



Features of Vocational Education Management in the Region

Yuliya L. Kamasheva¹, Galina S. Goloshumova^{2,3}, Aleksey Y. Goloshumov⁴, Svetlana G. Kashina⁵,
Natalya B. Pugacheva^{6*}, Zemfira M. Bolshakova⁷, Nadezhda N. Tulkibaeva⁸, Fedor F. Timirov⁹

¹Institute of Economics, Management and Law, Kazan, Russia, ²Moscow State Institute of Tourism Industry Named After Y. A. Sienkiewicz, Moscow, Russia, ³Academy for Advanced Studies and Retraining of Educators, Moscow, Russia, ⁴Open Joint Stock Company "Electronic Moscow," Moscow, Russia, ⁵Kazan State University of Architecture and Engineering, Kazan, Russia, ⁶Kazan State University of Architecture and Engineering, Kazan, Russia, ⁷Chelyabinsk State Pedagogical University, Chelyabinsk, Russia, ⁸Chelyabinsk State Pedagogical University, Chelyabinsk, Russia, ⁹The Institute for the Development of Education (Nizhny Tagil Branch), Nizhny Tagil, Russia. *Email: natalya-pugacheva@yandex.ru

ABSTRACT

The relevance of the article is reasoned by the increasing role of vocational education in the regional economy. In modern conditions, vocational education is considered as a systemic integrity of integrative interaction of education, science and industry, aimed at experts' forming who is ready for the life - long learning, capable to a certain type of professional activities, self-organization and competitiveness on the labor market. The purpose of the article is to find out management features of vocational education in the region. The leading method is the method of action research, allowing to obtain new knowledge about the management of vocational education in the region and to suggest methods for its optimization to improve the competitiveness of vocational education institutions in the international educational market and to obtain qualitatively new results in the process of vocational training. The article reveals the essence of management of vocational education in the region; clarifies trends in the management of vocational education in the region; identifies problems in the management of vocational education in the region, defines and justifies their solution methods (the implementation of modern financial and economic mechanisms of vocational education institutions' activities; development of normative-legal support of activities of vocational education institutions; the creation of new adaptive forms and mechanisms of management of vocational education in the region; making, implementation and development of quality management systems of vocational education). Article Submissions can be useful for research and teaching staff of vocational education system, for specialists of education management authorities and regional authorities.

Keywords: Management of Vocational Training, Management Methods of Vocational Education, Economic and Financial Mechanisms, Normative-legal Support of Professional Educational Institutions' Activities, The Management of Quality of Vocational Education

JEL Classifications: I21, I23, Z13

1. INTRODUCTION

1.1. The Relevance of the Study

The organization of vocational education through the integration of science and industry determines its positioning as a rather complex, multi-component process of dialectically interconnected one with the regional labor market (Pugacheva, 2009). The priority direction for the next few years is the creation of the necessary conditions for the preservation and development of regional systems of professional workers' training, transformation of vocational education into the means of development of regional social and economic systems based on the consolidation of institutions of secondary, higher and postgraduate education (Ivanov et al., 2015;

Shaidullina et al., 2015a; Lunev et al., 2014). The development of regional systems of vocational education is based on a specific (here and now) and universal (historical) experience and is reflected in the objectives of the educational policy of the region (Lunev et al., 2014a), in the content of vocational training, learning technologies, methodology of compilation of regional demand forecasts in staff for short, medium and long-term (Masalimova and Nigmatov, 2015; Lunev et al., 2014b), the procedures for the formation and maintenance of professional standards in the most popular and important for regional strategic development professions (Pugacheva, 2010); models of interaction between employers and educational institutions, the mechanisms of the network organization of educational, scientific and innovative

activities of vocational educational institutions (Lunev and Pugacheva, 2013); restructuring of vocational educational institutions (Pugacheva, 2010a).

