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Was the Transition to the Performance-based Contract at Vocational Schools in Moscow Region Successful?

The goal of our study was to compare the working conditions, salary size, and professional outcomes of teachers at schools that switched to the competitive performance-based (so-called ‘effective’) contract in comparison with teachers at schools that did not switch to this employment framework. The study focused on teachers at 83 vocational secondary schools (VSS) that are subordinate to the Ministry of Education of Moscow Region. We conducted an opinion poll to obtain direct information from teachers. We sent questionnaires consisting of 31 questions to 253 teachers. Of the respondents, 105 were included in the experimental group.
and 148 were placed in the control group. The results of our study show that teachers who work in organizations that have switched to the effective contract model have a higher subjective assessment of their own financial situation, greater expectations regarding their future income, greater confidence about the compensation plan, and a better opinion of the prestige of the teaching profession than teachers at schools that have not adopted an effective contract. The only parameter that cannot be interpreted as an unambiguously positive result is an increase in the frequency of teacher performance assessments at schools that have adopted an effective contract. It was also possible to establish the existence of a moderate relationship between the individual nature of the employment contract and the level of trust that teachers have in their compensation plan. In addition, we established another moderate relationship between informedness and the level of trust that teachers place in their compensation plan. Thus, we can recommend implementing the performance-based contract model at all VSS in the Moscow Region, because it has a positive impact on the immaterial motivation and financial position of teachers. By conducting additional measures to increase teachers’ informedness about effective contracts, we can increase their level of trust in them.

Introduction

How employees are remunerated in any industry always generates many questions and ambiguous decisions. And if we talk about the teaching community, then the question is complicated even more by limited funding and the various ways in which funds can be redistributed. The “Program for the Gradual Improvement of the Compensation Plan at State (Municipal) Institutions between 2012 and 2018” offers the following definition: “The performance-based [so-called ‘effective’] contract is an employment contract with an employee that specifies job duties, terms of payment, indicators and criteria for evaluating employee performance for the purpose of awarding incentive bonuses depending on the outcomes of the performed work and the quality of public services that are provided, and social support measures” (Government of the Russian Federation 2012). In essence, the effective contract is just a metaphor for a detailed labor contract, which is individually tailored to the employee
and is tied to the performance indicators of each employee and the organization as a whole.

The introduction of the effective contract provides for a salary increase when specific quality indicators for public services are achieved. This contract is based upon:

— Introducing an interconnected system of industry performance indicators
— Establishing incentive payments corresponding to performance indicators, criteria, and conditions for awarding bonuses that are reflected in model provisions for institutional employee remuneration, collective bargaining agreements, and employment contracts
— Canceling ineffective incentive payments
— Use of an independent system for assessing the achievement of specific quality indicators and the amount of performed public services (work). This system includes the introduction of public ratings of employee performance in addition to the assessment of their activities in accordance with performance criteria (Ibid.).

Public policy in this area pursues three main goals:

— A general increase in the level of teacher remuneration
— More robust regulation with respect to the nature and scope of teacher activities
— Altering the principles governing how allocated funds are distributed and raising the salaries of teachers who achieve the highest performance indicators (Ministry of Labor of Russia 2013).

The report “Education and Society: Is Russia Ready to Invest in Its Future?” published by the Civic Chamber of the Russian Federation has provided the ideological basis for the effective contract. It noted: “We need to transition from the model of teachers who work on an hourly basis to the full-time model. This means that the school, the technical college, and the university should pay enough to teachers so that they are not forced to work on the side somewhere else” (Civic Chamber of the Russian Federation 2007). The salary should be enough to cover living expenses and professional development costs and to support their families. As we see, these proposals emphasize
creating conditions that allow the teacher to concentrate on the school’s main mission.

The report of the Civic Chamber of the Russian Federation noted the following:

[T]he key elements of the educational system are the teacher, the vocational trainer, and the university professor. Education reform has so far failed to address the key task of engaging large groups of teachers and involving them in the process of education modernization not as passive elements, but as the main actors, so that they do not think to themselves: “So what else are they going to come up with? What form are they going to impose on education, and how am I going to adapt to it?” We want them to really feel that they play the main role in education. To accomplish this, society must consequently establish an effective contract with teachers. It must be a contract that guarantees the interests of society in the education system. This cannot be done without taking into account the interests of teachers (Ibid).

