

Why Incentives Don't Pay: Introducing Bonus Pay in the Kyrgyz Republic and the Undoing of Reforms

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Abstract. In 2011, the Kyrgyz Republic implemented a teacher salary reform aimed at attracting new teachers to the profession and motivating teachers to improve the quality of their work. A key component of the reform was the introduction of the Stimulus Fund, an incentive pay structure. Although the Stimulus Fund comprised only 10 percent of the budget allocated to schools for staff compensation, this paper shows that it nevertheless played a significant role in the reform implementation process.

This article examines whether the Stimulus Fund was successful in motivating teachers and the extent to which it was employed as intended to incentivize and reward high-performing teachers. The

theoretical framework for this research builds on the scholarship of Larry Cuban [1998], who posits that schools and not policy makers are the key influencers of whether reforms are adopted or rejected. What this study suggests is that contrary to policy goals, the introduction of incentive pay had a deleterious impact on teacher motivation and resulted in a number of unintended consequences, including intergenerational rifts among teachers, a rejection of other components of the 2011 teacher salary reform, and a failure to make progress in overcoming the persisting challenge of attracting and retaining qualified teachers. As early as six months after the reform was announced, it began to be dismantled by schools and teachers. I argue that the Stimulus Fund was a catalyst for undermining the entire new teacher salary reform.

Key words: Kyrgyz Republic; teacher salary reform; incentive pay; policy implementation

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Data was collected for a UNICEF Kyrgyzstan project (with Gita Steiner-Khamisi as the principal investigator) that was a situation analysis of teachers in the country, including teacher salary, teaching hours, and quality of instruction. I am grateful to UNICEF for allowing me to use the data collected to contribute to scholarship on the teaching profession and to Professor Steiner-Khamisi for the opportunity to contribute to this research study.

Since the dissolution of the Soviet Union in 1991, the Kyrgyz Republic has undergone significant structural reforms within its economic sector, including rapid liberalization and privatization of the labor market. Over the course of the last 25 years, public sector jobs, including the education sector, have seen profound change owing to the shift in the economy from a centralized state-run system to a liberal and competitive market economy [Heyneman, 2004; Dudwick et. al, 2003]. The economic changes in the country lead to inequalities as people came to compete for limited employment opportunities and not rely on the government for either a work placement or a supportive safety net.

During the Soviet era, while base salaries for state workers were low, a nuanced system of rewards that included bonuses and allowances, plus non-pecuniary benefits such as access to housing and vacation packages, made public sector work, including the teaching profession, a desirable occupation [Filtzer, 1994; Bereday, Schlesinger, 1963]. The structure of the Soviet remuneration system was based on teachers taking on one or more *stavkas*, or one teaching load (comprised of between 14–18 hours of teaching). Teachers also had the flexibility to take on less than one *stavka*, or additional teaching loads, ranging from half to a full second *stavka*. This gave teachers a highly flexible work life, allowing them to earn extra money by taking on a larger teaching load, while providing many of the supplemental benefits to all teachers regardless of their teaching load.

In post-Soviet Kyrgyzstan, state allocations to the education sector decreased and the government no longer provided supplemental teacher benefits such as discounted transportation, free utilities and allocation of plots of land for housing (and farming in rural areas). Many teachers left the education sector, leaving a shortage of teachers in the profession. Those who stayed in the teaching profession came to rely on the salary for teaching hours, increasingly taking on two or in some instances even more than two *stavkas* (effectively teaching over 36 hours each week). The education sector in the Kyrgyz Republic also came to rely on teachers taking on increasingly large teaching loads due to the shortage of teachers in the profession.

Following Kyrgyzstan's low performance on the PISA (Programme for International Student Assessment) test in both 2006 and 2009, it came to light that among the key contributing factors of declining student performance outcomes was the shortage and decreasing quality of teachers [UNICEF, 2009]. International donor agencies, including UNICEF and USAID painted a 'crisis scenario' of the country's teaching workforce, including a shortage of teachers overall as well as teachers in the ranks who were not qualified to teach the subjects they were assigned to teach, teachers of retirement age who taught part time to supplement their pensions, and teachers who divided their time between two or more schools [UNICEF, 2009; Shamatov, Sainazarov 2010].

With pressure from local and international communities, in 2011, the Kyrgyz Ministry of Education and Science (MOES) introduced a teacher salary reform (hereafter, "the reform" or the "2011 reform") aimed at increasing teacher salaries and improve teaching quality. It was determined that teachers needed to be motivated to improve the quality of their teaching. As such, a new incentive component of the teacher salary was introduced, called the *Stimulus Fund*. The incentive component became one of three teacher salary components, the two others being the 'guaranteed' salary component (based on the teachers' assigned teaching hours) and the 'allowances' portion of the salary (supplements based on various criteria such as teaching at

a specialized school, working in a mountainous region, and length of tenure in the profession). Although the *Stimulus Fund* comprised only 10 percent of the budget allocated to schools for staff compensation, it nevertheless had a significant impact on their implementation process.

