

Performance-Based Contracting and Increase in Wage in Preschool Education: Development Strategies, Motivation and Incentives

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Abstract. This article explores opportunities in using performance-based contracting as a tool for internal recruitment and a means of solving problems that preschool educational institutions face in their development. Kindergarten staff underwent little change for decades. Sociological surveys revealed the first shifts in the motivation of preschool teachers after some large-scale salary increase measures in education were undertaken. According to the Monitoring of Education Markets and Organizations, only 60% of preschool teachers wanted to continue working for their institutions in 2007–2011, while 40% felt like changing their jobs. In 2016, 78% of kindergarten teachers did not want to

quit: they had new incentives and an interest in professional growth, their work had become more creative, and interest in work had come to the fore. The findings give reason for considering further support of the salary reform feasible in order to change the nature of preschool teaching as a strategic vector of development in this education sector. As the course of the preschool teacher salary reform has been analyzed and the major trends in changes in institutions that applied performance-based contracting in 2012–2016 have been identified, the conclusion is made that further implementation of performance-based contracts is possible provided that performance criteria recommended “from above” are specified wisely at the level of individual educational institutions and adjusted to kindergarten-specific development strategies. Personnel policies are becoming a resource in the transformation of preschool education content and its orientation towards the development of 21st-century skills.

Keywords: performance-based contracting, preschool education, motivation of preschool teachers, remuneration of labor, effectiveness criteria.

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There has been quite a strong focus on the teacher pay reform in both national policies and research over the last decade. However, publications in this field have mostly dealt with institutions of secondary and higher education [Abankina 2009; Klyachko, Avraamova, Loginov 2014; Kurbatova, Levin 2013; Kuzminov 2011], virtually ignoring the situation in kindergartens. It was not until fairly recently that the correlation between teachers' motivation and compensation came to the foreground in education research, namely in 2012, when a single modernization policy for all public industries was adopted. The policy introduced quantitative benchmarks at the national level to increase salaries in education, science and healthcare and proposed a unified vision of performance-based contracting as a remuneration system for public industries where salary size is contingent on employee performance assessment¹.

Despite the common goals and principles of transforming the compensation systems in public industries, it is appropriate to analyze the effects of the reform individually for each segment of the education system, paying attention to specific aspects of teaching at different stages, peculiarities of team building, and formal and informal working principles. The special nature of preschool education lies primarily in the specific methods it uses to assess "output results": this is the only education stage that has no universally acknowledged system of assessment criteria. While the performance of a secondary or trade school teacher can be universally evaluated in the form of USE (Unified State Examination) scores or student compliance with the recognized standards in WorldSkills competitions, there is no such evaluation system in preschool education. Besides, the professional activities of preschool teachers differ fundamentally from those of secondary or college teachers: teaching in a kindergarten is characterized by teamwork (cooperation between teacher and junior teacher in one group), inseparability of education, nurturing and caring processes, close contact with parents, and working in a small, almost entirely female environment with specific organizational culture and values.

No agreement has been achieved yet on the effects of performance-based contracts in the public sector, educational institutions in particular. There are studies confirming the positive effects [Derkachev, Zinovyev 2016] as well as those that reveal negative impacts of the reform [Belyavina 2016]. The pros and cons of the transformations are described in detail, for instance, by Bruijn [2005]. The differences in findings are explained by the plurality of interests of those affected by the reform.

¹ Edict of the Government of the Russian Federation No. 2190-p "Program for Stepwise Improvement of the Compensation System in Public (Municipal) Institutions for 2012–2018."

Foreign researchers insist that effects of education reforms should be analyzed with due regard for the course of their implementation, involvement of various actors (politicians and educational institutions) in such implementation, and perceived friendliness of the existing formal and informal institutions to reform promotion. Michael Fullan argues that “the result of a reform depends on how its objectives are understood by direct education system participants, the intensity and nature of their actions” [Fullan 2006]. As Larry Cuban writes, it is not education authorities but schools that introduce new approaches, so they are the first to actually decide whether a specific reform will be accepted or rejected [Cuban 1998]. Raisa Belyavina, while analyzing the reform implementation, investigates into how and why schools adjust this reform as well as the logic behind the process [Belyavina 2016].

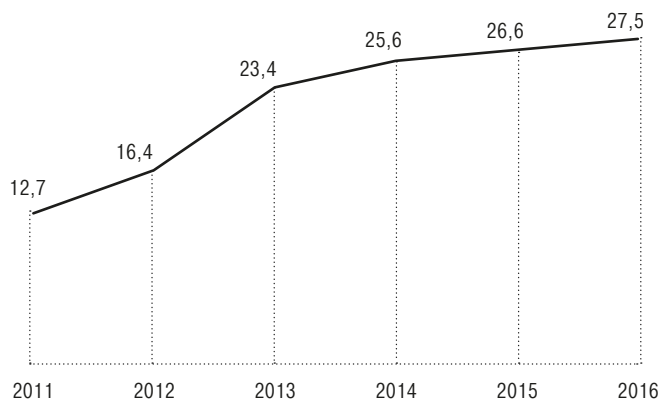
This approach to evaluating the effects of reforms is used in this study to analyze the institutional context of introducing performance-based contracting in Russian preschool education in 2012–2016 and to determine possible development vectors of the initiated labor compensation reform. We suggest that the primary task at this stage is to create a system of target performance indicators that are easily measurable, objective and understandable for teachers. That is why the final part of this paper delves into opportunities in using performance-based contracting as a tool of internal personnel policy and a means of solving problems that preschool educational institutions face in their development.