1.2. The Essence of Management of Vocational Educational System

Management of vocational educational system should be understood as a productive interaction of authorities (federal and regional level) and the education authorities with the local authorities, vocational educational institutions, enterprises, business organizations, non-governmental organizations, aimed at ensuring of optimal functioning and development of vocational educational institutions in order to increase their competitiveness in the international market of educational services and to receive qualitatively new results of vocational training (Pugacheva, 2010a).

1.3. The Essence of the Management of Vocational Education in the Region

The management of vocational education in the region is the process of consolidation of regional authorities and education authorities, local government, vocational educational institutions, regardless of ownership and administrative subordination, enterprises and business organizations, aimed at practical implementation of the regional educational policy, the formation of regional educational environment, ensuring of the quality of vocational training of future specialists, improving of the competitiveness of vocational educational institutions at the regional and international markets of educational services (Pugacheva, 2011).

2. MATERIALS AND METHODS

2.1. Methods of the Study

During the study following methods were used: Analysis of the regulations, the method of action research, the method of expert evaluations, observation, questioning.

2.2. The Experimental Base of the Study

Experimental work was carried out on the basis of vocational training institutions of the Republic of Tatarstan in Russia. The experimental work included 128 heads of vocational training institutions, 410 specialists of educational authorities.

2.3. The Stages of the Study

The study was conducted in three stages:

- The first phase of the study was devoted to the analysis of the current state of the problem in the scientific literature and practice of management of education; to the development of the research program.
- The second step was aimed at clearing the essence of management of vocational education in the region; trends in the management of vocational education in the region were revealed; problems in the management of vocational education in the region were identified, their solution methods were defined and justified; experimental work to verify the effectiveness of these methods was carried out.
- On the third stage, the systematization, interpretation and synthesis of the research results were carried out; theoretical

conclusions were refined; processing and registration of the obtained results of the study was performed.

3. RESULTS

The main results of this study are: (1) The identification of major trends in the management of vocational education in the region; (2) identification of problems in the management of vocational education in the region; (3) definition and justification of the methods of solving the problems in the management of vocational education in the region.

3.1. Major Trends in the Management of Vocational Education in the Region

It was found that in the management of vocational education in the region are the following trends:

- Improving of the quality of vocational education, as one of the factors of supply and demand interaction in the field of educational services.
- Promotion of mobility of students and teachers; grants support of students and teachers; ensuring the employability for graduates and the career prospects showing for them.
- Development of social partnership in the sphere of vocational education, the recognition of state-public structures and methods of management of vocational education in the region.
- Development of structural and functional integration of vocational training institutions and enterprises in the industry: The creation of multidisciplinary educational complexes; association of research and educational institutions; the formation of industrial educational clusters.
- Organization of network interaction of educational institutions, regardless of forms of ownership, directed on concentration of different types of resources, the development of various forms of social partnership, integration of educational activities.
- Improving the image of vocational educational institutions.

3.2. Problems in the Management of Vocational Education in the Region

The following problems in the management of vocational education in the region are revealed:

- The functions of the management bodies of vocational education of different competence are not defined (federal, regional, municipal levels) throughout “vertical management.”
- There are no regional centers of organization and coordination of vocational training institutions for the development, assessment, testing and implementation of innovations in the field of quality management of vocational training.
- The “tree” of normative legal acts is not developed providing corporation of vocational training institutions with industrial enterprises to improve the quality of workers’ and specialists’ training, to provide for rational utilization of financial, material and intellectual resources.
- The financial and economic mechanisms of vocational educational institutions’ activities need adjustment.
- There is imbalance of vocational training by levels (secondary and higher vocational education), directions (engineering-technical and social-humanitarian) and forms (full-time - part-time).

3.3. Methods of Problems' Solving in the Management of Vocational Education in the Region

Methods of problems' solving in the management of vocational education in the region (implementation of modern financial and economic mechanisms in the field of vocational educational institutions' activities; development of normative-legal support of activities of vocational educational institutions; the creation of new adaptive forms and mechanisms of management of vocational education in the region; making, implementation and development of quality management systems of vocational education).