This paper examines whether schools in the Kyrgyz Republic use the *Stimulus Fund* as intended, to motivate and reward high-performing teachers. The paper also asks whether the *Stimulus Fund* played a role as a catalyst for teachers to begin to undo the 2011 reform that many teachers came to believe undermined the status and salary of the most experienced teachers and advantaged young teachers and new entrants to the profession [UNICEF, 2014]. The paper begins with the theoretical framework for this study followed by a brief methodological overview; the context that shaped the introduction of the reform in 2011 will subsequently be discussed, followed by a detailed overview of the *Stimulus Fund* structure in design and in practice; an analytical perspective will be offered on the impact of the *Stimulus Fund* on teacher quality and reform implementation, and concluding observations will be made on the relevance of examining reform implementation by examining the logic of how and why schools and teachers modify reforms.

**Education reform:
development and
implementation**

Countries that face teacher shortages and challenges in attaining education quality aim to attract new and qualified teachers to the profession. Education policy makers look for remedies to teacher shortages that are suitable for their country, often by 'borrowing' ideas that have been tried in other contexts, nationally or internationally [Chabbott, 2009; Steiner-Khamsi, Silova, Johnson, 2006]. However, borrowed policies that are implemented locally are not necessarily a fit within the context of the country, particularly when the ideas are based on so-called 'best practices' from other sectors or education systems in other countries [Steiner-Khamsi, 2012]. When policies are adopted based on models that do not fit local cultural norms, reforms are often met with local resistance (Ibid). When new policies are perceived to be deleterious to salary, status, or social hierarchies, the affected individuals are likely to galvanize to resist reforms and maintain the status quo [Daly et. al., 2009].

Larry Cuban [1998] writes that schools and not policy makers are the core policy implementers and key influencers in whether reforms are adopted or rejected. There is a discernable difference in the legitimization process of reforms that takes place at the policy and practitioner levels. Policy makers are apt to assess reforms on goal oriented outcomes and achievements, whereas teachers scrutinize reforms based on a code of "moral and service values inherent to teaching that differ from the technical and scientific values that policy elites possess" [Cuban, 1998. P. 459]. When there is a disparity in

the legitimization process of a reform between policy makers and practitioners, the way in which the reform is implemented at the school level may not reflect the intended goals of the policy makers. As such, we can observe that “schools change reforms as much as reforms change schools” [Cuban, 1998. P. 455], a process that will be explored in this paper to argue that in the case of the Kyrgyz Republic, teachers and schools have been key reform change agents in modifying and largely undoing the 2011 salary reform.

In theoretical terms, the logic of reform goals at the policy level must match the logic of legitimacy and implementation capacity at the school level. If new policies are judged to be incongruent within school contexts, educators are likely to mobilize to reject the reform. As this paper will show, the 2011 reform in the Kyrgyz Republic was judged by teachers to contradict social norms within schools and in the course of several years was largely undone. As early as six months after the reform was announced, it began to be dismantled by the teachers. In this paper, I will argue that the *Stimulus Fund* was the catalyst for undermining the reform.

Sources of empirical data

This paper draws on research that was conducted in the spring of 2014 by a team of researchers including myself to assess the implementation of the 2011 reform and its impact on the situation of teachers in the Kyrgyz Republic.¹ This mixed-method study includes statistical information collected on teacher salaries at 279 schools across the country. Ten schools located throughout the country were selected through a purposive sampling technique to ensure diversity of representation by location (urban, rural/mountainous), school size (under enrollment, over enrollment), language of instruction (Kyrgyz, Russian, Uzbek, multiple-language), and school status (gymnasium, regular school). Across the ten schools, interviews with 54 school administrators were conducted as well as focus groups with 148 teachers. A total of 217 teachers completed a questionnaire about their salaries before and after the reform. The organization and distribution of the *Stimulus Fund* was examined at each school. Seven of the schools shared data of the *Stimulus Fund* distribution amounts and/or the criteria used to determine *Stimulus Fund* payouts to staff.

Context shaping the 2011 teacher salary reform

Following the collapse of the Soviet Union, the Kyrgyz Republic began to undergo significant economic transformation as it transitioned from a communist to a capitalist state. The emergence of the private

¹ Data was collected for a UNICEF Kyrgyzstan project which was a situation analysis of teachers in the country, including teacher salary, teaching hours, and quality of instruction. I am grateful to UNICEF for allowing me to use the data collected to contribute to scholarship on the teaching profession.

sector affected the labor market of the country with the private sector becoming the most lucrative, and as such, the most attractive employment sector. As enterprises formerly owned and operated by the state were privatized and incorporated into private ownership, the private sector attracted into its labor force people previously employed by the state.