Diverse methods of scientific knowledge systematization and structuring as well as analytical tools are used to achieve the research objectives: analysis of statistics and financial statements of government agencies and educational institutions, analysis of sociological survey results, and content analysis of regulatory documents and (applied) research articles. References to sources of information and descriptions of the methods used are provided as the article unfolds.

There is no universal understanding of performance-based contracting in academic or professional publications, so the interpretation used in this article should be explained first. Performance-based contracting is regarded here as defined in a national regulatory document, namely the Program for Stepwise Improvement of the Compensation System in Public (Municipal) Institutions for 2012–2018,² i. e. as both an increase in teachers’ salaries and a performance-related pay system. Meanwhile, it is worth remembering that preschool teachers formally remain employed under open-ended contracts, so performance-based contracting does not suggest any other reasons for dismissing employees or terminating employment relations with them in addition to those stipulated by the labor law. Unlike in higher education, where teachers sign fixed-term contracts following a vacancy

² <http://www.iroski.ru/docs/doc-26-11-2012-2190.pdf>

Figure 1. **Average monthly salary of a preschool teacher** (1,000 rubles)



Source: Rosstat data (form ZP-Obrazovanie in 2013–2016, form 85-K in 2011–2012)

competition, the preschool education system has preserved the tradition of hiring employees under open-ended employment contracts. Thus, the notion of performance-based contracting has a metaphorical meaning in kindergartens: rather than switching to the new remuneration system, they add an incentive to salaries of teachers hired on a “permanent” basis, the size of which is contingent on employee performance.

1. The context of introducing performance-based contracting in preschool education

Analysis of the institutional transformations that preschool education has seen in the last five to seven years reveals that the system provided a favorable environment for introducing performance-based contracting.

First, it was in preschool education that the transition to performance-related pay, which had hardly been used in kindergartens before, coincided with a hefty pay rise in 2012–2013 (Fig. 1). According to the Russian Federal State Statistics Service (Rosstat) (form 85-K), the face value of labor costs in preschool institutions increased twice in five years, from 204.5 bln rubles in 2010 to 437.8 bln rubles in 2014. In comparison, the introduction of the new labor compensation system in secondary education began with 21 regions in 2007. Ten more regions—participants in integrated education modernization projects—joined the reform in 2008–2009, and the rest caught up in 2010. The pilot regions which launched the new system in 2007–2009 had to secure a teacher pay rise mostly at the cost of their internal reserves and optimization—it was only in 2012–2013 that the president signed a large-scale salary rise in secondary education. This way, the changes in salary formulae (the introduction of incentives) coincided with the pay rise in preschool education.

Second, the labor compensation reform in kindergartens came with changes in funding: the partial shift of funding to the regional

level, the launch of per capita formulae, and the expansion of the financial autonomy of educational institutions. As a result, the liability for funding preschool institutions (in particular, labor costs and procurement of textbooks, study guides, learning tools, games and toys) moved from the municipal level to the level of subjects of the Russian Federation in 2014. Relevant regional subsidies are calculated using per capita formulae. Although the redistribution of preschool education funding liabilities did not always meet sufficient funding in some regions [Khokhlova, Ruzhnikova 2014], it served as a good institutional measure to promote transparency in the identification of expenses in preschool education (due to per capita subvention formulae) and to improve competition among kindergartens.

There has been a significant increase in financial autonomy of preschool institutions recently. Kindergartens incorporated as autonomous and budgetary organizations are entitled to plan their expenditures to the extent of per capita government subsidies they are granted. The proportion of autonomous and budgetary institutions in preschool education keeps growing, as evidenced by changes in government spending on subsidies to such organizations. As the Federal Treasury reports, funding on subsidies to autonomous, budgetary and other noncommercial organizations providing preschool education services accounted for 83% of the consolidated spending on preschool education in all subjects of the Russian Federation in 2016, as compared to 81% in 2015, 71% in 2014, and 56% in 2013. The figures speak volumes about the spread of financial and economic independence and taking on responsible financial management as a leadership philosophy among preschool education institutions.

Third, the network of kindergartens was undergoing a fundamental change as performance-based contracting was introduced. Four hundred thousand new places had to be created yearly in 2013–2014 in order to meet the goal of providing 100% accessibility of preschool education for children aged 3–7. New kindergartens with brand new teams and principals were commissioned in regions. Performance-related pay policies were adopted on presenting such organizations in the education market so as to motivate staff and build a positive image.

As we can see, the institutional situation in preschool education in 2012–2016 was favorable for inculcating performance-based contracting, thanks to the massive increase in teacher pay concurrent with changes in compensation formulae (the introduction of incentives and performance assessment criteria), the expansion of financial autonomy, and a more transparent allocation of funding.