3.3.1. The implementation of modern financial and economic mechanisms of vocational educational institutions' activities

It is established that the implementation of modern financial and economic mechanisms of vocational educational institutions' activities should be directed to:

- The creation of educational institutions' small businesses in certain areas.
- The implementation of special higher financing standards on urgently demanded professions and specialties for the region's economy.
- Implementation of energy saving technologies and reducing of the costs on public services.
- Ensuring of normative per capita funding of educational institutions to provide the standard educational services.
- The development of multi-channel financing of vocational educational institutions.
- The implementation of sector wage in vocational educational institutions and support for students enrolled in professions and specialties for priority sectors of the economy, high-tech science-intensive industries and critical technologies, as well as showing high results in training.

3.3.2. Development of normative-legal support of activities of professional educational institutions

It was found that the development of normative-legal support of activities of professional educational institutions should be subject to:

- Conjugation of primary, secondary and higher professional educational curricula.
- Creating conditions for the transition to an autonomous form of organization of work.
- The development of network interaction of professional educational institutions, aimed at the concentration of different types of resources, creation of various forms of social partnership, integration of the educational process.
- The continuity of the activities of vocational educational institutions and the elimination of disparities and overlaps in training of workers and specialists to meet the needs of the regional labor market.
- Creation of sector educational consortia, as temporary associations of vocational educational institutions with industrial enterprises, based on the separable principle, providing equal cooperation and the balance of social and economic interests of all parties, the emergence of their goals and non-additive interests, with the aim to improve the quality of workers' vocational training, capable to self-organization

and competitiveness on the regional labor market, ready to learn throughout life.

3.3.3. The creation of new adaptive forms and mechanisms of management of vocational education in the region

It was determined that the creation of new adaptive forms and mechanisms of management of vocational education in the region should be based on the combination of the following principles:

- The principle of networking, aimed at models creating of the entities of the regional system of vocational education in various logical grounds.
- The principle of integration, involving the establishment of regular, stable relationships between vocational educational institutions, regardless of ownership forms and administrative subordination.
- A participatory principle, causing the development of state and social structures, forms and methods of management and productive cooperation of educational institutions with research organizations, enterprises and business structures.
- The principle of autonomy defining the functions of the management bodies of vocational education of various competencies for all "vertical management."
- The principle of innovation, focusing on the development of organizational and managerial innovations.
- The principle of subsidiarity, envisaging the creation of conditions for the voluntary and committed participation of enterprises and business organizations in the development of vocational education.

3.3.4. Creating, implementation and development of the quality management systems of vocational education

It was found that the creating, implementation and development of quality management systems was to ensure the competitiveness of institutions of professional education in the educational services market and the competitiveness of graduates in the labor market. Quality management systems of vocational training should include the following components:

- A study of the best practices of Russian and foreign institutions of professional education on creation, implementation and development of quality management systems.
- The creation and implementation of quality management systems in vocational educational institutions.
- Coordination of vocational educational institutions' activities to develop and implement quality management systems.
- The formation of innovative management techniques' bank in the framework of the implementation of quality management systems.
- The creation of scientific and methodological recommendations for the development, implementation and realization of quality management systems in vocational educational institutions.
- Advisory services for vocational training institutions on the quality management issues.
- Conferences, symposia, seminars, exhibitions and other similar activities conducting on quality management of vocational education.
- Research carrying out in the field of quality management of vocational education.

3.4. Stages of Implementation of Methods for Problems Solving in the Management of Vocational Education in the Region

The implementation of methods for problems' solving in the management of vocational education in the region involves the following steps of the experimental work: Ascertaining, forming and control one.

