DEFICIENCY IN AN ABUNDANCE COUNTRY:
SHORTAGE OF HIGHLY-QUALIFIED PERSONNEL
IN RUSSIAN PETROLEUM INDUSTRY

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Abstract. Nowadays the petroleum industry of Russia requires the highest professional level of its personnel. However the budget for personnel training and development, for corporate universities, re-training and skill improvement courses are formed residually, which results in the deficiency of highly-qualified personnel. These aspects are studied in the below article.

Keywords: personnel, skill improvement, re-training, security, continuous education, mentorship

Taking the challenge of the 21st century Russian managers begin to understand that it is difficult to talk about achieving a new efficiency level and impossible to win in a competition without drastic improvement in the work with personnel. Under the today conditions, which are updating rapidly and changing constantly, the importance of continuous skill and qualification improvement of personnel is constantly growing. Effective and secure use of production is crucially dependent on the staff qualification. At present the activity of petroleum companies in the field of innovations is extremely low. Among the main factors of this situation the majority of companies of the petroleum industry indicated the low innovative potential of production facilities, which is primarily determined by the shortage of highly-qualified personnel who can operate new equipment.

Each petroleum company strives for effective and system-based work with its personnel which is supported by the ideas of continuous education, uninterrupted skill improvement and re-training of personnel.

The data of the author's survey shows that Bashkir companies of the petroleum industry pay a lot of attention to the system of internal education and special re-training and skill improvement courses, which is reflected in Fig. 1.

Thus, the majority of companies solve this matter by means of courses (52.5 %), the least attention is paid to short-term traineeship (0.4 %).

An important place in the structure of re-training and skill improvement types belongs to the system of mentorship. 62.8 % of the respondents in petroleum companies confirmed that this system does exits (Fig. 2).
Fig. 1. Types of re-training and skill improvement in petroleum companies (in % of the number of respondents) [1]

It has been estimated that an average petroleum company spends about 25 - 50% [2] for personnel training from the budget designated for personnel (excluding the staff compensation fund) – but few companies possess instruments to measure the level of yield of these huge capital investments. Top managers are not always ready to realize the necessity of these expenses.

Oleg Sidomonidze, the Business Development Manager of Schlumberger [2], is of the opinion that the sporadic and non-recurrent nature which is traditionally common to educational programs, in combination with the Russian political and economic instability, because of which demands of companies are always changing, encumber both planning and building of a system of training oriented at the future. Experts believe
that this industry dwells at the stage of “partial exhaustion of knowledge”. It is well-known that 20% of professional knowledge is lost each year after graduation from universities. Knowledge is becoming obsolete in various science branches in connection with its rapid development, for example in economics, management and business it becomes obsolete in 2 years, in metallurgical engineering – in 3.9 years, in engineering – in 5.2 years, in petroleum and petrochemical industries – in 4.8 years, etc.

For a long time companies have paid a lot of attention to staff selection, compensation and privileges, social aspects, corporate culture, but they never paid attention to training. They thought that they could “buy” or find specialists or the latter would come to them themselves, but it becomes more and more difficult to “buy” specialists, that is why the manager of Schlumberger suggested that an international system of skill improvement for petroleum personnel (NExT) should be established.

Since the priorities of company top managers are changing rapidly and are aimed at maximizing of short-term profits, it becomes more and more difficult to implement long-term educational programs. In order for any educational program to yield the desired outcome, it should be clearly decided who trains, what is trained, how, when and with what purpose – only then plans can be implemented successfully. With this purpose the management of petroleum companies must decide on the following questions: What systems of skill improvement are optimal in your opinion? and What educational methods are applied in your company?

Judging from the specific character of the work of the petroleum industry, 65.3% of the respondents answered that the optimal system of skill improvement is the system of specialized training. Unfortunately, the fact that more attention should be paid to the personality-oriented educational system is less realized. The personality-oriented educational system will help increase the importance of personnel in petroleum companies (Fig. 3).

![Fig. 3. Optimal systems of skill improvement in petroleum companies (in % of the number of respondents) [1]](image-url)
Following the results of the performed survey it was revealed that the most popular methods of training are targeted experience gaining (planned); traineeship. Among the least used methods there are: business games; internship; command monthly training (Fig. 4).

