



TEACHERS:

A REGIONAL STUDY ON RECRUITMENT,
DEVELOPMENT AND SALARIES OF TEACHERS
IN THE CEECIS REGION

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ACRONYMS

AMD	Armenian dram
BAM	Bosnian marka
CEECIS	Central and Eastern Europe and the Commonwealth of Independent States
ECCE	early childhood care and education
EFA	Education for All
FTI	Fast Track Initiative
GEL	Georgian lari
GDP	gross domestic product
IBE	International Bureau of Education (UNESCO)
ICT	information and communications technology
KGS	Kyrgyz som
MKD	Macedonian dinar
MDL	Moldovan leu
MoES	Ministry of Education and Science
NGO	non-governmental organization
NQT	newly qualified teacher
PISA	Programme of International Student Assessment
OECD	Organisation for Economic Co-operation and Development
OSI	Open Society Institute
TFYR	The former Yugoslav Republic (of Macedonia)
TIMSS	Trends in International Mathematics and Science Study
TJS	Tajik somoni
TSU	Tbilisi State University
TVET	technical and vocational education and training
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
USD	United States dollar
USSR	Union of Soviet Socialist Republics
UZS	Uzbek som

EXECUTIVE SUMMARY

The UNICEF CEECIS study on teachers is a six-country empirical study on recruitment into teaching, teacher development, and teacher salaries in Armenia, Bosnia and Herzegovina, The former Yugoslav Republic of Macedonia, Kyrgyzstan, the Republic of Moldova and Uzbekistan. The six national research teams – representing UNICEF education officers and lecturers from the region, as well as researchers from Teachers College, Columbia University, New York – collaboratively collected the data and also produced national reports. This regional report focuses predominantly on the six case studies, although it draws from additional studies on educational reform in the region and on the first national case study of teacher shortage, which was conducted in Kyrgyzstan in 2009. In this regard, the regional report presents a summary of the most important findings and includes also a few highlights from the national case studies.

THE UNICEF CEECIS STUDY ON TEACHERS

One of the main objectives of the research project was to understand why there is so much public debate in the region about the ‘crisis of the teaching staff’ (Russian: *krizis pedagogicheskogo kadra*), despite the fact that there is such a large output of pre-service teacher-education graduates, little shortage, and a highly qualified teaching workforce. The first national study, carried out by UNICEF Kyrgyzstan, uncovered practices at school level that are detrimental to the quality of education and that, at closer examination, mask the real extent of teacher shortage. In an attempt to fill vacancies and/or boost the income of the poorly paid teachers, school directors redistribute the hours from the vacant position among the teaching staff. This practice is widespread and problematic because the hours are often assigned to teachers who either have no training in that particular subject or take on these additional hours in excess of their regular teaching load. In total, schools use 10 different coping strategies to deal with teacher shortage. As a result of these school-level strategies, the national statistical offices in the region report minimal (under 5 per cent) to no teacher shortage. One of the goals of the regional study was to assemble information on the 10 indicators of latent teacher shortage and, as part of the school-based analysis, identify other factors that have a negative impact on the quality of teaching and education.

THE TEACHING WORKFORCE

The feminization of the teaching profession also applies to the CEECIS region and, in fact, is especially pronounced in the region: four out of five teachers are women. It decreases with each level of education. In ECCE, the percentage of female teachers is above 95 per cent, and drops to as little as 54.6 per cent in upper secondary school. The over-representation of women in the teacher labour force is generally associated with the lowered status and salary of teachers, as well as the option to work part-time.

A particular phenomenon of the CEECIS region is the high percentage of teachers at or above retirement age, especially in the Republic of Moldova, Uzbekistan, and Kyrgyzstan. The reasons for hiring retired teachers vary and range from hiring restrictions (Armenia, Republic of Moldova) to shortage of teachers (Kyrgyzstan).

Overall, there are very few unqualified teachers working in the region. The regional study, however, identified two large target groups of underqualified teachers that deserve greater attention: (1) correspondence students who work part-time as teachers (in the region known as ‘teachers with incomplete higher education’), and (2) teachers who teach subjects or work in minority-schools for which they have not had any training. Both groups tend to work in small, rural schools – that is, in geographical areas that are considered to be less resourceful and marginalized.

RECRUITMENT INTO TEACHING

There is a proliferation of research that emphasizes the importance of recruiting the ‘right’ school graduates for pre-service teacher education who, upon completion of their degree, will end up working as teachers. There are, in total, five indicators that measure effective recruitment into teaching: (1) admission rate, (2)

enrolment rate, (3) completion rate, (4) transition rate, and (5) retention rate of newly qualified teachers. It is noticeable that ministries of education only collect information on the enrolment and completion rates in universities, including in pre-service teacher-education programmes. The information on how many graduates from teacher training programmes actually end up working as teachers and how many of them remain on the post had to be assembled from a variety of other studies.

The UNICEF CEECIS study on teachers compared the admission requirements in the six countries. In many countries, teacher-education studies represent the degree programme that attracts masses of students, has very low admission requirements, and provides a disproportionate large number of government scholarships. Universities in the Caucasus, Central Asia, and Eastern Europe distinguish between 'budget students' (recipients of government scholarships) and 'contract students' (self-finance their studies). It is assumed that a great number of students enrol in teacher-education studies because they were turned down by other degree programmes and because funding was available. Despite the large output of teacher-education graduates, very few transition into the teaching profession. The university-work transition rate in Kyrgyzstan, for example, is only 17 per cent. That is, over four fifths of the graduates – including those who received government scholarships – prefer to be unemployed or work in another profession rather than work as a teacher. The study identified a few pilot projects or best practices in the region that attempt to (1) recruit the right kind of secondary school graduates into teaching, (2) attract newly qualified teachers into schools that are considered challenging, and (3) provide support structures and other benefits that make newly qualified teachers stay in the peripheral location.

PROFESSIONAL DEVELOPMENT OF TEACHERS

This report provides a historical sketch of in-service and pre-service teacher-education reform in the region. The previous in-service training system entitled each teacher to four to six weeks of professional development every three to five years. With a few exceptions (e.g., Uzbekistan), this comprehensive but expensive system only exists on paper or has been discontinued. Non-governmental organizations, starting with the Soros Foundation Network in the early 1990s and then others, filled the void that the suspense of the state-run system left behind. In comparison, pre-service teacher-education reform lagged behind and was only treated as a priority after external funding was channelled into higher education and secondary schooling was extended to 11 or 12 years. The innovation gap between in-service teacher-education reform and reform in other subsectors of education (including pre-service education reform) widened over the years and generated reform pressure in the areas of standard, curriculum, student assessment, and textbook development. One of the neglected areas is the reform of the current salary structure. The teaching load system (Russian: *stavka*) pays teachers by the teaching hour and compensates them additionally for grading student notebooks and other pedagogical and non-pedagogical tasks. The current salary structure – in operation in the Caucasus, Central Asia, and Eastern Europe – perpetuates the belief that teachers should be additionally compensated for everything, including for other pedagogical tasks.

Pre-service teacher education has been criticized by many for its generalist orientation and little regard for pedagogical knowledge and teaching practicum. The induction of newly qualified teachers is well-developed in Bosnia and Herzegovina and The former Yugoslav Republic of Macedonia. Experienced teachers are paired with novice teachers and mentoring is clearly regulated and also financially compensated.

The professional development of teachers, in particular in-service training, has become 'de-monopolized' and undergone a major transformation over the past 20 years. Governments are facing challenges with how to deal with changes with regard to providers, financing modalities, format, and access to in-service teacher training. This chapter presents lessons learned and a few best practices that have successfully dealt with the changed realities.

SALARIES OF TEACHERS

The salary structure in the Caucasus, Central Asia and Eastern Europe is fundamentally different from salary structures in the rest of the region and in EU countries. Even though teacher salaries constitute three

quarters or more of the recurrent expenditures in education, the financial, professional and pedagogical problems associated with the teaching load (*stavka*) system are underestimated. The remuneration of teachers does not only have repercussions for the status of the profession, but also determines how much time teachers spend for pedagogical work other than simply teaching.

The average monthly base salary for one teaching load of 18–22 hours ranges from \$20 to \$398 (all dollar figures cited are U.S. dollars) in the eight examined countries of the CEECIS region. In countries with the *stavka* system (all countries in the regional study except for Bosnia and Herzegovina and The former Yugoslav Republic of Macedonia), a distinction must be made between the average base salary and the actual monthly salary or total pay, respectively. The total pay reflects the actual number of hours taught and supplements received. In the two countries with the lowest teacher salaries, Tajikistan and Kyrgyzstan, the total pay slightly increases, but is still at a low of \$26 or \$86 per month, respectively. In the Republic of Moldova and Kyrgyzstan, the total pay of teachers is much higher than the base salary because teachers tend to take on additional teaching hours and receive substantial salary supplements. In the Republic of Moldova, the average total pay for a teacher in the middle age category with a higher education degree is 1.7 higher than the average base salary, and in Kyrgyzstan is 2.7 times higher. The contrary applies to Armenia, where most of the teachers teach less than one teaching load/*stavka* of 22 hours per week, thereby lowering the total pay, sometimes to a level below the base salary for one teaching load.

More important than the actual salary is the relative salary of a teacher as compared to the national wage average, or as compared to other professions that require the same level of qualification. This data could not be systematically secured for all six participating countries. Data has been accessed for two countries of the region (not part of the UNICEF CEECIS study on teachers): Tajikistan and Georgia. In Tajikistan, the average salary in education was 30 per cent lower than the national wage average. In Georgia, the average salary for policemen is three times higher than that of teachers. Nevertheless, the teacher salary is in many countries considered attractive despite the low salary for a variety of reasons, including secure income, pensions and social benefits, possibility to collect fees for private tutoring and other service (in some countries more than in others) and possibility to boost the income by teaching additional hours.

The low teacher salary in combination with the low statutory teaching load (18–22 hours) have turned the teaching profession into a part-time job, encouraging teachers to either take on additional hours in the school, seek additional income from parents, or take on additional job outside the school.

The regional study compared the actual teaching hours of teachers and also examined the various salary supplements, allowances, bonuses and other benefits given to teachers across the region. Across all countries with the *stavka* system, teachers are paid salary supplements for notebook checking and for serving as homeroom teachers. Salary allowances or additional benefits (e.g., plot of land, apartment, discounts on utilities) are nowadays scarce and, if given, only exist in cities and municipalities that are able to draw from sizable tax revenue. There is a great salary differential between young and old teachers that makes it difficult to attract newly qualified teachers into the profession. Last but not least, teachers in small schools (typically rural schools) are at a disadvantage with the *stavka* system because they are not in a position to take on additional teaching hours that would lift their salary.

CONCLUSIONS AND RECOMMENDATIONS

The last chapter of this report presents recommendations with regard to the following aspects that are most pressing when it comes to improving the quality of education:

- The school-level analysis of the regional study has helped to introduce a new notion of teacher qualification that matters a great deal for quality education: the notion of *underqualified teachers*. Teachers may be qualified based on their formal qualification, but nevertheless end up working at a school in a position or in subjects for which they are underqualified. Concretely, the school-level analysis revealed the need to improve the qualification of three large groups of teachers: teachers who (1) as part of the widespread and popular redistribution practice, teach subjects for which they

were not trained, (2) correspondence students who work as part-time teachers, and (3) teachers in minority schools who teach subjects in a language for which they do not have a training background.

- *Effective recruitment into teaching* requires a greater concern for admission criteria and university-work transition rates. It is indispensable that teacher-education programmes gather and disclose information on all five recruitment indicators.

- *Accelerate pre-service teacher-education reform.* As mentioned previously, pre-service teacher-education reform lags behind the innovations that were introduced in in-service teacher training.

There is a noticeable quality erosion because teachers are not prepared to teach multiple subjects (in secondary schools) or multiple grades (in rural primary school).

- *Fundamental teacher salary reform.* The salary for one teaching load (base salary) is not sufficient to make a living or financially support a household. As a result, teachers in the region have developed all kinds of compensation strategies to offset the shortcomings of the *stavka* system. They seek additional income from (1) teaching additional hours, (2) collecting fees from parents at school, and/or (3) take on additional work outside of school.



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CHAPTER 1: INTRODUCTION: UNICEF STUDY ON TEACHERS IN CEECIS

Governments in different parts of the world, including in the regions of Central and Eastern Europe (CEE) and the Commonwealth of Independent States (CIS), face the challenges of how to best recruit school graduates into teaching, develop effective teachers, and then retain them on the job. The shortage of qualified and effective teachers is a global phenomenon and has led numerous organizations, including the Organisation of Economic Co-operation and Development (OECD), UNESCO, World Bank and McKinsey¹ to emphasize the importance of attracting, developing, and retaining effective teachers.