3.4.1. *Ascertaining stage*

The purpose of ascertaining stage was to identify the attitude of scientific and pedagogical staff of vocational educational system, specialists of education authorities and regional authorities in the management of vocational education in the region. At this stage, a number of heads of vocational training institutions and professionals of the education authorities were united in task groups to implement the methods of problems solving in the management of vocational education in the region. The task groups developed curricula for the implementation of methods for solving problems in the management of vocational education in the region, including actions and deadlines.

3.4.2. *Forming stage*

As part of the formative stage methods for problems' solving were implemented in the management of vocational education in the region and their effectiveness was tested. Modern financial and economic mechanisms were introduced into the activities of vocational educational institutions: Special higher standards of financing were introduced on urgently demanded professions and specialties for the economy of Tatarstan; series of measures were developed and implemented to establish at educational institutions enterprises with the foundation of the institution. To optimize the normative-legal support of activities of vocational educational institutions a package of regulatory-legal acts was updated regulating financial activities on the basis of per capita norms of financing; the regulation was developed and implemented on the regional system of grant support for the development of vocational training. State-public structures of management of vocational education in the region are created and formed: Council of University Rectors, public charitable foundations, school boards and coordinating councils. The quality management systems of vocational education were developed and implemented.

3.4.3. *Control stage*

In the control stage effectiveness indicators of methods for problems' solving were identified in the management of vocational education in the region. Management of professional education in the region was monitored. During the monitoring the internal and external examination of management results of vocational education was organized. Internal examination was carried out by task groups. An external review was held with the participation of deputies of the State Council of Tatarstan and the Kazan city Council. In all types of examination the representatives of public authorities of management of vocational education took part. It was found that the proportion of small business enterprises with the Foundation of the institution increased from 10% in 2010 to 76% in 2015. The share of income derived from the activities of small enterprises in educational institutions in the consolidated budget of these institutions grew from 2% in 2010 to 42% in 2015.

The share of public funding on the implementation of special funding for higher standards for urgently demanded professions and specialties increased from 5% in 2010 to 12% in 2015. The proportion of students enrolled on vocational educational curricula for priority sectors of the economy, high-tech knowledge-intensive industries and critical technologies increased from 35% in 2010 to 73% in 2015. The number of regulations on incentive payments to various categories of workers, on amendments to the statutes and other local acts of educational institutions from 2 in 2010 to 5 in 2015 increased. Since 2010, annually the collection of legal acts in the sphere of professional education has been published. The number of public organizations that contributed to the development of vocational education in the region increased from 5 in 2010 to 24 in 2015. The share of managers and employees of institutions of professional education, possessing certificates of authorized by the quality of education increased from 12% to 51%.

4. DISCUSSIONS

An important theoretical and practical significance for the study have the works of Averkin (1999), Bochkarev (2001), Pugacheva, et al. (2014), Terentyeva (2007), Shaidullina et al. (2015b), Lisitzina et al. (2015) which describe the principles and functions of management of territorial educational systems. However, analysis of scientific papers shows that the problem of managing of professional education in the region is debatable. The special literature does not solve the issue of the essence of vocational education management in the region; trends are not revealed, problems in the management of vocational education in the region are not identified and methods for their solution are not defined.

5. CONCLUSION

It is found that the characteristics of vocational education management in the region are as follows. Firstly, it is a process of effective interaction of vocational educational institutions, regardless of ownership forms and administrative subordination, regional authorities, local authorities, public organizations, manufacture, consumers of educational services based on a clear distribution of roles, responsibilities, participation and aimed at the concentration of various types of resources, the development of variant forms of social partnership and the integration of the educational service market and the labor market, to improve the quality of life in the region. Secondly, it is the organization of network interaction of vocational educational institutions with the aim of their competitiveness increasing in regional and international markets of educational services, quality improving of vocational training of highly qualified specialists.

Article submissions can be useful for research and teaching staff of vocational educational system, specialists of educational authorities and regional authorities in the development of strategies for the development of vocational education in the region.

