

Components of the competitiveness of Arctic university graduates as an object of social and labor relations

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Abstract. The state of the transport infrastructure is one of the most problematic areas in the Arctic. Taking into account the strategic position of the Arctic territories, the growing interest of foreign states in Russian natural resources and communications, transport support for existing and planned industries, the training of qualified specialists should promptly have developed within the framework of the national program for the development of the Arctic territories. The implementation of the program requires a special approach to the training of competitive graduates of the transport complex. Large-scale production projects will require hundreds of engineering and technical specialists: engineers, transport workers, logisticians, builders, etc. The components of competitiveness of a university graduate have been determined, which constitute general requirements for future transport specialists working in the conditions of the Arctic.

1 Introduction

The relevance and significance of this study are determined by the fact that the development of the Arctic transport system, including air, water and land communications, is one of the strategic priorities of the Russian state policy in the Arctic. The tasks of developing Arctic natural resources are directly related to the need for radical improvement and the creation of new transport hubs, new roads, new vehicles, and improved infrastructure, which will help improve the living conditions of the local population, solve social problems, and increase the level of transport accessibility of Arctic settlements.

The length of public roads in the Arctic zone of Russia is 108.9 thousand km, of which only 38.4% (41.8 thousand km) is improved. In completely Arctic regions this figure is 0.6% of the total length of the road network. Thus, the successful solution of the problems of the transport complex in the circumpolar territories, including cargo transportation, the operation of road transport enterprises, the construction of new and reconstruction of old roads, will largely depend on the level of training of specialists - engineers in the field of road transport who are competent and competitive and in demand in the Russian and regional markets.

Within the framework of the State Program of the Russian Federation "Development of Education for 2018-2025" (Decree of the Government of the Russian Federation No. 1642 of 26.12.2017), the main goal of higher professional education is to train the qualified employees of the appropriate level and profile, competitiveness in the labor market, who are responsible and fluent in their profession and capable of effective work in the specialty at the level of world standards [9].

Graduate competitiveness is a new trend in Russian higher education. According to the definition of the famous manager of the twentieth century, Paul Drucker, "it consists of the competitive advantages and distinctive features of the employee". R I Platonova points out, "The competitiveness of a specialist of a regional university," is determined by the content of the educational order of the state and the regional community and the requirements of the educational standard and regional labor markets. Competitiveness is formed in certain socio-cultural conditions generated by social and cultural traditions, and the mentality of the peoples of the region" [5]. In the education system, competitiveness is defined as the sum of the competitiveness of an educational institution, the personal and professional advantages of its graduates.

The purpose of the study: to determine the components of the competitiveness of a graduate in the transport industry.

Research objective: to identify the specific features of the formation of a competitive specialist in the field of motor transport for work in the Arctic zone. To achieve this goal, empirical research methods were used: observation, and survey.

The reform of engineering education in the field of motor transport will be accompanied by an active search for means to intensify the process of forming the competitiveness of future specialists, which is confirmed by the results of scientific research (V I Andreev, L M Mitina, D V Chernilevsky). The training of engineering specialists in the field of motor transport in various aspects has become the object of scientific research of Russian scientists of different generations (A N Kara, A A Nikolaeva, P A Fatkhutdinov, N N Kolobkov, Yu A Dmitrieva, etc.).

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2 Scientific and theoretical approaches to the formation of a competitive specialist in the university

A wide range of positions of scientists on the competitiveness of specialists gave grounds to identify the following approaches to clarify this essence:

1. General scientific approach determines the content of professional abilities and the development of a competitive personality (A A Angelovsky, T V Bendas, E F Zeer, V Ya Zinchenko, E I Mashbits, L M Mitina, C A Novoselov).

2. Management approach developed within the framework of the theory of management by foreign (I Ansoff, A Weissman, F Woodcock,) and domestic (V A Dyatlov, V V Travin, P A Fatkhutdinov) researchers.

3. Pedagogical approach reveals the competitiveness through priority, core qualities of the individual (V I Andreev, S A Borisenko, N V Borisova, E F Zeer, O I Polkina, S M Shirobokov, N V Fomin, D V Chernilevsky, etc.).

4. Psychological approach: Competitiveness is interpreted as the ability to anticipate, update and use all the opportunities for development (L M Mitina); development of criteria and levels of competitiveness formation (H H Sidorova, N V Fomin, N L Hristolyubova); conditions for the formation of students' competitiveness (Y V Andreeva, R Y Akhmetshin, I V Darmanskaya, H H Sidorova, F R Tuktarov).

5. Acmeological approach studies the competitiveness of a specialist in terms of achieving a high level of quality of professional activity and creativity (K A Abulkhanova-Slavskaya, A A Derkach, A A Bodalev, N V Kuzmina, E A Klimov); aspects of the manifestation of the competitiveness of specialists in various fields of activity (A R Kilba, K A Krasilnikova).

