

THE TRADITIONAL FIELD OF FUNCTIONING OF THE REGIONAL HIGHER SCHOOL AND DEVELOPMENT OF A PARADIGM OF ITS DEVELOPMENT (ON MATERIALS OF THE REPUBLIC OF TATARSTAN)

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Abstract: This article was prepared in part of research project No. 16-06-0062, supported by RFFI. The subject of the research is the analysis of the paradigm of RF higher education development in the system of regional field of functioning and its compliance with the current and future needs of the emerging innovative landscape. The main emphasis in the work is put on the understanding of the educational potential of regional systems and identifying ways of movement of financial and information flows in the field of science and higher education, taking into account the regional specifics of the traditional field of functioning of higher education and the specific features of the organizational and economic development of territorial systems. In the framework of the article the methods of generalization, descriptive analysis and synthesis of scientific information resources, including research of foreign and domestic authors – experts in the field of development of the higher education system were used. Personal experience in the analysis and evaluation of tools and mechanisms of development of the educational environment was used. The main conclusions of the study are scientifically reasoned conclusions about the fact that the process of reprogramming the educational environment in Russia should be based on the formulation of technology of constant updating of training courses, which minimizes their delay in responding to changes in the realities of science and innovative sphere of national and global level. On the basis of the established system of evolutionary development of the educational sphere, a general picture of the regional innovation landscape is developed, which needs to be corrected and contributes to the solution of actual problems in the field of stimulating of innovations in the region.

Key words: Higher school, reproduction of traditions and innovations, regional innovative landscape, educational and methodical schemes, consulting of fundamental disciplines

1 Introduction

Higher education and its resources now play an important role in the effective and successful development of both regional and national economic systems. At the same time, we can say that in the world community, focused on the formation of the information society, there is a stable trend of increasing the importance of this role of higher education and its resources. This means that higher education is no longer just a tool for the innovative development of national systems, but also a tool for their strategic development, which determines the success of social relations in all areas. This increase in the importance of higher education resources, in turn, suggests the need to coordinate and create effective mechanisms for regulating the development of the national/regional higher education system and increasing the public impact of its resources. This is especially important for the Russian Federation, which currently lags far behind the advanced countries in terms of development and efficiency of the applied use of scientific and educational potential of higher education, which, accordingly, does not allow it to take a worthy position in the world markets and complicates the development of its economic system.

Higher school is just one of the institutions of public life, the activities of which are closely intertwined with the activities of other public institutions with their own guidelines and trends of development (Wu, 2014; Tuan, 2017). Consequently, the study of the features of higher school development requires understanding of what logic of development these public institutions have, as well as how the interaction of society and its institutions happens with the system of higher school in its development and use of its resources. The analysis of this kind is complex, difficult to structure, but at the same time it is essential for improvement of the efficiency of the use of higher school resources, because it allows you to understand correctly and in more detail what society wants to get from the higher school and what it is ready to provide for its development.

The effective development of higher education and the creation of mechanisms for its regulation is complicated by the fact that there are certain conflicts between the interests of different social institutions and the interests of the higher school due to fundamental differences in value systems. However, regulation implies the impact of certain public institutions on higher education. It is obvious that the existing conflict of interest will be manifested in the process of regulation: society will actively impose its system of values on higher education, while higher education will actively resist it, which will be manifested not only in defending its own interests, but also in ignoring certain public needs.

Another objective aspect of the development of the higher school system and the complexity of its regulation is that the higher school is one of the structural links (institutions) of regional and national systems (Varshavsky, 1998; Villalobos Antúnez, 2016). Consequently, the regulation of higher school development and its transition to a new level are connected, first of all, with the change of views, values and professional training of individuals of society, which is obviously a long-term process, which involves more than one generation, and requires the creation of well-designed strategic development programs and their phased implementation.

Consideration of higher education as one of the structure-forming links between regional and national systems also means that qualitative changes in the structure of this institution necessarily lead to certain changes in the development of society (Willis, 1986). Therefore, in the formation of mechanisms for regulation and use of the potential of higher education, it is necessary to determine not only how certain methods of regulation will affect the development of the higher school, but also what (at the level of the "second wave") changes it will entail in the system of social relations and the system of social values. This article is devoted to the solution and understanding of the issues raised.

2 Methodology

To analyze the characteristics of the studied regional innovation environment, one can use the dichotomous triad method, highlighting the following dichotomies:

- traditional field-innovative field;
- institutional field-technological field;
- landscape field-network field.

The allocation of these field types allows to evaluate the scientific and educational potential of regional systems and to identify the ways of financial and information flows in the field of science and higher education.