Contract theory, which forms a part of the institutional economy, has provided the theoretical basis of the effective contract system in education.

M.V. Kurbatova and S.N. Levin (2013) write that the effective contract is based on two theoretical concepts: the effective salary and an incentive contract. The effective salary concept proposes that the employer offer a level of pay that is higher than the market rate but that still allows the employer to earn a maximum profit all other things being equal. The effective salary allows the employer to hire the most effective employees and lower the risks of opportunistic (dishonest) behavior. The incentive contract concept assumes that the labor contract between the employer and employee has been drafted in such a way that it helps reduce the employer’s risks of employee opportunism.

According to S.Yu. Roshchina (2004), a system of informal institutions arose in Russia in the 1990s to fill the vacuum left by the lack of formal institutions. All arrangements concerning issues of salary, the number of working and vacation days, additional payments, etc., between the employee and employer differed from what was
stipulated in the formal legal agreements. The employment contract is also characterized by being incomplete (i.e., it is impossible to elaborate the specific terms of employment down to their smallest details) and implicit (many issues related to the terms of employment are not spelled out in the labor contract). In addition, the labor market contains both industrial workers, for whom the standardized nature and social security of a formal labor contract are very convenient, as well as post-industrial workers, for whom the boundary between work and rest is blurred and where individual arrangements with an employer are more typical. To compensate for negative trends on the labor market caused by the specific features of its institutional structure, it has been proposed to amend certain formal provisions of labor law and transition to the institution of more flexible and individualized labor contracts (Roshchin 2004). It should be noted that the individualization of labor contracts is the fundamental principle that should ground the effective contract system. In addition, an effective contract proposes that the employment agreement detail the teacher’s job functions, performance indicators, incentive indicators, as well as the amount of financial compensation in as much detail as possible. This, in our opinion, should help ensure that labor contracts are more completely detailed to match the requirements of an effective contract.

I.V. Abankina and L.M. Filatova (2015) note that incentivization is starting to take root in the consciousness of the teacher community. However, teachers today quite loudly protest that they are not satisfied with high regional differences in salary levels and the fact that only a small portion of their salaries are guaranteed.

An article by a group of authors (Andrushchak et al. 2010) summarized the arguments that have been made in favor of the principle of “performance-based pay,” which connects incentive payments for teachers with the achievement of performance indicators in their work: this system has had a positive influence on student success, improving test results and increasing the amount of time that teachers devote to meeting individually with students. At the same time, critical arguments have been made against the “performance-based payment” principle, including the fact that it is difficult to select performance-based indicators, the importance of offering non-monetary motivation for teachers, the possibility
of fraud, and the danger of encouraging competition between teachers (Ibid.).

P.V. Derkachev and M.A. Pinskaya (2014) offer the following conclusions in their article. First: Principals and teachers are becoming more satisfied with their salaries. The gap between the actual salaries of teachers and their expected level is gradually shrinking. The contract is becoming a more effective tool for attracting teaching staff. Second: Salary growth is accompanied in a significant number of schools by an increase in teacher workload and class size. This has led to a worsening of the working conditions of teachers, thereby undermining the very ideology of the effective contract. Third: The mechanisms that are designed to solve the problems of managing the quality of classroom teaching by current teachers have either not been implemented or they have not been coordinated with the other elements of the management system.

As statistical data have shown, the enrollment in basic vocational education (BVE) and VSS programs between 2010 and 2012 remained stable. At the same time, there was a fairly significant drop in the number of all categories of teachers, including K–11 teachers and vocational trainers. It is likely that one of the main reasons for this is the following: in the course of implementing the Decree of the President of the Russian Federation dated May 7, 2012, No. 597 “On Measures for the Implementation of Public Social Policy,” the principals of vocational schools have redistributed the work load among teaching staff, which has led to burdening full-time teachers with larger teaching loads while letting go other staff members at the same time. Thus, salary increases have not yet been accompanied by a revision of the core competencies for employees. Rather, these increases in wages have been secured by increasing the workload of teachers in the VSS system (Derkachev, Dudyrev, and Knyazev 2014).