The preoccupation with teachers needs to be viewed in the context of the current focus on education quality and learning outcomes. Education for All requires that governments pay greater attention to learning outcomes if dropout, repetition and low educational attainment are to be avoided. It is not coincidental that, with the quality focus in mind, several governments and international organizations embarked on Learning for All initiatives. UNICEF's concern, in particular, is the supply of qualified teachers for marginalized communities. Unequal access – based on gender, ethnicity, social class and location (urban/rural) – persists in the region² even though net enrolment and educational attainment have regained an impressive high level of literacy after a sudden drop during the first transition period of the 1990s.

This paper reports the results from a study conducted by the UNICEF Regional Office for CEECIS in 2010 on teacher quality in the CEECIS region, *Teachers: A regional study on recruitment, development and salaries of teachers in the CEECIS region*. The research entailed a six-country empirical study on recruitment into teaching, teacher development, and teacher salaries in Armenia, Bosnia and Herzegovina, The former Yugoslav Republic of Macedonia, Kyrgyzstan, the Republic of Moldova and Uzbekistan. The six national research teams – representing UNICEF education officers and lecturers from the region as well as researchers from Teachers College, Columbia University, New York – collaboratively collected the data and also produced national reports. This regional report focuses predominantly on the six case studies, although it draws from additional studies on educational reform in the region and on the first national case study of teacher shortage, which was conducted in Kyrgyzstan in 2009. In this regard, the regional report presents a summary of the most important findings and includes also a few highlights from the national case studies.

One of the main objectives of the research project was to understand why there is so much public debate in the region about the 'crisis of the teaching staff', despite the fact that there is such a large output of pre-service teacher-education graduates, little overall shortage, and a highly qualified teaching workforce. The first national study, carried out by UNICEF Kyrgyzstan, uncovered practices at school level that are detrimental to the quality of education and that, on closer examination, mask the real extent of teacher shortage. In an attempt to fill vacancies and/or boost the income of the poorly paid teachers, school directors redistribute the hours from the vacant position among the teaching staff. This practice is widespread and problematic because the hours are often assigned to teachers who either have no training in that particular subject, or take on these additional hours in excess of their regular teaching load. In total, schools use 10 different coping strategies to deal with teacher shortage in particular subjects. As a result of these school-level strategies, the national statistical offices in the region report minimal (under 5 per cent) to no teacher shortage. One of the goals of the regional study was to assemble information on the 10 indicators of latent teacher shortage and, as part of the school-based analysis, identify other factors that have a negative impact on the quality of teaching and education.

The six national studies applied the same research design, sampling plan, and the same data collection instruments to allow for regional comparison. Each research team added research questions and interview items that were particularly relevant in their country-specific policy context.

¹ OECD (2005). *Teachers matter: Attracting, developing, and retaining effective teachers*. Paris: OECD; World Bank, Independent Evaluation Group (IEG) (2006). *From schooling access to learning outcomes: An unfinished agenda – An evaluation of World Bank support to primary education*. Washington, D.C.: IEG; UNESCO (2005). 'Education for All: The quality imperative'. *EFA Global Monitoring Report 2005*. Paris: UNESCO; McKinsey & Co. (2007). *How the best performing school systems came out on top*. London: McKinsey & Co. *McKinsey Report*; McKinsey & Co. (2010). *Closing the talent gap: Attracting and retaining top third graduates to a career in teaching*. London: McKinsey & Co.

² UNICEF (2007). *Education for some more than others? A regional study on education in Central and Eastern Europe and the Commonwealth of Independent States (CEECIS)*. Geneva: UNICEF CEECIS.

In *sampling* the 10 schools per country, a two-step sampling procedure was applied: first, two provinces/districts were selected that, according to the official statistics, are considered average with regard to teacher shortage. In a second step, five schools from each province/district were selected that reflect a maximum variation with regard to school size, location (urban/rural), language of instruction, type of facility (state-owned, community-owned, community/state-owned), and any other criterion that accounts for diversity in the respective country.

Four *types of data* were collected: interview data at the school level; human resource information retrieved from salary tables, staff lists, etc. at the school level; policy documents; and statistical information at school, district/province, and central level.

UNICEF Kyrgyzstan participated in two studies: the Kyrgyzstan-1 study on teachers was the pilot study for the CEECIS regional study, and the Kyrgyzstan-2 study on preschool teachers applied the same research design and sampling plan, but adjusted the data collection instruments to suit preschool realities. This report focuses on the six studies that dealt with teachers in primary and secondary school.

1.1 10-PLUS-1 INDICATORS OF TEACHER SHORTAGE

There is a vast literature on factors that hamper effective teaching. Policy analysts in the CEECIS region frequently mention three reasons for low teaching quality:

1. *Inappropriate teaching environment*: The class and school setting – ranging from challenging class size to scarce school resources – make it difficult for teachers to work effectively.
2. *Inadequate qualification*: The quality of pre-service teacher education is poor and, as a result, qualified teachers are ill prepared for their work.
3. *Teacher shortage*: Schools face difficulties filling their vacancies with qualified teachers and therefore hire unqualified or underqualified teachers. In addition, qualified teachers are often asked to teach additional hours in subjects for which they have no training.

Unsurprisingly, the lack of qualified teachers is a huge concern for parents, the public, and government officials. In fact, the Russian term *krizis pedagogicheskogo kadra* (crisis of the pedagogical cadre) is frequently used in several countries of the region to refer to a situation characterized by massive teacher shortage, ineffective teaching, low teacher morale, and low teacher salary. The crisis of the teaching workforce varies considerably within a country, with schools in rural and peripheral areas typically at a disadvantage for hiring and retaining qualified teachers.

Nevertheless, the realities do not match the official statistics. Despite the crisis talk about teachers, the national statistics offices report little teacher shortage, ranging from 0.06 per cent (Uzbekistan) to 4.2 per cent (Kyrgyzstan).³ A closer examination in Kyrgyzstan reveals that 95.8 per cent of the teaching positions are indeed filled, but not necessarily by qualified teachers. With no clear solutions in sight, schools in Kyrgyzstan – but also in other countries that experience teacher shortage – have become skilful with coping, year after year, with the lack of teachers. An empirical study in schools brought to light 10 school-level strategies of coping with teacher shortage. The eleventh strategy – cancelling the lessons – is only considered if all other options failed. Curiously, this eleventh – or ‘plus-one’ – strategy is commonly viewed as indicative of teacher shortage, whereas the other 10 indicators tend to go unnoticed.

The UNICEF Kyrgyzstan study demonstrated that the 10 coping strategies at school level unintentionally mask the real extent of teacher shortage in Kyrgyzstan.⁴ The research team behind the UNICEF Kyrgyzstan

³ National Statistics Committee of the Kyrgyz Republic (2008). *Education and science in the Kyrgyz Republic: Statistical compilation*. Bishkek: National Statistics Committee; Ministry of Public Education of Uzbekistan (2010). *Regional data on teachers and their qualifications*. Tashkent: MoPE.

⁴ UNICEF Kyrgyzstan (2009). *Survival strategies of schools in the Kyrgyz Republic: A school-level analysis of teacher shortage*. Bishkek: UNICEF Kyrgyzstan.

study recommended that the Ministry of Education and Science interpret the other 10 very common strategies – such as, for example, having teachers take on additional hours in subjects for which they were never trained or having teachers take on two or more teaching loads – as indicators of teacher shortage. With its clear focus on school-level hiring and staff-management practices, the UNICEF Kyrgyzstan study pioneered a novel approach to understanding the reasons for low teaching quality. This particular approach informed the conceptual framework of the current regional study on teachers and is therefore summarized here. Table 1 presents an overview of the indicators that were identified for latent teacher shortage in the context of the Kyrgyz Republic.

The shortage of qualified teachers in Kyrgyzstan constitutes one of the biggest barriers for extending schooling from 11 to 12 years and for improving the quality of education. The 2006 PISA study mentions the shortage of qualified teachers in Kyrgyzstan explicitly and attributes its low PISA scores in science to the lack of qualified science teachers: In Kyrgyzstan, 62 per cent of all schools report vacancies in science and almost all of these schools (59 per cent countrywide) cope with this shortage by filling their vacancies with teachers who take on additional lessons in science, or by assigning unqualified teachers (that is, teachers qualified in other subjects but with no training in science) to teach science.⁵ Kyrgyzstan is a good case in point to understand the close relation between teacher quality and student outcomes: Kyrgyzstan scored last in the two most recent PISA results: In PISA 2006, it ranked 57 out of 57 countries, and in PISA 2009, it ranked 65 out of 65 participating countries. The gap in score points between students in Kyrgyzstan and Shanghai-China, the top-performing region in PISA 2009, corresponds to 242 score points – or more than six years of formal schooling.

Naturally, there is great variation in the region. In Armenia, for example, there is a surplus of teachers. In other countries of the region, the surplus is restricted to urban areas, but shortage exists in rural areas, forcing us to pay greater attention to deployment and teacher management issues. Nevertheless, the six-country UNICEF CEECIS Study on Teachers identifies several hiring practices at the school level that have a detrimental impact on quality teaching. The most problematic aspect is the redistribution of hours to teachers who do not have an educational background in the subject that they are teaching (e.g., geography teacher taking on hours in math). There are three reasons for this widespread practice:

- Fragmented school curricula make it difficult to fully employ a secondary school teacher for his/her subject only – that is, small allocation of instructional hours per subject;
- Highly specialized pre-service teacher-education curriculum – that is, teachers are only prepared to teach in one or two subjects;
- High demand for taking on additional teaching hours because of the low teacher salary.

In other words, teacher shortage is not a ubiquitous phenomenon in the CEECIS region, but concern with teacher quality is widespread. The pioneer study in Kyrgyzstan, presented at the seventh Central Asia Forum on Education in September 2009, resonated with ministries of education in other countries of the region because of its focus on teacher quality.

1.2 EFFECTIVE RECRUITMENT, QUALITY TEACHER EDUCATION, MOTIVATED TEACHERS

There is a wide range of policy responses to tackle the shortage of qualified teachers. The situation in the CEECIS region is remarkable given the ‘overproduction’ of perspective teachers in pre-service teacher-education programmes. Yet, only a few of them ever become teachers. Recruitment into teaching, however, is not the only challenge for the educational systems of the region. Other challenges arise that deal, more narrowly, with the low quality of pre-service teacher education and the low morale of teachers.

⁵ OECD (2007). *PISA 2006: Science competencies for tomorrow's world, vols. 1 and 2*. Paris: OECD. Centre for Educational Assessment and Teaching Methods (CEATM); CEATM (2008). *We study for life: The results of the international comparative study of functional literacy of 15-year-old pupils, PISA 2006*. Bishkek: CEATM; UNICEF (2009). *Learning achievement in the CEECIS region: A comparative analysis of the results from the 2006 PISA study*. Geneva: UNICEF CEECIS.

