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THE SYSTEM OF LABOR RESOURCES DEVELOPMENT UNDER THE FORMATION OF NATIONAL SYSTEM OF QUALIFICATIONS *

The article overviews the experience of Russian large companies, the existing regulatory and methodological framework and current foreign practice of adult education. The authors present their analysis of the development prospects of additional professional education in Russia related to the implementation of the national system of qualifications. The article presents the list of updated functions of additional professional education institutions, involving business competencies formation. The authors also offer a model of system interaction of additional professional training with such subsystems of national system of qualifications as the system of vocational training, the system of independent evaluation and certification of qualifications by employers associations.

Keywords: national system of qualifications; additional professional education; business competencies.

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СИСТЕМА РОЗВИТКУ ТРУДОВИХ РЕСУРСІВ В УМОВАХ СТАНОВЛЕННЯ НАЦІОНАЛЬНОЇ СИСТЕМИ КВАЛІФІКАЦІЙ

У статті на основі наявного досвіду великих компаній Росії, чинної нормативно-методичної бази, а також вивчення освітніх програм для дорослих за кордоном надано аналіз перспектив розвитку системи додаткової професійної освіти в Росії у зв'язку з впровадженням національної системи кваліфікацій. Надано перелік актуалізованих функцій установ додаткової професійної освіти, що передбачає формування бізнес-компетенцій освітньої установи. Також запропоновано модель взаємодії системи додаткової професійної освіти з такими підсистемами національної системи кваліфікацій, як система професійної підготовки, система незалежного оцінювання та сертифікації кваліфікацій, а також з об'єднаннями роботодавців.

Ключові слова: національна система кваліфікацій; додаткова професійна освіта; бізнес-компетенції.

Рис. 3. Табл. 3. Літ. 11.

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СИСТЕМА РАЗВИТИЯ ТРУДОВЫХ РЕСУРСОВ В УСЛОВИЯХ СТАНОВЛЕНИЯ НАЦИОНАЛЬНОЙ СИСТЕМЫ КВАЛИФИКАЦИЙ

В статье на основании имеющегося опыта крупнейших компаний России, существующей нормативно-методической базы, а также изучения программ обучения взрослых за рубежом представлен анализ перспектив развития системы дополнительного профессионального образования в России в связи с внедрением национальной системы кваліфікацій. Представлен перечень актуализированных функций учреждений дополнительного профессионального образования, предполагающий формирование бизнес-компетенций образовательного учреждения. Также предложена модель взаимодействия системы дополнительного профессионального образования с такими подсистемами национальной системы кваліфікацій, как система профессиональной подготовки, система независимой оценки и сертификации кваліфікацій, а также с объединениями работодателей.

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Ключевые слова: национальная система квалификаций; дополнительное профессиональное образование; бизнес-компетенции.

Introduction. Transition of national economic system on the innovative way of development requires significant changes in country's labor resources, which represent the main productive force of the society, including working population, with the potential to participate in socially useful activities, producing material and intangible goods and services.

System reorientation of Russian economy on the recovery and development of domestic production involves complex decisions related to HR management at the state level in which the most important parameters are first and foremost the level of education and qualification that defines the increasing role of knowledge as a production factor. However, the average level of workers' qualification in Russian organizations is about 30–35% below Western Europe and it continues to decline. According to the experts of the Ministry of Education and Science of the Russian Federation in the next 10 years about 80% of the currently used technologies will become obsolete, and 80% of employees will have education received over 10 years ago (Davydenko, 2011). All this determines the need for continuous update of qualifications and development of employees' competences in line with changing requirements of production and increase in employer's requirements to educational level and professional skills of job seekers at the labor market.

To solve this problem at federal and sectoral levels there exists a system of human resource management, the basic element of which is additional vocational training which is also undergoing significant changes.