A.R. Andreyeva, S.A. Popova, and N.V. Rodina conducted a study of the specific features of how VSS institutions have transitioned to effective contract principles. The researchers identified both organizational and curriculum-related barriers that have prevented the introduction of effective contracts at this
stage in such a way as to ensure that they have a full-fledged impact on improving the performance of employees at VSS institutions. This in part may be related to the hurried and forced way in which institutions have transitioned to the effective contract, which in accordance with the “Program for the Gradual Improvement of the Compensation Plan at State (Municipal) Institutions between 2012 and 2018” had to be implemented by 2018. The transition to the effective contract system that was started in 2013 has entailed new organizational procedures, but has not in fact brought about any substantive changes: over the course of a relatively short period of time most VSS institutions concluded addenda to the employment contracts of their current teachers and offered new contracts to their recently hired employees. The mechanisms that are used by the school’s parent agency to tightly regulate how effective contracts are implemented as well as the chaotic search that the schools themselves conduct to find ways to solve this problem do not produce optimal results in real practice. Schools need methodological and regulatory support if they are to continue to implement effective contracting principles (Andreyeva, Popova, and Rodina 2014). The paper authors identified several typical salary models that have been conditioned by indicators that are specific to the institution: They include institutional income from state coffers and extrabudgetary sources of income as well as the nature of the relationship that the institution has with its parent agency and the employers of its graduates (Ibid.). For us it is important to note that VSS are diverse. Thus, for the purposes of our study we have divided all VSS institutions in the Moscow Region into different clusters.

N.A. Zaichenko (2016) unveiled a series of important risks of implementing effective contracts. The first risk is the fact that the meaning (methodology) of the effective contract is unclear: the economic and legal categories that underlie the effective contract are not fully understood. The second risk is that the share of the guaranteed part of the teacher’s salary should be at least 85 percent, because the costs of measuring teacher performance are very high. The third risk is that unethical institutions that possess actual information about the real quality of the service will take
advantage of this information asymmetry to cover up problems at their institution by not letting outsiders know that their teachers do not meet performance indicators. The fourth risk is that the bureaucratic focus on the use of performance indicators inside the school helps to ease pressure from outside (as exerted by district or city authorities) and even to secure an additional bonus for the future. The fifth risk is the placebo effect. The real effect of an effective contract is that it makes the “patient” believe in the effectiveness of the “drug.” The sixth risk is that an effective contract promotes the creation of an “institutional traffic jam” where those institutions that had not created their own payment models and did not have rules that needed to be changed with the coming of the effective contract win out. The seventh risk is that the effective contract will generate an “institutional trap”: an imitative model of quasi-effective behavior that takes shape at the current time at reactive speed will become a behavioral norm that will trap the future. Getting out of this trap will be even more costly than the implementation of an effective contract (Zaichenko 2016).

A collection published by the Higher School of Economics that analyzes the experiences of the member countries of the Organization for Economic Cooperation and Development (OECD) notes that “teaching is remunerated as expected and highly welcomed by teachers.” Salary is one of the tools that schools use to recruit university graduates to work as teachers (Zaichenko 2011). For example, in Singapore teachers pass a certification exam that determines the position that each teacher can occupy. The higher the position, the higher the salary that is paid for it. We see that the system of core competency levels that is tied to a differentiated salary scale at each level is badly correlated with the Russian system of core competency levels for teaching positions (Ministry of Health of Russia 2008), in which the levels simply correspond to received education. K.G. Mitrofanova (2012) has concluded that in such a situation teacher career growth is practically impossible.

In the United Kingdom, increasing salaries has been an important measure for eliminating staff shortages in the general education system (see Zaichenko 2011). From this we can conclude
that material incentives are important to the process of increasing the attractiveness of the teaching profession.

In Sweden, the government has established only minimal salaries for teachers. It has been left to the school principal to decide what each teacher’s individual salary should be. It is telling that more than 70 percent of teachers who are members of trade unions have voiced their approval of this system (Ibid.). Thus, we see that Sweden has adopted principles that allow labor contracts to be determined on an individual basis, and schools have been given the autonomy to set wages for their teachers. These principles are also fundamental to the Russian effective contract system.

K.M. Ushakov (2011) argues that direct incentivization only works in professions involving routine work. Teaching, by contrast, is a creative profession, and thus incentives run the risk of either accomplishing nothing or actually reducing teacher performance. Salary plays a role in ensuring workplace morale: if the salary is too low, then the teacher will feel significant disutility; if salary is set at a very high level, then it will not produce an equivalent amount of positive utility. Salary is designed to satisfy lowest order needs (food and security), but it is not related to the satisfaction of higher order needs (communication, recognition, and self-expression). Therefore, material incentives only work at a certain level.