3 Results and Discussion

Traditional education in the views of its potential and real consumers, as a rule, is steadily associated with the study of the fundamental foundations of knowledge and is not in real demand both because of a certain reassessment of the value of these foundations, and due to the significant obsolescence of their "fixed assets" - the scientific base that underlies the educational and methodological schemes and methodologies of bringing the student to the "cutting edge" of science and (Psacharopoulos, 1994). Also, the decline in demand for traditional education is largely due to the lag of provincial science from this "cutting edge", which is largely a consequence of the long-established regional isolationism as a set of ideas about the objectivity of the backlog (provincialism).

Such representations arise from narrow-minded associations of type "classic - tradition - irrelevance." However, Philistine consciousness ignores the fact that, firstly, the established classification of sciences is not yet a condition of their "classical" irrelevance or non-actualization, and, secondly, what is much more important, science as a whole should be considered as a complex of humanitarian technologies with a lagging effect, having a "long - term turnover".

On the other hand, the regional scientific and teaching corps, largely due to its spontaneous structuring, already reproduces in its own environment the Philistine approach to its goals and objectives, often "adjusting" the scale of objective values under the momentary activity of individual sections of the regional landscape of capital (Carayannis and Grigoroudis, 2016). This leads to the fact that in the relevant traditional training and research centers they teach soundly in fundamental areas, but what they know themselves, and not what you need to know at the level of modern requirements.

Thus, the most relevant area of application of efforts in the field of consulting of fundamental disciplines is the formulation of the technology of constant updating of training courses, minimizing their delay in responding to changes in the realities of science itself. This reprogramming technology involves:

1. qualified assessment of modern scientific achievements, which requires connection to specialized information networks and to all information flows in the relevant scientific areas;
2. re-conceptualization of the relevant information fields, taking into account the new information dominant and the reprogramming of the relevant consulting threads;
3. elaboration of "joints" of fundamental disciplines, their mutual "breakthroughs" and on this basis forecasting of further development of the relevant scientific and applied directions;
4. development of mechanisms for recognition by one science (discipline, direction) of potential problems within the framework of another one at the level of both applied and fundamental interaction, etc.

From a substantial point of view, the following trends that deserve careful study have emerged in the process of "mastering" the fashion trends of the West by Russian science and education.

The phenomenon of the initial development of simplified consulting in new industry areas (management, insurance, marketing, banking, reengineering technologies), followed by the complexity of the subject and the development of relevant research areas. In fact, within the existing information landscape, "sowing of seeds" was carried out to initiate the formation of a certain required information environment and infrastructure of "germination" of scientific schools in the future. Such a strategy was typical for the directions that had no direct analogues in Soviet science, and was based on the transformation of the existing conceptual apparatus of general theoretical disciplines in the domestic science of the corresponding profile.

Crafts began to develop quickly, to some extent using mathematics, which was due to the universality of its language (Kruss et al, 2015). Soviet probability theory schools were able to switch almost painlessly to the development and independent development of the formalisms, underlying the actuarial calculations of the theory of insurance, the theory of finance and risk management. Of course, over time, the effect of the phenomenon under consideration gradually fades.

Another trend was reflected by the phenomenon of the desire to preserve old scientific knowledge through reformulation and presentation in a new language, in generally accepted terms. The emergence of this phenomenon was stimulated, on the one hand, by the presence of points of contact in domestic and foreign studies on the related profile (for example, the theory of

management and Cybernetics), and on the other - the return through the "administrative markets" to the planned administrative regulators. Thus, the reference to the topics related to vertical integration and financial and industrial groups is a reflection of the significant development of the processes of vertical integration in the Russian economic system and the desire of some of the ruling elites to restore the old economic order (Freitas, 2013). It is interesting to note that examples illustrating this phenomenon can come to us from the West, so to speak, "entirely", as in the case of institutional economic theory.

It is obvious that in the framework of the developed innovation environment the considered phenomenology can have only local significance, while under the modern Russian conditions this phenomenology of spirit is a quite significant factor influencing the logic of development.

4 Summary

In general, according to the levels of problems that stimulate innovation, in particular, in education, the following general picture of the regional innovation landscape can be offered.

1. Global problems - expected man-made disasters and natural disasters. The first set of problems sets the challenges of planning and ecology of the metropolis, in the broadest sense — from the rhythmology of urban networks to the recognition of risk consortia, necessary for the prevention and dispersion of street disturbances or to identify potential outbreaks of epidemics. More generally, it is a management task, but not of a structure, but of a habitat (it is, of course, an anthropogenic environment). Innovations in the field of "recultivation" of the environment should be connected, first of all, with the greening of harmful chemical industries, and in the future-with their removal from the places of residence of people.

It is necessary to highlight the global security problem in connection with the generally recognized assessment of the activities of a number of international organizations as terrorist. In this regard, education itself acts as a humanitarian anti-Terror technology (Brovkin, 2018). The task of education in many ways is the involvement of large masses of the population in the system of values, excluding attempts on life, rights and freedoms of the individual.