2. Reform process, emerging barriers and limitations

Problems that limited and inhibited the use of performance-related pay principles emerged in the course of reformation. First of all, inconsistency and disagreements in the conceptual framework as well as in the signals received by reform implementers, i. e. regional and municipal authorities and educational institutions, and from the reform de-

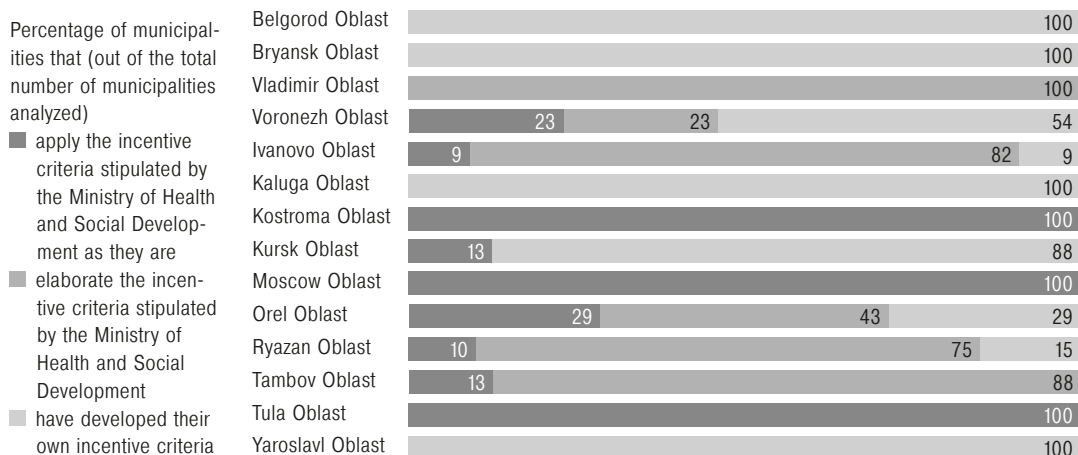
velopers, i. e. federal executive agencies, became obvious. This can clearly be seen from the recommendations on incentive improvement that are contained in two federal documents: the Program for Stepwise Improvement of the Compensation System in Public (Municipal) Institutions for 2012–2018 (hereinafter referred to as the Program) and the Unified Recommendations on Establishing Compensation Systems for Employees of National and Municipal Agencies at Federal, Regional and Local Levels for 2017³ (hereinafter referred to as the Unified Recommendations). According to the Program, “the system of incentives will be improved <...> through canceling non-performance-based compensation”; “employee performance indicators and criteria are poorly developed, and their implementation is largely formal. Many employee compensation systems have been sticking to previously applied incentives that appear to be low-effective in the present-day context (e. g. good fulfillment, labor intensity, labor quality, etc., without specifying the measurable parameters).” At the same time, the Unified Recommendations focus national and municipal organizations on applying the list of incentives approved at the federal level by the Order of the Ministry of Health and Social Development No. 818 of 12/29/2007. The list is common for all public industries and thus includes four types of incentives: (a) for labor intensity and high performance, (b) for labor quality, (c) for the length of continuous service, and (d) bonuses⁴. Therefore, the list contains incentives that the Program identifies as ineffective, so these two documents provide no clear picture of how incentives may be improved.

In the course of reforming, the responsibility for the design of performance criteria was actually imposed on educational institutions as no single approach to defining performance had been offered at the national level. Exemplary regulations on labor compensation adopted by regional and municipal authorities for subordinate organizations in a number of regions use such incentive criteria as “labor intensity” or “quality” without indicating any exact measurable indicators. As educational institutions receive highly generalized recommendations from their founders, they often use the same wordings in local remuneration-related documents. As a result, the meaning proper of the per-

³ The Unified Recommendations on Establishing Compensation Systems for Employees of National and Municipal Agencies at Federal, Regional and Local Levels for 2017 were approved by the Resolution of the Russian Trilateral Commission for the Regulation of Social and Labor Relations dated December 23, 2016 [*Rossiyskaya Gazeta*, national iss. no 7164 (296), December 29, 2016].

⁴ Order of the Ministry of Health and Social Development No. 818 of December 29, 2007 (as amended on 09/17/2010) “On Approving the Types of Incentives in Federal Budgetary, Autonomous and Government Institutions and Explicating the Methods of Calculating Incentives in Such Institutions.” Available at: <http://legalacts.ru/doc/prikaz-minzdravsotsrazvitiya-rf-ot-29122007-n-818/>

Figure 2. **Ways of establishing incentive criteria for preschool teachers in recommendations on labor compensation developed by certain municipalities in the CFD**

