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B.K.Issayeva, E.B.Tlessova, T.A.Azatbek

L.N.Gumilyov Eurasian National University, Astana, Kazakhstan
E-mail: b.isayeva_78@mail.ru, t.ilvira@mail.ru, tolkyn_d2005@mail.ru

**PECULIARITIES OF INNOVATIVE DEVELOPMENT
OF THE PERSONNEL POTENTIAL OF FOREIGN OIL COMPANIES
AND APPLICATION OF THEIR EXPERIENCE IN KAZAKHSTAN**

Abstract. In this article considered an innovative development of the human resources potential of oil companies of foreign countries and indicators of innovative development of human resources in foreign oil companies and their application in Kazakhstan are presented. Also, the concept of the dual system of personnel training and the importance of its implementation on the basis of colleges and universities of the state are disclosed. The concept of innovative development of personnel potential and providing them with oil and gas industry enterprises is proposed, based on the cluster approach to the training of engineering personnel in the educational and scientific production process and innovation, where the university plays a coordinating role among all stakeholders. Due to this, competitiveness is ensured: graduates of universities, products created by graduates of the university, as well as enterprises and universities themselves. Also, the article mentions the practice of mentoring, which is considered an integral part of professional development, since the support of an experienced mentor can be useful in a career which allows trainees to adopt the skills and experience of management, develop their own managerial abilities.

Key words: personnel, personnel potential, innovation, dual training, oil companies, oil and gas industry, personnel reserve, professional mobility, career, training, innovative process, nationalization of cadres.

The innovative development of the personnel potential of domestic oil companies is based on the system of values of their people. Not so long ago, the main motive for the employee to work was the desire to make a contribution to building the country's communist system, but such high motives are replaced today by a desire for material gain. In domestic companies, the category "professionalism" is formed very blurry, so the level of wages, as a rule, depends on the rarity of specialization. In the period of modernization of the Kazakh economy, technical and technological renovation of production, the country especially needs high-quality personnel with ambitiousness, determination, initiative and creativity. Therefore, the innovative development of human resources in the oil and gas industry should give unquestionable priority. The need for specialized, problem-oriented education arises with the complication of the processes of developing production and the use of complex science-intensive products. The "technology" of training specialists meeting the requirements of consumers and capable of solving complex problems in various spheres of production activity is guaranteed assurance of a set of competencies and quality of training on the basis of intra-university quality assurance and quality assurance systems.

From the revealed features of innovative development of human resources capacity of foreign practice allows to give recommendations on application of their experience in Kazakhstan oil companies (table 1).

In particular, if we look at individual indicators, the experience of Japan is recommended for the Kazakhstani oil companies in terms of professional mobility. In the Japanese model, the moral qualities and loyalty to the enterprise are of paramount importance. Therefore, many Japanese enterprises take into account, first and foremost, the professionally and socially important qualities of the employee, allowing him to adapt to the conditions of the enterprise relatively easily, to show creative activity, readiness for constant training in and out of the workplace high professional mobility. The system of labor

remuneration and promotion used in the companies of Japan in accordance with the high age of the year presupposes a strong dependence of the reward on the length of service in one enterprise and its continuity. For example, a Japanese worker aged 30-34 years, who changed his place could receive only 75% of the salary of his colleague of the same age who works in the same company continuously from the moment of graduation. With age, the difference in pay increases: after changing jobs at the age of 35-39 years, only 71% could count, and 40-49 years - 59% of the wages of his peer, who continued to work in the same company all the time. Such a system of labor remuneration economically stimulates the employee's dedication and is connected with the system of lifelong hiring. Therefore, in the Japanese model, the professional knowledge and skills of employees are formed in the course of professional activity in the enterprise, i.e. enterprises are guided by the training of all potential employees, regardless of the existing profession and qualifications [1].

