

Transformation of civil service employees' professional development system

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Veröffentlichungsversion / Published Version

Zeitschriftenartikel / journal article

Empfohlene Zitierung / Suggested Citation:

Evarovich, S. A., Lavrova, T. B., & Polyakova, A. G. (2020). Transformation of civil service employees' professional development system. *Public Administration*, 22(2), 101-106. <https://doi.org/10.22394/2070-8378-2020-22-2-101-106>

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Трансформация системы профессионального развития государственных гражданских служащих

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Аннотация: В исследовании определены основные изменения, затрагивающие сферу повышения квалификации и профессионального развития государственных гражданских служащих, в том числе обусловленные новшествами в нормативно-правовом регулировании.

Благодарность: Статья подготовлена в рамках выполнения научно-исследовательской работы «Разработка предложений по совершенствованию подходов к формированию списков федеральных государственных гражданских служащих для направления на мероприятия по профессиональному развитию» государственного задания РАНХиГС.

Ключевые слова: государственная гражданская служба, государственный орган, государственные гражданские служащие, профессиональное развитие, дополнительное профессиональное образование

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Статья поступила в редакцию 14 октября 2019 года.
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Еварович С.А., Лаврова Т.Б., Полякова А.Г. Трансформация системы профессионального развития государственных гражданских служащих. *Государственная служба.* 2020. № 2. С. 101–106.

TRANSFORMATION OF CIVIL SERVICE EMPLOYEES' PROFESSIONAL DEVELOPMENT SYSTEM

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Abstract: Since maintaining and improving the qualification level by the civil servant is implemented through the professional development, the study identifies main changes affecting this area, including those caused by the changes in the legal regulation.

Acknowledgment: The article was prepared as part of the research work "Development of proposals to improve approaches to the formation of lists of federal civil servants to be sent to events on vocational training" of The Russian Presidential Academy of National Economy and Public Administration state task.

Keywords: civil service, public authority, civil service employees, professional development, additional professional education

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The article was received on October 14, 2019.
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Evarovich S.A., Lavrova T.B., Polyakova A.G. Transformation of civil service employees' professional development system. In: *Gosudarstvennaya sluzhba.* 2020. № 2. P. 101–106.

Introduction

One of the main measures to ensure sustainable and coordinated social development is the improvement of public administration, including through the professional development of personnel. According to Art. 62 of the Federal Law No. 79-FZ on July 27, 2004, "On the State Civil Service of the Russian Federation", the professional development of state civil servants is determined by the need to maintain and improve the appropriate level of qualification for proper performance of their official duties. The effectiveness of the developed and adopted managerial decisions and, as a result, the

realization of public interests depends on the degree of preparedness and qualification level of civil servants. As a result, the role of not only the declarative definition of the list of professional competencies for state civil servants but also the quality of their formation as an element of the personnel management system for the state civil service is increasing.

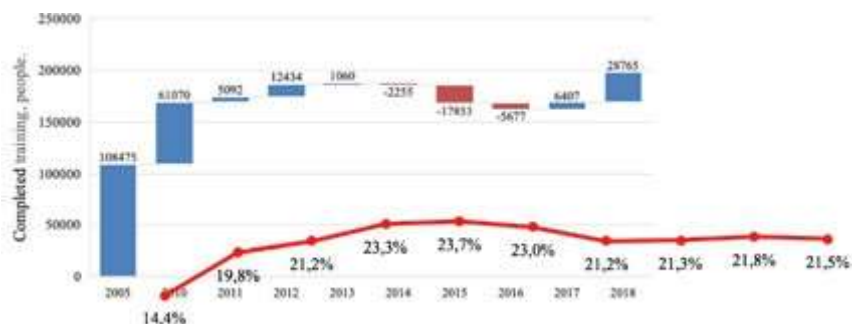
The professional development of state civil servants is considered to be a process of formation and continuous improvement of professionally significant knowledge, competencies and personal qualities that contribute to the effective fulfillment of personnel's responsibilities and functionalities; it is designed to expose the employee's abilities to successfully solve the tasks and to ensure further professional growth. Professional development is not limited to specialized training, which, first of all, should be practice-oriented and ensure the professional development of the employee. It also includes career and motivational components that determine the relationship between the growth of professionalism of civil servants and their career advancement. The competencies held by a civil servant are based not only on knowledge, skills, abilities, and qualities necessary to occupy a specific position, but also serve as requirements for a particular post.