6. The sociological approach understands the competitiveness as the basis for the stability of society, based on the conscious subordination of the individual to the norms and requirements of culture by virtue of their own benefit (N M Mukhamedzhanova), a package of abilities and personal qualities that ensure successful socialization in society and active adaptation in the labor market (A Y Flier); education that is formed during a person's life, due to social impact (O V Dushkina); the ability to see a long-term perspective (J Naisbit).

7. Economic approach (P A Fatkhutdinov, T B Marushchak, L D Medvedeva, S I Sotnikova, I V Virina, A F Stepus, E A Galuzo, T I Bezdenezhnykh, A G Shatokhin, E V Pirogova, P A Krysin, etc.) develops the competitive principle between legal entities, goods, services and the ability of the subject (participant) of the competition to be more attractive to consumers in comparison with analogues due to the presence of a number of competitive advantages. According to Dmitrieva Y A, the following components identified:

- motivational component (system-forming in relation to all other components of competitiveness), which determines the list of abilities and qualities to be

developed, in accordance with the system of goals and values of the individual;

- the qualification component that determines the educational and professional activities of the graduate;

- a personal component that reflects the characteristics of the competitive behavior of a university graduate when interacting with potential employers (university teachers, practice manager, mentor, etc.);

- the business component that characterizes the competitive advantages of the graduate and the strategy of behavior in relations with the employer.

3 Components of the competitiveness of the Arctic University graduate

As part of our research, we will clarify the components of the competitiveness of a graduate student and a young specialist.

The second level of the competitiveness pyramid can be specified as follows: the competitiveness of an individual → the competitiveness of a graduate student → the competitiveness of a particular specialist in the field of motor transport. Graphically, the pyramid of a specialist's competitiveness can be represented in the form of Fig. 1.

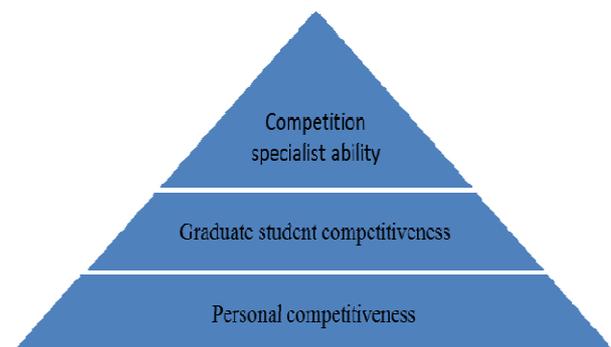


Fig.1. The pyramid of a specialist's competitiveness

We have determined that the competitiveness of a specialist is the unity of his motivational, qualification, personal and business characteristics that ensure a high level of theoretical training, possession of practical skills of professional activity, free orientation in related fields, the ability to adapt to the professional environment, compliance with the requirements of the employer and teamwork.

A N Kara clarifies that the specificity of a specialist as an object of social and labor relations in the system of competitiveness, having a specific product - the ability to competent and productive work-consists in the long-term nature of its possible competitiveness, so the process of achieving it and ensuring it is also quite long. At the same time, when considering the concept of "competitiveness of a university graduate", it is necessary to take into account the objective features due to the nature of the intermediate position of the graduate, since on the one hand, during the training process, they

were exposed to the university (compliance of the graduate with the requirements of the Federal State Educational Standard of Higher Education), and on the other hand, to the requirements of the labor market and a specific employer. Additional factors influencing the formation of the future specialist's competitiveness are the conditions prevailing in the labor market, as well as the degree of adaptation to the graduate himself and his ability to effectively interact with the employer and teachers.

As a graduate of the university masters, professional knowledge, skills, skills of work in the specialty, and ways of communication, their adaptation to the workplace, ideally after a certain period of time (on average up to 3 years), the competitiveness of the graduate is transformed into the competitiveness of a specialist.

In her work, Nikolaeva A A proved that the content structure of the student's competitiveness included a combination of 3 components:

- cognitive, consisting primarily of knowledge and skills in a specific professional field, including knowledge of modern information technologies, knowledge of foreign languages, native and foreign culture, the ability to navigate a huge amount of changing information and quickly process it;

- emotional, reflecting the value orientations of the individual, his attitude to himself, his life, his chosen cause, interaction with people in joint activities, his future and the future of his country;

- activity-based, related to the professional self-determination of the individual in specific life circumstances on the basis of individual and professional capabilities.

These components in the structure of the competitiveness of the student's personality are interrelated and interdependent, each of them, regardless of the other two, has no independent significance. This allocation is appropriate to identify the dynamics of the development of the competitiveness of the individual in the context of higher education.

Based on the description of each of the selected scientists' components of competitiveness, we can assume that the emotive component of competitiveness according to A A Nikolaeva corresponds to the motivational, cognitive - qualification and activity business component allocated by Dmitrieva Y A.

It should be noted that we are talking about a strong interdependence of the components of competitiveness of graduates in relation to each other that, in our opinion, is truer.