Table 1 - Indicators of innovative development of personnel potential in foreign oil and gas companies and their application in Kazakhstan

Indicators	USA	of the Japan	of the Russian Federation	Republic of Kazakhstan
Professional mobility	Positive phenomenon, the preference is given to specialists passing from one specialty to another, and the company.	A negative phenomenon, a high evaluation of the dedication of one company, sometimes a specialty, a multiple generation of the family	Average phenomenon in a large territory of Russia	Regarding oil companies, the application of the Japanese experience is recommended
Training of young specialists for the personnel reserve	Evaluation of young (27-33 years) employees and determination of their career growth.	Company employees' children	Training at the expense of the company - motivation, reduction of staff turnover.	Internship in foreign countries under special programs for determining professions. It is recommended to apply the experience of the US and RF
Knowledge	Development based on strategic needs. Continuing education. Training in the direction of the work of other functions		Orientation on the development of knowledge for current needs Training only in the direction of work	
Career	Individual career planning of each manager, specialist and employee, consisting in the reserve for promotion, taking into account the firm's capabilities and the business qualities of the applicant.	There is a system of "lifelong hiring". Employees are often tested for general intelligence, education, personal attitudes and character traits. Personal prosperity depends on the prosperity of the company.	Specific career development programs are developed for all levels of staff, taking business into account. Creation of a career planning system based on internal rotation	Career development is carried out in accordance with the requirements of a separate structural unit and does not take into account the needs of the business.
Directivity in the training of personnel	Training of personnel for the production of high-tech and science-intensive products and focus on fundamental and applied sciences	-	-	There is an advanced experience for Kazakhstan of the company operating in the country LLP "TCO", "KPO". US experience is recommended
Involvement of the company's personnel in the innovation process	Method "Work out"	Kaizen system	Crowdsourcing technology	Does not have a specific technology or system. It is recommended to apply the experience of the US and Russia
Power distance	Not pronounced	Not expressed	High level	
Note - Compiled by the author				

If we consider the indicator of involvement of personnel in the innovation process, then in Kazakh oil companies there is no specific technology or system for using this indicator. Therefore, in our opinion, it is recommended to apply the experience of the US and Russia, i.e. It is necessary to introduce some elements of crowdsourcing with enough serious motivation of the idea generators. It is necessary to launch a unified corporate portal where the company's employees can leave their rationalization proposals and the authors of the claimed innovative ideas will have the opportunity of career and material growth in the company. That is, so-called social elevators will be introduced, which will become a good platform for the exchange of views of employees and one of the tools of business synergy, the promotion of corporate philosophy. We believe that encouraging a collective search for advanced solutions in the company will yield results and good results. As a result, the company will become a real team of creative people, united around the same goal - increasing the value of a group of companies [2].

KPO individually tailored to the needs of each employee in their career advancement, offering them specialized development programs. The most common method of training in the company is training courses, the purpose of which is to give employees the necessary professional qualifications within the framework of the world standard. The next stage of training and development is the opportunity to participate in international certified programs. Since the KPO strategy is based on the introduction of recognized international techniques and technologies, its employees need not only professional skills and skills for servicing new equipment. Also, each specialist must constantly improve their knowledge, which are mandatory for successful work in this industry at the international level [3].

Ensuring the quality of education and training of competitive specialists of the required level of quality for companies in the oil and gas industry, enterprises with innovative strategy requires the fulfilment of a number of conditions and compliance with a set of criteria that are not currently formulated in a sufficiently definite and unambiguous manner and therefore allow for a wide variety of interpretations when using this term. The quality of training, the quality of training a specialist in a university includes the notion of social importance, prestige, the demand for a profession, and for the holder of a "quality" education - compliance with the requirements of a set of characteristics reflecting his personal, social and professional competencies. The main trend in the world educational space is currently the development of innovative engineering education aimed at the formation of specialists in the field of technology and technology, not only a body of professional knowledge and skills, but also special competencies focused on the ability to apply them in practice, in real conditions, when creating science-intensive new competitive products.

For higher education institutions, the provision of quality engineering staff based on an integrated quality management system of training is also a means of ensuring the university's competitiveness, its sustainable development.

The solution of the problem of graduate training, the formation of human resources and the provision of enterprises and organizations requires unity of approaches and principles of training specialists that are competitive in the domestic and international labour markets and their joint implementation with all interested parties.