A.G. Kasprzhak speaks about the importance of aligning the salary levels at the different levels of education (2013). It is unclear to us whether this provision has been implemented in the effective contract system. In fact, there seems to be evidence to the contrary: the existing regulations actually establish lower minimum requirements for teacher competencies at the VSS level than the instructor requirements in secondary general and higher education. This will increase the level of wage differentiation in the existing compensation plan.

A.Yu. Pimenov describes a project for generating a compensation plan for schools. In the opinion of the author, you cannot eliminate competition between teachers, so it is necessary to develop a differentiated compensation plan. However, teacher job duties are not broken down into separate components. Instead of this, a system of teacher position levels is being developed. Defined requirements are
being developed for these positions. If the teacher satisfies these requirements, then he will automatically receive a raise. The fact that the procedure for refining the teacher compensation plan and the process of defining job duties for the different professional levels are being conducted openly makes it possible to maintain a high level of mutual trust in the teaching community (Pimenov 2013).

Thus, we identified two points of view about the effective contract from our literature review. The first believes that the introduction of the effective contract will help to increase teacher motivation in the education system, and the second argues that the introduction of the effective contract will not have any positive consequences.

The literature reviews that were conducted in our present study as well as in previous papers authored by one of the present authors (Derkachev 2013, 2014; Dudyrev and Derkachev 2013) have helped us to formulate research questions and hypotheses as well as to determine the questions that were included in our teacher opinion poll.

**Study methodology**

Our main research question was to identify the outcomes of implementing the effective contract. This contract system has been introduced at vocational schools in Moscow Region by the government of Moscow Region through the regional government’s program “Education in Moscow Region” (Government of Moscow Region 2013b). Another important document that regulates the transition to the effective contract model in Moscow Region is the action plan (“road map”) “Changes to the Social Sphere that Are Aimed at Improving the Effectiveness of Education and Science in Moscow Region” (Government of Moscow Region 2013b). It proposes that the introduction of an effective contract in the system of vocational education and VSS in Moscow Region will ensure:

— The certification of teachers at vocational schools, who will then be hired under an effective contract after completing certification.
— The introduction of effective contract mechanisms with the heads of the vocational training system and vocational schools. These mechanisms will be responsible for establishing a relationship between the
quality indicators that are set for the school’s public services and the level of performance by heads of the vocational training system and vocational schools.

— Information and monitoring support of the introduction of the effective contract.

An analysis of the regulations has allowed us to conclude that it was the regional leadership that announced the introduction of an effective contract at vocational schools in Moscow Region.

At the time of the study a unique situation had materialized in Moscow Region: Some VSS have transitioned to the effective contract with their teachers, whereas others have not. Therefore, the goal of our study was to compare the working conditions, the salary size, and the performance of teachers at schools that have transitioned to the effective contract with teachers at schools that have not transitioned to such a contract.

The study focused on teachers at 83 VSS that are subordinate to the Ministry of Education of Moscow Region. Each of them exists in a special context. Therefore, in creating an experimental and a control group, we tried to include different types of VSS in the study. To do this, we collected statistical data for each of the schools from information provided by the Regional Electronic Monitoring System (REMS) for vocational education in Moscow Region.

These data provided the main basis for our decision to group schools according to the following criteria:

— Geography (we used the indicator of distance from Moscow)
— Productivity (number of teachers per student)
— Finances (size of the average salary of teachers and vocational trainers)
— Level of educational programs (share of students who study in skilled worker training programs).

The VSS were grouped using a cluster analysis. It is used to classify objects into relatively homogeneous groups across multidimensional data. In our case, we conducted a hierarchical cluster analysis (using tree-structured clustering). All indicators were standardized in order to
make them more comparable. The Euclidean distance was used as a measure of distance, and Ward’s method was used as an algorithm for combining objects into clusters.

The cluster characteristics that are provided in Table 1 demonstrate the differences between them.