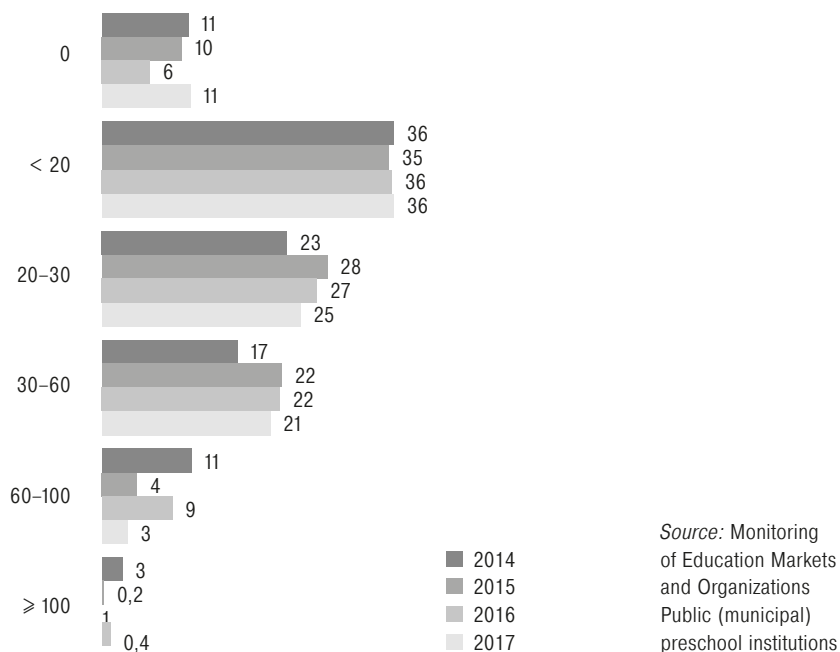


formance-based contracting philosophy becomes diluted, employees finding the stimuli and criteria of the variable component of their salaries vague and dubious.

Differences in the ways that regions determine incentive criteria for preschool teachers can be illustrated through content analysis of municipal regulatory documents that stipulate preschool teacher pay policies (Fig. 2). Content analysis was carried out in 2017 for municipalities of the Central Federal District based on Consultant Plus data. Incentive criteria were analyzed for 14 regions of Russia, in which the total of 157 municipal documents containing recommendations on preschool teacher compensation policies had been collected⁵. The analysis revealed the following types of practices: (a) municipalities use the generalized recommendations from the Order of the Ministry of Health and Social Development No. 818—“labor intensity”, “labor quality”, “length of service” and “bonuses”—without specifying the parameters to measure; (b) municipalities elaborate the generalized recommendations; (c) municipalities introduce incentive criteria of their own. As can be seen from Figure 2, the practices of establish-

⁵ Since the Consultant Plus resources did not allow collecting documents from every municipality, the subjects of the Russian Federation included in the Central Federal District were covered by content analysis to varying extents. The following number of municipal acts was analyzed: 10 in Belgorod Oblast, 10 in Bryansk Oblast, 9 in Vladimir Oblast, 13 in Voronezh Oblast, 11 in Ivanovo Oblast, 10 in Kaluga Oblast, 5 in Kostroma Oblast, 8 in Kursk Oblast, 27 in Moscow Oblast, 7 in Orel Oblast, 20 in Ryazan Oblast, 8 in Tambov Oblast, 12 in Tula Oblast, and 7 in Yaroslavl Oblast.

Figure 3. **The proportion of incentives in salaries of teachers in public (municipal) kindergartens** (% of respondents)



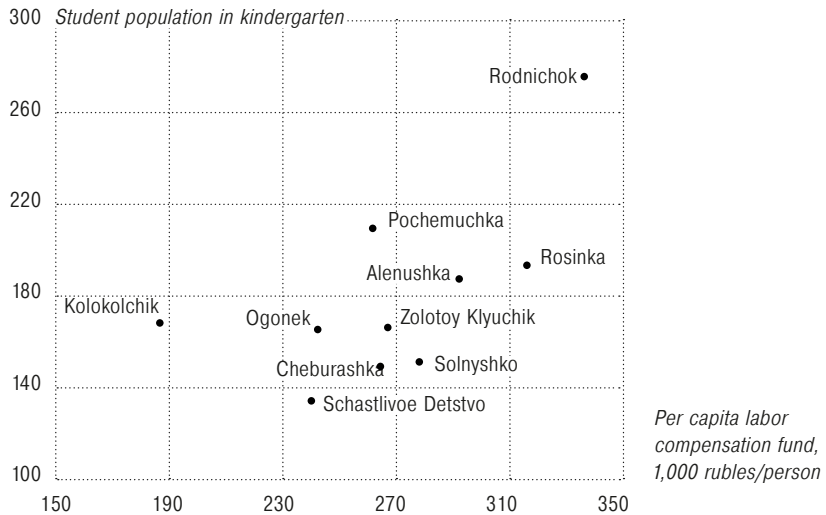
ing (detailed) internal incentive criteria and using the generalized recommendations are distributed more or less equally among institutions.

The introduction of performance-based contracting implied that performance-based incentives would strengthen the differentiation in salaries. However, the methodological recommendations did not provide a clear answer in whether to raise salaries for all teachers or only for the most effective ones. The pay rise was in fact perceived in regions and municipalities as a social measure applicable to all of the teaching staff, a kind of repayment of “debts to teachers” and compensation for low salaries in the previous years—not only as incentives for performance, which were originally designed to increase salaries for the most effective teachers as a bonus for quality, not the volume of work done.

The degree of differentiation in preschool teacher salaries comes under the cognizance of principals, so the gap could either widen or reduce across institutions. Surveys conducted as part of the Monitoring of Education Markets and Organizations show that the overall differentiation in preschool teacher salaries has changed little since performance-based contracting was introduced (Fig. 3).