The analysis of foreign practice makes it possible to note, as one of the effective solutions, the development of a dual system of training engineering personnel used in a number of countries (Germany, Switzerland, Russia) [4]. The dual system of education implies the simultaneous receipt of professional training without interruption from production and training in the specialty at the university. Kazakhstan is currently studying the experience of dual training, creating a legislative and regulatory framework for the development of dual (cooperative) education: the Law of the Republic of Kazakhstan "On Education", the State Program for the Development of Education in the Republic of Kazakhstan for 2011-2020. According to JSC data According to the data of the Republican Scientific and Methodological Centre for the Development of Technical and Vocational Education and Qualification, 24 experimental sites have been set up to introduce a dual system based on colleges in all 16 regions [5]. The recommended concept of innovative development of personnel potential and providing them with oil and gas industry enterprises can be based on a cluster approach to the training of engineering personnel in the educational and scientific-production process and innovation activities. Here the university plays a coordinating role among all the parties concerned. Thanks to this, competitiveness is ensured: graduates of universities, products created by graduates of the university, as well as enterprises and universities themselves.

The main principles of training specialists, their involvement in oil companies are [6]:

- Comprehensiveness - the training of graduates and the subsequent updating of the competencies of specialists by the resources of all stakeholders together: the state, the university, employers, students;
- the demand - the preparation of graduates who meet the needs of the state, employers, society, labor market;
- the responsibility for the quality of the graduates' preparation is borne by all the participants of the formed system in accordance with the accepted obligations;
- permanence - continuous professional development, retraining and certification;
- balance of interests - mutual obligations of interested parties: state, university, employers, students.

At the same time, the role of educational institutions, which should be assigned to the central position, should become a qualitatively different one, since knowledge of educational institutions, including higher education, vocational and technical universities, provides targeted pre-university training, as well as direct training, the implementation of educational and educational work, the formation of social and personal competencies of specialists, conducting research work with the involvement of students. This will ensure that future specialists develop creative skills, creative thinking, readiness for innovation and other competences [7].

Occupying a central position, universities will analyse employers' applications, target targeted training of specialists, conduct competitive selection taking into account the interests of employers, support postgraduate support for graduates, including certification, advanced training.

With this approach, students and graduates of educational institutions will actively and consciously participate in obtaining education, forming competencies, attestation, certification, advanced training, and acquisition of additional professions.

On the part of employers, active vocational guidance work should be carried out among schoolchildren, using appropriate information resources, thus ensuring a contingent of students for the educational institution and for further employment. Thus, this scheme allows to provide targeted training of specialists, in addition, it is possible to organize training of specialists for local production, which provides competitive positions of universities at the regional level, since they can comprehensively study the needs of their region in the specialists of relevant local employers, students acquire the opportunity to practice at employers' enterprises, which strengthens ties with graduates already at the stage of training. Educational institutions can get the opportunity to organize guest lectures or lecture cycles by experienced workers of enterprises. On the other hand, for educational institutions the use of this approach will solve problems with the search for places of practice and the employment of graduates.

This approach will provide universities with the opportunity to create flexible training programs for specialists at all levels, in turn, students can determine at their discretion training programs, including pre-university, postgraduate training, based on the need to develop and apply certain competencies [8, 9].

Thus, in each of the stages of the development of the consortium of companies KPO BV, Chevron's valuable asset, which owns 18% of the company's shares, has the highest professionalism of employees able to work in the future, with an accuracy to determine the time and place of application of forces to obtain maximum effect. KPO is the largest employer in the region: out of almost four thousand employees of the company, the majority are citizens of Kazakhstan. The basis for successful development in the company is the human factor. KPO uses its own intensive training and development program, the purpose of which is to motivate employees to grow professionally, and increase their role in the company. The responsible employee is given the opportunity to fulfil a wider range of duties requiring independent decisions. A system has been built that guarantees the promotion of talented and motivated employees to positions of responsibility. Professional growth and innovative development involves intensive training of company employees.