At least one school that had switched to the effective contract was randomly selected inside each cluster. Teachers at five such schools were included in the experimental group. In addition, at least one school that had not switched to the effective contract was randomly selected inside each cluster. Teachers at seven such schools were included in the control group. Admittedly, the “Premium” second cluster stands out due to a number of parameters, because this cluster contains schools with more effective management, so it was excluded from further analysis to avoid possibly impacting the study’s results.

We conducted an opinion poll to obtain direct information from teachers. The opinion poll was originally developed by a group of school principals and assistant principals studying in the master’s program in Educational Administration in the Graduate School of Education, Institute of Education, National Research University Higher School of Economics under the direction of A. Yu. Pimenov and P.V. Derkachev. It was then reworked for our study. The opinion poll includes 31 questions (see the appendix). It was conducted through an electronic questionnaire made in GoogleForms as well as in paper form depending on the technological capabilities of the particular school. In both cases the researchers monitored how the questionnaire was completed by respondents.

Thanks to this, it was possible to minimize possible risks that respondents would misunderstand the questionnaire as well as risks of administrative pressure being exerted on respondents. A total of 253 teachers at VSS were polled, of which 105 were included in the experimental group and 148 were included in the control group.

To determine the statistical significance of the differences in the mean values, the Student’s t-test for independent samples was used. This method was used for quantitative variables. If the
<table>
<thead>
<tr>
<th>Cluster no.</th>
<th>Distance from Moscow, km</th>
<th>Share of students enrolled in skilled worker training programs, %</th>
<th>Number of teachers per student</th>
<th>Size of the average monthly salary of teachers and vocational trainers, thousands of RUB</th>
<th>Cluster description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>82</td>
<td>89</td>
<td>12</td>
<td>36</td>
<td>BVE: a cluster that mainly consists of basic vocational institutions that mostly prepare skilled workers (former BVE professions).</td>
</tr>
<tr>
<td>2</td>
<td>49</td>
<td>38</td>
<td>17</td>
<td>50</td>
<td>Premium: a cluster that mainly consists of institutions where resource centers with additional financing have been created.</td>
</tr>
<tr>
<td>3</td>
<td>121</td>
<td>12</td>
<td>13</td>
<td>38</td>
<td>Peripheral: a cluster made up of institutions whose main activity has traditionally long been preparing mid-tier specialists.</td>
</tr>
<tr>
<td>4</td>
<td>71</td>
<td>11</td>
<td>22</td>
<td>38</td>
<td>Mixed: a cluster that is very similar to the third one, but whose institutions have a high number of teachers per student as well as a higher proportion of distance students.</td>
</tr>
</tbody>
</table>
Student’s t-test is 0.05, then we should conclude that the differences in this parameter are statistically significant.

The Kolmogorov-Smirnov test is a nonparametric alternative to the test for independent samples. It is used when the variables are expressed on an ordinal scale. If the Kolmogorov-Smirnov test is 0.05, then we should conclude that the differences in this parameter are statistically significant.

The Mann-Whitney U test is a nonparametric statistical test that is used to estimate the differences between two samples for the level of any measured quantitative trait. This test makes it possible to identify differences in the parameter values between small samples. If the Mann-Whitney U test is 0.05, then we should conclude that the differences in this parameter are statistically significant.

As for the Wald-Wolfowitz test, the conditions for its application are the same as for the Mann-Whitney U test or for the Kolmogorov-Smirnov test. The values for both groups of respondents are aligned in a single ranked sequence. Then, the number of group attribute changes is calculated. This number is used to help find the number of continuous sequences (number of changes plus 1). If the Wald-Wolfowitz test is 0.05, then we should conclude that the differences in this parameter are statistically significant.

We used the SPSS software package to process the opinion poll results and conduct a data analysis.

Let us now consider issues related to the socio-economic status of the respondents. If there are no differences concerning socio-economic status between the experimental and control groups, then it will indicate that the sample of respondents is reliable and correct.

An analysis of the significance of the following issues did not reveal any statistically significant differences in the experimental and control groups: age, number of children in the family, qualification grade, total number of years of teaching experience, and length of tenure in the current position. Thus, we can conclude that the experimental and control groups are representative.

In addition, our study uses Spearman’s rank correlation coefficient, which measures whether a monotonic relationship exists between random variables. Spearman’s correlation is ranked, i.e., to estimate
the strength of the relationship between two variables, their corresponding ranks are used instead of their numerical values (Moosmyuller and Rebik 2009).