2. State reforms – these are, first of all, problems of management, i.e. optimization of management structures at all levels and branches of power. The most important part of the management reform should be the optimization of the management of the state's provision of compulsory social services to the population (health, law enforcement, housing, transport, pensions, etc.).

3. The relationship of the type of "federation -region". Traditional innovations in servicing of functioning clusters will be complemented in connection with the problems of the first group. The latter act here as the problems of ecology and safety of road and air transport, going into the field of both humanitarian problems and purely technical requirements. Also, the most important problem is the depletion of regional energy resources of the Republic of Tatarstan and, as a result, the collapse of the remaining "sovereignty-forming programs". This will entail both the search for a substitute in the emerging information vacuum and the ever-increasing release of labour and intellectual resources. In this regard, the role of innovations in the field of division of powers between the region and the Federal center, humanitarian technologies to change the structure and improve the efficiency of the labor market and improve the management of migration flows.

4. Humanitarian problem. With sufficient share of confidence it is possible to express the idea that the state policy in the field of control over the gene pool of the country currently involves two main components: 1) selection of the most active parts involved in the process, managed by the network management, and 2)

control over the remaining part through government control, exercised through traditional state institutions. In accordance with this policy (in a number of aspects objectively reflecting the self-identification of Russian citizens), the main innovation flows will also be divided: the classic "human rights" will be improved mainly within the group 1), while for the group 2) social guarantees will be at the forefront. Moreover, humanitarian technologies will be increasingly used as instruments in the latter case.

5 Conclusion

Relying on the presented arguments and axioms, it should be noted that the regulation of the process of development of higher education and the use of its potential is a rather complex process that requires significant resource costs. However, this should be seen as a necessary condition for the intensive development of society, the formation of progressive views and the creation of prerequisites for a real economic, political and social recovery of the national economic system. Higher education should not develop "on its own" — it is a public institution, and therefore its functioning should be focused primarily on the public interest. At the same time, higher school, like any other system, according to the law of energy conservation, is selfish, i.e. internally it strives to realize its own interests, which, ultimately, manifests itself in the form of development of "science for the sake of science itself" (Gunasekara, 2004). However, such principles of functioning of science do not allow to speak about it as socially significant, which in the long term can lead to a systemic collapse of higher education within the national system. This, of course, is undesirable both for the higher school itself and for the society, which in this scenario is deprived of the tool of intensive innovative development, which is necessary in the conditions of limited resources and increased global competition. Therefore, external regulation of the higher school and its adaptation to the public interest are necessary within the framework of the strategic development of national economic systems. And the creation of adapted tools for its development in accordance with emerging trends in the global/national/regional environment is a necessary condition for the effectiveness of development not only of the educational environment, but also of the economic system as a whole.

Acknowledgements

The work was carried out at the expense of the subsidy allocated to the Kazan state University to perform the state task in the field of scientific activity (№26.9776.2017/BCH)

Literature:

1. Wu J. (2014). Cooperation with competitors and product innovation: Moderating effects of technological capacity and alliances with universities, *Industrial Marketing Management*, No. 2, pp. 199-209.
2. Varshavsky A. (1998). Socio-economic problems of Russian science: long-term aspects of development, *economic Issues*. No. 12.
3. Willis R. (1986). Wage Determinants: a Survey and Reinterpretation of Human Capital Earnings Functions, *Handbook of Labor Economics*. Amsterdam.
4. Psacharopoulos G. (1994). Returns to Investment in Education: a Global Update, *World Development*. 22(9).
5. Carayannis E., Grigoroudis E. (2016). Quadruple Innovation Helix and Smart Specialization: Knowledge Production and National Competitiveness, *Foresight and STI Governance*, 10(1), pp. 31-42.
6. Kruss G., McGrath S., Petersen I., Gastrow M. (2015). Higher education and economic development: the importance of building technological capabilities, *International Journal of Educational Development*, No. 43, pp. 22-31.
7. Freitas I.M.B., Geuna A., Rossi F. (2013). Finding the right partners: Institutional and personal modes of government of university-industry interactions *Research Policy*. 42(1), pp. 50-62.
8. Brovkin A.V. (2018). Problems of modern Russian system of higher education and ways of their solution in the interests of all participants of educational process: part 1, *Modern education*, No.1, Pp. 1-10.
9. Gunasekara C.S. (2004). The regional role of universities in technology transfer and economic development. *British Academy of Management Conference*, St Andrews, Scotland.
10. Villalobos Antúnez J.V. (2016). Ciencia y Tecnología para la libertad, *Opcion*, 32(79), pp. 7-9.
11. Tuan V.V. (2017). Communicative Competence of the Fourth Year College Students: Basis for proposed English Language Program, *Astra Salvensis*, Supplement No. 2, p. 45.