Managing the professional development of civil servants allows to create the right direction for their training and education, to ensure and maintain the reliability of the organization, and also to maximize the potential of each employee. Moreover, the lack of professional development significantly reduces the motivation of employees [Martynova, Evarovich, 2018. P.36-47]. To understand the needs of the labor market and the training of qualified personnel, corresponding to modern realities, it is necessary to determine the principles of professional development of employees and ensure variability and individualization of the educational areas. Perhaps, this should be preceded by a set of special measures to deregulate and liberalize this process.

Quantitative characteristics of the civil servants' professional development system

In 2019, the Decree of the President of the Russian Federation "On the professional development of civil servants"

Figure 1. The number (of people), the absolute increase (in number of people) and the proportion (%) of civil servants who completed training under the programs of Additional Professional Education in the corresponding year



entered into force. The implementation of this decree means a new stage in modernization of the professional development system.

According to Art. 62 of the Federal Law No. 79-FZ of July 27, 2004, "On the State Civil Service of the Russian Federation", the category of "professional development" includes Additional Professional Education (APE) and other professional development measures carried out during the entire period of civil service. In 2018, 128 684 civil servants of the federal state civil service of the Russian Federation and 68,834 civil servants of the constituent entities of the Russian Federation took Additional Professional Education courses¹. This amounted to 19.4% and 26.9% among all employees working in government positions and civil service posts accordingly (Figure 1).

In Figure 1, the red line illustrates the stabilization in the dynamics of the civil servants' share of people, who have been trained under the Additional Professional Education programs. Annually, around 20% of all state civil servants receive Additional Professional Education. The blue columns in the diagram represent the years, in which there has been an increase in the number of civil servants, who were trained in Additional Professional Education programs; the orange columns show periods, when such dynamics were negative. According to the column on the left, the upper boundary of each of the diagram's columns shows the total number of civil servants (both federal and employees of the constituent entities of the Russian Federation), who have been trained under Additional Professional Education programs in each of the periods.

In terms of management levels, the dynamics of the number of employees, who underwent additional education, is not synchronous. According to the Federal State Statistics Service, the largest share of employees of the federal state civil service, who received additional education, falls on 2012 – it was 23.5%² (Table 1).

A downward trend has been observed since 2012, and by 2018 the share of employees of the federal state civil service, who have received additional education, has reduced to

¹ <https://www.gks.ru/folder/11191>

² <https://www.gks.ru/folder/11191>

Table 1. Training of personnel of the federal state civil service in the Russian Federation by types of Additional Professional Education

Year	Underwent APE		of them in Additional Professional Education programs					
	Ppl.	% of the number of employees substituting government posts and state civil service posts	prof. retraining		advanced training		APE outside of the Russian Federation	
			Ppl.	%	Ppl.	%	Ppl.	%
2005	85651	15,2	2558	3,0	82295	96,1	174	0,2
2010	127972	20,3	1577	1,2	125465	98,0	108	0,1
2011	122844	20,4	1698	1,4	120177	97,8	142	0,1
2012	136816	23,5	1524	1,1	134439	98,3	133	0,1
2013	131946	23,1	2002	1,5	129199	97,9	92	0,1
2014	125812	21,6	1461	1,2	124268	98,8	83	0,1
2015	116345	20,3	1503	1,3	114776	98,7	66	0,1
2016	107628	19,8	1953	1,8	105608	98,1	67	0,1
2017	111048	19,9	2310	2,1	108727	97,9	11	0,0
2018	128684	19,4	2940	2,3	125739	97,7	5	0,0

Table 2. Training of the state civil service personnel in the constituent entities of the Russian Federation by type of Additional Professional Education

