Planning Individual Educational Trajectory in Continuing Education

Marina Georgiyevna Sergeeva, Vyacheslav Nikolayevich Skvortsov, Aleksandra Sergeyevna Sokolova, Svetlana Vitaliyevna Rachev, Nikolay Gennadiyevich Poyarkov, Ekaterina Vladislavovna Konysheva, Iana Viktorovna Poliakova

Abstract: Introduction. The current socio-economic development of Russia is characterized by intensive changes in the field of interaction between the employment sector and the education system. The society positively perceives the measures of the state to support and develop education, which has become the most important area of social policy, going beyond the interests of the pedagogical community. Methods. Today, professional education institutions operate in challenging conditions. It is necessary to provide advanced training of specialists for innovation economy taking into consideration long-term demographic situation. Results. Development of individual educational trajectories is a multifaceted process. The goal of an individual educational trajectory is to ensure the development of self-reliance and individual initiatives, the possibility of the fullest realization of the creative potential for successful activities in the professional sphere. Discussion. The classification of external factors was developed as a result of the study. The external factors were classified by the type of activity (political, economic, social, legal, educational, etc.); by the source of action (state, cultural, technical, financial, spiritual, etc.); by the effect of exposure (direct/indirect action); by value relation (favorable, neutral, unfavorable, threatening); by the content of action (wide and narrow). The main external factors, influencing the development and implementation of educational trajectories in the continuous education system, in accordance with current legislation, are the general state educational policy, the economic viability of the education system, provision of social guarantees for the realization of citizens’ rights to education. Conclusion. Planning of educational trajectory is a joint activity of a student and a teacher, consisting of several interrelated stages.

Index Terms: labor sphere, education system, advanced training, innovative economy, individual educational trajectory.

I. INTRODUCTION

The current socio-economic development of Russia is characterized by intensive changes in the field of interaction between the employment sector and the education system. The society positively perceives the measures of the state to support and develop education, which has become the most important area of social policy, going beyond the interests of the pedagogical community.

The impact of human capital and the quality of vocational education on the economic growth is reflected in the Strategy for the Development of the Economy until 2020, proposed by the Government of the Russian Federation. The restructuring of production has changed the parameters of the labor market. There is a growing interest of employers to qualified workers (locksmiths, plumbers, millers, etc.) and mid-level specialists, who in various industries make up from 60 to 80% of the productive forces. By now their deficit reaches 30%. Under these conditions, the role of initial and secondary vocational education in qualified personnel training increases. On the contrary, according to the joint research conducted by the Higher School of Economics and Rosstat (Federal State Statistic Service), 50% of graduates currently remain unclaimed or are not working in their specialty. Among all graduates, certified engineers make up 30%, and they more often than others do not work in their specialty, their diplomas remain unclaimed [1].

The Government of the Russian Federation has developed a set of measures to support and develop vocational education institutions. These measures are an integral part of the Priority National Project “Education”. This project allowed educational institutions to combine innovations with system changes in vocational education, to increase the responsibility of the education system to students, to the country’s economy. Many vocational and higher education institutions are becoming regional, interregional and international innovative resource education centers. Their innovative activities are aimed at retraining and advanced training of personnel, lifelong education of citizens, distance learning and other innovations.

The Government also develops modern mechanisms of public-private partnership with the business community. A new system of financing development programs and professional training and re-training is taking shape. Gradually, a modern, variable type and appearance of vocational education institution began to take shape,
focusing on the result — the needs of individual and the labor market. The approaches to the entry of the Russian vocational school into the European Copenhagen process are being worked out. All this fully corresponds to the current changes in the economy and the labor market [2].

II. METHODS

Today, professional education institutions operate in challenging conditions. Advanced training of personnel is required for the innovation economy, taking into account the long-term demographic situation, the intensified competition between the levels of vocational education, the new order of recruitment into the Armed Forces of the Russian Federation (up to 40% of the admission should be school leavers), etc. However, a number of other problems accumulated over many years are preserved and very slowly solved, among which attention should be paid to the following [3]:

- in the conditions of diversification of the economy, the training of professional personnel is lagging behind the pace of high-tech industries restructuring;
- the demand for national production is far ahead of the educational institutions’ possibilities in terms of the graduates number and structure of personnel training, especially in the high-tech specialties;
- insufficient investments, structure and volumes of budget financing (especially in the system of initial and secondary vocational education) impede the renewal and development of fixed assets;
- lack of economic incentives for employers to invest in vocational education does not allow providing the necessary quality of vocational education;
- legislative and regulatory framework for all levels of vocational education is not sufficiently developed and controversial, the system of taxation of this category of educational institutions is ineffective. The low level of remuneration of teachers and scholarships for students is has negative influence on motivation of teaching staff to carry out scientific work and implement innovations, as well as on the modernization of educational process. These factors significantly reduce autonomy and independence, extrabudgetary and other new organizational activities of professional education institutions;
- the quality of human resources, the level of scientific support and the proportion of scientific research continue to decline in vocational education institutions. The system of advanced training for teachers is outdated and requires updating;
- the status of a young specialist is not clearly defined for employers. The reason, as follows from the monitoring data, is that vocational education institutions and employers in Russia are not interested in each other, and only imitate successful joint activities.

All these factors, of course, influenced the effectiveness of vocational education. The development of initial and secondary vocational education does not seem promising. School graduates are more interested in higher education. Public opinion is also being shaped not in favor of initial and secondary vocational education.

Thus, by now, many problems have accumulated that hinder the tasks of vocational education development. The search for new and more effective ways to improve and develop the system of lifelong education actualizes the issues of individual educational trajectories.

One of the most important indicators of economy competitiveness is the level of development of labor resources, the quality of professional training, which directly depends on the degree of interaction between the system of vocational education and the real sector of the economy.

Great importance in the positive resolution of this issue belongs to the professional and qualification advancement of an individual through the career ladder in view of one’s intellectual, psychological and professional orientation.

Comparative analysis of the individual educational trajectory (IET) development in the USA [4] made it possible to single out the following target groups, which are also characteristic of Russian society: women entering the labor market for the first time or repeatedly; pensioners facing the problems of changing lifestyles and transition from working mode to free mode; military retirees, adapting to civil life, etc.

Until 1995, there was no career planning in Russia as a social and scientific phenomenon. Thus, before the transition of Russia to market relations, the term ‘career’ had informal character and, as a rule, a negative meaning [5].

In this study, by professional career, we understand the opportunity of an individual to achieve a new higher professional, social, economic, scientific, cultural and moral status based on self-determination and self-regulation, achieved through continuous professional development. Career provides high-quality, continuous professional education in accordance with established, philosophically justified goals, strategy and technologies [6].

The needs of individuals in the development of their educational trajectory and the construction of professional career are caused by a number of motives. Guided by these motives, a person takes active efforts to achieve specific goals:

- autonomy, the desire for independence, the ability to do everything in his/her own way,
- functional competence, the desire to be the best expert in the profession and capacity to solve the most complex problems,
- security and stability, the desire to preserve and strengthen job position,
- managerial competence, the desire for power, leadership, success, which are associated with a high position, rank, status symbols, etc.,
- entrepreneurial creativity, the desire to create or organize something new, engage in creativity, etc.

It should be noted that individual needs vary with age and qualifications. In this study, on the basis of these changes, the types of professional career are highlighted according to the environment (professional and intra-organizational), according to the content of the changes occurring in the process of career movement (authority, qualification, status, monetary) [7].

Career is a long process that goes through a series of successive stages: preparatory stage, establishment,
advancement, maintenance, withdrawal and retirement. The case study analysis of many operating managers’ careers shows that the whole diversity of career types is obtained by combining four main models: ‘springboard’, ‘ladder’, ‘snake’ and ‘crossroads’. Existing career models show that the career can be dynamic, associated with the change of jobs, and static, carried out in one enterprise and in one position through professional growth [8].

The study highlighted the main conditions in which a person makes a career choice: tradition, chance, duty, target choice. In the Russian Federation, two career guidance systems have been established historically:

- territorial centers for career guidance of youth and psychological support of the population, financed through the federal budget;
- departments and centers of career guidance established in the employment agencies throughout the country, financed from extrabudgetary sources and from the State Employment Fund.

III. RESULTS

Development of individual educational trajectories is a multifaceted process. It is designed to ensure the development of independence and initiative, the possibility of the most complete realization of the individual creative potential for successful activity in the professional sphere. Such aspects of the modernization process as the transition to a multi-level education system, the development of mobile educational programs and standards (European Qualifications System), the achievement of academic mobility, suggest the availability of alternatives in the educational sphere and force learners to make choices based on their own capabilities and labor market needs. It is the choice of IET that will ultimately allow everyone to develop those personality traits that are most in demand at the moment.