Table 1: 10+1 indicators of teacher shortage

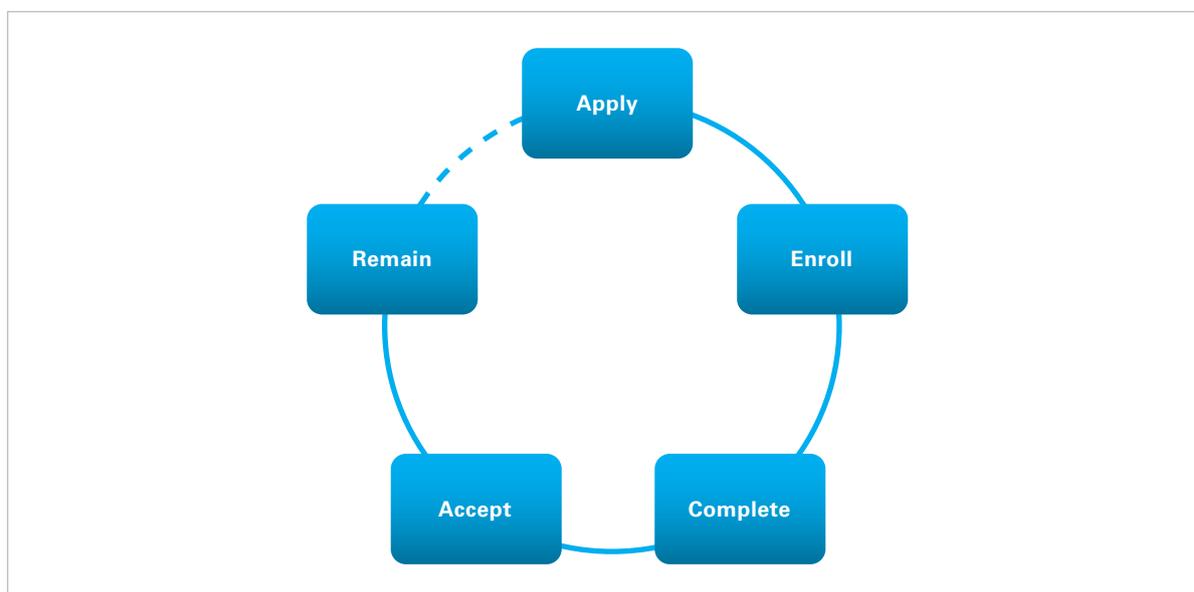
		Indicators	Measurement/Examples	
1	A. Para-Teachers (non-qualified teachers)	Number of professionals (without pedagogical training) who teach at a school	For example, electrician who teaches physics, accountant who teaches math, etc. (professionals without pedagogical training)	
2		Number of pedagogical specialists who teach subjects for which they were not trained	For example, Kyrgyz language and literature teacher (with a pedagogical specialist degree) who teaches biology or subjects other than Kyrgyz language and literature.	
3		Number of university students who teach at a school	This includes both part-time correspondence students (zaochnik) as well as full-time university students (ozchnik) who teach at the school	
4	B. Qualified Teachers who teach beyond the permissible or advised retirement age, teaching load, or class/group size.	Number of teachers at retirement age	Teachers who continue to teach or are brought back to the school to fill vacancies; the retirement age is 63 years for men, and 58 years for women.	
5		Number of teachers hired from another school	To circumvent the regulation on the maximum teaching load (24-27 hours per school), teachers are hired from another school to teach at the school. At times these teachers are also hired because the school lacks teachers with the needed qualifications.	
6		Number of teachers teaching at the same school with more than 24-27 teaching hours/week	Schools need to request permission from the District Education Department if their teachers teach more than 1.5 teaching loads. Some districts officially lifted the ceiling for the maximum amount of teaching hours from 1.5 to 2 teaching loads (stavka).	
7		Number of teachers who do not split the class into groups despite the entitlement to do so	In a few subjects (foreign language courses, IT, etc.), schools are permitted to split the class into two groups to allow for more effective learning. Schools with teacher shortage typically do not split the classes in groups to avoid an increase of teacher shortage.	
8		C. Mismatch between what is taught on paper and what is taught in practice	Number of teachers with prolonged absences or absenteeism	The absences can be seasonal or permanent and can be related to other non-school related economic activities/work (harvesting, trade, etc.) or other school-related obligations (e.g., principals or deputy-principals in charge of teaching classes, but because of other obligations neglect their teaching commitment).
9			Number of teachers who teach for a shorter duration than officially prescribed	The duration of the instructional hours is shortened regularly to save on human resources (that is lacking). The reduction in instructional time applies both to lessons (35 minutes instead of 45 minutes) as well as to the school year (shorter school year than prescribed).
10			Number of teachers that are listed in the lesson plan without holding the actual lessons	This indicator includes teachers that are kept on the payroll but who have recently or a long time ago quit the job and moved to another location.
+1		Cancelled subjects and lessons	Measures those subjects that were reported as having a vacancy (or lessons within a subject that had a vacancy) that were not taught in the past school year	

Source: UNICEF Kyrgyzstan (2009)

EFFECTIVE RECRUITMENT

Recruitment into teaching covers the entire cycle from the moment school graduates apply to pre-service teacher education, to the moment they accept a teaching position and decide to stay in the profession.

Figure 1: The cycle of recruitment into teaching



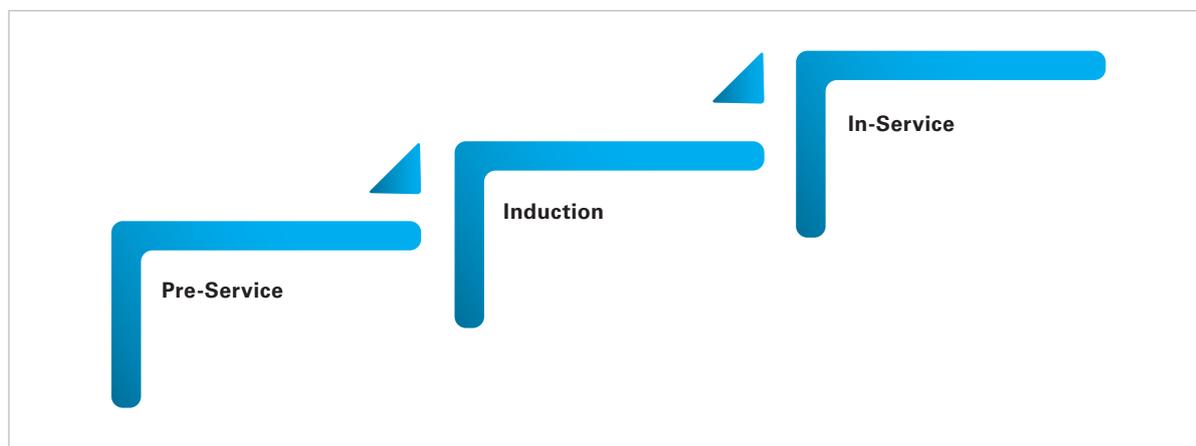
Several research questions arise when the full cycle is examined, such as, for example:

- Who applies to pre-service teacher education, who chooses to accept a position as a teacher, and who stays in the profession?
- How difficult/easy is it to be admitted to pre-service teacher education as compared to other degree programmes in higher education?
- How selective is admission into pre-service teacher education?
- How many admitted teacher-education students have 'survived' by the end of their studies?
- Of those who complete their degree, how many accept a teaching position? Of these, how many indeed show up at the assigned school?
- Finally, two to five years later, how many of the newly qualified teachers are still working in the profession?

The UNICEF CEECIS study on teachers presents the characteristics of the teaching force in the region and addresses some of the questions listed above.

QUALITY TEACHER EDUCATION

Even though this study initially did not intend to examine the curriculum of pre-service teacher education or analyse the in-service provisions for teachers, the national research teams pointed out that qualification alone should not be regarded as the only indicator of teacher quality. Someone may be a newly qualified teacher and yet not have acquired the necessary competencies to be a supportive, caring, and effective teacher. A scrutiny of what is actually taught and how the content is taught to prospective teachers as well as current teachers is very much needed. This report will therefore present a few general trends in professional development of teachers in the region. This study applies a lifelong-learning approach, in that the various stages of professional development – pre-service teacher education, induction of newly qualified teachers, in-service teacher training workshops – are considered, and various forms of in-service teacher education are examined (see Figure 2).

Figure 2: Lifelong learning of teachers

MOTIVATED TEACHERS

What attracts newly qualified teachers to a particular teaching post is not necessarily identical to what induces teachers to stay in the profession. Chapter 5, on teacher salaries, examines the working conditions in the six countries that participated in the study. In a few countries, there are large disparities in living standards and working conditions between rural and urban areas and between young and old teachers. In such cases, incentive schemes have been developed, with mixed outcomes, to lure and retain qualified teachers in rural schools. In many countries, as well as in the CEECIS region, the teaching profession – but also other jobs in the public sector – have lost their appeal, and governments are eager to understand what worked best in other countries to attract and retain qualified teachers. Without exception, each and every country in the region was, until the early 1990s, characterized by a common set of teacher-related policies from the communist era. Given their similar past, countries from the region are able to learn many lessons from each other.

It is important to bear the broader context and the past socialist legacy in mind when examining teacher retention policies in the region. First, the teacher-management system was firmly based in manpower planning. Higher education was vertically organized and each ministry was in charge of forecasting manpower needs in its sector, employing the workers, training them and periodically upgrading their competencies. The ministries of education were in charge of hiring and training teachers and deployed them to wherever there was a need for them, including to remote, rural schools. Second, jobs in the government sector were highly regarded and came with a series of special benefits and privileges. Third, the salary differentials between the various categories of government workers or civil servants were relatively small. For each profession, different kinds of salary supplements and allowances were allocated that were specific to each profession. In the teaching profession, there were salary supplements for grading student notebooks, serving as a class teacher, taking charge of laboratories, etc. Since the 1950s, the teacher salary was fragmented yet attractive, given the overall status of teachers during the socialist period.⁶

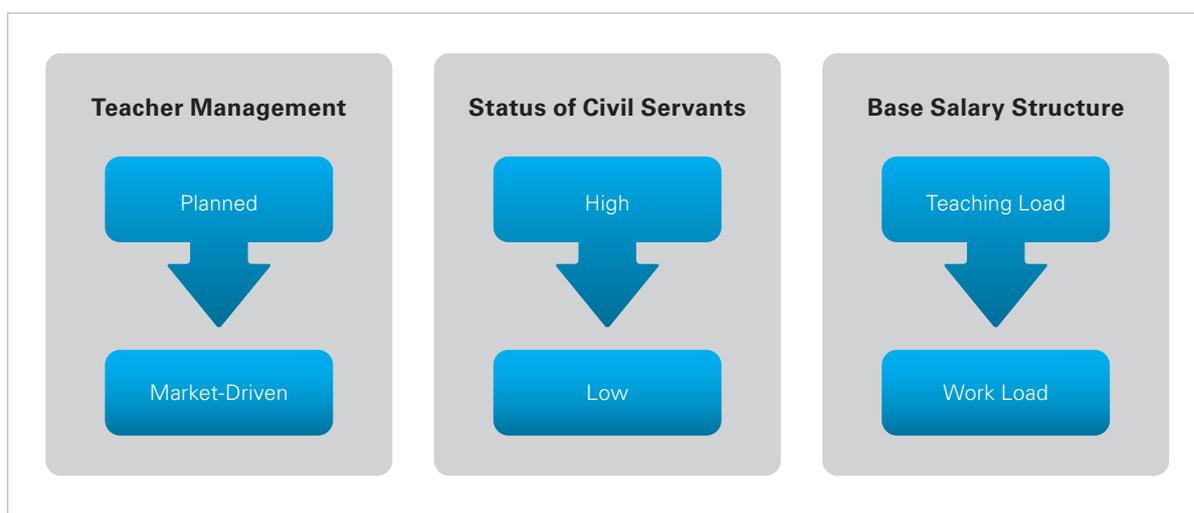
The move to a free market economy triggered a fundamental change in the ways teachers are managed, classified, and employed: in most countries of the region, schools or district education offices announce vacancies and employ teachers. Wages in the public sector are hardly competitive, and graduates from pre-service teacher-education programmes are at liberty to seek a job in the private sector unless they have signed a service agreement with the district authorities and the university. Even those who study with government scholarships do not always complete the full cycle of the two or three year service requirement. They quit the teaching posts as soon as possible for more lucrative jobs.

The teacher salary structure has been reformed in many countries in an attempt to make the teacher salary less fragmented, more transparent, and more predictable. The move to a weekly workload of 40 hours per

⁶ The dissertation of Harold Noah, from 1966, explains the salary structure during the communist period: Noah, H. J. (1966). *Financing Soviet schools*. New York: Teachers College Press.

week may be seen as an attempt to elevate the teaching profession to the status of a full-time job and increase teacher accountability. Figure 3 provides an overview of some of the contextual changes that have significantly impacted the profession. They will be discussed throughout this report.