Since the collapse of the Soviet Union, the public sector in the Kyrgyz Republic has witnessed declines in earning potential as compared to the private sector, including significant declines within the human services sector. In 2010, the education sector in the Kyrgyz Republic reported salaries far below the average salaries in other professions [National Statistical Committee of the Kyrgyz Republic, 2014]. Teachers had among the lowest salaries of public sector employees in the country, second only to the agricultural sector (*Jubilee Statistical Yearbook: The national economy of USSR*, <http://istmat.info/node/>). Low earnings have resulted in a loss of prestige in the teaching profession and the attrition of teachers, many of whom have left to work in the private sector including private tutoring as well as trade and petty commerce [Silova, 2010; Niyozov, Shamatov, 2006]. This has subsequently left the country with enormous challenges in attracting and retaining new teachers. The vast majority of university students who complete their studies in teacher education either never enter the teaching profession or leave the classroom after a year of work [UNICEF, 2014]. Approximately just 15 percent of all students who study teaching end up in a teaching career; this includes 'budget students' who receive government scholarships for obtaining university degrees and majoring in teaching [UNICEF, 2009. P. 33]. Consequently, the quality of education in the Kyrgyz Republic has seen a precipitous decline in the last two decades. In both 2006 and in 2009, the Kyrgyz Republic ranked last in the PISA (Programme for International Student Assessment) test of student learning, raising national concerns about the declining quality of education in the country. Following the PISA results, the situation of teachers was determined to be a key contributing factor to the decline in educational outcomes [Shamatov, Sainazarov 2010]. With internal and international pressure, the Ministry of Education and Science (MOES) of the Kyrgyz Republic resolved to introduce reforms in the teaching profession to make it a more attractive profession with goals set for retaining quality teachers and attracting qualified new teachers to join the ranks.

Introducing the 2011 salary reform

MOES worked with international and local consultants and donor agencies² to revamp the teacher salary structure to make the profession more attractive. The salary reform introduced in 2011

² This included Kyrgyzstan-based Socium Consult, USAID and UNICEF.

included three core components³. First, eliminating the Soviet *stavka* salary schema and replacing it with a weekly workload structure that caps the number of teaching hours and standardizes the workloads of teachers. Second, introducing a compensation rubric based on education criteria rather than the antiquated *categories* system that functioned as a semi-automatic teacher promotion scheme. And finally, a new component, the *Stimulus Fund*, was introduced to incentivize teachers to improve the quality of their work and was intended for distribution to teachers based on their performance.

Each of these salary components was aimed at improving the quality of teachers. First, by capping the number of hours that teachers spend teaching in a given week, the quality of teaching was to be increased by unburdening teachers from excessive teaching loads. An equitable distribution of teaching hours among all teachers was also a measure to instill a uniform and equitable distribution of work hours, regardless of teachers' tenure. Second, replacing wage calculations based on a semi-automated promotion system of teacher *categories* with education credentials criteria was a move to attract more qualified teachers into the profession. Finally, the introduction of the *Stimulus Fund* was intended to motivate all the teachers to increase their work competency and continually improve the quality of their work.

Despite what were good intentions and a concerted effort to modernize the salary system and align the Kyrgyz Republic's teacher remuneration structure with that of teacher salary schemes around the world, what was evidently not accounted for by policy makers is that this reform would contradict the age-stratified norms of compensation among teachers in Kyrgyz schools. Each reform component was viewed by senior teachers (teachers with over 20 year of teaching experience or nearing retirement age) as a mechanism to decrease their salary and undermine their status and social standing within schools. Placing a ceiling on the number of teaching hours that teachers could take on was deemed as a deductive measure to decrease the teaching hours of the most experienced teachers and limit their potential earnings. Shifting the compensation structure to reflect educational qualifications rather than experience and *categories* earned during a teacher's professional life course was seen as an overt policy to reduce the wages of senior teachers. And finally, the introduction of bonus pay that encourages all teachers regardless of age and tenure to compete for extra pay was deemed as a tactic to undermine senior teachers' experience and competence. Competing for merit-based pay with beginner teachers was seen as an insult to experienced teachers

³ Ministry of Education and Science of the Kyrgyz Republic (2009) Government decree No. 18 on introduction of new salary system of employees of educational institutions; Ministry of Education and Science of the Kyrgyz Republic (2011) Education development strategy 2011–2020, Background paper. MOES: Department of Strategic and Analytical Work.

who had dedicated their professional lives to their work as teachers. Shortly after the introduction of the reform, senior teachers became the most vociferous opponents of the reform and the main proponents of reverting the salary structures back to the old system [UNICEF, 2014].

