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**BASE UNIVERSITY IN REGIONAL INNOVATION POLICY**

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**Abstract**

The paper reveals the content of the innovation policy of the state, at the regional level of which the solution of complex socioeconomic tasks is inseparably linked to the activity of a reference university. A reference university is a new educational component in the system of interaction among the authority, science and entrepreneurship. Scientific researches of basic functional peculiarities of such university pertain to the topical problematique and have not been covered yet in scientific publications. The aim of the paper is to highlight the basic sources of the resource of competence and responsibility in the activity of a reference university representing a new type of innovation interaction of education with authority and entrepreneurship.

As a result of the conducted research, we have identified two main sources of the resource of competence and responsibility of a reference university. Theoretical processes in the field of formation of a fundamentally new type of scientific integration – transdisciplinary integration of scientific knowledge, widely represented in the activity of a reference university – pertain to the resource of its competence. The source, in its turn, of the resource of responsibility correlates directly with the performance of its basic functions by a reference university. Therefore, being an educational and engineering centre of innovation development of the region, a reference university represents the most important social component of the region possessing the necessary resource of competence and responsibility in the process of practical realisation of the policy of the innovation development.

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**Keywords:** A Reference university, innovation regional policy, resource of competence and responsibility, transdisciplinary integration, functions of a reference university

## 1. Introduction

The success of a socioeconomic status of a country in the modern world depends to a decisive degree on the scientific and technological and innovation policy carried out by the state. At a federal level, the problem is resolved in terms of nation-wide scales of the socioeconomic development of the country. But



in the regional version of the innovation policy, the solution of complex problems correlates directly with the activity of recently established reference universities in the number of entities of the Russian Federation. The peculiarity of such type of an institute of higher education consists in the fact that it transforms into a leading educational and engineering and technological centre, the frameworks of competence and social responsibility of which are specified by the existing sectoral specificity of region development and the scientific and technical vector of its assumed innovation prospect. A reference university is a new educational component in the interaction of the education system with authority, science and entrepreneurship, a new type of the university which is organically built in the integral structure of the regional innovation policy. It was largely assigned to solve the responsible tasks of this policy with a high level of efficiency of the final results. The activity of such university in a region, functional peculiarities and the degree of its influence on the development of society pertain to a quite important scientific problem, the theoretical development of which has not been realised in the scientific literature. The aim of the paper is to determine the main sources of the resource of competence and responsibility in the activity of a reference university, representing a new type of innovation interaction of education with authority and entrepreneurship.

## **2. Materials & Methods**

From the general scientific viewpoint, the understanding of the unity and profound interaction among the laws of nature, laws of socioeconomic life, means of technological progress and the needs of human being development must underlie an innovation policy. We see the fundamental novelty, underlying this unity of the integration idea, in its radical influence on the content of relations among authority, society and business. First of all, it is a question of rapid rapprochement of science, education, economy and management, of transformation of this process into an integration research area, the theoretical basis of which must be represented, from our point of view, not just by a variety of interdisciplinary connections, but by manifestation of the newest type of scientific rationality, the newest type of integration – transdisciplinary integration. Namely this theoretical peculiarity, theoretical novelty of disciplinary synthesis constitutes, from our point of view, the main source, the main conceptual model of the resource of competence of a reference university. Theoretical parameters of the resource of competence are of great importance in the research carried out by us. Their clear advantage over the purely practical (empirical) approach to the understanding of the competence phenomenon is expressed in the following. First, a theory always allows keeping track of the most significant (promising) potential of the conceptual variants of explanation of the essence and, consequently, regularities of development in the field of absolutely new structural interactions among the education system, authority and a socioeconomic situation in the region. Secondly, a theoretical level of accompaniment of the processes of this interaction allows monitoring the manifestations of features of a new (non-existent earlier in the history of science) type of rationality – rationality based not just on only interdisciplinary studies, but on transdisciplinary relations among classic subdisciplines.

Since the region participates actively and even acts as one of the main initiators of establishment of a reference university, this circumstance is, undoubtedly, a base reason, the genuine foundation of the discussion of the resource of responsibility of this university. Highly responsible tasks are laid on the activity of a reference university regarding its innovation participation in the development of the socium,

regarding its decision of educational, economic, engineering and technological and social problems in the region. In this connection, we believe that an innovation resource of responsibility of a reference university in its combined activity with respect to the development of the region can be revealed, having indicated and formulated the most significant functions of the university.

