DOI: 10.35330/1991-6639-2020-6-98-242-255

A MODEL OF ONTOGENESIS OF REGIONAL EDUCATION SPACE

R.V. GURFOVA, I.V. ASHINOVA, KH.V. MASHUKOV, A.A. SHIRITOV

Federal State Budgetary Educational Institution of Higher Education «Kabardino-Balkarian State University named after H.M. Berbekov» 360000, KBR, Nalchik, Chernyshevsky str., 173 E-mail: yka@kbsu.ru

The paper examines the problems of interaction between universities in the region on the main tracks of the development of higher educational institutions and their response to global challenges. The financial and economic activities of each of the universities of the territory, their contribution to the educational space of the region and the laws of their interaction are analyzed. The research is based on the triplex theory. Descriptive and mathematical models of the genesis of the space of knowledge, the space of consent and the space of innovation have been built. Their synergistic interaction is built using the diffusing properties of spaces. Based on the diffusion equation, a model of ontogenesis of regional universities is formed.

The main strategic objectives of universities for the period up to 2025 have been determined. Their development tracks and ways of formation in the educational space of the territory are identified. The process of financing the main strategic tasks of the development of the educational space of the region has been modeled.

A scheme for determining the contribution of each university for each strategic task and their solution in the most effective way is proposed. The result of considering the model are the values of the optimal costs for the region, aimed at achieving the main economic goals.

The results obtained in the work are the next stage in the development of a complete model of the strategic development of the system of higher educational institutions in the region.

Keyword: genesis of development, triple helix, model of triplex, knowledge space, agreement space, innovation space, global challenges, education, diffusion equation.

REFERENCES

- 1. Kalmykova A.M., Mashukov Kh.V. *Sotsial'no-ekonomicheskiye usloviya realizatsii si-stemy regional'nogo obrazovaniya* [Socio-economic conditions for the implementation of the system of regional education] // Bulletin of the Kabardino-Balkarian State University named after H.M. Berbekov. Series: Law, Economics. 2019. No. 4 (12). Pp. 24-28.
- 2. Itskovits G. *Model' troynoy spirali // Innovacii*. [Model of the triple spiral // Innovation] 2011. No. 4(150). Pp. 5-10.
- 3. Ashinova I.V., Gurfova R.V., Nakhusheva Z.A. *Model' troynoy spirali v proyektsii razvitiya Kabardino-Balkarskogo gosudarstvennogo universiteta v sovremennykh usloviyakh* [The triple helix model in the projection of the development of the Kabardino-Balkarian State University in modern conditions] // Bulletin of the Kabardino-Balkarian State Agrarian University named after V.M. Kokov. 2017. No. 4 (18). Pp. 45-51.
- 4. Informatsionnaya sistema analiza deyatel'nosti obrazovatel'nykh organizatsiy v sfere vysshego i srednego professional'nogo obrazovaniya [Information system for analyzing the activities of educational organizations in the field of higher and secondary vocational education]. http://indicators.miccedu.ru. (data 17.12.2020)
- 5. Nakhusheva Z.A., Ashinova I.V., Gurfova R.V., Mashukov Kh.V. *Ekonomiko-matematicheskaya model' razvitiya regional'nogo universiteta formata 3.0 // Sovremennyye problemy prikladnoy matematiki, informatiki i mekhaniki* [Economic and mathematical model of the development of a regional university of format 3.0 / Modern problems of applied

mathematics, computer science and mechanics]. Proceedings of the international scientific conference. 2019. Pp. 103-110.

- 6. Fadeev A.S., Gerdi V.N., Baltyan V.K., Fedorov V.G. *Integratsiya obrazovaniya, nauki i proizvodstva: ot bazisa k realiyam* [Integration of education, science and production: from basis to reality] // Higher education in Russia. 2016. No. 4. Pp. 55-63.
- 7. Zinevich O.V., Balmasova T.A. *«Tret'ya missiya» i sotsial'naya vovlechennost' universitetov: k postanovke problemy* ["The third mission" and social involvement of universities: to the problem statement] // Power. 2015. No. 6. Pp. 67-72.
- 8. Tikhonov A.N., Samarsky A.A. *Uravneniya matematicheskoy fiziki* [Equations of Mathematical Physics]. Moscow State University. M., 1999. 735 p.
- 9. Golovko N.V., Zinevich O.V., Ruzankina E.A. *Tret'ya missiya universiteta i model' mnogopol'zovatel'skogo upravleniya dlya regional'nogo razvitiya* [The third mission of the university and a model of multi-user management for regional development] // Comparative politics. 2018. Vol. 9. No. 1. Pp. 5-17.

Information about the authors:

Gurfova Rita Vanoevna, Candidate of Economic Sciences, Associate Professor of the Department of Computer Technologies and Information Security of the Federal State Budgetary Educational Institution of Higher Education "Kabardino-Balkarian State University named after H.M. Berbekov".

360000, KBR, Nalchik, Chernyshevsky street, 173.

E-mail: guruinform1961@yandex.ru

Ashinova Irina Viktorovna, Doctor of Philosophic Sciences, Associate Professor, Scientific Secretary of the Federal State Budgetary Educational Institution of Higher Education "Kabardino-Balkarian State University named after H.M. Berbekov".

360000, KBR, Nalchik, Chernyshevsky street, 173.

E-mail: asin07@mail.ru

Mashukov Khyzyr Vyacheslavovich, Head of the Department of Grants of the Research and Innovation Activity Department of the Federal State Budgetary Educational Institution of Higher Education "Kabardino-Balkarian State University named after H.M. Berbekov".

360000, KBR, Nalchik, Chernyshevsky street, 173.

E-mail: khiz.87@mail.ru

Shiritov Astemir Alimovich, 3rd year student, direction of training 03/38/04 "State and municipal administration", FSBEI HE "Kabardino-Balkarian State University named after H.M. Berbekov".

360000, KBR, Nalchik, Chernyshevsky street, 173.

E-mail: astemir.shiritov.01@bk.ru