![Bar chart showing methods of training in petroleum companies](http://www.ogbus.ru/eng/513)

Nonetheless, as the variety of opinions expressed on this matter shows, the question of what employees should be trained is quite difficult.

It is easy to calculate the relation between the employees who have been trained and the amount of accidents, production errors or cases of poor repair of equipment, but in the matters concerning financial, legal or managerial aspects of company activities such calculations are practically impossible. The higher an employee's position, the more difficult it is to measure their contribution, thinks Natalia Pradedova [3], the Personnel Assessment Specialist of Rosneft company. Besides, although training is useful for personal enrichment, responsibilities of many company employees are limited to performance of a single task, which means that expenses for training may be unjustified. The HR expert of Rosneft thinks that the company must not have a lot of leaders, not everyone can be a “star” - someone must do mechanical work too. She is of the opinion that this company needs people who can perform only one type of work properly.

HR specialists have carried out a survey about most popular topics in educational programs, the respondents mentioned “leadership” along with project administration,
risk management, management of a new technology or professional training as well as language learning. However, as it turned out, the Russian definition of “leadership” differs from the traditional one adopted at the West – under “leadership” they meant personal purposefulness, the ability to motivate other people, the ability to distribute resources effectively, team spirit, but not the ability to make orders, because “no team should have two leaders”.

The majority of personnel development specialists think that educational progress should start from the highest ranks (the management) – annual assessment of the managers' activities can become an incentive to improve their work, while other employees ranging from staff recruitment officers to mid-level managers should be able to fully evaluate the profit that their efforts make for the company. When people understand the meaning of the work which is given to them, they can fill gaps in knowledge more easily and they are more susceptible to training.

Discussing the topic of effective educational methods petroleum specialists think that practical application of knowledge cannot be divided from theoretical classes – some of the representatives of this field had positive experience of educational programs which were connected with practical work over real projects.

Mentorship programs, open collar communication programs as well as individual training performed by company specialists in order to train successors – all of these methods are acknowledged as effective on the condition that the mentor is well informed about new technologies and has no fear that their trainee can become a competitor, when they feel, even before the mentor's retirement, that the trainee is ready to replace them at their work position.

Transfer of employees from one place on the Earth to another place also helps them gain experience, but there is a risk that the employee may not come back. There is shortage of specialists both here and abroad. Russian specialists are sent abroad, but almost all of them stay there. However, this scenario is less possible in international companies, such as Shell or British Petroleum, than in Russian ones, for example Rosneft. Rotation of employees, when an employee is sent to a regional branch of a company so that he could settle the branch on solid ground, is another popular element in the career advancement pattern: a lot of companies use it to give their employees an opportunity to move up the career ladder.

Among other matters, training can be of use in solving the problems of huge growth of compensation in petroleum industry. According to Pradedova the compensation level increased by 20 - 25% [4] only during 2005 because of the deficiency of qualified specialists at the labor market. Alongside with it, good compensation at the labor market is more often considered a purely for-appearance factor, since employees are more attracted with bonuses, privileges and corporate culture.

Investments into education are connected with some risk – for example, with the risk to lose a valuable employee who can quit the job on the training completion. It has
been estimated that about 50% of young specialists quit jobs within the first year of working in a company. Non-qualified personnel can easily become dead weight for a company. The carried out researches prove that employees must be trained notwithstanding the risk of their possible leave for another company – trained at least to raise the general level of the petroleum market. Andrey Valyaev, an HR specialist of Sibur company [5], thinks that training has one more negative feature. It lies in the fact that the higher the qualification of an employee, the higher their career requirements and the higher their ambition. However, this risk can be lowered with motivational compensation packages, well-chosen in accordance with each employee’s individual demands and qualities.

At this stage the question about the causes of the personnel deficiency problem sounds topical. The question about the social responsibility of the state in the sphere of training qualified specialists for the industry and about the current state of university education in the petroleum field worry a lot of people too.

As the Russian system of education becomes more commercialized, the educational level of students sinks. Anatoliy Nabokov, an HR specialist of LUKOIL Overseas [6] says that universities have to follow obsolete state standards which need to be significantly corrected, at the same time a lot of universities and teachers are not ready to comply with the needs and requirements of petroleum companies – and the level of these needs and requirements is higher with the companies than with the state. He thinks that the problem lies in the fact that all the departments of any university have less than one per cent of teachers younger than 40 years of age; professors who are 60, 65, 70 continue giving lectures using the same materials that they used at the beginning of their pedagogical practice. Many companies find a way out by sending their specialists and managers to universities for pedagogical partnership with teachers or, like large companies, such as Rosneft, which can afford it – by organizing their own university departments under the supervision of company managers, thus replacing the state in its pedagogical function which it is said to exercise.