### **3. Results & Discussion**

We assume that the typical aspects of the modern society characterised by us (in many respects resembling a set of characteristics, which has already become standard, when revealing the essence of scientific and technical revolution) can perfectly act as an innovation platform for continuation of advanced researches in the field of analysis of the newest interdisciplinary integration interactions of interest to us. These planned researches, certainly, concern immediately the main subject of our articles – analysis of resources of competence and responsibility of a reference university. It is necessary to clarify specifically the conceptual directionality of integration interactions, which we will express in the following way. Firstly, new interdisciplinary directions of development under conditions of wide application of information and communication technologies acquire a network character, that is, they are developed rather by the type of “network” interdisciplinary interactions, similar to, for instance, modern NIBC-convergence than by the type of formation of the interdisciplinary phenomenon in cybernetics (when it was created as a science by N. Viner) (Machlup, 1962; Roco, Bainbridge, 2004). Secondly, for the first time, the subject of research in this case becomes the search of the scientific foundation relevant to an uncommon integration transdisciplinary unity – in essence, a possible unity among different spheres of cognition, such as, for example, between science and policy (or among science, manufacture and geopolitics). Thirdly, these researches should be accompanied by a fundamentally new theoretical feature – the search of the special (newest) methodological basis of their conducting. And, fourthly, the newest integration interactions, enumerated by us, are already directly relevant to revealing the most important specific aspects of the activity of a reference university, to the analysis of which we will further proceed to.

At present, foreign literature places strong emphasis on interaction of education and science, science and business, education and a regional policy. However, the whole range of the indicated interaction is analysed from the specific scientific, specific sociological and specific economic points of view. In the papers of the foreign publication as we noticed, the scientists lack the striving for seeing philosophical and methodological researches, revealing an innovation problematique from the standpoint of the fundamentally new type of rationality, a new type of scientific integration – transdisciplinary integration. Thus, namely the interdisciplinary (not transdisciplinary) principle of methodology is realised, for example, in the article, the subject of analysis of which is management of innovation integrating structures of education, business and science (Fetschenko, Shadoba, Katkow, Shchelikova, Glushak, 2015). We discover a similar style of analysis in other articles as well (Charron, Rothstein, 2016; Pang Min-Seok, 2014; Myrkhalykov, Aidarova, Seidahmetov, Abishova, 2014), although the value of their content is evident in terms of revealing the elements of innovation activity or the specificity of interaction of education and science under conditions of specific manufacture. Such scientific papers, wherein the specifics of innovation interaction of science, education and manufacture is presented from the standpoint

of either typification of the process (Musaeva, 2015), or under conditions of the functioning of a national research university (Kartashova, Shirko, Khomenko, Naumova, 2015), or in the terms of the competence basis of practice-oriented training of specialists (Baumann, Harfst, Swanger, Saganski, Alwerfalli, Cell, 2014), deserve, from our point of view, a positive attitude as well. Let us emphasise again the fact that the research subject of our paper (compared to the above-stated review of subject researches) differs by its philosophic methodological directionality. We are interested in the search of the newest theoretical and methodological principles of understanding of transdisciplinary scientific integration, underlying the formation of the resource of the competence and responsibility of a reference university and accompanying the process of innovation rapprochement of authority, education and entrepreneurship.

Since the region takes an active part (and even acts as one of the major initiators) in the establishment of a reference university, this circumstance is, undoubtedly, a basic reason, genuine foundation of discussion of the resource of responsibility of this university. The functioning of a reference university is assigned quite responsible tasks with respect to its innovation participation in the development of the socium, with respect to its solution of educational, economic, engineering and technological and social problems in the region. In this connection, we assume that the innovation resource of responsibility of a reference university in its combined activity regarding the development of the region can be revealed, having indicated and formulated the most significant functions of the university. We will accept this condition as a starting point of the further discussions relatively the resource of responsibility.