The aim of this study is the development prospects analysis of additional professional education system under the conditions of national qualifications system introduction. Formation of new mechanisms of legal and institutional regulation of skills demands of employers and supply of qualifications from the system of training and staff development is needed to address the imbalances between the requirements for quality and quantity of manpower in various economic sectors and the offer of educational services. In Russia the national system of qualifications is being formed to ensure:

- compliance of knowledge, skills and competencies of the established qualifications and the relevance of qualifications to current and future needs of developing labor markets;
- consistency, continuity and interconnection of qualification subsystems of higher, secondary and primary education, adult education, general secondary education by merging them into a single framework;
- implementation of the continuous education principles (better access to education, including adult education, formal recognition of informal education, optimization of investments in different segments of education);
- controll of migration flows and maintenance of the required skill level of foreign workforce.

Thus, significant changes in the implementation of national qualifications system in Russia are connected with the necessity for transformation of professional education system, including additional and professional education.

Literature review. One of the most global projects in the recent years aimed at radical transformation of regulation of social-labor relations and principles of labor market subjects' interaction is the project to upgrade the national system of qualifications. Based on European practice, today's qualification systems should include the following elements: occupational standards, national qualifications framework, training and development of personnel, the system of independent assessment and qualifications' certification.

In Russia the system of training and staff development is represented by education institutions of secondary and higher professional education, institutions of additional professional education: training institutes, training centers, industrial schools and corporate universities.

Analysis of foreign experience of adult education organization points out to terminological ambiguity in the description of this process.

The original theoretical model for the development of a range of concepts describing the adult education was the idea of life-long learning. In the early 1970s UNESCO and the Council of Europe recognized this approach as the key educational strategy, which replaced the idea of traditional education.

The central ideas of lifelong education theory are as follows:

1) due to constantly changing external environment there is a need for systematic acquisition, renewal and development of competencies of workers throughout the whole life of an individual aimed at self-realization;

2) dependence of successful life strategies upon constant involvement of an individual in lifelong learning, motivation and increasing abilities for self-learning;

3) recognition of the value of all available conductors of educational services, including schools, universities and other educational institutions, formal, informal and open ones.

In varying degrees, these ideas are implemented in the subsequent theories that describe the role and the place of education in the life of individuals, organizations and the state in general.

At the stage of its formation (1960s) the concept of life-long education was not much different from the theory of education throughout life, which equally emphasized the idea of unity of education for children and adults. Gradually, the content of the concept was reduced to education for adults who return to formal education system of schools and colleges or continue their education outside formal education structures. This approach is market oriented, as it emphasizes the commercial nature of educational services that are bought and sold according to market laws.

In foreign sources often enough the authors consider as identical the theory of "further education" and the concept of "continuing education", as both approaches operate on the same realization forms of adults' educational activity. Recently, however, most authors use these concepts, understanding further education as post-compulsory education in official institutions after the end of the period of compulsory school, aimed at getting a particular profession, by the level of education in an intermediate position between the middle and high school (Mitina, 2005).

The concept of "resumed education" appeared in the late 1960s reflecting one of the practical forms of the idea of education throughout life and presenting a more radical view on education and society in general. Criticizing the existing system of

education, its supporters proposed an alternative model, emphasizing the right of every person to join, exit and return to the world of education, especially in formal and predominantly daytime education in the adult life. Effect of extreme radicalism and high costs of this idea realization, to date, resumed education is seen as one possible educational alternative for adults in response to technological innovations (Mitina, 2005).

Permanent education is education that accompanies a person throughout his/her life. Continuity of education involves continuing development of the man through changing sequentially connected stages, each of which is a sensitive period for the emergence of the next. Today's interpretation refers to the system of education and upbringing of children and young people in connection with an extensive network of formal and informal types of adult education and training system for the employed.

In order to show the results of the analysis of the existing approaches to the description of additional education system, we propose to use the matrix principle, based on two basic criteria – the nature of education and the purpose of students in an educational process (Figure 1).