While the first two components of the new salary scheme were centralized and implemented with oversight of the MOES, the *Stimulus Fund* component, including the organization, criteria-setting, and distribution of the bonus pay was relegated to the discretion of schools. Because schools were given the authority to decide how to allocate and distribute *Stimulus Funds* among their administrative and pedagogical staff, it is this component of the salary structure that reveals the reform reactions at the school level and the dynamics within schools among key influencers as reflected in the implementation of the new reform. *Stimulus Fund* allocations also reveal the allegiances and power dynamics within schools, including among teachers, between teachers and administrators, and between the school and the policy makers. In the following section, I will show how *Stimulus Fund* criteria were determined at the school level, share several examples of how bonus pay was calculated at schools, and suggest that the introduction of bonus pay in the Kyrgyz Republic became a catalyst for undoing the 2011 teacher salary reform.⁴

The *Stimulus Fund*

Competition for bonus pay among teachers is not a new phenomenon for post-Soviet countries. During the Soviet era, teachers in the Kyrgyz Republic and throughout the republics of the Soviet Union were incentivized to support students by preparing them to participate in *Olympiads*, or academic competitions, organized at district and national levels. Those teachers whose students competed successfully in the *Olympiads* received salary premiums, which were often sizable amounts. As previously mentioned, what was different about the introduction of a formal bonus pay structure is the perception by senior teachers that it was intended to reallocate a portion of the salary formerly awarded to senior teachers in the form of *category* supplements to all teachers, regardless of their tenure or experience. Competing for merit-based pay with all other teachers was seen as an insult to experienced teachers, many of whom had volunteered time throughout their careers to mentor new teachers and improve the quality of work of all teachers—something that seniors were now expected to do on a competitive basis.⁵

⁴ For an examination of how teachers undid the other components of the reform please see [Steiner-Khamsi, Belyavina, 2016; UNICEF Kyrgyzstan, 2014].

⁵ The *Stimulus Fund* accrues 10 percent of the total salary fund allotted for school staff and is transferred to schools every three months. With some guidelines and oversight from MOES, schools decide how exactly to allocate the bonus pay funds to teachers and administrators.

Table 1. ***Stimulus Fund* criteria, as recommended by MOES**

| Criterion |
|---|
| Complexity and intensity of teaching |
| Quality of extracurricular activities |
| Preparation and organization of conferences and workshops |
| Preparation of students for academic competitions (Olympiads) |
| Authoring original content or curricular activities |
| Curriculum development and lesson preparation |
| Condition of classroom |
| Absence of administrative penalties |
| Quality maintenance of documents and school records |
| Work discipline (e. g. promptness, adherence to dress code, etc.) |

Source: MOES

Although the idea of bonus pay is itself not new, the introduction of the *Stimulus Fund* as incentive pay to motivate teachers to improve their performance was seen as contradicting the values and work life of teachers, many of whom felt that they were already working at full capacity and saw incentive pay amounting to 10 percent as patronizing rather than motivating [UNICEF, 2014].

In announcing the salary reform, MOES offered suggested model criteria for how schools could allocate the *Stimulus Fund* to motivate teachers (Table 1). However, the final criteria design was left to the discretion of schools. Bonus pay is disbursed to teachers on a quarterly basis and schools were instructed to form *Stimulus Fund Committees* comprised of teachers and administrators to set the performance criteria for the bonus pay and to oversee the process of tracking teacher performance throughout the quarter to determine the bonus pay earnings for each teacher as well as each school administrator.

The following section presents an analysis of how schools in the Kyrgyz Republic have integrated the *Stimulus Fund* into their salary structure and school environments.

Implementing the *Stimulus Fund* at the school level

Because allocation of the *Stimulus Fund* criteria and the distribution of incentive pay was relegated to the authority of the school, there is wide variation in school distribution patterns of incentive pay. While the MOES provided sample protocols for distributing the funds based on performance metrics, the Ministry did not stipulate that it would hold