Figure 3: Challenges of retaining effective teachers: A historical perspective



1.3 THE CEECIS REGION AND THE SIX SAMPLE CASES

Over the past decade or more, many countries in the region have incrementally modified the previous system of recruitment, development, and retention of teachers, and adapted it to the new environment. They replaced dysfunctional elements of the old system with 'best practices' selectively borrowed from other comparable educational systems. This study attempts to uncover cross-national similarities as well as country-specific features. At the same time, the study examines whether there exist subregional patterns that would clearly distinguish one subregion from another. The CEECIS region is divided in six subregions, presented in table 2:

Table 2: UNICEF's subregions in the CEECIS region

Subregion	Countries
Caucasus	Armenia , Azerbaijan, Georgia
Central Asia	Kazakhstan, Kyrgyzstan , Tajikistan, Turkmenistan, Uzbekistan
Central, Eastern and Southern Europe	Albania, Romania, Bulgaria, Bosnia and Herzegovina , Croatia, Kosovo ⁷ , Montenegro, Serbia, The Former Yugoslav Republic of Macedonia
Western Commonwealth of Independent States	Belarus, Republic of Moldova , Russian Federation, Ukraine
Other countries	Turkey

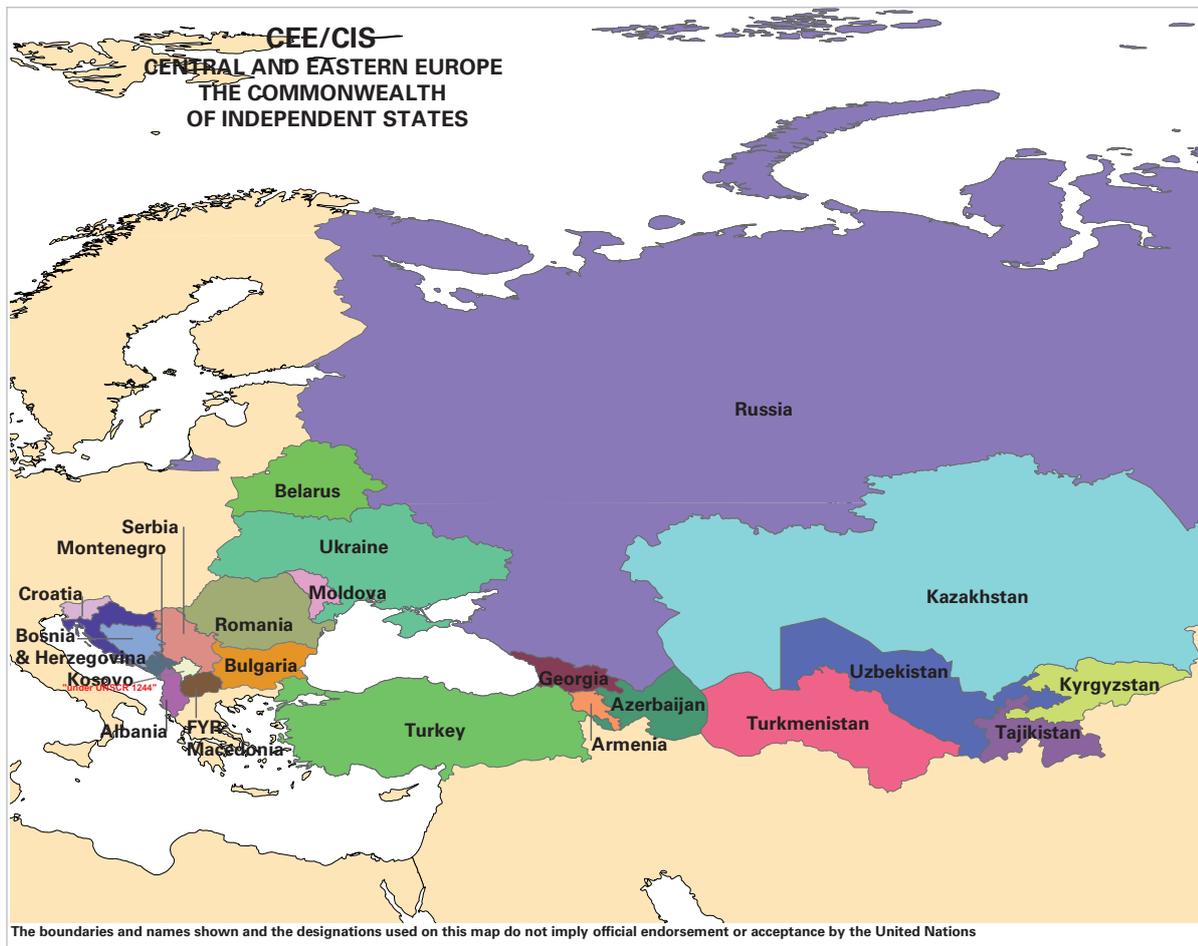
From the 22 countries of the region, six participated in the UNICEF CEECIS study on teachers. They are highlighted in bold in Table 2. Four subregions are represented in this study: Caucasus (Armenia), Central Asia (Kyrgyzstan, Uzbekistan), Central, Eastern and Southern Europe (Bosnia and Herzegovina, The former Yugoslav Republic of Macedonia) and Western Commonwealth of Independent States (Republic of Moldova). There were two UNICEF studies conducted in Kyrgyzstan: the first was on teachers in general education, and the second focused on educators and teachers in early childhood care and education

⁷ UNSCR 1244.

(ECCE). The two studies are referred to as Kyrgyzstan-1 study (general education focus) and Kyrgyzstan-2 study (ECCE focus). The studies from all other countries focus exclusively on teachers in general education – that is, primary, lower secondary and upper secondary school.

The map presents the CEECIS region. The data from the six cases/countries have been supplemented with additional information from other countries in the Caucasus, Central Asia, countries of the former Yugoslavia, and the Western Commonwealth of Independent States.

Map of CEECIS region



1.4 METHODOLOGICAL NOTES

This report draws on a desk review, as well as on empirical studies in six countries of the region. A few comments on the research design of the empirical studies may be useful to understand the focus of the investigation. As mentioned before, the strength of this particular research design is that it supplements centrally collected information on teachers with school- and district-level data on recruitment into teaching, teacher development, and retention of teachers. The studies should be considered qualitative case studies that help to understand the working conditions and challenges of teachers at the school level.

1.4.1 SAMPLING OF SELECTED SCHOOLS

Each of the empirical studies consists of school- and district-level data gathered in 10 schools of two provinces/districts of each country. A two-step sampling procedure was applied: average case selection and maximum variation sampling. First, the two provinces/districts in each country were selected, according to the official statistics, as those that are considered average with regard to teacher shortage. In a second step, five schools from each province were selected to reflect a maximum variation with regard to

school size, location (urban/rural), language of instruction, type of facility (state-owned, community-owned, community/state-owned), and any other criterion that accounts for diversity in the respective country. For example, the research team in the Republic of Moldova selected the two districts Falesti and Stefan Voda because they are ranked in the middle with regard to teacher shortage (see Table 3).

Table 3: Selection of two Provinces/Districts within Each Country: Example from the Republic of Moldova Study

Raion	Total Number of Schools in the Raion	Number of Vacant Teaching Positions	Ranking
Hincesti	54	92	1
Cimislia	34	45	5
Straseni	39	37	9
Cantemir	38	34	10
Falesti	51	30	11
Stefan Voda	30	27	13
Floresti	56	25	15
Drochia	41	21	20
Leova	34	16	22
Municipality of Balti	30	1	A
Municipality of Chisinau	168	103	B
<i>Total</i>	<i>1,513</i>	<i>996</i>	
Average		28.45	

The next table presents the school selection in Kyrgyzstan to illustrate the maximum variation case selection criterion used in the six-country study.

Table 4: Selection of 10 Schools: Example from the Kyrgyzstan-2 Study

Oblast	District name	Name of school	Location of preschool	Size of school	Languages of instruction	Owner
O-1	Osh	KG 1	Urban	461	Kyrgyz, Russian	State
O-2	Osh	KG 2	Urban	350	Russian	State
O-3	Alai	KG 3	Rural	160	Kyrgyz	Community
O-4	Nookat	KG 4	Rural	330	Kyrgyz, Russian	Community/state
O-5	Karasu	KG 5	Urban	133	Uzbek	Private
B-1	Batken	KG 6	Urban	216	Kyrgyz	Community
B-2	Leilak	KG 7	Rural	42	Kyrgyz	State
B-3	Leilak	KG 8	Rural	89	Kyrgyz	State
B-4	Batken	KG 9	Rural	115	Kyrgyz	State
B-5	Batken	KG 10	Rural	33	Kyrgyz	Community

1.4.2 TYPES OF DATA

Four types of data were collected:

1. Interview data at the school level, district level and, if applicable, at the province level. The research teams interviewed school directors, deputy directors, teachers and students, either in individual interviews or in focus group interviews.
2. Human resource information retrieved from salary tables, staff lists, and other documents gathered at the school level.
3. Policy documents: regulations and decrees were gathered in schools, districts, provinces and at the central level.
4. Statistical information gathered at each level (school, district/province, central level) as well as assembled by means of a desk review.

Interview data. The research teams interviewed all school directors and deputy directors, a minimum of five teachers as well as an average of eight students per school. As Table 5 illustrates, a total of 1,244 individuals were interviewed in 60 schools of the region for this study in 2009–2010. In addition, 10 ECCE directors and over 50 teachers and parents were interviewed in the Kyrgyzstan-2 study on preschool teachers.

Table 5: Interviews in the six-country study

	Armenia	Bosnia & Herzegovina	TFYR Macedonia	KyrgyzStan 1	Republic Of Moldova	Uzbekistan
Directors	27	10	10	17	20	19
Teachers	60	60	60	157	69	63
Students	99	100	109	208	54	102
Total	186	170	179	382	143	184

Human resource information. Next, Table 6 provides an overview of the types of human resource information retrieved at school level. The table presents the Russian terms with the English translation provided in brackets.

Table 6: Human resource information gathered at school level: Example from the Uzbekistan study

Form	Samarkand					Jizak				
	1	2	3	4	5	6	7	8	9	10
<i>Tarificazia</i> [tariff table]	X	X	X	X	X	X	X	X	X	X
<i>Vedemost</i> [monthly salary receipt sheet]	X	X	X		X			X		X
<i>Tabel</i> [daily attendance record]	X		X		X	X		X	X	X
<i>R.I.K.⁸</i> [number of pedagogical staff]	X	X	X		X	X		X	X	X
<i>O.S.H.⁹</i> [the school statistical report]	X	X	X			X			X	X
<i>Uchebni plan</i> [curriculum]			X	X		X		X	X	X
<i>Shtatnoe spisok</i> [staff list]			X		X	X	X			

Each of the types of human resource information provided imported clues for understanding the composition of the teaching workforce at the school level and their *actual* teaching hours. The tariff table (Russian: *tarificazia*), for example, is a numbered list of all the teachers currently employed, produced in September of each year and up-dated in January to reflect the distribution of teaching hours and allocation of salary supplements. In general, the tariff table records the name, sometimes date of birth, category, subject, diploma, year, teaching load, base salary, salary supplements including additional hours, professional mastery, prizes, special 'intensive' subjects, head teacher duties and notebook checking. The last column in the tariff table lists the estimated monthly salary of the teacher.

Policy documents. The policy documents ranged from a compilation of relevant laws, regulations and decrees (e.g., regulation on teacher salary) to a collection of institutional agreements, memorandums of understanding, and project descriptions that deal with teachers (e.g., project description of the World Bank Young Specialist Deposit Scheme).

Statistical information. The information on the characteristics of the teaching force, enrolments in teacher-education institutions, attrition rates, and other relevant information have been collected from government sources (National Statistics Committee, Ministry of Education, etc.) as well as from technical reports produced by national or international agencies.

Put together, these data make up the regional database with transcribed interviews, human resource information on teachers, a corpus of policy documents and statistical information. This resource is comprehensive and uniquely focused on school level, teacher-related issues and concerns.

Box 1: The knowledge network of the six-country UNICEF CEECIS study

The UNICEF CEECIS study on teachers represents a collaborative effort between three types of institutions: ministries of education, universities and UNICEF offices in six countries of the CEECIS region. The six research teams – listed in Appendix A – consisted of members from the three types of institutions.

The study included both regional and country-specific research questions and was, by design, a mixed methods study nested in contextual comparison. The six teams agreed on a set of cross-national research questions – related to teacher shortage, teacher development, teacher remuneration and work conditions – that guided all national case studies. They applied the same sampling design and used the same set of data collection instruments to allow comparison. At the same time, each national research team identified research questions that were country-specific and reflected current policy debates in the country. The combination of regional as well as country-specific research questions allowed for dense description and contextual comparison.

In addition, the study was unique in its approach to knowledge building and transfer. Over a period of six months, January to June 2010, each research team met regularly, either virtually or in person, to collaboratively develop and carry out their national case study. Half of the team members were based in the region and the other half were based at Teachers College, Columbia University in New York. The collaboration between government officials, university lecturers, graduate students, as well as UNICEF ensured not only access to data, but also enabled bridging the divide that sometimes exists between educational research, policy work, and international development. Knowledge transfer between the three communities was reflected in all aspects of the study, including in the research supervision and advisement. The study was co-directed by Gita Steiner-Khamsi, professor of comparative and international education at Teachers College, Columbia University (based in New York), and Philippe Testot-Ferry, Regional Education Advisor UNICEF CEECIS (based in Geneva), with support from Erin Weeks-Earp and Erin Tanner.

⁸ R.I.K. is the abbreviation for *O Chislivosti Sostave Pedagogigeskikh Rabotnikov*.

⁹ O.S.H. is the abbreviation for *Otchet Obsheobrazovatelnoi Shkoli*.