Education is one of the main factors of society development and, therefore, it is considered as the most important state function, which is not less significant than provision of the national security. A new system of education must be oriented to educating a creative person, an innovation person possessing stable world view principles and being the main driving force of development. Modernisation of education affects all sectors of society, all branches of economy. It stimulates the transformation of interrelations of the policy and business so as to facilitate the process of rapprochement of science, education, economy and manufacture in the best way. As the majority of researchers note, it is possible to achieve the innovation results in this direction only by creating a fundamentally new system of education. It is the establishment of reference universities in the country that is appealed to play a significant role in achievement of these results (as we mentioned earlier).

The modern scientific and technical revolution is of permanent nature, stimulating innovation changes in the life of a society in the form of a continuous sequence. In its process, they involve the whole system of constantly renovated scientific knowledge, its interaction with advanced technologies and transformation of social factors (the structure of population employment, the life quality of people in the regional socium). A unified integral quality created in the process of the closest cooperation of science, education, economy, manufacture and consumption, becomes to a greater degree one of the basic factors of development of science and education. This circumstance forces in no small measure to focus the attention of researchers and practitioners not only on studying and enhancement of the function of a reference university, but also on the analysis of the resource of responsibility and its activity. The more so that the activity of a reference university suggests optimisation of flows of knowledge and information within the framework of the unified information and communication system “science – education – business – manufacture – a structure of population employment”. Undoubtedly, all these force to actualize the provision of pursuing the regional innovation policy, to investigate a scientific definition of

this concept. And only in this case, a detailed elaboration of the concept “a territory of innovation development”, as well as its practical applications such as megalopolises, science towns, tech cities, separate economic areas (SEA) and other local areas become possible.

Owing to the conducted analysis of urgent issues on the modern state of science and education in the country and their interaction with authority and business, as well as the purposeful search of the main source of responsibility of a reference university, let us formulate a number of functional tasks of its activity. In our opinion, the following functional tasks should be referred to them:

1. To develop interdisciplinary and transdisciplinary directions of researches on the innovation basis, to train highly qualified specialists in accordance with the diversified structure of industry and economy of the country.
2. To elaborate scientific criteria with reference to the regional strategy of enhancement of life quality on the basis of the growth of the share of highly qualified specialists in the field of population employment in industry, economy and social activity.
3. To actively participate in the regional establishment of the most significant practical applications of science and technology: megalopolises, science towns, tech cities, separate economic areas (SEA) and other local territories.
4. To carry out the closest interaction in the area of fundamental researches with other scientific and educational centres of the region (for instance, with a federal university or an academic branch of RAS).
5. To educate the intellectual, creative youth, having the advanced world outlook knowledge and stable guidelines in the life and capable of innovation professional activity.

Relatively the fifth item of the above-stated material, it is possible to add that, at present, this peculiarity of the activity of a reference university takes on a particular urgency under conditions of constantly changing rules and attitudes in the process of modernisation of the national education system. For the majority of learners, students, teachers and university educators, the educational process has been proceeding inside of the constantly changing system. This conditions, in many respects, the presence of the unstable and uncomfortable situation, significantly worsening the opportunities of optimal orientation in the educational field. “Instability, – as V. V. Mironov fairly notes, – is always accompanied by the replacement and deformation of the value paradigm, which significantly influences the spirituality of a personality and, as a consequence, leads to a negative reproduction of this situation in real life, and then it influences the very system of value preferences of a young generation, the vector of which is directed to the future” (Mironov, 2012).

#### **4. Conclusion**

The originality of the research is as follows:

- thinking and experimental verification of the complex of pedagogical conditions that increase the formation efficiency of the University students’ civil competence;
- development of formation methods of the university students’ civil competence, presented in a special course "Civic competence of technical college students."

Theoretical relevance of the research is as follows:

- to clarify the concept features of "civic competence", "to construct civic competence";
- to determine the nature, structure and functions of the civil competence of the University;
- to formulate and clarify the content of the research principles: democratization, humanization, relations between education and life, cultural policy, the formation of cooperate personality, efficiency.

The practical implications is to develop a method of forming civil competency of university students, presented in a special course "Civic competence of students in a technical higher school", in methodical instructions for students studying this course.

Defining the research prospect, we can note that the work make no pretense to exhaustiveness of the development problem of the University students' forming civic competence. Thus, actual issue is the development of such aspects as the influence of sociocultural environment on the process of civil competence formation, the study of the relationship between civil competence and ethnic tolerance.

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