The analysis of the scientific base devoted to the problem of assessing and improving the competitiveness of a specialist has shown that individual researchers have formulated their own definitions for understanding the concepts of "employee competitiveness and personnel competitiveness".

Therefore, it can be said that the degree of compliance of the characteristics of the labor activity of employees with the requirements imposed on their work by employers, competitiveness in the labor market is determined not only by the qualitative characteristics of

the labor force, but also by the conditions on the labor market.

4 Pedagogical conditions affecting the increasing competitiveness of future specialists in the transport industry in modern

Table 1. Rating of factors affecting the training of a competitive specialist in the transport industry.

№	Factor name	Ball
1	Competence and professionalism of teachers and employers	5.0
2	Direct participation of employers in the educational process	5.0
3	An interesting and meaningful program training	5.0
4	Comfortable, supportive and friendly environment	5.0
5	Practice organization quality	5.0
6	The level and quality of the material base of the university and the enterprise, the equipment of the educational process	5.0
7	High-speed and stable internet	5.0
8	Provision with modern simulators, computer and office equipment, library funds	5.0
9	The possibility of self-realization and all-round development of the student personality	5.0
10	Application of new teaching methods and technologies focused on modern educational and digital technologies	4.7
11	Human relationships in the link "teacher-student", "employer-trainee"	4.7
12	Professional development, internships employees	4.3
13	Planning and control	4.3
14	Conducting seminars, conferences to exchange knowledge and experience	4.3
15	Having a good scientific foundation of the training unit	4.3
16	Availability dining room	4.0
17	Dormitory availability	3.7

In recent years, the modernization of Russian vocational education is associated with its integration into the international educational community, for training specialists in the modern economy and improving the quality of education. On the basis of an internal assessment, the factors influencing the training of a competitive specialist in the transport industry and the quality of student education are identified and ranked. Quality education at all its levels is achieved and will be

effective only with the active participation of all stakeholders of the educational organization, including the students themselves, their families, and employers. The introduction of competence-based educational standards, leveling the system of training students, measures to strengthen the links of universities with production and the scientific sector, the allocation of leading universities, designed to become methodological and scientific centers in their regions - all this contributes to solving the problems of training personnel taking into account the needs of the Russian economy and global competitiveness of domestic technical education [7].

The formation of fundamentally new technological environment enterprises in the transport industry requires an influx of qualified specialists who have modern engineering and technical knowledge and advanced production technologies, who understand the trends in the development of the transport sector, and have regional practice-oriented training.

An expert group consisting of the educational part, teachers Faculty of Road Transport and employers identified, evaluated and ranked factors affecting the quality of student learning and the competitiveness of graduates. So, 13 main factors were identified, presented in table 1, of which 10 are the most significant. According to ten factors that have the highest degree of influence on the quality of the educational process, a self-assessment of the work of the faculty was made with the ultimate goal of training a competitive specialist in the transport industry, increasing the rating of the main factors affecting the quality of student education and the training of a competitive specialist in the transport industry. This highlights the most relevant aspects of educational, informational, social and psychological nature.

Currently, special requirements are imposed on the content of educational programs, on the implementation and level of mastering by students of practice-oriented competencies to increase the competitiveness of graduates of the transport and road industry [1]. The faculty has concluded about 30 long-term agreements with various organizations in all areas of training and levels of education - practice bases, where key professional competencies are formed, incl. skills in design, research activities, experience of practical training in regional conditions, opportunities for further employment [2]. The largest basic partners of the faculty are AO Mechel, GAZ Group (Nizhny Novgorod), AO Polyus Gold, FKU Uprdor Vilyui, PJSC Doriss, LLC Investdorstroy, AO RIK Avtodor, LLC Rechnoy port of Yakutsk ", JSC" Kranservice ", MUP" YAPAK ", YIPK and other potential employers who, in modern conditions of production, as well as an educational organization, have become interested and responsible partners in the implementation of high-quality practice-oriented training.

5 Conclusion

Thus, the components of the competitiveness of a university graduate constitute and determine the general requirements for future specialists in the field of motor transport, laying the basis for the concept of a competitive specialist-motor transport worker working in the Arctic are:

- readiness to work in innovative and extreme modes;
- practice-oriented training in regional conditions aimed at high-quality mastering of technology and professional competencies;
- high adaptability to changes, positive perception of innovations and technologies of transformation in professional activity;
- subject-personal attitude to active intellectual activity and interaction with students, teachers and colleagues;
- professional and personal readiness for the increasing intensity of work;
- need for training, self-education, professional retraining, professional and personal improvement;
- willingness and ability to participate in decision-making at different levels (in study groups, projects, work collectives, professional associations, etc.);
- orientation to maintaining social and personal health, including a culture of thinking, work behavior, nutrition, consciousness, etc.

Modern global changes in the world show that it is the field of education that determines the priority direction in the training of competitive specialists.

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