1.5. CHAPTER SYNOPSIS

- The three main reasons, frequently mentioned by policy analysts in the CEECIS region to explain low teaching quality are: (1) *inappropriate teaching environment*; (2) *inadequate qualification of teachers*; and (3) *teacher shortage*, when schools face difficulties filling their vacancies with qualified teachers and therefore hire unqualified or underqualified teachers.
- The Russian term *krizis pedagogicheskogo kadra* (crisis of the pedagogical cadre) is frequently used in several countries of the region to refer to a situation characterized by massive teacher shortage, ineffective teaching, low teacher morale and low teacher salary. While national statistics offices report little teacher shortage, ranging from 0.06 per cent (Uzbekistan) to 4.2 per cent (Kyrgyzstan), the realities do not match the official data. A closer examination in Kyrgyzstan reveals that 95.8 per cent of the teaching positions are indeed filled, but not necessarily by qualified teachers.
- The study identifies several hiring practices at the school level that have a detrimental impact on the quality of teaching. The most problematic aspect is the redistribution of hours to teachers who do not have an educational background in the subject that they are teaching (e.g., geography teacher taking on hours in math). There are three reasons for this widespread practice:
 - Fragmented school curriculums make it difficult to fully employ a secondary school teacher for his/her subject only, meaning that small allocation of instructional hours per subject;
 - Highly specialized pre-service teacher-education curriculum, meaning that teachers are only prepared to teach in one or two subjects;
 - High demand for taking on additional teaching hours because of the low teacher salary.
- While the situation in the CEECIS region is remarkable given the ‘overproduction’ of perspective teachers in pre-service teacher-education programmes, only a few of them ever become teachers. Challenges for the educational systems do not only concern recruitment into teaching, but also the low quality of pre-service teacher education and the low morale of teachers, due to very low wages in the public sector.
- What attracts newly qualified teachers to a teaching post is not necessarily the same as what induces teachers to stay in the profession. In the CEECIS region as well as in many countries, the teaching profession and other jobs in the public sector have lost their appeal. Governments are eager to understand what worked best in other countries to attract and retain qualified teachers.
- The first research carried out in Kyrgyzstan in the context of this study brought to light 10 school-level strategies (indicators) of coping with latent teacher shortage: (1) number of professionals (without pedagogical training) who teach at a school; (2) number of pedagogical specialists who teach subjects for which they were not trained; (3) number of university students who teach at a school; (4) number of teachers at retirement age; (5) number of teachers hired from another school; (6) number of teachers teaching at the same school with more than 24–27 teaching hours/week; (7) number of teachers who do not split the class into groups despite being entitled to do so; (8) number of teachers with prolonged absences or absenteeism; (9) number of teachers who teach for a shorter duration than officially prescribed; and (10) number of teachers who are listed in the lesson plan without holding the actual lessons. The eleventh strategy – cancelling the lessons – is only considered if all other options failed. The eleventh – or ‘plus-one’ – strategy is commonly viewed as indicative of teacher shortage, whereas the other 10 indicators tend to go unnoticed.



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CHAPTER 2: **THE TEACHING WORKFORCE**

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It is noticeable that there is much more data available on students than on teachers. Several organizations have started to address the shortcoming and have built databases that document teacher policies.¹⁰ Furthermore, governments and international organizations use different indicators for describing the main characteristics of the teaching workforce. In some countries, for example, the age of teachers is recorded, whereas in others the years in service are registered. These measurement differences create challenges for cross-national comparison. Similar compatibility problems arise for determining the ratio of female teachers as a percentage of the total teaching force; some databases distinguish by primary, lower secondary and upper secondary (UNESCO Institute of Statistics), whereas others provide only figures for basic education.

2.1. GENDER

In 2004, 59 per cent of the world's teachers in general education (primary and secondary schools) were women. In terms of global average, the proportion of female teachers at secondary level rose from 45 per cent to 52 per cent between 1991 and 2004.¹¹ As the following table illustrates, the feminization of the teaching profession in primary and secondary school is even more pronounced in the CEECIS region: Four out of five teachers in the region (82.1 per cent) are women. Table 7 provides exact figures for those countries that participated in the UNICEF CEECIS study as well as estimates for a few other countries in the region.

Table 7: The ratio of female teachers as a percentage of the teaching workforce in primary and secondary schools

		% Female teachers
Caucasus	Armenia	90.1
	Azerbaijan	93.5
	Georgia	89.0
Central Asia	Kazakhstan	92.5
	Kyrgyzstan	81.0
	Tajikistan	55.5
	Uzbekistan	69.0
Former Yugoslavia	Bosnia & Herzegovina	71.7
	Croatia	79.8
	TFYR Macedonia	61.0
Western CIS	Belarus	99.8
	Republic of Moldova	84.3
	Russian Federation	89.5
	Ukraine	88.7
	Regional Average	82.1

Sources: UNICEF CEECIS study on teachers, UIS data, EPDC compilations¹²

Note: The UIS data only lists data on primary school teachers for Belarus. For all other countries, the data is for primary and secondary school teachers. In some countries, the average has been calculated based on the percentage of female primary and female secondary teachers.

¹⁰ See, for example, the UNESCO teacher-education programme or the SABER (System Assessment and Benchmarking for Education Results) teachers' initiative of the World Bank.

¹¹ UNESCO Institute of Statistics (2006). *Teachers and educational quality: Monitoring global needs for 2015*. Montreal: UIS.

¹² We are grateful to Carina Omoeva, Education Policy and Data Center in Washington, D.C. (USAID-funded agency), for providing useful compilations of data on the composition of the teaching workforce in the region.

Furthermore, the ratio of female teachers decreases with each level of education. In ECCE, the percentage of female teachers is above 95 per cent throughout the region. The ratio drops considerably at the higher levels of education. In Bosnia and Herzegovina, the percentage of female teachers in upper secondary school shrinks to as little as 54.6 per cent.

Historically, the feminization of the profession is a trend of the late twentieth century and is generally associated with the lowered status and salary of teachers. There may be additional factors that account for the overrepresentation of women in the teacher labour force such as, for example, the option to work part-time.

In three of the subregions examined in this study (Caucasus, Central Asia and Western CIS), the teaching-load (*stavka*) system is in effect. In this study, only the countries of former Yugoslavia represent the exceptions to the rule: they pay teachers in terms of the normative weekly workload (40 hours per week) rather than by the hours actually taught. The *stavka* system is able to accommodate teachers who choose to work less or more than one normative teaching load. Depending on the country, the normative teaching load is 18–23 periods per week. There are numerous teachers who work one quarter of a *stavka* (4–6 periods/hours per week) and a few who teach more than 1.5 *stavkas* (27–35 periods/hours per week). In the countries with the *stavka* system, the distribution of teaching hours among the teaching staff of the school is stratified by both gender and age: female teachers tend to teach fewer hours than male teachers, and older teachers tend to take on more than 1 or 1.5 teaching loads, leaving young female teachers in the category of lowest paid teachers of a school. Some of these young female teachers opt to teach less than a *stavka* so that they are able to work at home.

2.2. AGE

Several governments in the region – notably Armenia, Kyrgyzstan, Republic of Moldova and Uzbekistan – issued warnings about an imminent teacher supply crisis that may arise given the large number of old teachers in the workforce.

The retirement age in the region ranges from the age of 55 to 65. It varies depending on gender and country. In all countries, teachers need to have worked for a certain time period in order to be eligible for full pension payments. The minimum requirement in the region ranges from 15 to 30 years. In addition, a few countries require *uninterrupted* years of service as a condition for full pension payments. This requirement, in particular, has caused a dilemma for teachers who temporarily suspend teaching for working in more lucrative professional fields or countries.¹³ For example, one of the drivers for the phenomenon of ‘ghost teachers’ in Tajikistan is the requirement regarding uninterrupted years of service. School principals in Tajikistan kept teachers who worked as labour migrants in Russia, Kazakhstan or other countries of the region on the payroll system to encourage them to return to teaching without having the pension later prorated.

Table 8: Retirement age and teachers at/above retirement age in select countries

	Armenia	Bosnia and Herzegovina	TFYR Macedonia	Kyrgyzstan	Republic of Moldova	Uzbekistan
Women (age)			62	58	57	55
Men (age)	65	65	64	63	62	60
Teacher at/above retirement age	2.0%	N/A	0.0%	5.0%	18.8%	7.1%

As Table 8 demonstrates, it is common to hire teachers above the retirement age in three of the six participating countries (Kyrgyzstan, Republic of Moldova, Uzbekistan). At the opposite age spectrum are

¹³ See Steiner-Khamsi, Gita (2007). *The stavka system in Tajikistan: Background, challenges and recommendations for teacher salary reform*. Dushanbe: Education Modernization Project.

correspondence students, listed in official statistics as 'teachers with incomplete higher education', who work as part-time teachers. These two phenomena – a large proportion of retired teachers and significant percentage of teachers with incomplete higher education, should be interpreted as indicators of latent teacher shortage. They are briefly illustrated in the following sections and presented in greater detail in the national reports of the UNICEF CEECIS study on teachers.

2.2.1. RETIRED TEACHERS IN YEREVAN

Table 9 presents a detailed breakdown of teachers by age group with specific information on age distribution by *marzes* (provinces). This data illustrates that middle- and senior-age teachers make up the bulk of the teaching workforce. It also shows that the number of young teachers entering the profession is smaller than the number of teachers in the middle age group who are nearing retirement.

Table 9: Teachers in public schools of Armenia by age and province

Region	< 25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 >	Total
Yerevan	378	720	951	1,249	1,483	1,654	1,750	1,456	832	318	10,791
Aragatsotn	146	209	367	418	491	476	446	275	138	34	3,000
Ararat	144	224	306	404	420	490	561	477	195	28	3,249
Armavir	186	287	403	494	500	542	580	549	221	24	3,786
Ghegarkhunik	145	326	503	579	604	525	495	396	195	48	3,816
Lori	253	324	452	468	572	595	672	520	216	33	4,105
Kotayk	208	305	456	498	518	549	595	445	209	37	3,820
Shirak	230	430	507	555	604	585	639	522	255	28	4,355
Syunik	135	227	252	282	330	337	415	356	160	18	2,512
Vayots Dzor	61	80	93	109	163	178	150	136	70	8	1,048
Tavush	96	144	230	257	287	297	299	278	166	65	2,119
Total	1,982	3,276	4,520	5,313	5,972	6,228	6,602	5,410	2,657	641	42,601
Percentages	4.7	7.7	10.6	12.5	14.0	14.6	15.5	12.7	6.2	1.5	

Source: National Centre for Education Technologies (2009, 38)

In Armenia, the official retirement age was 64 until 2010 and was raised to 65 in 2011. Teachers who are eligible to retire start to receive their full pension at this age even if they continue to work. In September 2009, the number of pension-age teachers in public schools was 641, or 1.5 per cent out of the total number of teachers. Of those teachers, 49.6 per cent (318 teachers) worked in Yerevan. The strong presence of retired teachers in schools in Yerevan is remarkable given the surplus of employed teachers in urban areas (see Box 2). In general, older teachers are considered to be more effective and better trained than the young generation of teachers. They are also better networked and are able to secure attractive teaching posts, both in public and private schools, even if they are formally retired.

Box 2: Retired teachers despite teacher surplus: Coming to grips with the situation in Yerevan

The concept of teacher shortage is categorically different from the teacher shortages identified in some of the other CEECIS countries. The vast majority of teachers work significantly less than a full *stavka*, which is 22 teaching hours. Each of the 10 schools in the UNICEF study has a surplus of teachers, the majority of whom in effect worked only part-time. The surplus of teachers can be attributed to principals not willing to lay off teachers, preferring to keep them employed by redistributing hours, with some degree of disregard toward pedagogical preparation in subjects taught. However, while there is a surplus of teachers on payroll, 89.5 per cent of the 363 teachers who were interviewed in the UNICEF Armenia study are short of a full *stavka* load. This means that nearly 9 out of 10 teachers in Armenia do not reach full wage potential. Government jobs, including the teaching profession, function very much as a social safety net for families, including those of retired teachers, who have experienced times of economic volatility over the past 20 years.

2.2.2. TEACHERS AT BOTH ENDS OF THE AGE SPECTRUM IN KYRGYZSTAN

The UNICEF study on general education teachers in Kyrgyzstan (Kyrgyzstan-1) identifies a high proportion of teachers at retirement age in rural schools. On average, 5 per cent of the teachers are at or above retirement age. Typically, the only young teachers in rural schools are alumni of the school who work part-time as teachers (*zaochniks*) and are simultaneously enrolled as correspondence students at nearby branch colleges or universities. Different from urban areas, where it was a matter of individual choice for retired teachers to resume work at school to supplement their pension with additional income, schools and district education departments in rural areas of Kyrgyzstan morally coerce retired teachers into teaching. A sense of professional responsibility, at times mixed with patriotic overtones, but also the fear of having to close down a school, are drivers for the retiree's decision to resume work at the rural school. Commenting on the large proportion of retired teachers at the schools, the school principals of a school in a remote rural observed, "Teacher shortage is massive at our school: only patriots teach here."