Unequal opportunities in building up incentive compensation funds in large and small kindergartens became another barrier to the extensive introduction of performance-based contracting in pre-

Figure 4. **The correlation between per capita labor compensation funds and student population in kindergartens of Kaliningrad Oblast (all within the same municipality)**



Source: Based on statistical form 85-K, 2014

school education. Using the size effect, large institutions can afford to establish higher incentives than small ones. Figure 4 gives examples of correlations between the size of kindergarten (number of students) and compensation funds per teacher: the more children that are enrolled, the higher per capita funding. Obviously, incentives in larger kindergartens may play a more crucial role in motivating teachers to perform better.

Unequal compensation fund opportunities are inherent to the kindergarten network structure, as preschool institutions differ in student population. Mechanisms of competition in preschool education are limited because proximity to home remains the key criterion in choosing a kindergarten for most parents (61% in 2016, according to the Monitoring of Education Markets and Organizations). For this reason, performance-based contracting formulae must be different in large and small educational institutions.

Promotion of performance-based contracting has also been largely inhibited by poor regional funding. This factor is of special importance for preschool education, where public subsidies constitute 85–88% of all revenues. Private contributions to kindergartens consist almost entirely (95%) of fees paid by parents. Such fees have increased over the recent years, which did not affect, however, the proportion of private contributions in revenues of preschool institutions. In addition, private funds play a near-zero role in raising kindergarten teacher salaries (accounting for less than 1% of labor compensation funds).

Table 1. Subjects of the Russian Federation broken down by the ratio of preschool teacher pay to average salaries in secondary education (Number of subjects for 12 months)

	2013	2014	2015	2016
≥ 100%	25	47	37	39
95–99%	36	29	38	32
90–94%	12	4	9	8
80–89%	9	2	1	5
70–79%	0	1	0	1
60–69%	1	0	0	0

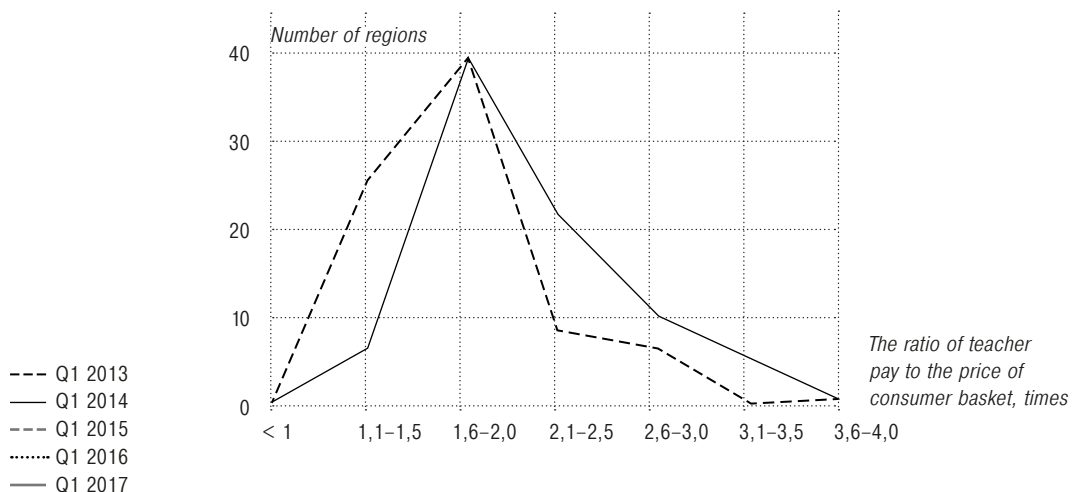
Poor regional funding and ineffective budget planning [Akindinova, Chernyavsky, Chepel 2016] are among the reasons why most regions did not succeed in bringing preschool teacher salaries to the level of average teacher pay in secondary education, as required by the presidential decree, despite all the effort (Table 1).

How kindergarten employees perceive the effects of introducing performance-based contracting in preschool education could not remain unaffected by the decrease in the purchasing power of teacher salaries in 2015–2017 after a pay rise had come into view in 2014. Figures 5 and 6 demonstrate the correlation between preschool teacher pay and the price of consumer basket, which reflects the purchasing power of the salary. The distribution curve shifted rightwards in 2014, which means that the purchasing power of preschool teacher salaries increased in more regions than in 2013 (Fig. 5). However, it shifted back to the left in 2016–2017, meaning that purchasing power dropped almost to the level of 2013 (Fig. 6).