The structure of the system of formation and innovative development of the personnel potential of oil companies based on the cluster approach is presented in Figure 1.

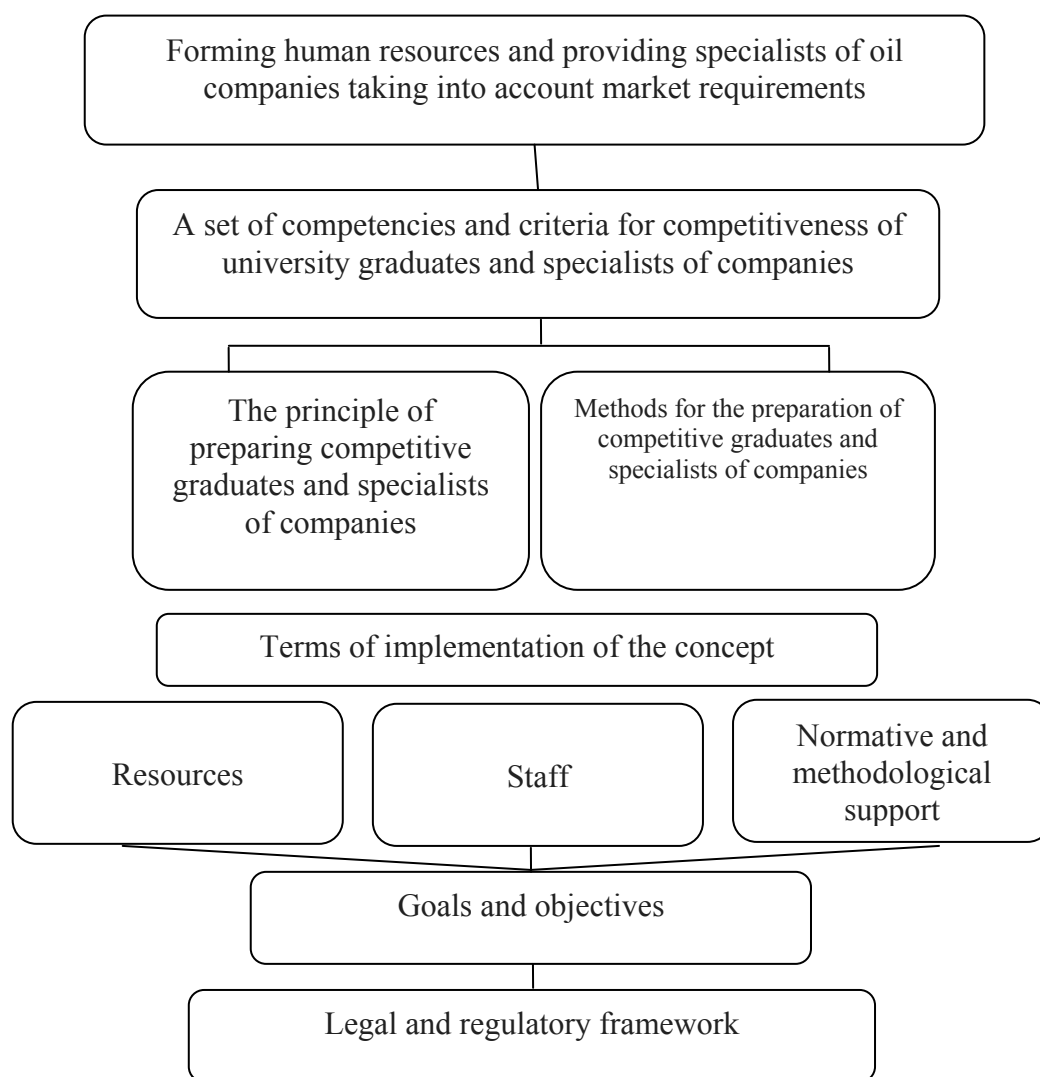


Figure 1 - Structure of the system of educational, scientific and production process for the formation of a dual model of training Note: compiled by the author

This system of formation and development of the personnel potential of oil companies is based on the following fundamental principles:

1. Competitive specialist - competitive products - competitive enterprise - competitive higher education institution - competitive education.