At the opposite end of the age spectrum are university students working as teachers. There are two types of university students who work as teachers: correspondence students (*zaochnik*) and full-time university students. The research team collected district-level statistical information on how many university students were employed as teachers. In one of the districts the breakdown was as follows: 51 full-time university students to 309 correspondence students – that is, a ratio of 1 to 6. Typically, district education departments make agreements with universities in the province or region to have university students fill vacant teaching positions. Part of the agreement is, for example, that fourth and fifth year university students are permitted to skip their classes at the university if they teach at a school. This applies to *all* degree programmes and not to university students in pedagogical specializations alone. According to the agreement, only well-performing fourth and fifth year university students are supposed to work as teachers and earn the entry-level salary of a full-time teacher. After all, they miss all their classes for two years and only show up at the university for exams. In reality, however, any university student is able to join this university-school collaboration programme.

Similarly, there is a huge gap that yawns between the intended and actual curriculum of correspondence studies. By design and per agreement between school and part-time students, correspondence students should (a) only start teaching towards the end of their second year of correspondence studies, and (b) should suspend teaching twice a year (fall and spring) for a few weeks to attend classes in teacher education. In practice, however, most correspondence students are former students from the school who start teaching right away after they have completed grade 11 at the school.

Students of tenth and eleventh grade classes reported how former friends of theirs who used to be one or two grades ahead now work as teachers at the school. To make things worse, most correspondence students do not leave their teaching post twice a year to take classes in pre-service teacher education because the school depends on them, and also because the correspondence student cannot afford to lose the income during the study period. The transition from being an eleventh-grade-student in one year and then a young correspondence student and schoolteacher in the following is naturally filled with anxiety. The younger correspondence students elaborated on their insecurities with teaching and a few of them explicitly mentioned the problem of earning the respect of grade 10 and grade 11 students. Most schools pair experienced with inexperienced teachers, but in practice, the experienced teachers have such a high teaching load themselves that they are not in a position to sufficiently train and mentor the inexperienced young teachers. Whereas the majority of *zaochniks* are typically alumni that continue at the school in the role of a teacher, there also exist older correspondence students who enrol in part-time studies to acquire the required higher education specialist diploma.

Box 3: Last year's student, this year's teacher: Recruiting young teachers for village schools in Kyrgyzstan

In Kyrgyzstan, the correspondence and full-time students account for 9 per cent and 30 per cent, respectively, of the teaching force in the 10 visited schools. On average, every seventh teacher – or 13 per cent of all teachers in the 10 schools – has an incomplete higher education. This group of young teachers is not to be underestimated. In Kadamjay rayon, the district in Batken province with the highest teacher shortage rate in the province, 16 per cent of the employed teachers are correspondence students. Despite their lack of pedagogical knowledge and experience, the young correspondence students are popular because they are from the village – in fact, are typically alumni of the school – and have a sense of loyalty towards the school. As one principal expressed in an interview, “We did try to hire young teachers. We keep hiring them and then they leave. Last year alone, five young teachers left for Russia. The ones with a higher education diploma only last a few weeks and then leave. The correspondence students are much better: they stay.” Most new recruits in village schools are last year's students who started to teach this year and are simultaneously enrolled in correspondence studies.

Correspondence students are from the village, are typically alumni of the school and have family and other social bonds in the community. Finally, a less known fact is that correspondence students they are revered because so many of the regular teachers are former correspondence students themselves. When one scratches at the surface of the group that has, according to the National Statistics Committee, a higher education specialist diploma (78 per cent of the teaching force nationwide), one finds that many of them earned their specialist diploma by means of correspondence studies. In the 10 visited schools, one third to half of the teachers with a higher education specialist diploma had been former correspondence students themselves.

It is important to bear in mind that many of the regular teachers with a university degree did not complete the full course of pedagogical study and most of them learned teaching on the job at the school. This especially applies to the middle-aged teachers who completed their studies in the 1990s and afterwards. The majority of these teachers completed their higher education diploma as correspondence students. In contrast, the older teachers (known for having better teaching skills) studied as full-time students during the Soviet era. Even though the former correspondence students ended up having the same degree (higher education specialist diploma), the principals distinguish between teachers who completed their studies full-time or as a correspondence teacher. One principal in the UNICEF Kyrgyzstan-1 study on teachers, for example, explained that she does not assign grade 10 and 11 classes to teachers who were former correspondence students. Another principal explained that she does not select former correspondence

students as mentors for young teachers regardless of how experienced and skilful the former student has become over the years. Clearly, teachers who completed their teacher education in the form of correspondence studies have the reputation of being second-class teachers.

The UNICEF Kyrgyzstan-2 study on preschool teachers identified a high turnover among the staff of the ECCE institutions. Eleven per cent of the teachers in the sample of preschool were 55 years old or older. Because of the high turnover, directors often look for teachers who are retired primary school teachers and convince them to work in preschools, since these teachers are less of a flight risk.

2.2.3. RETIRED TEACHERS IN THE REPUBLIC OF MOLDOVA: A PUBLIC CONCERN

Policies on retirement in the Republic of Moldova are regulated by three laws: the Law on State Social Insurance Pensions, the Moldovan Law on Public Social Insurance System, and the Social Security Budget Law.¹⁴ The most recent regulation was issued in 2009 and is subject to annual review and reconfirmation. These policies and regulations address retirement of all Moldovan public sector employees. There are no specific directives for teachers because they are included as public sector employees.

Box 4: Coping with hiring restrictions

The lack of regulation and policy outlining mechanisms for the retirement of teachers is a prevalent issue. Principals resort to hiring retired teachers as part-time staff because there are restrictions with hiring new, full-time teachers. The UNICEF Republic of Moldova study on teachers found that retired teachers are used as a coping mechanism for teacher shortage in all 10 schools from the study. Data from the National Bureau of Statistics indicate that 18.7 per cent of the teachers are retired and continue to teach. These retired teachers desire teaching hours and are therefore ideal for filling small shortages at schools, including absences such as maternity leave. Data from interviews showed that the retired teachers do not ask for full workloads and are satisfied with teaching hours left after distribution of regular teaching hours to other teachers. In addition, the directors and students appreciate their experience, content-area knowledge and training in the subject for which they are teaching these small numbers of hours. On the other hand, no regulations exist to support the timely retirement of teachers that would in turn incite the regeneration of the teacher workforce. Furthermore, by taking on hours and continuing to teach, these retired teachers are seeking supplemental income to increase their insufficient pensions.

The data collection at school-level in the Republic of Moldova revealed that there are three different modalities for hiring retired teachers:

1. Teachers at/above retirement age who stay on while also receiving a pension
2. Retired teachers who are rehired to fill a full-time or part-time vacancy
3. Retired teachers who are rehired on a term appointment – that is, on contract basis.

The following two examples illustrate the different modalities used to employ retired teachers: At a school in Stefan Voda district, a retired teacher was interviewed who was taken on full-time as a biology teacher. Due to a shortage of qualified biology teachers, the director found this retired teacher who had retired and moved from a nearby village to the *raion* centre. The retired teacher had been at the school for three years and earned a full salary as well as her pension. Examples of retired teachers on contract basis include retired teachers who are rehired on contract basis for the duration of a maternity leave or other temporary leaves of regular teachers.

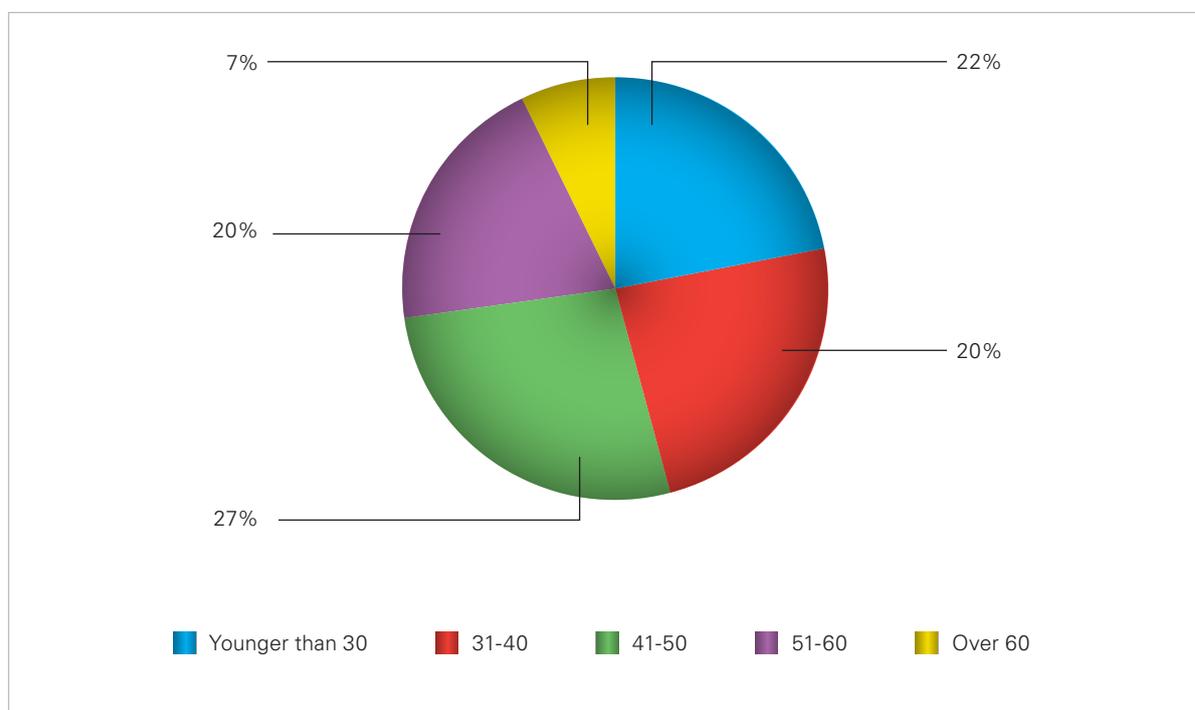
¹⁴ More precisely: Law on State Social Insurance Pensions no.156-XIV, 1998; the Moldovan Law on Public Social Insurance System no.489-XIV 1999; and the Social Security Budget Law, no. 129-XVIII, 2009.

The aging teacher population and the large proportion of retired teachers have become an issue of public debate in the Republic of Moldova. The national UNICEF Republic of Moldova study on teachers demonstrates that the share of retired teachers as a percentage of the teacher labour force has more than doubled in the period between 2002 and 2007.

1.1.4. AGE DIFFERENCES BY LOCATION AND LANGUAGE OF INSTRUCTION IN UZBEKISTAN

As shown in Figure 4, teachers younger than 30 years make up 22.2 per cent of all teachers. The total of teachers who are between 31 and 40 years of age is 24.5 per cent; between 41 and 50, 26.3 per cent; and between 51 and 60 years, 20.1 per cent. However, it is noteworthy that 7.1 per cent of teachers are over 60. The retirement age is 55 for men and 50 for women, thus a sizeable number of teachers (more than 7.1 per cent) are retired or eligible to retire but still teaching.

Figure 4: Teachers by age group in Uzbekistan



Source: Ministry of Public Education (2010).

In addition, regional variations do exist: In the sample of the Monitoring Learning Achievement study,¹⁵ younger teachers were found to be more prevalent in Syrdarya (20 per cent younger than 22 years, 20 per cent between 22–29 years), Navoi (33 per cent between 22–29 years) and Tashkent (21.4 per cent between 22–29 years) provinces. In general, young teachers are more prevalent in rural areas. Age also differs greatly by language of instruction. As can be seen in Table 10, the teachers teaching in Uzbek, Kazakh and Karakalpak languages are fairly well distributed, whereas there are very few young teachers teaching in Russian, Tajik and Turkmen.¹⁶

¹⁵ Ministry of Public Education of Uzbekistan (2006). 'Monitoring of learning achievement, volume MLA I: Mathematics and sciences with life skills, grade 4'; and 'volume MLA II: Mathematics and sciences with life skills, grade 8'. Tashkent: Ministry of Public Education, with UNESCO and UNICEF.

¹⁶ Percentages in the MLA sample are derived from 386 numeracy and science teachers surveyed in 6 languages in 10 regions.