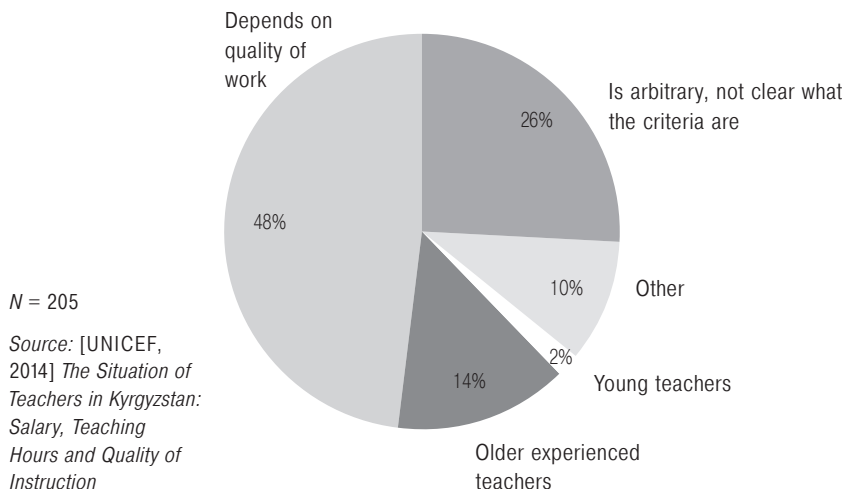
schools accountable for implementing the recommended criteria. For this reason, the ways in which the *Stimulus Fund* was implemented around the country shows a range of techniques in which schools adapted the *Stimulus Fund* to reconcile the other components of the salary reform that were challenged by the teachers. While some schools implemented the criteria exactly as recommended by the MOES, other schools used the incentive fund allocation to undermine and revert the reform by, for example, disbursing the funds to compensate senior teachers for the eliminated *categories* component of the salary or equally among teachers. This study has identified four patterns of how schools distributed the funds from the *Stimulus Fund* to the teachers of the school. They include:

- *Category* replacement distribution
- Teacher micro-management or compliance distribution
- Egalitarian distribution
- Performance-based distribution.

The *category* replacement distribution pattern suggests that some schools reserve bonus pay funds to compensate the most experienced teachers, owing to the eliminated *categories* structure from the *stavka* system, which resulted in dismayed and disgruntled senior teachers. Other schools use the incentive pay fund to ensure administrative compliance of all teachers by rewarding the most diligent teachers more than others, but only marginally so. Research on the distribution patterns of the *Stimulus Fund* in this study reveals that there is an overwhelming emphasis in schools in the Kyrgyz Republic on a distribution of incentive funds that reflect an egalitarian approach, or distribution of funds that do not amount to significant distinctions in bonus pay between teachers. This scheme of egalitarian distribution of funds represents the most explicit rejection of the *Stimulus Fund* policy as intended by MOES, whereby schools reject the pay for performance model and opt instead to distribute incentive funds equally among all teachers. Finally, some schools do distribute *Stimulus Funds* based on teacher performance. The metrics selected for assessing performance, however, do not necessarily reflect teaching quality but rather other aspects of teachers' work, most notably the fulfillment of administrative duties.

In a survey administered to over 200 teachers, approximately half responded that the *Stimulus Fund* is distributed based on the quality of teachers' work (Figure 1). However, a quarter of the respondents indicated that the criteria of the *Stimulus Fund* are either arbitrary or nontransparent at their school. Another ten percent indicated that there were other metrics based on which the *Stimulus Fund* is allocated. Interestingly, significantly more teachers reported that the *Stimulus Fund* aims to reward older and more experienced teachers than young teachers. This is contrary to the goals of the MOES, which

Figure 1. **Teacher responses on distribution of Stimulus Funds at their school**



envisioned that opportunities for bonus pay would make the teaching profession more attractive to young people and recent university graduates.

It is significant that 48 percent of the survey respondents indicated that the incentive pay is determined on the quality of teachers' work. The following section examines at the school level the criteria designated by *Stimulus Fund Committees* to assess quality of teachers' work.

Stimulus Fund criteria at the school level

In introducing the reform, the MOES provided recommendations for *Stimulus Fund* criteria that schools may consider for determining *Stimulus Fund* distribution to teachers. Table 1, presented in the introductory section on the *Stimulus Fund* enumerates these recommendations.

What is notable about these suggested criteria is that all but one of them reflect dimensions that measure tasks other than student learning. The only criteria that does reflect student learning is the preparation of students for *Olympiads*. However, even the preparation of students for academic competition concentrates the teacher's effort on one or several students rather than on improving the education outcomes of all students. The other dimensions that are recommended in the MOES criteria that may contribute indirectly to student learning are teaching preparation work, professional development, and extracurricular work of teachers. By far the most prominent criteria category of measuring teachers' quality of work includes administrative functions, such as the maintenance of

documents and record keeping and the absence of administrative penalties. While these are important professional responsibilities of teachers, they do not bear a direct impact on any improved quality of teaching and learning.

Four schools in the sample which were visited as part of this study provided information about the criteria used for determining *Stimulus Fund* allocations at their school. Each of the schools used most of the criteria as recommended by MOES, with one school using all of the criteria. Two of the schools included a number of additional criteria ranging from teacher professional development to the development of training manuals and teacher publications in newspapers and magazines. Only one school made significant additions to the *Stimulus Fund* criteria that reflect teacher contributions to student learning (See school 4 in Table 2). Criteria at this school include the use of active and interactive teaching methods, the application of new educational methodologies, and work with students who are falling behind, including collaborating with the parents of these students.