2. Joint training coordinated by the university and postgraduate support and maintenance of competitiveness of graduates and specialists of the enterprise during professional activity - professional cycle by all stakeholders - participants of the system.

3. Training specialists in the interests of all categories of "consumers" of specialists - the state, employers, trainees in accordance with the developed and agreed educational standards and curricula.

4. The responsibility of the university for the quality of training, satisfying employers and the competitiveness of the graduate and specialist of the enterprise at all stages of his professional activity.

5. Mutually beneficial relations of all participants of the system in the process of preparing graduates and accompanying the company's specialists during the entire professional cycle on the basis of obligations assumed, responsibilities and resources [10].

At the heart of the system that realizes the concept:

- Mission, goals and objectives of the system of training human resources and providing personnel with companies with an innovative development strategy;

- Requirements for the totality of competencies of graduates of university and specialists of enterprises, corresponding to the needs of employers;
- Indicators and criteria for the competitiveness of graduates and specialists of enterprises;
- Methods of formation and development of personnel potential - competitive graduates and specialists of enterprises in the educational and research and production innovation cluster;
- Methods for assessing competencies and competitiveness of graduates and enterprise specialists;
- Methods for assessing the effectiveness and effectiveness of the formation of human resources in the educational and research and production innovation cluster;
- a complex of strategic, tactical and normative-methodical management of educational-scientific-industrial innovation cluster in the interests of forming competitive graduates of higher education institutions and development of company specialists during all professional activities;
- Methodology for forecasting and assessing the competitiveness of university graduates and enterprise specialists;
- a method for assessing the degree of readiness and determining the need for and the appropriateness of the participation of organizations and enterprises in the educational, scientific and industrial innovation cluster [11].

The appointment of such a system, formed in accordance with the proposed concept, is the formation and development of the personnel potential of oil companies on the basis of the training of graduates of universities and the constant educational and methodological support of enterprise specialists during all subsequent professional activities to ensure that their competencies meet the requirements of employers and maintain their competitiveness in the market labour.

The goal can be achieved by combining the material, intellectual and information and other necessary resources of the university, employers' organizations, trainees and the state in the educational and research and production innovation cluster (ERPC).

The innovative nature of the educational, research and production innovation cluster consists both in the orientation of the formed human resources potential of companies in the oil and gas industry for innovative activities, and in the use of innovative methods of approaches to cluster activities.

Synergetic effect from the addition of the potential of the participants of the ERPC:

- Stability of formation, maintenance and reproduction of personnel potential of the enterprises with required competences;
- maintaining the competitiveness and relevance of university graduates and enterprise specialists throughout their professional activities on the basis of an integrated approach and coordinated by the university participation of the state, employers, specialists of enterprises [12].

To ensure the effectiveness of the activities of the ERPC on the recommended model, it is necessary to develop requirements for the totality of competencies of graduates of universities and specialists of enterprises taking into account the needs of enterprises belonging to the cluster. Cluster management requires the development of a set of normative management documents that includes documented requirements for processes, indicators and criteria for their effectiveness and effectiveness, as well as methods for their evaluation [13].

Thus, innovative development of oil companies should have innovative solutions in the system of updating its personnel. If we do not take effective measures, we can hardly expect a "breakthrough" innovative development of human resources potential in the matter of attracting young scientific personnel to the real economy and the oil industry of the Republic of Kazakhstan. The high level of competitiveness of the oil and gas industry increasingly depends on the ability of the personnel potential of oil companies to continuously generate and effectively apply in practice all new knowledge and the most up-to-date innovative technologies.

Separately, one must say about the practice of mentoring, which is considered an integral part of professional development. Responsibility for his personal development is always borne by the employee

himself. But at the same time, the support of an experienced mentor can be useful in a career, allows trainees to adopt the skills and experience of management, develop their own managerial abilities.