Table 10: Age profile of teachers by language of instruction in Uzbekistan

Teaching language	Under 29	30 to 39	40 to 49	50 years +
Uzbek	18	29	32	21
Russian	7	20	33	40
Kazakh	24	29	43	5
Karakalpak	19	31	37	12
Tajik	0	25	37	37
Mixed	19	25	25	31
Turkmen	8	75	0	17

Source: Ministry of Public Education (2006).

Box 5: Multinational educational systems at risk

In Uzbekistan, the emigration of Russian, Tajik and Turkmen nationals has resulted in a shortage of subject teachers in these schools. Similarly, in Tajikistan and in Kyrgyzstan, the Russian-language schools face insurmountable challenges with filling their positions. Schools in the Central Asian countries that offer a curriculum with Russian as a medium of instruction are now dealing with a teaching workforce that is fast approaching retirement age. With little new intake of young teachers, the future of the multinational education system – a dominant feature of former Soviet educational systems – is at risk. In some of the Central Asian countries, there are also great disparities with regard to textbook provision, equipment and other resources depending on the language of instruction of the school. In today's context, some of these schools for foreign nationals are no longer strongholds of multicultural education but are in danger of becoming marginalized and offering second-class education.

A similar trend may be observed in the other countries of the region where retired teachers compensate for teacher shortage: Retired teachers tend to be hired for subjects or in languages of instruction where there is an under-supply of teachers. Thus, many schools with Russian as a language of instruction, or a minority language of instruction, resort to retired teachers to fill the vacancies. Similarly, retired teachers of foreign languages, math and sciences are also brought back to school because there is a teacher shortage in these subjects.

The aging teacher population, the strong presence of retired teachers in the labour force in several countries of the region, and also the feminization of the profession hint at the relative low salary and status of teachers.

2.3. QUALIFICATION

Table 11 lists the qualifications of teachers in five of the six countries. Data on the qualification of teachers in Bosnia and Herzegovina was not available. As mentioned before, two studies were carried out in Kyrgyzstan: one on teachers in general education (Kyrgyzstan-1) and the other on teachers in ECCE (Kyrgyzstan-2). In ECCE in Kyrgyzstan, the director of the preschool facility typically holds a higher education degree, whereas the other educators and preschool teachers have a specialized secondary school (*pedagogicheski uchiliske*) diploma, an incomplete higher education (university correspondence students), or only graduated with a diploma from upper secondary school.

Overall, there are very few unqualified teachers working in the region (see Table 11). The only group that is considered unqualified are teachers who only hold a secondary school diploma. Teachers with a technical-vocational degree (specialized secondary school, including *ped uchiliske*) are nowadays considered qualified. The so-called 'specialized secondary school diploma,' offered in vocational-technical secondary schools, have been phased out in several countries of the region. In The former Yugoslav Republic of

Macedonia the two-year technical-vocational degree with a pedagogical specialization was phased out in academic year 1995/1996 and replaced with the four-year higher education degree. Teachers with more than 15 years of work experience are automatically 'upgraded,' that is, do not need to enrol in additional programmes to obtain their new certification. Teachers who hold a two-year pedagogical degree but fewer than 15 years of experience are eventually required to obtain their four-year pedagogical degree. There is no deadline set for them to acquire the four-year degree. The same pattern applies to Bosnia and Herzegovina where teachers with a two-year degree and more than 20 years of teaching experience were automatically upgraded and, in terms of salary, considered to have the higher education degree. Most of these teachers either have retired or will retire within the next five years.

A few other countries continue to offer the technical-vocational degree with a pedagogical specialization that, in most countries, is nowadays restricted to pre-service teacher training for preschool or for the lower cycle of primary school. Overall, there are far fewer teachers who completed a pedagogical programme in a technical-vocational college than at a university. In Armenia, for example, the ratio is 1:4. In 2009, only 972 students (of which 953 were female) completed their pedagogical studies at a technical-vocational institution. In comparison, the number of B.A. graduates with a pedagogical specialization was 4,200 students (of which 3,308 were female), more than fourfold. The technical and vocational education and training (TVET) degree is offered in pedagogical colleges and offers a variety of entry and study requirements: nine years of secondary education + four years of technical-vocational education, 11 + 2, or even 12 + 1). The graduates are eligible to work in preschools or in primary school (grades 1–4).

Throughout the region, the four-year pedagogical degree is considered the standard. Traditionally labelled Higher Education Pedagogical Specialist Diploma, several governments renamed the degree in concert with the Bologna Agreement and call it a bachelor's degree. In many cases, however, the change in terminology was introduced without having yet substantially reformed the previous teacher-education curriculum in practice.¹⁷

Table 11: Qualification of teachers

	Secondary school diploma	Specialized secondary school (TVET)	Incomplete higher education	Higher education degree
Armenia	0.0	2.8	14.3	82.1
TFYR Macedonia	3.0	28.0	0.0	69.0
Kyrgyzstan-1	1.8	11.8	7.7	78.7
Republic of Moldova	0.5	13.0	3.6	82.9
Uzbekistan	0.0	26.6	3.2	70.2

It is important to note that in most countries, the official statistics list the educational attainment of teachers but do not differentiate between degree and specialization. The same applies for salary categories. Curiously, teachers are assigned to a salary category exclusively based on their level of education and not based on their qualification in the teaching profession. Thus, teachers listed (and paid) as having a higher education degree comprise both professionals with non-pedagogical degrees (e.g., mathematicians, historians, etc.), as well as those with a pre-service teacher-education degree or a pedagogical specialization, respectively (e.g., teachers of math, teachers of history). Similarly, the TVET degree does not always differentiate between a pedagogical specialization within TVET and other specializations offered there (examples include electricians, machinists, etc.). The distinction between a pedagogical and a non-pedagogical qualification matters if we want to make a distinction between qualified, unqualified and underqualified teachers. Curiously, in many countries of the region, professionals with a higher education degree are not considered 'underqualified teachers' even though they did

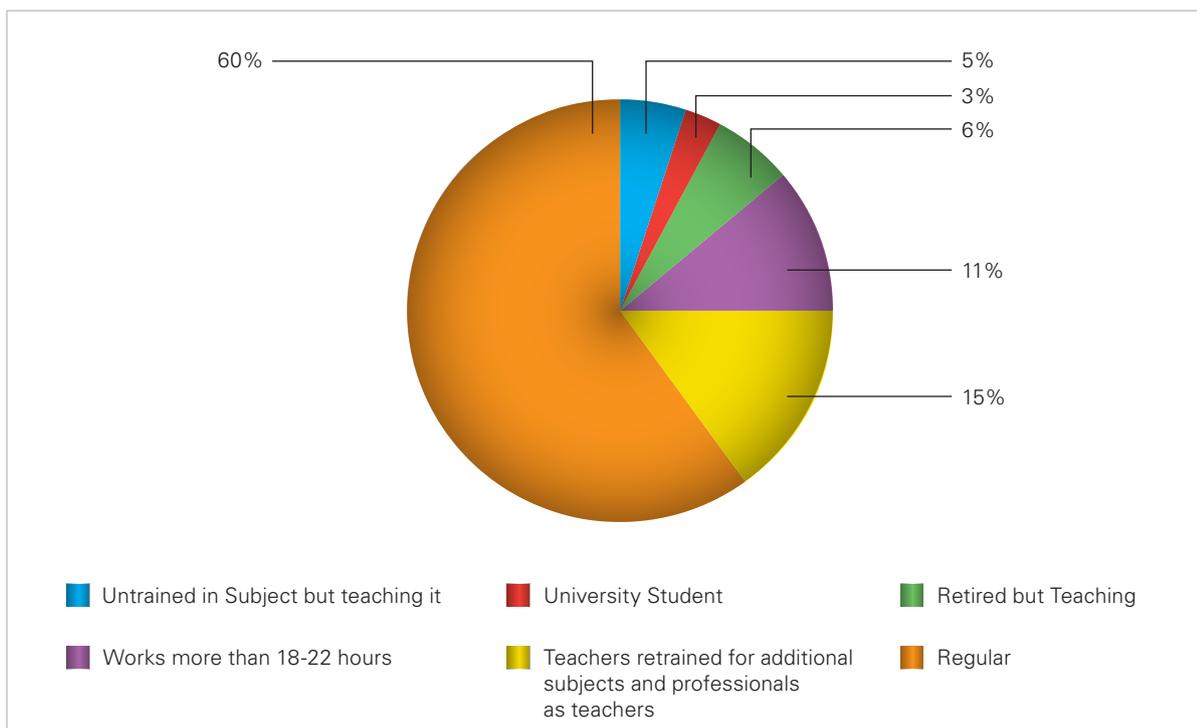
¹⁷ In Bosnia and Herzegovina, the teacher-education programme was extended from four to five years by introducing the two cycles inscribed in the Bologna Agreement: three years bachelor's degree and two years master's degree. It has been recently introduced and there were no graduates from the new extended degree programme at the time of this study.

not complete pre-service teacher education. From a teaching quality perspective, degree, with or without a pedagogical specialization, matters a great deal. Therefore, the argument may be made that hiring graduates from higher education, regardless of their specialization, is another indicator of latent teacher shortage.

Some governments are better than others at systematically upgrading the qualifications of underqualified teachers. In Uzbekistan, diploma holders without a pedagogical specialization must enrol in a retraining programme. Such programmes are offered in 16 teacher training institutes across the country. The programmes last 576 hours. The entry requirements are less rigorous for primary teachers: any professional is eligible for retraining to become a primary teacher. However, to become a secondary teacher, the professionals' former occupation must be similar to the subject they will teach (e.g., a pharmacologist can retrain to teach chemistry). Underqualified teachers who have worked as substitute teachers for subjects in which they are not trained may also choose to upgrade their qualification. These teachers can retrain to teach a different or an additional subject by attending a 400-hour certification programme at one of the 16 teacher training institutes. The retraining programme lasts 16 weeks and is tuition-based. To receive certification, four qualifying exams must be passed at the end of the course. Retraining institutes can be found in every province in Uzbekistan, on and off university campuses, and have been operating since 2002. Between 2002 and 2006, any teacher could retrain to teach any subject. Following the passage of Order 90 of the Ministry of Higher Secondary and Special Education of Uzbekistan in 2006, secondary school teachers could only retrain to teach a subject similar to the subject of their degree.

The UNICEF Uzbekistan study of teachers collected the 10 tariff tables of the sample schools and analysed information on 579 teachers. In the sample of 10 schools, 15 per cent of the teaching workforce was retrained and acquired a certification to teach in the new subject(s) that they were teaching. The qualification profile of the 10 sample schools in Uzbekistan is presented in Figure 5: 75 per cent of the teachers teach in subjects for which they were trained: three quarters of them (60 per cent of teachers in the sample) earned a specialist diploma in the subject they were teaching and, as mentioned, 15 per cent of teachers in the sample were retrained to teach the subject they were assigned. The only groups that are nowadays underqualified are teachers who are untrained in the subject but nevertheless teach the subject (5 per cent) and university students (3 per cent). Thus, the group of underqualified substitute teachers, comprising 8 per cent of the teaching force, is rather small.

Figure 5: Teacher qualification in Uzbekistan



The low percentage of underqualified teachers in the education system of Uzbekistan has to do with the retraining programme that is rigorously enforced. For teachers, the retraining programme is attractive as it enables them to increase their workload and salary. A teacher who once taught only Uzbek might retrain to teach both Uzbek and Russian, for example. Similarly, a primary school teacher might retrain to teach secondary school.

Box 6: Retraining in another language of instruction

Legislation in Uzbekistan requires that teachers be trained not only in a specific subject, but in a specific language. For some teachers, this is problematic. A teacher might, for example, have trained to teach mathematics in Uzbek, or history in Russian; but should this teacher then be hired at a school that requires them to teach the given subject in another language, that teacher would be obligated to retrain for the new subject-language combination. In one of the semi-urban sample schools of the UNICEF Uzbekistan study on teachers, for example, the language of instruction was Tajik, but 38 per cent of teachers were not originally trained to teach their respective subjects in Tajik, and thus, an unusually high number of teachers were retrained.

Finally, the high ratio of university students working as teachers (teachers with incomplete higher education) in Armenia and Kyrgyzstan is noticeable. These university students, in most cases graduates of the school in which they now work as part-time teachers, help fill vacancies that otherwise would be recorded as teacher shortage. However, in addition to teacher shortage, other reasons may apply, such as, for example, circumventing rigid teacher employment requirements with regard to posting of positions, following a protocol for making job offers, etc., or, in the case of teachers with incomplete higher education, simply providing a social safety network for residents by employing graduates from the school. There is a scarcity of studies exploring this important issue.