The introduction of performance-based contracting was accompanied by other changes in preschool education as well, which affected the process and perception of the reform. Measures to improve accessibility of preschool education for children aged 3 and older entailed an increase in teacher workload: as groups were growing in size (according to the Monitoring of Education Markets and Organizations, an average kindergarten group comprised 26 children in 2017, as compared to 24 in 2014), the average number of children per teacher increased (from 8.9 in 2010 to 11.2 in 2016). No reduction of preschool education staff was observed, with the exception of administrative and medical personnel⁶. Preschool teachers often tend to associate a higher workload with a pay rise,

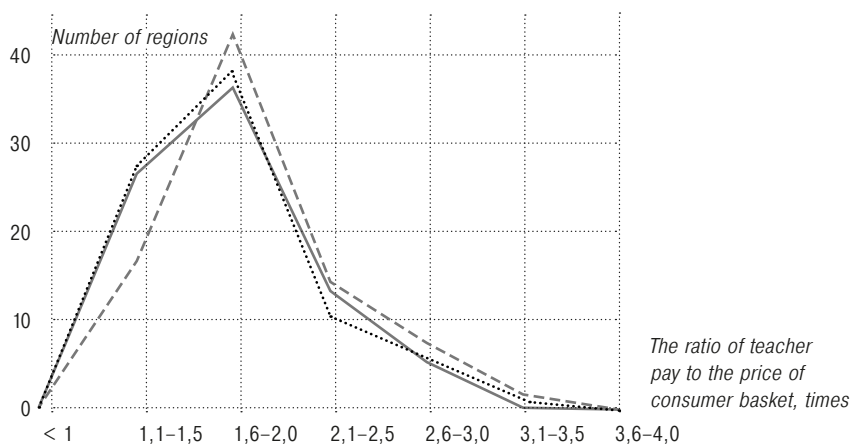
⁶ According to statistical form 85-K, the overall number of employees in pre-

Figure 5. **Subjects of the Russian Federation broken down by the ratio of preschool teacher pay to the price of consumer basket (times) in 2013–2014**



Source: Calculations based on Rosstat data

Figure 6. **Subjects of the Russian Federation broken down by the ratio of preschool teacher pay to the price of consumer basket (times) in 2015–2017**



school institutions was around 1,494,000 in 2011 and 1,520,000 in 2015, including:

- administrative staff: 79,000 in 2011 and 75,000 in 2015;
- teaching staff: 613,000 in 2011 and 644,000 in 2015 (including teachers: 475,000 in 2011 and 501,000 in 2015);
- junior teachers: 178,000 in 2011 and 184,000 in 2015;
- teaching assistants: 120,000 in 2011 and 128,000 in 2015;
- service staff: 468,000 in 2011 and 472,000 in 2015;
- medical staff: 36,000 in 2011 and 17,000 in 2015.

so such reform conditions are perceived negatively by the participants.

This way, the introduction of performance-based contracting in preschool education encountered a number of institutional and financial limitations, and the conditions turned out to be unequal in kindergartens of different sizes. These barriers could inhibit further development of the reform if it had not been for the important positive transformations in how preschool teachers assessed their work, sociological surveys found out.

3. Attractiveness of the kindergarten teacher job as seen by preschool teachers

Very little attention was paid to motivation of preschool teachers for quite some time. Meanwhile, employee motivation plays a crucial role at the stage of transition to performance-based contracts, helping implement a personnel policy designed to provide quality preschool education which is aligned with present-day requirements and challenges.

Preschool teachers were paid low salaries, 50% of the average regional salaries in most regions at best. This sector of education did not receive any strong support from the national government, and the workforce was ageing as little to no young blood was flowing into the profession. Unlike school teachers who were engaged actively in systemic reforms starting from 2006, preschool teachers never received any meaningful signals that would boost their motivation and interest for work. The situation underwent a 180-degree turn in 2012, when the president issued decrees on raising pay for preschool teachers.

According to the Monitoring of Education Markets and Organizations, only 60% of preschool teachers wanted to continue working for their institutions in 2007–2011, while 40% felt like changing their jobs. However, only 2% of the latter had viable alternative career options, while the rest intended to quit but made no effort in this direction, either being convinced that they would fail to find another job or being about to retire. It is easy to imagine the state of mind in a teaching team where 40% are going to quit but never make the move. They are hard to rely upon in solving education quality enhancement problems, while limited resources leave few opportunities for incentives.

The situation changed radically in 2013, according to the Monitoring of Education Markets and Organizations. Over 76% of preschool teachers reported that they were eager to keep their jobs. The proportion of those who had found an alternative job dropped to 0.9%, making this type of employee a rare phenomenon. The number of teachers planning to quit but making no effort decreased by half. It was only the percentage of employees about to retire that remained more or less the same. This way, the teaching staff of preschool education institutions had developed a fundamentally new motivational structure.

Surveys showed that the observed positive dynamic in the motivational structure of teaching staff was maintained after 2013, which means that the transformation was persistent. Seventy-eight percent

of public preschool teachers (81% in private kindergartens, for comparison) did not want to change their jobs in 2016.

Those changes were induced first of all by implementing the Decree of the President of the Russian Federation No. 597 of 05/07/2012, which resulted in much higher average salaries in preschool education. Kindergarten teachers were given an incentive to keep working; in addition, most employees in every economic sector were interested in keeping their jobs during the severe economic crisis.

4. Performance-based contracting as a tool of kindergarten personnel policy

Given the ambiguous institutional mechanisms of introducing performance-based contracting and the scarcity of public funding, granting educational institutions more freedom in pursuing performance-related pay policies (in establishing incentive criteria, determining the size of incentives, etc.) seems to be the only way to keep the reform going.