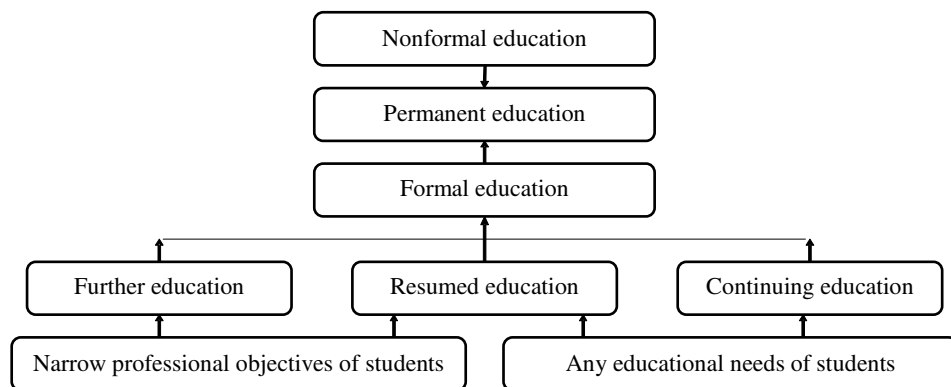


Figure 1. The concepts of supplementary education by purposes and nature of education process, authors'

Basing on the analysis of the existing concepts and approaches, continuing education can be considered as a comprehensive term for institutionally provided system of learning activities (formal and informal), which adapts to changing socioeconomic conditions and is aimed at full development of a person throughout his/her life, and is based on internal motivation and external resources and mechanisms.

The study of practices in different countries allows distinguishing 3 basic models of continuous education realization (Ankudinov, 2014):

1. Continuing uninterrupted education, which received its name due to the fact that the central place of such programs of adult education are universities. Overall, in the USA more than 30% of all universities are involved in continuing education. Fairly widespread this model is also in France: here such programs are carried out in special university centers of continuing education. These centers are implementing two tasks, one of which is associated with development and implementation of special educational programs for students with different levels of training, and the se-

cond is conducting alignment of courses to support working individuals who wish to enroll in an education institution.

2. The model of experience-based training, involving a continuous process of training, which is carried out primarily in a workplace. Due to proximity to production processes and substantial involvement in training of production workers, this model implies a very adaptive and quick response to changes in external and internal environments of an enterprise. According to L. Nadler (1994), training is geared to enhance what a person does as a worker, while his/her academic activity involves activation as a subject in the process of improving own professional skills. This model of supplementary professional education is widely spread in the US, Canada, and such European countries as Germany, England, Sweden, and France.

3. Recurrent education involves worker's "plunge" in educational environment over specific periods that are carried out in parallel with work. In the US and UK this model is especially popular for school graduates enrolled in higher education institutions. Training programs include several months of work alternating with academic semesters. In the USA about 1/3 of all higher education institutions offer programs of cooperative learning. In Canada 40% of all students are studying on such programs. As demonstrated by studies such training programs are better adjusted to labor market requirements and are aimed at integrated development of professionals (Trubin, 2011).

The presented model is successfully integrated into the national systems of qualifications in foreign countries, due to the fact that learning and qualifications assessment are included into the curriculum which includes work experience in a workplace (Koulz et al., 2009).

Similar system in Russia has a long history of educational tasks solution. At this point, the system of continuous education, supervised only by the Ministry of Education and Science of Russian Federation, includes over 1350 education institutions and structural units of higher and secondary specialized educational institutions implementing programs of additional professional training and retraining. According to the forecasts the growth of continuous education market in Russia using innovative formats (primarily, within non-formal education) will be 20–25% (Spravka o..., iace-edu.com).

The increasing significance of non-formal education linked to the development of the national qualifications system in Russia. M. Coles writes that the level of a person ceases to be measured by training timing or subjects studied and begins to be measured by achievements or learning outcomes, i.e. competences, understood as a holistic set of knowledge, skills, experience and relationships, the actualization of which ensures the quality of employee job functions in different situations (Koulz et al., 2009). Thus, it is required to define a new coordinate system that specifies a different level of interaction of training centers with consumers of educational services. In this regard, it is necessary to conduct empirical research to determine the level of readiness of adult education system to solve new professional tasks.

