information and communication technologies plays a special role in the implementation of educational programs on the basis of FIP in the field of procurement.

The importance of human resource development and the formation of the information technology industry was emphasized in the Decree of the Government of the Russian Federation of 01.11.2013 No. 2036-r "On the Approval of the Strategy for the Development of the Information Technology Sector in the Russian Federation for 2014-2020 and for the Future to 2025".

For each of the key skills identified by the results of the survey, further monitoring of the pace of formation of competence with the use of IT technologies (in particular, the educational platform Moodle, successfully applied on the basis of SSEU, which allows to manage the learning process using an individually-oriented approach.

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The application of an individual-oriented approach becomes possible when taking into account in the process of designing an educational program and its implementation of the structural composition of students in the programs of professional development, as well as spheres of their economic activity (Tatarnikova, 2007; Sullivan, Czigler, & Hellgren, 2013).

Table 01. Spheres of economic activity of students in procurement

Field of activity	Percent of listeners
Employees of federal authorities and authorities of constituent entities of the Russian Federation	9%
Employees of municipal educational institutions	36%
Employees of municipal health institutions	24%
Municipal employees	26%
Other	5%

Source: Authors.

Determining the levels of readiness for professional activity, taking into account the set of aspects of professional activity, allows us to outline a specific program for the self-improvement of the procurement specialist (contract manager). Given the postulate of the interdependence of the individual and the activity, it can be concluded that it is willingness that determines the success of the performance of labor functions (Gate, 2010; Kirichenko, 2012; Dufek, 2015).

The structure of readiness for the professional activities of contract management activities includes cognitive, reflexive, evaluative, information and technological components directly related to the labor functions of planning, rationing procurement, search, information processing, analysis, procurement system management (Naumova, 2009; Pellegrino & Hilton, 2012; Larchenko, 2015; Menshenina, 2018).

The pattern of readiness for professional activity is influenced by patterns and expectations about the risks associated with a particular work function. In purchases, these risks are due, first of all, to a complex, multilevel, constantly changing regulatory framework (the work of the contract manager takes place in conditions of information redundancy, instability in the absence of clear regulations for making managerial decisions), information technology features of the budget system (Galkina, 2011; Sklyarova, 2014).

According to the study conducted on the basis of the Federal Innovation Site of the State Educational Establishment of the Samara State Economic University, the negative expectations regarding the risks of professional activity in the procurement sphere were as follows:

Table 02. Risk-based approach in training of contract managers

Risks	Percent
Risks of violations during planning	43%
Risks of violations in the organization of procurement procedures	21%
Risks of breach of contract	92%
Risks of violations during the evaluation and consideration of applications for participation in procurement procedures	11%
Risks of breach of contract performance	78%
Risks of violations when accepting the results of performance of a contract	59%

Source: Averina (2017).

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The obtained data allow to identify the "problem" area of activity, the functions of the contract manager and pay special attention to the development and consolidation of necessary knowledge, skills and skills in the training process in order to reduce such risks and negative expectations of the student. At this stage, we can talk about the introduction of a risk-based approach in training contract managers.

7. Conclusion

It should be noted that FIP at all stages of its activities should monitor the quality of the educational process, with the aim of managing the quality of education. Such monitoring allows to successfully pass control measures when the innovative site confirms its status, which is temporary and can be withdrawn in case of unsatisfactory indicators on the basis of monitoring results. In this connection, objects of monitoring the quality of an innovative educational project (program) are of interest.

As part of their activities, FIPs should monitor the ongoing project (program), as well as timely and reliable information support for the project (program), informing learners about the goals, objectives, implementation mechanisms, and the effectiveness of the project (program). The objects of monitoring the internal system for assessing the quality of the project (program) are the main business processes:

- carrying out applied research and developing a unique product (Middlehurst, 2002);
- designing and providing educational services on the basis of the developed product (Axelrad et al., 2016).

The indicators for the process of "Designing and providing educational services on the basis of the developed product" are:

1) the presence of changes in the environment and infrastructure of the educational organization based on the results of the project (program);

2) improving the funds of evaluation tools and evaluation technologies (Trubin, 2011; Vorobyova, 2014);

3) the dynamics of the qualification and competence level of teachers participating in the implementation of the project (program) (Vukasovic & Stensaker, 2018);

4) satisfaction of students with the quality of the provided educational services (determined by conducting sociological surveys).

The main problems associated with the activities of innovative sites (both federal and regional levels) include the demonstration as an innovative activity of the diverse work of educational institutions, and not actual results on the goals and objectives; lack of evidence of accomplishment of tasks, availability of results (Hazelkorn, 2011; Stensaker, 2018).

Thus, in the process of research, new questions and problems emerged that need their solution:

1. It seems advisable to continue research on solving the problem of FIP monitoring activities in the system of retraining and advanced training taking into account the methodological system and the quality monitoring system of the educational process proposed by us.

2. A negative factor has been identified, which has the most significant impact on the quality of implementation of DPO programs on the basis of FIP. Such a factor is the absence of post-program counseling or post-program support for students at the end of the refresher course.

It should be noted that the creation and functioning of FIP is an urgent need of social and economic environment, increasing the success of professional activity of students.

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