**Study results**

Next we will consider only those parameters for which there were statistically significant differences in the mean values between the experimental and control groups.

In looking at the data presented in Table 2, we can conclude that the respondents in the experimental group more often noted an improvement in their actual financial position. They, on average, indicated that they expect higher earnings. Teachers in the experimental group were more likely to believe that the incentive bonus portion of their wages would be distributed fairly. Teachers in the experimental group noted that they more frequently undergo teaching assessments.

Respondents in the experimental group believed that the current compensation plan helps improve the quality of teaching, and the criteria for evaluating teaching performance that have been developed at their school reflect actual teaching outcomes. Most respondents in the experimental group in contrast to the ones in the control group believe that the teaching profession is prestigious. Individual employment contracts have been concluded with most members of the experimental group.

Spearman’s rank correlation coefficients (the values of the described coefficients are in the range of 0.3–0.4, while the statistical significance of all coefficients is at the one percent level) demonstrate a moderate positive relationship between:

— The level of teacher informedness and the level of their trust in the compensation plan
— The individual nature of the employment contract and the level of trust that teachers place in the compensation plan
— The individual nature of the employment contract and the level of teacher informedness about the effective contract
Table 2

**Statistically Significant Differences between the Experimental and Control Groups**

<table>
<thead>
<tr>
<th>Question</th>
<th>Group</th>
<th>Statistical indicator</th>
<th>Value of the statistical indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Has your financial situation improved in the past year?</td>
<td>Control group</td>
<td>Mean value</td>
<td>2.22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Standard deviation</td>
<td>1.157</td>
</tr>
<tr>
<td></td>
<td>Experimental group</td>
<td>Mean value</td>
<td>2.58</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Standard deviation</td>
<td>1.013</td>
</tr>
<tr>
<td>5. Indicate the amount of your desired salary level (per month).</td>
<td>Control group</td>
<td>Mean value</td>
<td>48,875.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Standard deviation</td>
<td>13,182.956</td>
</tr>
<tr>
<td></td>
<td>Experimental group</td>
<td>Mean value</td>
<td>63,591.67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Standard deviation</td>
<td>24,167.756</td>
</tr>
<tr>
<td>9. Do you agree with the statement that “incentive” salary bonuses are</td>
<td>Control group</td>
<td>Mean value</td>
<td>2.28</td>
</tr>
<tr>
<td>distributed fairly at your school?</td>
<td></td>
<td>Standard deviation</td>
<td>1.054</td>
</tr>
<tr>
<td></td>
<td>Experimental group</td>
<td>Mean value</td>
<td>3.13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Standard deviation</td>
<td>0.791</td>
</tr>
<tr>
<td>10. Do you trust the procedure governing the distribution of salary</td>
<td>Control group</td>
<td>Mean value</td>
<td>2.50</td>
</tr>
<tr>
<td>bonuses that has been established at your school?</td>
<td></td>
<td>Standard deviation</td>
<td>1.136</td>
</tr>
<tr>
<td></td>
<td>Experimental group</td>
<td>Mean value</td>
<td>3.15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Standard deviation</td>
<td>0.820</td>
</tr>
</tbody>
</table>

(Continued)
Table 2

(Continued)

<table>
<thead>
<tr>
<th>Question</th>
<th>Group</th>
<th>Statistical indicator</th>
<th>Value of the statistical indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. How frequently is your professional performance assessed for purposes of calculating your incentive salary bonus?</td>
<td>Control group</td>
<td>Mean value</td>
<td>3.13</td>
</tr>
<tr>
<td></td>
<td>Experimental group</td>
<td>Standard deviation</td>
<td>0.793</td>
</tr>
<tr>
<td></td>
<td>Control group</td>
<td>Mean value</td>
<td>2.28</td>
</tr>
<tr>
<td></td>
<td>Experimental group</td>
<td>Standard deviation</td>
<td>0.904</td>
</tr>
<tr>
<td>13. Does the current compensation plan in place at your institution encourage you to increase the level of your professional performance?</td>
<td>Control group</td>
<td>Mean value</td>
<td>2.31</td>
</tr>
<tr>
<td></td>
<td>Experimental group</td>
<td>Standard deviation</td>
<td>0.896</td>
</tr>
<tr>
<td>18. Do the performance assessment criteria that have been developed at your school reflect your actual teaching outcomes?</td>
<td>Control group</td>
<td>Mean value</td>
<td>2.31</td>
</tr>
<tr>
<td></td>
<td>Experimental group</td>
<td>Standard deviation</td>
<td>1.091</td>
</tr>
<tr>
<td>19. Do you think that the teaching profession is prestigious?</td>
<td>Control group</td>
<td>Mean value</td>
<td>2.34</td>
</tr>
<tr>
<td></td>
<td>Experimental group</td>
<td>Standard deviation</td>
<td>1.125</td>
</tr>
<tr>
<td>21. Was the employment contract that was concluded with you individualized? Does it take into account your personal professional goals and objectives, or is the same employment contract concluded with all of the teachers at your school?</td>
<td>Control group</td>
<td>Mean value</td>
<td>2.13</td>
</tr>
<tr>
<td></td>
<td>Experimental group</td>
<td>Standard deviation</td>
<td>0.942</td>
</tr>
</tbody>
</table>
Conclusions