Year	Underwent APE		of them in Additional Professional Education programs					
	Ppl.	% of the number of employees substituting government posts and state civil service posts	prof. retraining		advanced training		APE outside of the Russian Federation	
			Ppl.	%	Ppl.	%	Ppl.	%
2005	22824	12,1	2622	11,5	19934	87,3	123	0,5
2010	41573	18,4	2059	5,0	39348	94,6	52	0,1
2011	51793	23,4	1847	3,6	49718	96,0	59	0,1
2012	50255	22,9	1947	3,9	48079	95,7	20	0,0
2013	56185	25,2	1748	3,1	54333	96,7	40	0,1
2014	60064	26,5	1733	2,9	58307	97,1	24	0,0
2015	51678	23,6	1654	3,2	50012	96,8	12	0,0
2016	54718	25,1	2011	3,7	52685	96,3	22	0,0
2017	57705	26,6	1973	3,4	55716	96,6	16	0,0
2018	68834	26,9	2765	4,0	66038	95,9	31	0,0

19.4%. Moreover, the vast majority of federal employees receive additional education in the means of advanced training programs – their share ranges from 96.1% to 98.8%. At the same time, in recent years, the proportion of federal public servants, who undergo professional retraining, has been growing. In 2012 it was 1.1%, but now the share is 2.3%.

A similar dynamic in the first approximation is observed concerning the civil servants' training in the constituent entities of the Russian Federation (**Table 2**).

In recent years, the proportion of civil servants in the constituent entities of the Russian Federation, who have received additional education, has been fluctuating within 25% (this figure is higher than the same amount for federal civil servants). In percentage terms, in the constituent entities of the Russian Federation, the proportion of state civil servants, who underwent professional retraining, is higher than on federal posts. In 2018, it was 4% (for comparison, in 2005 it was 11.5%).

The number of employees, who have received additional education at all levels of management outside of Russia, is extremely insignificant; and over the past few years, this number has only been decreasing. In 2018, 31 people in the state civil service and 5 people in the federal state civil ser-

vice from the constituent entities of the Russian Federation received Additional Professional Education abroad.

The concept of "professional development" was included in the regulatory vocabulary on July 29, 2017, with amendments to the Federal Law "On the State Civil Service of the Russian Federation". At the moment, civil servants can improve their professional skills not only within the framework of additional education programs in educational institutions, but also use other forms of professional development like self-education. Also, the new version of the law has expanded the number of reasons to send a civil servant to special professional development events. Another innovation is the introduction of such a concept as an "educational certificate", the procedure for the use of which should also be established.

In the framework of the Decree of the President of the Russian Federation No. 68 on February 21, 2019, "On the Professional Development of State Civil Servants" that entered into force, the provisions of the Decree of the President on December 28, 2006, No. 1474 "On Additional Professional Education of State Civil Servants of the Russian Federation", which determined the individual plan for professional development of each state civil servant, as well as

educational programs of state authorities for professional development of civil servants. The decree approved the Regulation on the procedure for professional development of state civil servants of the Russian Federation, according to which, the professional development of state civil servants includes:

- Additional Professional Education (advanced training and professional retraining);
- seminars, training, master classes, other events aimed primarily at the accelerated acquisition of new knowledge and skills by civil servants;
- conferences, round tables, official internships, other events aimed at studying best practices, public administration technologies, exchange of experience;
- self-studying by civil servants of educational materials related to their work. These materials should be placed on a specialized information resource intended for civil servants, which is created on the base of the federal state information system (hereinafter - the specialized information resource), as well as in other information systems;
- educational courses, access to which is provided to civil servants in a remote form in the means of use of a specialized information resource and other information systems.

The Regulation on the Professional Development of State Civil Servants of the Russian Federation also provides for mentoring in the relevant state body.

The results of state civil servants' participation in continuous professional development should be taken into account during certification, referral to other forms of professional development, appointing to a position from a personnel reserve, and awarding a bonus.