When analyzing the labor compensation reform, it appears feasible to shift the focus to the local level and recognize the paramount role of educational institutions in further reforming, a number of studies have found. The foreign research community has developed a separate field of study devoted to leadership in education. Studies in this area have resulted, among other things, in acknowledging the key role of educational leaders in implementing strategic projects and development programs. Researchers in this field assess how various leadership styles typical of leaders of specific educational institutions tell on the effectiveness of such organizations (for a comprehensive review of studies on leadership in education and its influence on institution effectiveness, see [Abu-Hussain 2014]). Michael Fullan believes that “all the major studies in school innovations and efficiency demonstrate that principals have a tremendous influence on whether a change will take place” [Fullan 2006]. Paul Berman and Milbrey Wallin McLaughlin have found that projects that receive active principal’s support are more likely to be implemented successfully [Berman, McLaughlin 1977].

Analysis of the introduction of performance-based contracting at the local level with kindergarten teachers—as a tool of internal personnel policy—may reveal its significant practical benefits in terms of promoting the reform and overcoming the existing barriers.

First, funding for performance-based contracts and incentive formulae can be managed better at the level of individual kindergartens. Educational leaders are on their own when it comes to evaluating the labor compensation fund opportunities and the size of incentives as well as aligning the latter with incentive criteria.

Second, incentives can be specified more precisely at the level of educational institutions, i. e. what should be classified as incentives and which ones are more effective for developing the kindergarten, improving its staff and enhancing the quality of educational and other types of services provided. In a situation where no unambiguous instructions on incentives can be obtained “from above” (from national

authorities), educational institutions together with experts from municipal and regional government agencies develop the best possible criteria for incentives to stimulate change and understanding of the reform by its participants. Michael Fullan considers this process to be a prerequisite for reform success: “A reform will never strike root until its meaning is captured by the participants” [Fullan 2006].

5. Research support for introducing performance-based contracting

Content analysis of abstracts to publications that have “performance-based contracting” in their titles was conducted using eLIBRARY.ru resources in order to find out how attitudes towards and perceptions of performance-based contracting have changed in the scientific and expert community. The sample included papers devoted to performance-based contracting in preschool, secondary and supplementary education for children as well as those analyzing the course of the reform in all public industries. Publications on performance-based contracting in tertiary education were not included in the analysis. The sample was comprised of 142 articles, each of which was assigned a conceptual category or two to capture their basic content. The following categories were used:

- Analysis of the concept of “performance-based contracting” and overview of regulatory documents. This category was assigned to articles describing the regulatory documents that define performance-based contracting and the introduction prerequisites as well as articles devoted to theoretical interpretations of “performance-based contracting” (in terms of economics, law, educational management, etc.) and related concepts (“effectiveness”, “performance”, “performance criteria”, etc.);
- Description of problems associated with introducing performance-based contracting. The category was assigned to papers identifying practical problems, challenges and barriers in transition to performance-based contracting in state-funded organizations;
- Criticism of performance-based contracting. The category was assigned to publications whose authors point to the impracticality of transition to performance-based contracting in their abstracts;
- Overview of effects of performance-based contracting. The category was assigned to articles that investigate the dynamic of statistical indicators which describe the level of salaries, budget expenditures and characteristics of organizations signaling the first effects of introducing performance-based contracting;
- Description of specific experience of introducing performance-based contracting. The category was assigned to papers summarizing the experience of individual institutions that introduced performance-based contracts;

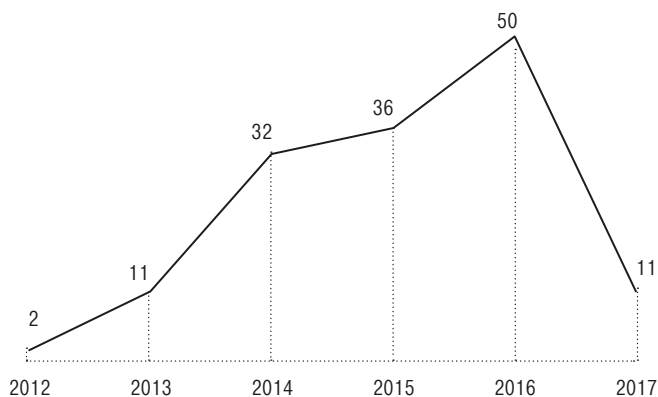
- Sociological surveys. The category was assigned to publications presenting the findings of sociological surveys designed to identify changes caused by the introduction of performance-based contracting;
- Recommendations and possible approaches. The category was assigned to articles offering recommendations, advice or specific models for introducing performance-based contracting.

The number of publications on performance-based contracting in the preschool, secondary and supplementary education of children as well as in the public sector in general has been growing gradually since 2013, when the relevant national documents were adopted: only two publications were found with the specified search criteria in 2012, as compared to 50 research papers published in 2016 (Fig. 7). The subjects have changed significantly over this period. While all the publications of 2012 were dedicated to understanding the concept of performance-based contracting and interpreting the relevant regulatory documents, the percentage of such articles was reducing during the years that followed (45% in 2013 and only 25% in 2016). The proportion of papers describing specific experiences in introducing performance-based contracting and specific models for its introduction had increased by 2016–2017 (remaining rather low though): publications in these two categories made up a total of 22–23% of all articles in the field published by 2013–2014 and 30% of all publications accumulated by 2017. Therefore, the methods of reform implementation are developed step by step at the level of the actual implementers.