Despite the fairly large number of VSS in Moscow Region, we were able to collect a representative sample of them using cluster analysis. As a result, an analysis of the questionnaire data confirmed that the sample can be trusted.

By identifying the outcomes of the effective contract, we were able to establish a number of rather interesting facts.

1. It clearly follows from the results that teachers at schools that have switched to the effective contract more highly assess their financial situation, have greater expectations of their future incomes, have greater trust in the compensation plan, provide higher assessments of the prestige of the teaching profession, and believe that the compensation plan is more tightly connected to the quality of teaching than teachers at schools that have not transitioned to an effective contract. The only parameter that cannot be interpreted as an unambiguously positive result is the increased frequency of assessments that teachers at schools that have implemented the effective contract have to undergo: excessive assessment procedures can reduce the amount of time that teachers have to teach.

2. The influence of the effective contract is not obvious. However, our study did not reveal any other factors that could impact the differences that were discovered in the study groups.

3. We established the existence of a moderate relationship between the individual nature of the employment contract and the level of trust that teachers have in their compensation plan.

Thus, we recommend implementing the effective contract system at all VSS in Moscow Region, since implementing such a system has a positive impact on the immaterial motivation and financial position of teachers.

In addition, the discovery of a moderate connection between informedness and the trust that teachers place in the compensation plan has allowed us to conclude that additional measures to raise teacher awareness about effective contracts may have positive outcomes.
Acknowledgments


Bibliography

Appendix: Questionnaire for teachers at VSS

1. Has your financial situation improved in the past year?
2. Do you need to seek out additional sources of income?
3. Did you receive more free time after you concluded an effective contract?
4. Do you believe that your current salary is commensurate with the mental and physical effort that you invest into your job?
5. Indicate the amount of your desired salary level (per month).
6. Indicate the amount of your actual salary level (per month).
7. What kinds of work are you willing to perform in order to increase your salary?
8. Do you know how your salary is calculated?
9. Do you agree with the statement that “incentive” salary bonuses are distributed fairly at your school?
10. Do you trust the procedure governing the distribution of salary bonuses that has been established at your school?
11. How frequently is your professional performance assessed for purposes of calculating your incentive salary bonus?
12. Who determines your teaching outcomes for purposes of calculating your incentive salary bonus?
13. Does the current compensation plan in place at your institution encourage you to increase the level of your professional performance?
14. Do you receive any additional income outside of your teaching job at school?
15. Do you work as a tutor outside of school?
16. Has the number of young teachers increased at your school during the last year?
17. Are you planning to change jobs in the near future?
18. Do the performance assessment criteria that have been developed at your school reflect your actual teaching outcomes?
19. Do you think that the teaching profession is prestigious?
20. Assess your level of familiarity with the effective contract.
21. Was the employment contract that was concluded with you individualized?
22. Does it take into account your personal professional goals and objectives, or is the same employment contract concluded with all of the teachers at your school?
23. What is your age?
24. What is your marital status?
25. How many children are in your family?
26. Your salary accounts for what share of your family’s budget?
27. Are you planning to make a significant purchase in the next six months? If so, then for how much?
28. What is your qualification grade?
29. How many years of teaching experience do you have?
30. What is your main position?
31. How many years have you been working in your current position?
32. Select the name of your school from the list.