The evolution of professional development system for state civil servants: an inside glance

In the course of our study, we interviewed the heads of personnel services of the federal executive bodies and heads of structural divisions, whose competence includes the issue of professional development planning for state civil servants. Personnel practices of seven government bodies were examined at both regional and federal levels. This was due to the need to obtain information about the planning mechanism for the professional development of civil servants and its stages; to find out what tools were used; what difficulties the authorities encountered in performing this process and what prospects exist in the context of the new legal framework.

Such information about the practice of specific federal authorities and the prospects for its change is not contained in scientific publications and regulatory documents. This happened due to the entry into force of new regulatory acts in February-May of 2019. New documents in federal executive bodies, regulating the process of organizing civil servants' professional development, have not yet been developed.

We interviewed three heads of personnel services in different federal executive bodies. One of the questions asked

was related to identifying the priority activities in the field of professional development. To the question "Which professional development measures are most in-demand in your state body (types, statistics)? And why?" the respondents answered the following: the first respondent named the official internships of employees in the central office (which last approximately one month), distance learning, educational events in the framework of annual professional competitions and forums. The second respondent named distance learning for newly recruited civil servants; basic trainings on the development of skills in public speaking, time management, conflict management, etc.; special programs related to individual specialized issues of public administration (in the form of seminars, advanced training courses). The third respondent named strategic sessions, trainings for senior staff, practice-oriented training at seminars, master classes for chief personnel.

Thus, the most popular are practice-oriented measures of professional development aimed at developing professional and personal qualities ("soft skills"), as well as distance learning.

Respondents noted that the prospects for improving the professional development system in state bodies are related to digitalization of the process based on the "Unified Information System of Cadre Management of the State Civil Service". This process begins with the planning of professional development activities by the public servants themselves in their personal accounts; this includes the creation of applications for training on a state order/assignment, the assessment of the input and output results for students, the preparation of reports and the adjustment of professional development areas for each civil servant.

A question was asked about the possibilities of the "Unified Information System of Cadre Management of the State Civil Service" in means of planning the professional development for civil servants. Respondents said that the system must necessarily provide for the possibility of building individual ways of professional development for each group of posts depending on the type of professional activity with a list of compulsory and varied educational programs. One of the respondents drew attention to the relevancy of introducing an adaptive training system in Unified Information System of Cadre Management of the State Civil Service, as well as introducing a system of diagnostics for the level of knowledge and skills (competencies) at the "entrance" and "exit" of the educational program so that the recipient could assess the results and quality of civil servants' training.

On the current and future compliance of the professional development system with the needs of the civil service

Close attention to the process and conditions of professional development is due to changes in the state civil service and new trends inherent to the educational system [Smyshlyeva, Titova, Evarovich, 2014. P. 133]. First of all, there is a definite movement from knowledge to skills. In most scientific and practical sources, we can find the training program, which was described in 1981 by the American Council on

Education – the so-called approach of a “learning society”; they stated that to implement this concept education reform is needed. The Council concluded that there was a strong need for new fundamental knowledge and that special attention should be paid to new skills, such as understanding of technologies, critical thinking, applied training, and communication skills. Since then, the question has arisen more and more often about which skills of the 21st century will be most in-demand in the coming decades. According to the World Economic Forum, the gap is now growing between what is being studied and what people will need in the future [Christensen, Lisheng, Painter, 2008. P. 360]. Now, there is a transition from a knowledge-based education system to a skills-based system. Such technologies as artificial intelligence, virtual reality, free online courses, and Learning Analytics are often seen as incentives that allow interactive, skill-based learning.

The second trend characteristic of foreign education systems is personalization, the ability to adapt education to individual needs. An individual approach can enhance the value of education by comparing knowledge and skills with the needs and interests of a student. Adaptive learning and individual learning management systems personalize the learning process for each student using specific technologies based on machine learning, analytics, and artificial intelligence. The clear benefit of personalization technologies is that systems can identify students who are at an intermediate level, have low academic performance, or vice versa, have better academic performance among other students. Information and communication technologies (ICT) can help differentiate learning styles, the pace of learning and learning management, contribute to a better understanding of distinction within study groups.