Methodology. The study is based on the authors' model of business competencies' structure, the implementation of which is necessary for full inclusion of education centers in the national system of qualifications. Under business competence of the system we mean the ability of additional professional training system to meet the

demands of the labor market through active integration of educational, innovative and marketing processes (Table 1).

Table 1. Structure of business competences of the adult education system
(Gileva et al., 2014)

Component of business competence	Contents	The condition for realization
Education component	- orientation of education process on the development of competencies that meet the requirements of professional standards	- quality of developed professional standards; - strengthening the interaction between universities and companies (employers) in education process
Innovative component	- conformity of the contents of training programs to the most relevant practices that are implemented in the real sector; - development of innovative forms and methods of training	- conducting research within companies (employers); - development of professional competencies of employees
Marketing component	- a choice of forms, methods and duration of a training program; - formation of training programs according to customer requirements	- research on labor market needs

Let us consider changes in the activities of education centers related to the development of their business competence which determines the transformation of the contents and forms education services provision.

The educational component of business competence determines new contents of education programs, the purpose of which is the development of knowledge and skills of students, established professional standards of the relevant type of professional activity. In this regard, the criterion for assessing the development of this component may be the amount of listeners that at the end of a program successfully pass the procedure of evaluation and certification of vocational qualifications.

The innovative component of business competence assumes the availability of the most relevant information based on best organizational practices, and the use of advanced forms and methods in educational processes – case studies, simulation games and learning tools. As the evaluation criteria of innovative components development, one can use the percentage of traditional and interactive teaching methods, the number of teachers with practical experience in the real sector as well as the results of public accreditation.

The marketing component of business competencies maximally stresses the requirement of customer centricity that determines flexibility and adaptability of education programs to changing requirements of the market and individual customers. A convincing example of the marketing approach implementation illustrates the activities of the sectorial centers of excellence of JSC "RZhD" – state railways in Russia. The Company has developed models of common corporate requirements for leading workers, and the work is being undertaken on individual assessment of the competences level. Depending on the identified gaps between the desired and the existing conditions, the curriculum is set, which in the framework of certain activities should

take into account not only the current level of specific competences, but the existing potentials of a particular employee which determine his/her value for the Company in a particular perspective. Thus, the sectorial system of professional education in order to meet the needs of the main customer moves from typical professional development programs to modular courses, short workshops, distance programs, individual and group coaching etc. Variety of topics, forms and methods of education has become sine qua non for additional professional education.

The idea of developing business competence of the additional professional education system is related to the need to meet the needs of key customers – the state, various economic sectors and individual citizens.

Formation of the national qualifications system in Russian Federation contributes to the formation of business competences of all of its educational centers. This becomes possible due to the existence of conditions for full-fledged dialogue between the labor market subjects, greater openness of companies, and emergence of professional standards as a formal result of joint discussion on the requirements to workers in different sectors.

The proposed model defines the main orientation on the interaction of actors in the process of providing education services. It should be noted that the basic condition for the implementation of business competences is associated with the exchange processes between the actors within the system relative to the needs and development forecasts of the labor market and its individual participants. This requires updating institutional and legal mechanisms that create the conditions for conducting joint research and scientific works, monitoring and long-term consulting on the most relevant practices of various enterprises.

In connection with the proposed methodology and the model of business competences the study objective is to examine the level of development of business competencies of the training centers, involved in retraining in "Personnel Management" in Novosibirsk and Omsk.

To assess the orientation of educational process on the development of competencies corresponding to qualification requirements according to the professional standard, as well as the degree of innovativeness of the used forms and methods of training, we have applied the method of content analysis. With its help we conducted qualitative and quantitative analyses of the contents of training programs in comparison with major units of the professional standard "Specialist in personnel management".