Every year students of higher educational institutions practice at KPO. Later, those who showed themselves competent professionals, it becomes possible to become full-time employees of the enterprise. A systematic approach is used in working with young people, and the company consciously relies on them. So, special attention in the personnel policy of the oil companies is paid to the creation and upbringing of the personnel reserve from young workers and specialists. To this end, companies should actively cooperate with educational institutions that train workers in professions and specialties in demand in the industry: contracts for cooperation should be concluded, practice for students on the basis of enterprises should be organized, lectures in educational institutions should be held, a reserve base should be established and selection of candidates. For example, Chevron provides the best students with access to professional development programs, prepares professionals for the oil and gas industry in Kazakhstan, which will determine its further development in the near future. In addition, to date, with the sponsorship of Chevron, a number of departments and institutes of KazNTU have received new laboratory equipment and computer classes with specialized computer software. The Resource Center of the student division of the Society of Petroleum Engineers (SPE) was also equipped and opened.

Chevron closely cooperates with the world's leading technical educational institutions, including universities in Canada, Great Britain, Australia, Thailand, Indonesia, India, South Africa and Venezuela, as well as with the best technical universities in the United States. Within the framework of the Chevron program, it assists universities in the implementation of new curricula, in improving the material and technical base, and also allocates grants and scholarships to the best students. The program of applied research of the Eurasian Fund, aimed at the wide dissemination of economic education, was supported. In this direction, close cooperation has been established with universities - the Atyrau University and the Institute of Oil and Gas.

A collective approach to the development of personnel ensures a high rate of nationalization of personnel. The nationalization of cadres is an important structural link in the creation of the economic legacy of oil companies. Its goal is to maximize employment opportunities for local people and invest in the professional development of Kazakhstan employees of the company. In oil companies, a career development system for prospective local employees is being developed and implemented to the level of managers [14].

The model of nationalization of personnel is closely linked with the main strategy of oil companies. At the heart of the training of local staff is not only the development of professional knowledge and technical skills, but also the general management capabilities, and the personal experience of each particular specialist, his ability to make responsible decisions. The very process of transition of the most gifted national cadres into the category of future potential managers responsible for business has its own philosophy based on the fact that the process of nationalization is not just a "mechanical" replacement of foreign specialists in Kazakhstan. It is an effective professional growth, the maximum realization of the abilities of local personnel. Success in this business in the future will depend not only on the company's economic success, but also on its reputation [15].

The International Consortium of KPO has prepared a detailed program on the nationalization of personnel, which was developed jointly with the Plenipotentiary of the Republic of Kazakhstan. The goal of the KPO Program on the nationalization of personnel is to ensure the appropriate level of professional training so that competent and qualified Kazakhstani personnel can successfully work in the positions that are currently occupied by foreign specialists.

In Kazakhstan, they will not come to a common solution: to use foreign experience or accumulate their own. Of course, this issue is controversial. There is no doubt only the realization that foreign experience was formed on the country mentality and traditions, so it requires careful study. Of course, Kazakhstani companies have their own experience in innovative development of human resources. But we

see that the main features of the domestic model are remnants of the Soviet system, which are no longer relevant in modern companies, so it is no accident that such companies implement the principles of human resource development, borrowed mostly from America and Japan.

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Б.К. Исаева, Э.Б. Тлесова, Т.А. Азатбек

Л.Н.Гумилев атындағы Еуразия Ұлттық университеті, Астана,

ШЕТЕЛДІК МҰНАЙ КОМПАНИЯЛАРЫНЫҢ КАДРЛЫҚ ӘЛЕУЕТІНІҢ ИННОВАЦИЯЛЫҚ ДАМУ ЕРЕКШЕЛІКТЕРІ ЖӘНЕ ОЛАРДЫҢ ТӘЖІРИБЕСІН ҚАЗАҚСТАНДА ПАЙДАЛАНУ