The majority of experts of the field acknowledged the necessity to establish contacts with universities in order to organize their own educational programs. The problem encumbering such solution of the matter lies in unreadiness of some educational institutions to cooperate with employers and in obsolete educational standards which the state universities have to observe. In this connection many companies have to pay universities for the opportunity to organize educational programs or hire/take as interns most competent students who are trained inside the company.

It is important to note that specialists agree almost in one voice that the today graduates are not ready to join the work actively, they are too much “theoreticized”. In many aspects they lack the sense of reality and understanding of how business processes operate. They can possess a good stock of theoretical knowledge, but, unfortunately, it is not enough. Modern business requires skills of practical application of knowledge and
the ability to establish adequate relations in a team. That is why Marina Pokhomkina, Corporate Training and Development Department Manager of TNK-BP [7], works more closely with schools, technical schools and universities, implements complex programs of multi-level training of the youth. Each year TNK-BP accepts over 300 young specialists who become participants of the “Three Horizons” (“Tri gorizonta”) development program immediately. It is a three-year program consisting of stages (horizons) of training “My company and I”, “My profession and I”, “My career and I”, the goal of which is to help young specialists master those knowledge and skills that are the best in the global experience.

Andrey Chepurnov, the leader of Personnel Attraction and Selection team of the Shell concern in Russia [8] notes that Shell invests quite large funds into the system of selection and training of young specialists which takes place worldwide. And university knowledge of the would-be participants does not have crucial significance. Their potential, the ability to make fast decisions, to analyze situations, achieve set goals and establish relations with people both inside the company and outside are important to the company. Experts note that it is more easy to train competent specialists who comply with all the requirements inside a company.

An example of successful cooperation of petroleum companies of Bashkortostan Republic with higher educational institutions can be given by Institute of Additional Professional Education under Ufa State Petroleum Technological University that carries out professional re-training of personnel, training of management personnel for Bashkortostan petroleum companies.

Analysis of the observed tendencies shows that, if oil corporations want to stay in business for 25 - 30 years more, they must try to interest students in the oil industry as soon as possible. As the population decreases on the whole, and the reputation of the petroleum industry deteriorates, the competition for the best heads in the sphere of IT, advertising, marketing and law is constantly toughening. And petroleum companies need to unite their efforts to evoke interest to the industry among students and children. Thomas Dowdy, a representative of British Petroleum [9] thinks that care for the reputation of the entire industry in the eyes of schoolchildren will help us in future.

The author's research shows that even against the background of the general decrease of the number of employees in the Russian petroleum industry (from 1991 to 2002 – 20 % [10], the personnel of LUKOIL was reduced by 11 % in 2005 in LUKOIL [11]) a qualitative percent increase of them was observed owing to training, re-training and skill improvement, which resulted in the growth of the share of employees with higher and secondary special education, both Candidates and Doctors of Sciences.

The most promising forms and priorities in the development of the system of re-training and skill improvement, additional professional education in the large companies of the Russian petroleum industry in accordance with the market demands are as follows: branch and corporate systems of continuous professional education with the focus
on practical work and psychological and social knowledge and skill, long-distance
learning, traveling seminars, information telecommunications, trainings, separate prior-
ity programs training a new type of manager-leader and personnel reserve, international
cooperation in implementing modern educational programs.

Thus, the influence of skill improvement and re-training of production staff con-
sists in the fact that the staff who possess the required volume of knowledge, abilities
and skills, provide production and ecological security, higher production efficiency,
quality, motivation of labor and a number of economic and social advantages with
rational use of material resources. That is why the influence of skill improvement and
re-training on production depends not only on the number of certified specialists, but
also on the quality of their education.

The economic and social effect of skill improvement and re-training of person-
nel of the Russian petroleum companies is of great practical importance for re-produc-
tion of the labor potential and prevention of possible problems in it. Skill improvement
and re-training of employees is an instrument measuring their mood, and it can be used
to study the core processes that take place inside and outside companies.

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