Taking into account the obtained results of this study a number of research challenges and promising directions that require further consideration can be identified: The scientific and methodological

support for vocational education management in the region; development of mechanisms and algorithms of the state-public management of vocational education in the region.

6. RECOMMENDATIONS

It is found that the efficiency of management of vocational education in the region will be enhanced under the condition of state and public governance mechanisms' development ensuring dialogue of educational institutions with students and their parents, representatives of civil institutions, employers.

REFERENCES

- Averkin, V.N. (1999), *The Administrative Management of Territorial Educational Systems*. Veliky, Novgorod: NRCO. p156.
- Bochkarev, V.I. (2001), Stage-public education management: What will it be. *Pedagogy*, 3, 9-13.
- Ivanov, V.G., Shaidullina, A.R., Drovnikov, A.S., Yakovlev, S.A., Masalimova, A.R. (2015), Regional experience of students' innovative and entrepreneurial competence forming. *Review of European Studies*, 7(1), 35-40.
- Lisitzina, T.B., Nikonov, V.V., Ilkevich, K.B., Ilkevich, T.G., Masalimova, A.R. (2015), The syllabus of the regional component of professionally motivational education developed for the students specializing in tourism. *Asian Social Science*, 11(2), 284-289.
- Lunev, A.N., Pugacheva, N.B. (2013), Scientific and methodical recommendations on the assessment of the quality and accessibility of public and municipal services. *Society: Politics, Economics, Law*, 4, 16-19.
- Lunev, A.N., Pugacheva, N.B., Stukolova, L.Z. (2014), Strategies and trends of municipal educational system development. *Scientific-Methodical Electronic Journal Concept*, 3, 14-16.
- Lunev, A.N., Pugacheva, N.B., Stukolova, L.Z. (2014a), Strategies of development of sphere of vocational educational services in the face of increasing autonomy within the Federal government. *Actual Problems of Economics*, 10(160), 215-221.
- Lunev, A.N., Pugacheva, N.B., Stukolova, L.Z. (2014b), Socially-oriented regional economic environment as a tool for services development management. *Actual Problems of the Economy*, 5(155), 247-251.
- Masalimova, A.R., Nigmatov, Z.G. (2015), Structural-functional model for corporate training of specialists in carrying out mentoring. *Review of European Studies*, 7(4), 39-48.
- Pugacheva, N.B., Lunev, A.N., Stukolova, L.S. (2014), Promising research areas of vocational education as a public good and meaningful heritage of the individual. *Modern Problems of Science and Education*, 1, 91-96.
- Pugacheva, N.B. (2009), Conceptual bases of modernization of vocational training system for the regional labor market. *Vocational Education in Russia and Abroad*, 1, 079-082.
- Pugacheva, N.B. (2010), Foresight as a component of the management of modern vocational education. *Vocational Education in Russia and Abroad*, 1(2), 65-69.
- Pugacheva, N.B. (2010a), Management of the municipal system of education: The theoretical foundations. *News of Russian Academy of Education*, 1, 71-83.
- Pugacheva, N.B. (2011), Priorities of higher vocational education in the modern theory and practice. *Sociosphere*, 1, 42-46.
- Shaidullina, A.R., Pavlova, N.A., Minsabirova, V.N., Burdukovskaya, E.A., Yunusova, A.B., Letyaev, V.A., Afanasev, A.S. (2015a), Integration processes in education: Classification of integration types. *Review of European Studies*, 7(4), 27-31.
- Shaidullina, A.R., Sinitzyn, O.V., Nabiyeva, A.R., Yakovlev, S.A., Maksimov, I.N., Gatina, A.R., Akhmetov, L.G. (2015b), Functions and main directions of development of the integrated educational-industrial complex "College-University-Enterprise." *Review of European Studies*, 7(4), 228-233.
- Terentyeva, I.V. (2007), *Council of Rectors as a Form of State-Public Higher Education Management: Monograph*. Kazan: Publishing House of Kazan State University. p214.