In our study, we consider IET as one of the ways to implement individualization in the conditions of a new paradigm, which relates primarily to student's activities aimed at self-education and self-development. Student’s own motivation and responsibility in the implementation of the cognitive activity, which reveals his/her personal potential, are the basis of IET.

We also examined the problem of choosing methods and ways of planning and implementing IET from the standpoint of the continuing education system, taking into account the diversity of levels and directions. The choice of IET is made by the students, based on individual values and personal preferences, general orientation in the sphere of vocational education and labor market, highlighting important life goals. The choice of IET is determined by complex of pedagogical conditions [9]: characteristics, interests and needs of learner and his/her parents in achieving the desired educational result; professionalism of the teaching staff; possibilities of a vocational education institution to meet the educational needs of the population and to provide educational services; material and technical facilities of a vocational education institution.

Readiness for choosing a career is considered as an internal quality of a person, its stable characteristic containing a high motivation for choosing educational trajectory, and as a result of specially organized activities that contribute to the student's readiness to make choices. The IET planning is carried out on the basis of a student-centered, individual and activity-based approach. The study highlighted the components and indicators of readiness that allow conscious and independent determination of the various options for IET. The criteria are proposed that relate to the components of readiness, namely, motivational and value (understanding of free will and action as responsibility, motivating the value basis of choice), cognitive (knowing the situation of choice, informational readiness for different options for building an educational route, defining alternative solutions), operational (vision of the variability of activity methods, prediction of results and consequences) [10].

The grounds of the IET choice and construction are based on the following psychological characteristics: inclinations towards a specific type of activity – technical creativity (creative and innovative person), scientific creativity (innovative and creative person), public-social (public-innovative person), organizational (organizational-innovative person); needs for professional self-determination, readiness for professional self-determination.

In order for the choice to take place, it is necessary to specify a variety of alternatives that define the subject field of the choice. For example, the subject field for choosing an IET for a college student includes a variety of in-depth and enriched educational content, rational methods of learning activities, forms of independent work and monitoring learning outcomes.

The basis for creating IET is the planning and development of own knowledge activities system and, which is provided by the following means [11]:

- the ability of a student to determine the individual pace and form of studying academic disciplines;
- the ability of a student to formulate own goals in the study of a particular topic or section;
- the ability of a student to apply the learning methods that are most appropriate to his/her individual characteristics;
- the ability of a student to evaluate and adjust his/her activities.

For the successful implementation of IET, it is necessary to create conditions that help students to realize their need for self-improvement, to formulate general educational and particular subject-specific tasks and problems. This possibility is formed sequentially and includes the following stages: diagnostic, fixing, formative, active, reflexive-evaluative. The analysis showed that the educational trajectory in multi-level education can be represented by a sequence of levels, forms and types of training that a student intends to go through, planning his/her professional career based on the synthesis of abilities, knowledge, skills, perseverance in achieving the goal.
IV. DISCUSSION

In the research process a classification of external factors was developed: by the type of activity (political, economic, social, legal, educational, etc.); by the source of action (state, cultural, technical, financial, spiritual, etc.); by the effect of exposure (direct/indirect action); by value relation (favorable, neutral, unfavorable, threatening); by the content of action (wide and narrow).

External factors in the narrow sense were considered as a general state policy in the field of education. External factors in the broad sense include any elements and any phenomena and/or processes that externally influence the education system. External factors can be both primary and secondary, depending on the degree of their legal significance and influence on the education system.

The main external, affecting the building and implementation of educational trajectories in the system of continuous education, in accordance with applicable law provisions, are general state educational policy; economic viability of the education system; provision of social guarantees for the realization of citizens’ rights to education.

The modernization of economy leads to the emergence of a large number of new and diverse economic structures that will increase the demand for new professions and specialties, as well as the demand for highly qualified personnel in the industry, development of multi-channel financing of education.

The changing place of an individual in the sphere of educational services is due to the new educational paradigm, when a learner is put in the center of the education system. The development of competition in the labor market complicates the socio-psychological conditions of educational activities and the employment of graduates, contributes to the formation of new models of training qualified workers and specialists with the involvement of social partners, develops new relations between the subjects of the educational process. An applicant is a consumer of educational services, an educational institution is the provider of these services, and a graduate becomes the seller of his/her qualifications and abilities.