Using performance-related pay principles as a tool of employment policy in kindergartens must be based on considering the specific aspects of preschool education and the job of kindergarten teacher. Yet, few Russian studies offer methods of applying knowledge on preschool teachers' values and motivation and the mechanisms of kindergarten staff enhancement in management of such institutions.

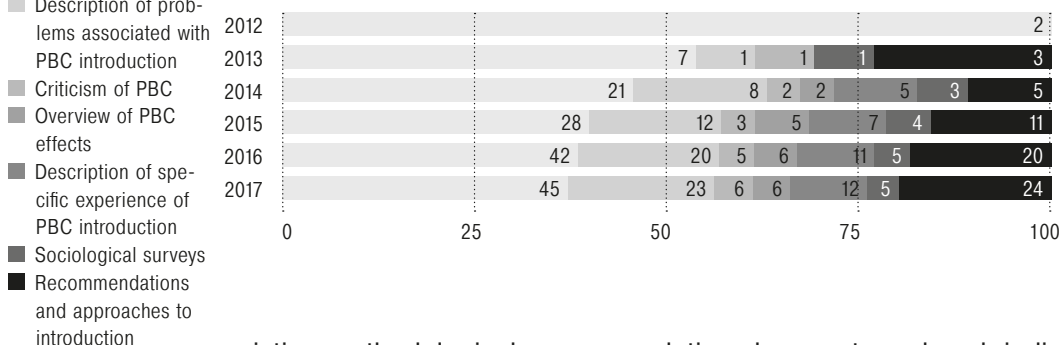
A recent study conducted in a Magnitogorsk kindergarten used standardized methods to observe teacher motivation in the context of introducing performance-based contracting. The authors found that a productive and amicable relationship with colleagues and a positive psychological climate are the most important criteria of teacher job satisfaction [Minaeva, Bagautdinova 2015]. These findings are consistent with the results of preschool teacher surveys conducted as part of the Monitoring of Education Markets and Organizations: a healthy work environment and convenient working hours were named among the main job satisfaction criteria in 2016 by over half of the respondents in both public (municipal) preschool institutions and private kindergartens [Abankina, Rodina, Filatova 2017]. All these results demonstrate the huge potential in using criteria reflecting collective job performance as indicators of teacher effectiveness. However, the

Figure 7. **The number of publications on eLIBRARY.ru that have “performance-based contracting” in their titles and study the introduction of performance-based contracting in institutions of preschool, secondary or supplementary education for children or in the public sector in general**



- Analysis of the concept of PBC and overview of regulatory documents
- Description of problems associated with PBC introduction
- Criticism of PBC
- Overview of PBC effects
- Description of specific experience of PBC introduction
- Sociological surveys
- Recommendations and approaches to introduction

Figure 8. **Articles that have “performance-based contracting” in their titles, published by the respective year, broken down by their content**



existing methodological recommendations have not used such indicators in any way so far⁷.

Based on search queries on eLIBRARY.ru

⁷ Recommendations on establishing performance indicators for employees of educational institutions are contained in the Letter of the Ministry of Education and Science of the Russian Federation No.АП-1073 “On Design of Performance Indicators” of June 20, 2013. The following areas of preschool teacher performance indicator design are offered: (a) implementation of additional projects, (b) organization of (participation in) system research, monitoring of students’ individual attainment, (c) implementation of measures to ensure communication with parents, (d) participation in the development and implementation of the main education program, (e) organization of physical education, health and sport activities, (f) working with children from socially disadvantaged families, and (g) design of education infrastructure

6. Conclusion Analysis of the institutional context of introducing performance-based contracting in preschool education in 2012–2016 and the review of problems encountered by the labor compensation reform lead to the conclusion that the leadership role should be vested in educational institutions as well as regional and municipal education authorities in order to keep the reform going. This level is where the most productive approaches to the design of employee performance criteria and types of incentives can be developed. Performance-based contracting models proposed by educational institutions, principals and employees as their end users appear to be the most viable.

It seems appropriate to support various discussions in the professional community on the accumulated experience of transition to performance-based contracting as well as cross-regional and cross-municipal meetings to allow educational leaders to share their best practices. Besides, it is necessary to carry out local experiments with different performance-based contracting models, using both individual and collective performance criteria. Such experiments should feature control and experimental groups of teachers involved in the reform, so that different models can be compared and the findings effectively analyzed, scientifically justified and presented to the professional community.

Given the emerging increase in preschool teacher pay satisfaction, it would be wise to sustain the effort to increase teacher pay after 2018, i. e. after the term specified in the presidential decree on raising salaries in the public sector expires. It is vital to continue improving spending efficiency in managing allocated subsidies with due regard for national law requirements in order to allow for a financial opportunity to increase salaries in preschool education and build up sufficient incentive compensation funds in kindergartens.

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elements. Most of these activities imply working independently to achieve individual, not collective performance.

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