The third feature inherent in educational systems is the spread of learning, which does not depend on time and place. The concept of learning, when it does not depend on location, is often considered in the context of the problem of continuous learning. These concepts are interrelated because in the literature they are considered related to the issue of increasing the adaptability of learning. But this is not something new; universities have been offering distance learning courses for many years. Moreover, criteria for the effectiveness of education flexibility and the most effective ways for its organization have already been identified. Nevertheless, researchers argue that the use of ICT can bring learning to the masses even more, regardless of time and place [Polyakova, Loginov, Serebrennikova, Thalassinou, 2019. P. 130-139]. It should be noted that the existing education system has not fully accepted this concept, although technologies are considerably introduced into the educational process. Personal electronic and mobile devices will become an essential factor in promoting this type of learning; their use in mixed education is expected to increase in the next two decades.

The fourth trend inherent to educational systems is networking, in which networks are seen as a way of interaction between educational institutions and students. Networking is not a voluntary choice of educational institutions, but

rather a forced development caused by increasing international competition in the education market. The reason why so many people see networking as a positive development is that it increases the students' chances of getting a high-quality education based on a common understanding of previous experience. This may mean that students are mobile in their choice, i.e. the students may attend courses at several different institutions. Also, instant messaging and social networks will increasingly integrate into the learning process to stimulate communication between students. Cooperation is necessary to improve the quality of the educational process and to more clearly adapt the educational material to certain groups of students. Cooperation can provide common intercultural understanding, which is also an integral part of the learning process [Knowles, Holton, Swanson, 2005]. However, it should be noted that the presence of cultural connections does not lead to the automatic development of intercultural skills.

Changes that occur in the public service entail the need to change the requirements that apply to its personnel. One of these changes is the recognition of the need for an integrated approach to solving almost any problem; this requires officials to have a comprehensive view on the problems that arise and the possible consequences that may occur directly beyond the employee's sphere of competence. Because of this, the forms and methods that are characteristic of the system of additional education are changing. Let us consider the future trends that will characterize the public service.

In the context of digital economy, all spheres of activity are changing, and this leads to a change in the main factors of the competitiveness of participants [Kolmakov, Polyakova et al., 2019. P. 172]. In an unstable, uncertain, complex environment, a state civil servant needs new abilities and organizational skills that are different from those that contributed to success in the past. Modern conditions actualize the role of the employees' initiative. They are expected to make consistent decisions that correspond with the employer's strategy and organizational culture [Bunkovsky, 2017. P. 25]. In this regard, becomes necessary not only the ability to acquire knowledge but also the availability of skills that allow employees to choose the appropriate educational trends and resources to obtain them.

Many educational organizations have appeared that represent the most diverse range of services, but the results of their functioning do not cause a significantly positive effect: a large amount of money was spent on training, but several studies indicate that more than 50% of managers believe that the money spent on staff education did not bring visible results. The need to change training models to increase their effectiveness is indirectly shown by the fact that in the United States only 10% of the \$ 200 billion spent on staff training was spent correctly and led to a real increase in students' skills and talents.

Let us consider the problems associated with additional education:

Many heads of educational institutions believe that traditional programs no longer provide sufficient training for

current and future tasks. There is a request for the development of communication and perceptual skills that are necessary for interaction and cooperation between employees; however, most executive educational programs are designed as a complement to MBA programs only or directed to replace it entirely. They focus on skill sets based on financial and economic disciplines, while seriously underestimating the importance of communication skills.

Educational programs also do not meet the set goal. Although the concept of continuous learning has spread, it has remained far from practical implementation. Traditional education is too episodic, exclusive and expensive, which means that it does not fit into the concept of continuous learning [Moldoveanu, Narayandas, 2019. P. 44]. In this regard, in leading business schools, the demand for individual educational programs that meet the specific needs in terms of talent development for employees has significantly increased. Corporate universities and "personal education clouds" fill this gap.