Changing the role of educational institutions in the educational space in connection with the new goals, processes of humanization and democratization will lead to the expansion of the rights of educational institutions, strengthening regionalization of vocational education, increasing competition between professional education institutions, development of educational innovations in the field of content and technology, expansion of their professional field in the context of diversification of education.

The implementation of educational trajectories in the continuing education system is also seen as the embodiment of the Russian legislation norms in the field of education in the practice of organizations, government bodies, educational institutions, officials, students, and citizens. This allows us to identify four forms of implementation of educational trajectories in the system of continuous education – compliance, execution, implementation and application of the existing standards. Compliance with the implementation standards of educational trajectories means avoiding from performing actions prohibited by established rules and refers to the passive form of lawful behavior of stakeholders in the field of personal promotion in the educational space in accordance with the levels of training.

Observance of standards for the implementation of educational trajectories consists in actively fulfilling the duties stipulated in Russian educational legislation by performing positive actions to provide students with educational services. Therefore, we can distinguish two forms of application of the citizens’ right to education: operational-executive and law-protecting.

Internal factors of building the IET in the system of continuous education are based on three concepts of personal development (biological, social, biosocial) and classified as biological, justified by the heredity of an individual; social, determining the needs of an individual; social, characterizing interpersonal relations of individual; special, associated with the particular psychological and physiological characteristics.

The following internal factors influence the building and implementation of IET in different degrees and at different stages of education: culture and image of an educational institution (staff qualifications, educational institution's material base, etc.); the adequacy of educational services to the structure and content of the students’ needs; content, organization and technology of educational activities, etc.

As a result of the study, we identified internal personal factors in the implementation of IET in the system of continuous education: motivation and self-motivation to learning; readiness to study in the chosen specialty; ability to work: capacity and performance; personal culture of mental labor; age crises.

V. CONCLUSION

The IET development is a joint activity of student and teacher, consisting of several stages: diagnosis of the personal development of a student; definition of educational aims; building a strategy for the development of the educational field; programming of individual educational activities; individual educational activities; presentation of personal results and their group discussion; reflexive-evaluative activity.

The directions of pedagogical support for IET development and implementation are:

- analytically-designing direction, including the analysis of individual characteristics and educational needs of students, the dynamics of their development;
- consulting direction, within the framework of which individual and microgroup consultations of students are conducted;
- coordinating direction, ensuring the joint work of vocational educational institutions and institutions of additional education, psychologists, social workers. This direction is designed to promote the development of constructive positive relationships between all subjects of open educational space, social support for students;
- organizational direction, affecting the organization of the educational process.
REFERENCES

1. Postalyuk, N.Y., Dubovitsky, T.Yu., Kiryushina, T.N. (2001). Planning professional career: guidelines for teachers. Samara: Profi, 31.
2. Stepanov, S.S. (2001). Ability and career. Moscow: Olma-Press, 123.
3. Asatryan, S.S. (2009). Psychological and pedagogical problems of personal development in the system of multi-level vocational education: monograph. Stavropol: Publishing House of North Caucasus State Technical University, 435.
4. Tryapitsyna, A.P., Radionova, N.F. (2009). The Problem of Designing Research Programs for Continuing Pedagogical Education. Man and Education: Academic Bulletin of the Institute of Adult Education of the Russian Academy of Education, 2, 16-23.
5. Popkov, V.A., Korzhuev, A.V. (2004). Theory and practice of higher vocational education: a manual for the system of additional pedagogical education. Moscow: Academic Project, 432.
6. Serikov, V.V. (2010). The nature of the pedagogical activity and features of professional education of a teacher. Pedagogy, 5, 29-33.
7. Sokolova, A.S. (2008). Career Education. Higher Education in Russia, 9, 160-162.
8. Sokolova, A.S. (2011). Diagnostics of the problems of the formation of the professional trajectory of graduate students at a medical university. Bulletin of Tver State University, 5, 120-131.
9. Prijazhnikov, N.S. (2008). Professional self-determination: theory and practice. Moscow: Academy Publishing Center, 320.
10. Reznik, S.D., Igoshina, I.A., Reznik, V.S. (2004). Management of personal career: manual for the specialty "Management of the organization". Moscow: Logos, 285.
11. Choshanov, M.A. (2001). Flexible technology of problem-modular training: a methodological guide. Moscow: Public Education, 157.