For determining the relevance of the retraining program results, satisfaction of students with contents and learning methods, we conducted a sociological survey of graduates of these programs, 2006–2015 academic years. The study was conducted at the Institute of Prospective Transport Technologies and Training of Personnel Siberian State University of Railway Engineering, and also at the Center of Business Education of Omsk State University n.a. Dostoevsky. The total number of respondents was 163 people, representing almost 59% of the total number of program graduates. Due to the presence of a complete description of the general population quota type was selected which fully reproduces the structure of the general population in proportions of the studied traits. The structure of the general population and the quota sample are presented in Table 2.

Table 2. Sampling for conducting the sociological survey, authors'

	Experience in personnel management		The lack of experience in personnel management		Subtotal	
	Abs. indicators	Indicators, %	Abs. indicators	Indicators, %	Abs. indicators	Indicators, %
General population	91	33	185	67	276	100
Sample population	51	31	112	69	163	100

The questionnaire allowed us collect the empirical material on such parameters as: the goals of further education, career in personnel management after the completion of the training program, solving the problem of self-development through further education.

Thus, this study allowed us collecting data on the level of development of business competence centers for additional education implementing the retraining program in "Personnel Management" in Novosibirsk and Omsk.

Results. In the first phase of the study we conducted a quantitative analysis of two training programs in "Personnel Management" (Table 3). In the coding form we used the contents of the professional standard "Specialist in personnel management", and the bachelors' curriculum in specialty 38.03.03 "Personnel Management" used at the Faculty of "Personnel Management", Siberian Transport University and the Faculty of Economics, Omsk State University.

The results of our content analysis of training programs in HR management allowed defining the following features. The program content focused on the Federal state educational standard, the basic educational program, the curricula and work programs in the study field 38.03.03 "Personnel Management". These documents focus primarily on the guidelines set by the Ministry of Education and Science of Russian Federation, educational associations, scientific and pedagogical community, providing training for specialists with higher education. The content analysis shows that the wording of the items in retraining programs coincide with the names of disciplines in the bachelor curriculum.

In terms of implementation of professional standards in the training system gets targeted and the contents are focused exclusively on the needs of the labor market in the form of functional maps by type of professional activity. The professional standard "Specialist in personnel management" includes 8 generic job functions, divided into 25 job functions. Content analysis of training programs shows that the subject of academic disciplines reflects the content of the professional standard by only 40%. The programs slightly reflect the new functions related to labor organization and remuneration of personnel, corporate social policy, as well as with operational and strategic personnel management. Thus, the existing training programs for personnel management are focused on the education standard and thus require substantial revision and improvements.

Analysis of data at the second phase of our would help study assess the demand for training results carried out among graduates of retraining programs, auditing revealed the following data.

Table 3. Coding form of the content analysis, authors'

Tag code	Tag, its gradation	Frequency of reference (curriculum 1)	Frequency of reference (curriculum 2)
A	The professional standard unit (PCs.)	7	6
A1	Documentary maintenance of work with personnel	1	1
A2	Activities with personnel	2	1
A3	Activities on evaluation and certification of personnel	1	1
A4	Activities on staff development	3	2
A5	Activities on labor organization and staff payments organization	0	1
A6	Activities on corporate social policy	0	0
A7	Operational management of staff and units of organization	0	0
A8	Strategic HR management of organization	0	0
B	Academic curriculum for preparation of bachelors in the specialty 38.03.03	19	20
B1	Economics of organization	1	1
B2	Labor market	1	1
B3	Psychology of management	1	1
B4	Employment law	1	1
B5	The basics of social insurance	1	1
B6	Communication consulting	0	1
B7	Organizational culture	1	1
B8	Psychophysiology of professional activity	1	1
B9	The basics of labor organization	1	1
B10	The basics of management theory	1	1
B11	Organization of personnel management	1	1
B12	Conflictology	1	1
B13	Ethics of business relations	2	2
B14	Motivation and stimulation of labor activity	1	1
B15	Information technology in personnel management	2	2
B16	Document provision of personnel management	2	2
B17	Methodology of scientific research	1	1
C	Forms and methods of training, %	100	100
C1	Traditional forms (lectures, practices, seminars)	68	62
C2	Interactive forms (case studies, situational tasks, business games, business simulations etc.)	32	38
D	Teaching staff employed on program, %	100	100
D1	Teachers with experience of working in the real sector or with experience in consulting	43	45
D2	Teachers with no experience in the real sector or with no experience in consulting	57	55