What is not clear and merits further study is how schools track and implement these criteria on a day-to-day basis. The evidence that is available, although not matched to the same schools as those that provided *Stimulus Fund* criteria, is how schools organize the *Stimulus Fund* pay structure.

Four schools in the study provided data on the incentive pay salary component paid out to teachers for one quarter. Table 3 shows the key summary data of how *Stimulus Funds* were disbursed at four schools in the Kyrgyz Republic.

Table 3 shows that the average amount of bonus pay received by teachers per quarter is similar across schools, with a difference of 405 som in the average amount received between the school with the highest and lowest average bonus payment. What is also interesting to note is that three of the four schools awarded a large number of matching bonus payouts to teachers, that is payments wherein at least two staff members received the same amount. One plausible explanation for this is that this approach allows for a more egalitarian distribution of funds than if all bonus pay allocations were individualized. Another possibility is that this type of distribution simplifies the bookkeeping processes of tracking each teacher's bonus pay accruals based on the numerous criteria schools adopt to calculate the bonus pay.

For the purpose of comparison, what follows is a comparative detailed analysis of the organization and distribution of the incentive pay structure in schools B and C (Table 3). These schools are compelling in their comparisons because they are comprised of an almost identical number of staff yet have very different numbers of matching payouts, suggesting that the organization of their bonus pay and bookkeeping practices are distinct.

Table 2. **Stimulus Fund** criteria comparison across four schools in the Kyrgyz Republic, 2013/14

| Stimulus Fund Criteria | School 1 | School 2 | School 3 | School 4 |
|--|----------|----------|----------|----------|
| Complexity and intensity of teaching | ✓ | ✓ | | ✓ |
| Quality of extracurricular activities | ✓ | ✓ | ✓ | ✓ |
| Preparation and organization of conferences and workshops | ✓ | ✓ | ✓ | ✓ |
| Preparation of students for academic competitions (Olympiads) | ✓ | ✓ | ✓ | ✓ |
| Authoring original content or curricular materials | ✓ | ✓ | ✓ | |
| Curriculum development and lesson preparation | ✓ | ✓ | ✓ | |
| Condition of classroom | ✓ | | ✓ | ✓ |
| Absence of administrative penalties | ✓ | | | |
| Quality maintenance of documents and school records | ✓ | | ✓ | ✓ |
| Work discipline (e. g. promptness, adherence to dress code, etc.) | ✓ | ✓ | ✓ | |
| Providing additional educational services | ✓ | | | |
| Teacher professional development | | ✓ | | ✓ |
| The quality of students' knowledge of subjects (assessed at the end of quarter) | | | ✓ | |
| Attitude towards work and work quality | | | ✓ | |
| Developing student exams, work practices and training guides | | | ✓ | |
| Articles published in newspapers, magazines (media) | | | ✓ | |
| Participation in competitions within district, city and at national level | | | ✓ | |
| Reports to the district, city and at national level | | | ✓ | |
| Substitute work (including planning, documentation, tidiness) | | | ✓ | |
| Portfolio (of teacher, students) | | | ✓ | |
| Merits (e. g. certificates, diplomas, awards) | | | ✓ | |
| Self-driven professional development and departmental development | | | ✓ | |
| The use of active and interactive teaching methods | | | | ✓ |
| Work with students who fall behind in coursework, including parent involvement | | | | ✓ |
| Maintaining an environment conducive to learning | | | | ✓ |
| Disciplinary and behavioral work duties | | | | ✓ |
| Use of technology in classroom | | | | ✓ |
| Organization of work in classroom | | | | ✓ |
| Fulfilling administrative duties (e. g. tracking class rosters, student health records, tracking student well being) | | | | ✓ |
| Incorporating innovative education methodologies | | | | ✓ |
| Working on class publications | | | | ✓ |

Note: Criteria noted in bold text are recommended by the Ministry of Education and Science; all others are assigned by individual schools.

Table 3. **Stimulus Fund distribution comparison across four schools in the Kyrgyz Republic, 2013/14**, (amounts as reported, in Kyrgyz som)

| | School A | School B | School C | School D |
|---|----------|----------|-------------------------------|----------|
| Highest Payout | 6,979 | 3,757 | 5,413 | 4,016 |
| Lowest Payout | 256 | 257 | 0 (200 lowest amount paid) | 156 |
| Average | 1,838 | 1,789 | 2,004 | 1,599 |
| Median | 1,328 | 1,700 | 2,375 | 1,807 |
| Total staff | 32 | 64 | 63 | 19 |
| Number of matching payouts (matching at least one other staff member) | 15 | 60 | 6 | 11 |