Another problem lies in the fact that managers expect a long-term strategic effect of the costs of employees' talent development. But only a small number of people undergo such training that pursues their own career goals, whether it is a promotion or gaining the benefits that are fit to their post. As a result, they don't necessarily stay with the employer, who funded their training.

There is a significant gap between the skills that are acquired through development programs and those that are required in practice. This is not good, because such programs were ordered by executive authorities [Batueva, Kolesnikov, 2015. P. 286-294]. This is especially true for interpersonal skills, which are necessary for implementing network relationships. Traditional educational institutions have extensive experience in teaching cognitive skills and assessing their development, but they have much less ex-

perience in teaching students how to effectively communicate and work with each other.

One of the problems associated with both the education system and the training of civil servants is the poor connection of the learning process with the practical use of acquired skills and competencies [Bondarenko, Kolmakov, 2018. P. 53-57].

Here the question lies in the emerging skills transfer gap. Studies conducted by experts in the field of cognitive sciences and neurobiologists, whose studies are related to the field of education, show a weak connection between the studied skill and its further use.

Conclusion

In recent years, one of the main directions in the state personnel policy has been the development and implementation of a new model for state civil servants' professional development. In the context of legislative changes, professional development is seen as a continuous process of increasing the professionalism and competence of a state civil servant in order to maintain the level of qualification necessary for the proper performance of official duties, as well as to increase the level of qualification for filling civil service posts. New legislation documents predetermined the main characteristics of this model: complexity, multi-directional and permanent nature, increased attention to self-education and the use of modern distance learning technologies. This became possible due to the improvement of civil servants' professional development through the use of special events (seminars, trainings, master classes, exchange of experience in the form of interagency interaction, adaptation measures as part of mentoring, etc.). At the same time, the emerging model of professional development lags behind the educational systems used in the practice of other countries.

References

- Batueva T.B., Kolesnikov A.M.* The system for training and professional development of government officials. *Uchenye zapiski Rossiyskoi Akademii predprinimatel'stva*. 2015. No. 45. P.286-294. In Russian
- Bondarenko T.G., Kolmakov V.V.* Distance learning as an active educational technology: assessment of implementation feasibility. *Azimuth nauchnykh issledovaniy: pedagogika i psikhologiya*. 2018. No. 3. P.53-57. In Russian
- Bunkovsky D.V.* Features of training the specialists in the field of combating economic crime. Proceedings of the twenty-second All-Russian scientific-methodological conference "Training for power structures: modern trends and educational technologies." 2017. P.22-25. In Russian
- Christensen T., Lisheng D., Painter M.* Administrative reform in China's central government - How much learning from the West? *International Review of Administrative Sciences*. 2008. Vol. 74, No. 3. P. 351-371. In English
- Knowles M.S., Holton III, E.E., Swanson R.A.* The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development. London, New York, etc. "ELSEVIER Butterworth Heine-mann". 2005. In English
- Kolmakov V.V., Polyakova A.G., Polyakov S.V.* Designing an innovative management decision support system based on network analysis

- and big data arrays processing algorithms. Proceedings of the III Black Sea international scientific-practical conference of Lomonosov Moscow State University. 2019. P.172-173. In Russian
- Martynova S.E., Evarovich S.A.* Participative HR-technologies in the governance of Russian regions. *Space and Culture, India*. 2018. Vol. 6. No. 4. P. 36-47. In English
- Moldoveanu M., Narayandas D.* The Future of Leadership Development. *Harvard Business Review*. 2019. Vol. 97, No.4. P.40-48. In English
- Polyakova A.G., Loginov M.P., Serebrennikova A.I., Thalassinos E.I.* Design of a socio-economic processes monitoring system based on network analysis and big data. *International Journal of Economics and Business Administration*. 2019. No. 1. P.130-139. In English
- Smyshlyaeva L.G., Titova G.Yu., Evarovich S.A.* Design and implementation of competency-based programs for continuing professional education. Content and form of educational activity organization in the preparation of a tutor in higher education. Collective monograph. Tomsk, 2014. P.113-133. In Russian