In the area of personnel management are employed approximately 60% of the surveyed. More than 60% of the respondents are still getting their education in technical, transport or humanities fields. The main learning outcomes of the retraining program the respondents name the following: career growth (31% of the respondents); more effective relationships with colleagues and managers (50%), personal development (76% of the respondents), participation in interesting projects (31%), wage growth (about 10%) (Figure 2).

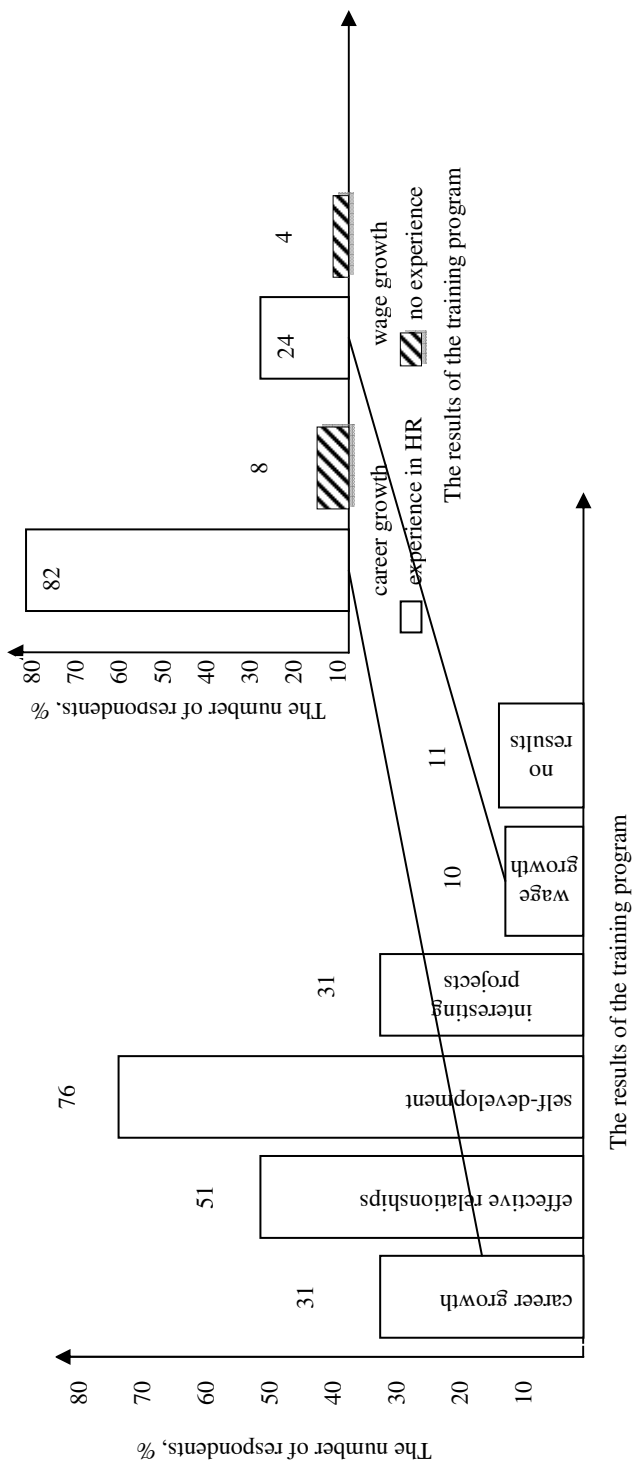


Figure 2. Most important learning outcomes for the retraining program, according to participants of the course, authors'

The program has become an incentive for career advancement for 15% of the respondents. 11% of them did not see any learning outcomes.