Calculating the Stimulus Fund

School B has organized its *Stimulus Fund* structure based on a points accumulation system. The school closely follows the MOES recommended criteria (Table 1). Each of the Stimulus Fund criteria outlined by the school corresponds to one or two points. Additionally up to ten points are allotted for teachers whose students participate and win awards in *Olympiads*. The school has allocated a numeric pay value for each point earned in the bonus system, valued at approximately 179 som. Staff members receive the total accumulated bonus payout each quarter. The minimum number of points earned by a staff member at this school in the period examined was two and the maximum was 21. As such, 60 out of 64 staff members at the school earned a bonus amount that was similar to the pay of at least one other staff member. Notably, this type of bonus system is fairly easy to calculate and the amounts are equitably distributed to teachers regardless of their work hours, years of teaching experience, education qualification, or any other criteria. However, because this system of bonus tabulation is based on awarding one point for each criteria (See Table 1), it is a categorical assessment of teacher performance, and does not allow for a gradation of performance assessment of a particular task. Instead teachers are awarded or penalized based on whether a given task or criteria was met or not. As such, this bonus structure, while transparently and equitably distributed among teachers, nevertheless appears to emphasize that the micro-management of teachers and compliance with the school's administrative functions is rewarded over student learning outcomes and the quality of the pedagogical work of teachers. This system can easily be used as a punitive measure or seen as permitting favoritism wherein some teachers benefit from the goodwill of the *Stimulus Fund Committee* while others do not.

School C appears to have a more individualized formula for calculating bonus pay for teachers and administrators. Of 63 staff

members, only six received the same bonus pay as other staff members. This school devised a different approach for calculating the *Stimulus Fund* payout than School B to arrive at the more differentiated totals. However, the final differentiated bonus payout conceals a calculation formula that is similar to that of School B. Staff are all assigned points based on the criteria of the *Stimulus Fund* as recommended by the MOES. Each month the staff are evaluated based on this criteria and accumulate points for their performance that are converted to payment amounts in som, in the same manner as at School B. Bonus pay at School C is calculated based on a total of 40 points rather than ten as in School B. Each criterion corresponds to anywhere from 1–7 points. The criteria that earn staff up to seven points are ‘quality maintenance of documents and records’ and ‘work discipline’, which correspond to a maximum of seven and six points, respectively. The lowest points allocations are for ‘incorporating innovative teaching methods’, ‘observing colleagues’ lessons’, and ‘minimal absences,’ valued at one point each. This distribution of bonus pay points suggests that this school also prioritizes teacher micro-management and compliance rather than teacher quality as pertains to student performance.

How is it that this school arrives at differentiated bonus payouts and why? Once the staff members’ bonus points for three months are tallied and converted to the monetary equivalent for each month, they are averaged. This average amount is then multiplied by the staff member’s average ‘work rate coefficient’—that is the quotient of full time work averaged over three months. (e. g. a coefficient of 0.8 or 1.1 are common). Finally, this is multiplied by a single ‘coefficient of additional wages’ determined for the entire school, and thus the same for all staff. This formula is illustrated in Table 4.

Table 4 illustrates the formula of bonus pay differentiation that takes place in School C. While it is not clear why the school opted to apply this differentiating formula to the calculation of incentive pay, there are several things that are evident in this data. First, as the ‘Bonus Pay’ columns in Table 4 illustrate, there is in fact not much individualized differentiation in calculating teacher bonus pay from month to month. It is feasible that staff members are tracked into a set monthly bonus pay that appears differentiated only at the net amount. What is also notable in this incentive pay allocation scheme is that the work effort is taken into account in the formula, thus prorating the incentive pay based on the overall work contribution of the staff member. Given that more senior teachers tend to be given more teaching hours, the *Stimulus Fund* at School C advantages experienced teachers over beginner teachers.

School C offers an example of how schools that objected to the *Stimulus Fund* component of the reform undermined the new incentive structure, both by devaluing the performance indicators that reflect pedagogical quality and by distributing this compensation component

Table 4. Sample of *Stimulus Fund* Distribution at School C, Kyrgyz Republic, 2013/14

| | Bonus Pay | | | | Coefficient of Additional Wages | Work Rate Coefficient | | | | Total Stimulus Fund Pay (in som) |
|----------------|-----------|----------|----------|---------|---------------------------------|-----------------------|----------|----------|---------|----------------------------------|
| | October | November | December | Average | | October | November | December | Average | |
| Staff Member 1 | 2,886 | 2,886 | 2,886 | 2,886 | 0.3087 | 0.8 | 0.8 | 0.8 | 0.8 | 713 |
| Staff Member 2 | 9,823 | 7,465 | 9,823 | 9,037 | 0.3087 | 1.1 | 1.1 | 1.0 | 1.1 | 2,976 |
| Staff Member 3 | 3,162 | 2,529 | 3,162 | 2,951 | 0.3087 | 0.7 | 0.7 | 0.7 | 0.7 | 638 |

based on the assigned workload, which is more rewarding of senior teachers. The intricate formula of calculating bonus payouts in fact conceals a uniform and redundant month-to-month assessment of teacher performance based on the set criteria.