Аннотация. Бұл мақалада авторлар шетелдік мұнай компанияларының кадр әлеуетінің инновациялық дамуын қарастырған, яғни шетелдік мұнай компанияларындағы адами ресурстарын инновациялық дамыту көрсеткіштері және оларды Қазақстанда қолдану. Сондай-ақ, кадрлар даярлаудың дуалды жүйесінің тұжырымдамасы және оны еліміздің колледждері мен жоғарғы оқу орындары базасында жүзеге асырудың маңыздылығы ашылады. Сонымен қатар, инновациялық қызметке және оқу-ғылыми-өндіріс процесінде инженерлік кадрларды даярлауға кластерлік тәсілге негізделген кадр әлеуетін инновациялық дамыту тұжырымдамасы және онымен мұнай-газ саласындағы кәсіпорындарын қамтамасыз ету концепциясы ұсынылған. Мұнда барлық мүдделі тараптар арасында үйлестіруші рөлді жоғарғы оқу орны атқарады. Нәтижесінде, осының арқасында бәсекеге қабілеттілік қамтамасыз етіледі: университеттің түлектері, олардың өнімдері, сонымен қатар кәсіпорындар мен жоғарғы оқу орындарының өздері құрған өнімдері. Сондай-ақ, мақалада тәлімгерлік тәжірибесі туралы айтылады, ол кәсіби дамудың ажырамас бөлігі болып

табылады, өйткені тәжірибелі тәлімгердің қолдауы мансапта пайдалы болуы мүмкін, тәжірибеден өту дағдылары мен басқару тәжірибесін игеруге, өздерінің басқару қабілетін дамытуға мүмкіндік береді.

Түйін сөздер: кадр, кадрлық әлеует, инновация, дуалдық оқыту, мұнай компаниялары, мұнай газ саласы, кадрлық резерв, кәсіби ұтқырлық, мансап, кадрларды даярлау, инновациялық үдеріс, кадрларды ұлттандыру.

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Б.К. Исаева, Э.Б. Тлесова, Т.А. Азатбек

Евразийский национальный университет имени Л.Н.Гумилева, Астана, Казахстан

ОСОБЕННОСТИ ИННОВАЦИОННОГО РАЗВИТИЯ КАДРОВОГО ПОТЕНЦИАЛА ЗАРУБЕЖНЫХ НЕФТЯНЫХ КОМПАНИЙ И ПРИМЕНЕНИЯ ИХ ОПЫТА В КАЗАХСТАНЕ

Аннотация. В данной статье рассматривается инновационное развитие кадрового потенциала нефтяных компаний зарубежных стран, представлены, по мнению авторов, показатели инновационного развития кадрового потенциала в зарубежных нефтяных компаниях и их применение в Казахстане. Также раскрывается понятие дуальной системы обучения кадров и важность его внедрения на базе колледжей и вузов государства. Предлагается концепция инновационного развития кадрового потенциала и обеспечения им предприятий нефтегазовой отрасли, основанная на кластерном подходе к подготовке инженерных кадров в учебно-научно-производственном процессе и инновационной деятельности, где координирующую роль между всеми заинтересованными сторонами играет вуз. Благодаря этому обеспечивается конкурентоспособность: выпускников вузов, продукции, создаваемой выпускниками вуза, а также собственно предприятий и вузов. Также в статье отмечается практика наставничества, которая считается неотъемлемой составляющей профессионального развития, так как поддержка опытного наставника может оказаться полезной в карьере, позволяет стажирующимся сотрудникам перенять навыки и опыт руководства, развить собственные управленческие способности.

Ключевые слова: кадр, кадровый потенциал, инновация, дуальное обучение, нефтяные компании, нефтегазовая отрасль, кадровый резерв, профессиональная мобильность, карьера, подготовка кадров, инновационный процесс, национализация кадров.

Information about authors:

Isayeva Bibigul Kuntuganovna - PhD, senior lecturer of the department "Economics", L.N.Gumilyov ENU, Astana, E-mail: b.isayeva_78@mail.ru;

Tlessova Elvira Bulatovna - Candidate of Economic Sciences, Associate Professor of the Department "Economics", L.N.Gumilyov ENU, Astana, E-mail: t.ilvira@mail.ru;

Azatbek Tolkin Azatbekovna - Doctor of Economics Sciences, Professor of the Department "Economics", L.N.Gumilyov ENU, Astana, E-mail: tolkin_d2005@mail.ru

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