It is important to note that a significant difference was found in the groups of respondents by the criteria of "career growth" and "wage growth" depending on whether they had experience in personnel management. In the group of students working in the field of HR career is mentioned by more than 80% of the audience, and wage growth by 25% of the respondents. In case when the respondent's professional activity is not associated with HR, career growth as a result of training was observed only in 8% of cases, and wage increases was mentioned by 4% of the respondents.

An important indicator of education quality is also the overall satisfaction of students with the course and its individual components. Assessment is made at the end of the annual program of retraining by the scale from 1 to 5. Data on satisfaction level is presented in Figure 3. The results show that in the group of the respondents having the experience in the field of personnel management, the general satisfaction with the course is higher than among the students working in other fields.

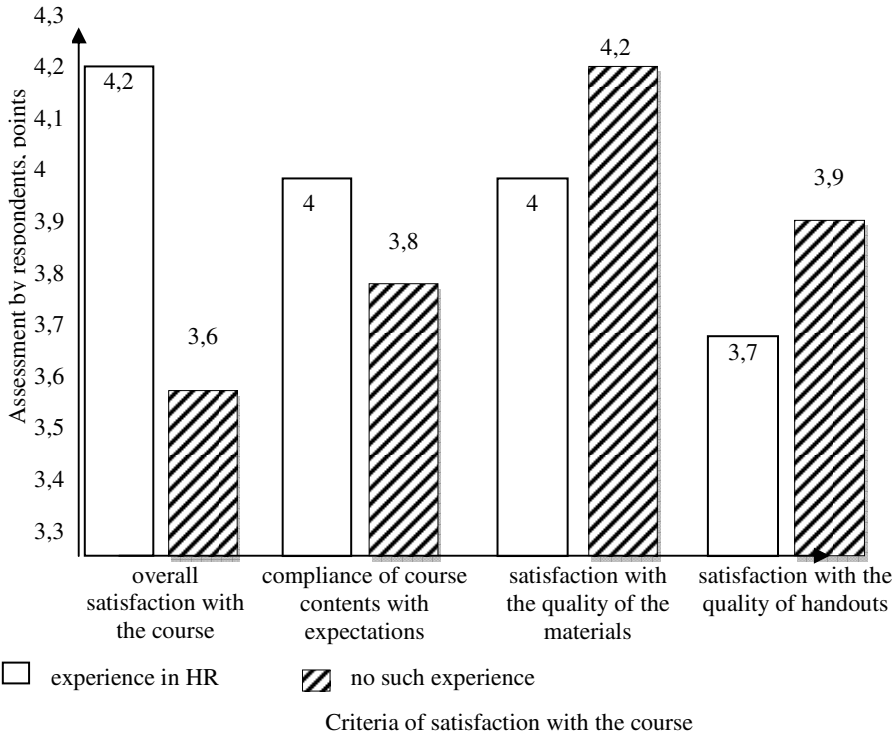


Figure 3. Satisfaction with the retraining courses in "Personnel Management", authors'

Thus, the results of the second phase of our study show the need to strengthen the business orientation of such training programs, which comes from students' demand in most advanced HR-practices and competencies.

Conclusions. Our monitoring shows that integration of adult education into the national system of qualifications requires significant changes in goals, objectives, contents and forms of retraining programs. These changes should be linked to changes in system settings and the expansion of the "customer" concept in adult education programs. Within the reform of vocational education in Russia governance and quality assurance in this segment of educational services were significantly reduced. Therefore, in the first place in the assessment of quality come the procedures such as public accreditation of educational programs and the creation of self-regulatory organizations. Thus, the system of additional vocational training currently is facing challenges related to reputational issues, strengthening the relations with employers as the main customers of educational services provided by such educational programs according to the requirements of professional standards. The main criterion of quality on adults programs in these conditions becomes the potential capacity trainees to undergo the certification procedure to confirm or increase the current level of skills. Thus, the key partners in the system in addition to public authorities, become employers and employees, as well as centers of independent evaluation and certification. Interaction among these partners involves certain procedures and mechanisms that are combined to form a functional-target model of adult education integration into the national system of qualifications.

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