Among the most notable findings in this analysis is that the intended recipients of the Stimulus Fund—new recruits to the teaching profession who were enticed to join a workforce that enables individuals to receive bonus pay for quality work—were in fact disadvantaged because schools used the *Stimulus Fund* to meet their priorities, be it to enforce work discipline, ensure the fulfillment of administrative duties of teachers, or to assuage the discontent of senior teachers who were distraught over the elimination of *categories*, the introduction of a cap on teaching hours (which was steadily lifted over the course of three years), as well as the shift to remuneration rewarding education credentials over tenure. The *Stimulus Fund*, which introduced competition among teachers but the administration of which was relegated to schools, became the catalyst and the modality for teachers and administrator to modify and revert many aspects to the 2011 teacher salary reform to the previous salary structure. The *Stimulus Fund* was the locus of control which enabled schools and educators to adapt the reform to fit their school and maintain the social hierarchies within that shape the allocation of work hours and salaries. As the analysis of four school *Stimulus Fund* criteria, four *Stimulus Fund* finance distribution schemes, and two in-depth analyses of *Stimulus Fund* formula rationales show, schools have organized their *Stimulus Fund* distribution schemes based on one of four models:

- *Category* replacement distribution
- Teacher micro-management or compliance distribution
- Egalitarian distribution
- Performance-based distribution.

Each of these reflects social dynamics, power relations, and collective visions of each school. How schools utilized the *Stimulus Fund* to change the reform also reflects the potential of teachers to be strong

advocates in shaping the future of their profession. The impact of teachers and schools on reforms is a topic that I am currently exploring further.⁶

Conclusion As countries such as the Kyrgyz Republic seek to identify solutions to local challenges that have been tried globally, the implementation of ‘best practices’ such as incentive pay are not necessarily a fit within local contexts. Reforms in remuneration policies within the public sector are especially precarious in implementation because they have a wide-spanning impact and are remarkably challenging to modify given the significant resources necessary for even small adjustments. Because salaries impact the livelihoods of people, reforms in this sphere also deeply affect many and are susceptible to scrutiny, resistance, and discontent. This is particularly so if the reform advantages—or even appears to advantage—one group at the expense of another, as was the case with the teacher salary reform of 2011 in the Kyrgyz Republic that aimed to attract young teachers into the profession and alienated senior teachers.

In this paper, I have examined the implementation of the *Stimulus Fund* and the extent to which schools in the Kyrgyz Republic use the *Stimulus Fund* to reward high-performing teachers and attract new teachers to the profession. The evidence shows that the goal of the *Stimulus Fund* to motivate teachers to improve the quality of their work does not match the values of educators who are affected by this salary structure. Senior teachers deemed the *Stimulus Fund*’s goals as incongruent with the “moral and service values inherent to [their] teaching” practice (Cuban 1998, p. 459), which includes making tremendous sacrifices to stay in the teaching profession and with incentive pay as reward for quality of work to be insulting rather than incentivizing given the context of low salaries of the teaching profession in post-Soviet Kyrgyzstan. .

Among the goals of the salary reform was to simplify the salary structure by eliminating the cumbersome *stavka* system, aligning the pay scale by education level to increase teacher qualifications, and introducing a bonus pay structure to incentivize teachers to continually improve the quality of their work and to reward the top performing teachers. The unintended consequences of this reform however are significant, and include an emerging intergenerational rift among teachers in Kyrgyz schools [UNICEF, 2014], persisting challenges in attracting and retaining qualified teachers, and a need for re-visioning teacher salary policies to meet the goals of the Ministry that are also better aligned with the values of all teachers.

⁶ My dissertation research topic focuses on teachers as reform changers and how senior teachers in the Kyrgyz Republic impact education reforms.

As the implementation of the salary reform at the school level shows, schools and teachers are the core agents of policy implementation and are key influencers in whether reforms are adopted or rejected. The standards that policy makers have of reform implementation may differ substantially from the standards of how reforms are received by institutions and individuals. At the policy level, reforms are tested against standards of fidelity to intent and effectiveness of implementation [Cuban, 1998] whereas at the school and individual levels, reforms are examined based on their values and adaptability to suit the local context (Ibid). For successful reform implementation, the logic of reforms at the policy level must match the logic at the school level. In the context of the Kyrgyz Republic, assessment of new reforms is a particularly sensitized matter given the volatility of the teaching profession and the resistance of teachers to change after two decades of transformation within the country. As the case of the Kyrgyz Republic shows, while the structure of the *stavka* system may be antiquated, the logic inherent in its reception as an equitable system of salary distribution continues to hold steadfast in the country and in the region.

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