2.4. CHAPTER SYNOPSIS

- In schools in the CEECIS region, four out of five teachers in primary and secondary school, and 95 per cent in pre-primary education, are women. This ratio decreases with each level of education, dropping to 54.6 per cent at the upper secondary level. The feminization of the profession is generally associated with the lowered status and salary of teachers as well as the option to work part-time.
- A particular feature of the teacher labour force in CEECIS is the high percentage of teachers at or above retirement age, especially in the Republic of Moldova, Uzbekistan and Kyrgyzstan. The reasons for hiring retired teachers vary and range from hiring restrictions (Armenia, Republic of Moldova) to teacher shortage (Kyrgyzstan). Structural adjustment reforms in many countries of the region have created pressure on governments to restrict the number of new hires, to introduce new funding mechanisms (notably, per capita financing), or to reward schools and districts that save teaching posts by distributing additional teaching hours to the existing teaching staff or by hiring part-time retired teachers.
- The teaching workforce is highly qualified: in the six participating countries, most teachers either have a university degree (over 70 per cent) or completed a vocational-technical college with a specialization in preschool or primary education (3–28 per cent).
- According to national statistics, few teachers enter the teaching profession with only a secondary school diploma. The regional study, however, identified two large groups of underqualified teachers that deserve greater attention: (1) *correspondence students* who work part-time as teachers (in the region known as ‘teachers with incomplete higher education’), and (2) teachers who teach subjects or work in minority-schools for which they have not had any training.

- The relatively large group of young teachers with ‘incomplete higher education’ – i.e., that works part-time while enrolled in correspondence studies – deserves much greater attention and support. Former alumni of the school, they work in their village or small town as part-time teachers, often under difficult conditions. As the retired teachers, they fill in those posts that qualified teachers turned down and are the ones who typically remain in the profession despite their poor preparation.
- Correspondence studies are often considered as second-class education and are viewed as transitional phenomena. Little is done to systematically improve their quality at colleges and universities or at the schools where these young teachers are supposed to be mentored by experienced teachers. A commitment to improving the quality of education in peripheral locations and reaching out to the marginalized would require a concerted effort to lift the quality of correspondence studies.
- The redistribution of teaching hours at school level is extremely popular because it enables teachers to earn more. This practice, however, has a detrimental effect on the quality of education and it hits small schools, typically located in rural areas, hardest: teachers who take on additional hours in small schools end up teaching subjects for which they have not been trained.
- The multinational education systems in Central Asian countries in which the national curriculum is offered in different languages of instruction experience serious staffing problems, in particular, in Kyrgyzstan, Tajikistan and Uzbekistan. There is a great shortage of teachers who are able to teach subjects in Russian or in other languages of the region. Currently staffed with old and retired teachers and, in some countries, supplied with old textbooks and poor teaching resources, many of these schools face survival problems, especially if they are located in rural and semi-urban areas.
- The presence of old and retired teachers in schools, and also the feminization of the profession, hint at the difficulty of attracting new teachers who would take on a full teaching load and live on a teacher salary alone. Several countries rely on hiring teachers at both ends of the age spectrum: on one hand, experienced yet retired teachers and, on the other, correspondence students who in the year before were students at the same school in which they serve as teacher a year later.



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CHAPTER 3: **RECRUITMENT INTO TEACHING**

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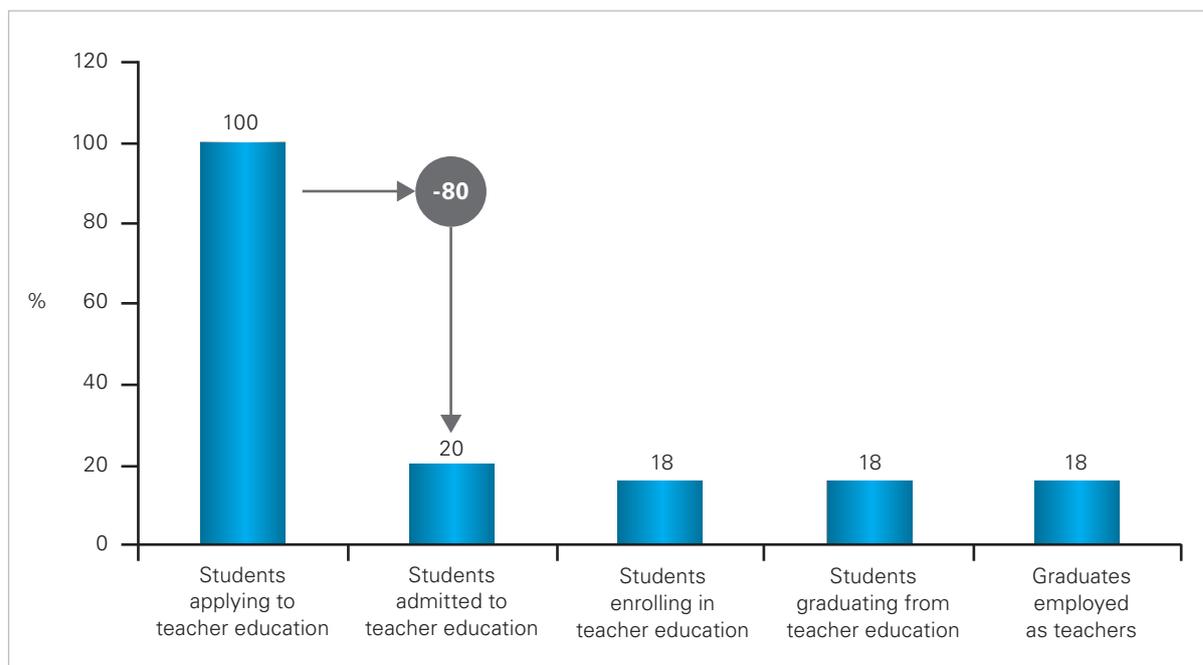
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In teacher-education research, recruitment into teaching is a well-known construct. It is a novel approach to determining the effectiveness of teacher education and is nowadays widely used in OECD countries to develop effective teacher development strategies. We propose that the following five indicators are used to measure the effectiveness of recruitment into teaching in the CEECIS region:

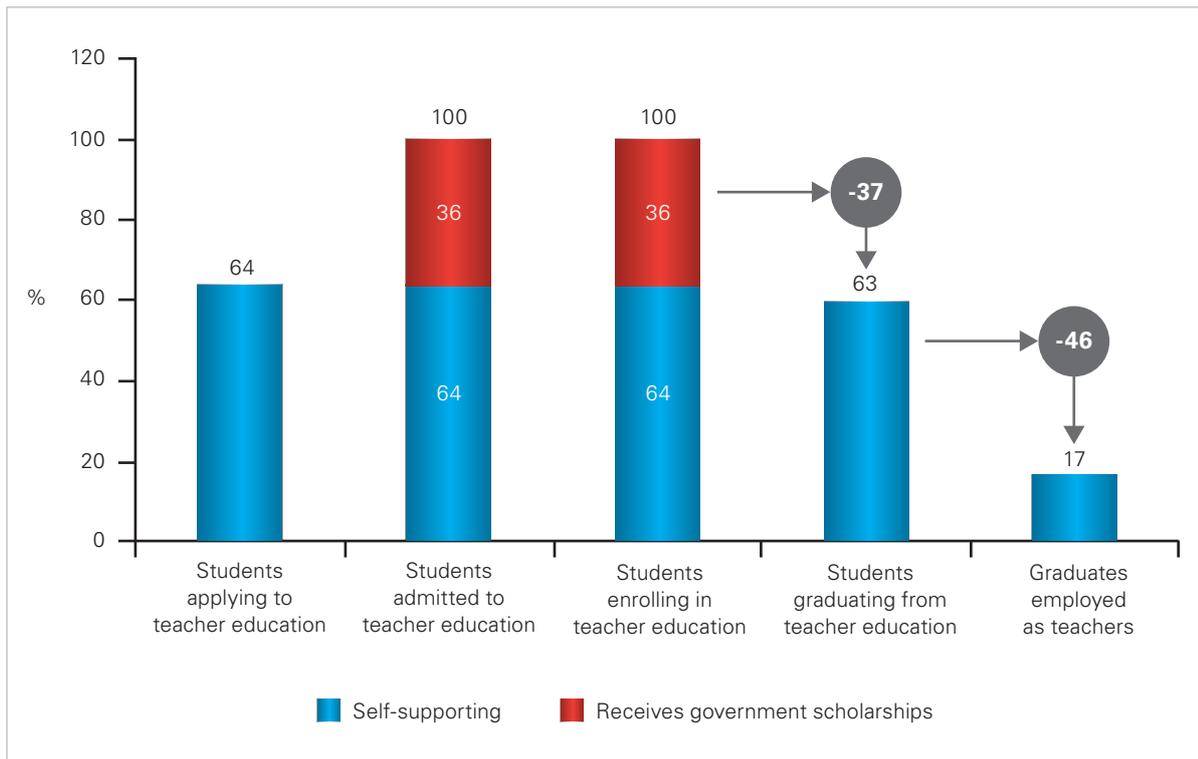
1. *Admission rate*: Number of applicants admitted to a teacher training diploma or degree programme.
2. *Enrolment rate*: Number of admitted applicants that actually enrol in a pre-service teacher training diploma or degree programme.
3. *Completion rate*: Number of teacher training students completing their three- or four-year training programme.
4. *Transition rate*: Number of graduates accepting a teaching position upon graduation from teacher training.
5. *Retention rate of newly qualified teachers (NQT)*: Number of NQTs that remain on the teaching post two years (or five years) after graduation.

Even though recruitment into teaching has been an object of intense academic scrutiny for many years, it has only in recent years drawn the attention of government officials and the general public. The two high-performing educational systems of Finland and Singapore are closely associated with effective recruitment into teaching: the admission criteria for teacher education are rigorous, the survival rate of those who actually graduate from teacher education is high, and most graduates go on to become teachers. The educational systems of Singapore and Finland (league leaders in TIMSS and PISA, respectively) have received so many accolades for their teacher-education systems that policy makers from other countries project features into these two systems that at times are only loosely related to reality. Naturally, not all nations have as rigorous a selection scheme for teacher-education applicants as Singapore and Finland. Even fewer countries succeed in convincing their teacher-education graduates to work as teachers. Figures 6 and 7 show recruitment into teaching in Singapore and in Kyrgyzstan.

Figure 6: Effective recruitment into teaching: Singapore



Source: McKinsey (2007). *How the best performing school systems came out on top.*

Figure 7: Ineffective recruitment into teaching: Kyrgyzstan

Source: Steiner-Khamsi, Kumenova, Taliev (2008).¹⁸

Singapore was ranked at the top in science and math in TIMSS 2003, and the Kyrgyz Republic scored at the bottom in PISA 2006 (ranked 57 out of 57 countries) and PISA 2009 (ranked 65 out of 65 countries). As Figure 7 illustrates, teacher-education institutions are extremely selective in Singapore, and universities only accept 20 per cent of those that apply. Almost all those who enrol complete their course of study and then, upon graduation, start working as teachers.

The situation is entirely different in the Kyrgyz Republic. Figure 8 illustrates the high attrition rate during teacher education, pointing to a huge waste of resources. In an attempt to combat teacher shortage, the Government of the Kyrgyz Republic treats the teaching profession as a priority and allocates a disproportionately large number of scholarships to university students in pedagogical specializations: 36 per cent of all teacher-education students receive government scholarships (that is, are 'budget' students). However, very few (17 per cent) end up working as teachers. During the five-year teacher-education diploma programme, 37 per cent of those enrolled either abandon their studies or switch to another programme over the course of their studies. Only 63 per cent of those who start teacher training actually obtain a higher education diploma with a teaching specialization. Of those that complete their studies with a teacher-education specialization, even fewer choose to become teachers.

It goes without saying that the contexts vary considerably. Teaching is an attractive profession in Singapore and, for a variety of reasons (low and fragmented teacher salaries, difficult working environment, etc.), an utterly unattractive one in the Kyrgyz Republic. Teacher-education institutions in Singapore can afford to be highly selective, whereas the same institutions in Kyrgyzstan only remain in operation because they use two negative selection criteria. First, they absorb students who were turned away in other degree programmes because they scored low in university entrance examinations. Second, they attract those who depend on government scholarships.

¹⁸ Steiner-Khamsi, Gita, Chinara Kumenova and Nurlan Taliev (2008). *Teacher attraction and retention strategy*. Background paper for the Education Development Strategy of the Kyrgyz Republic 2011–2020. Bishkek: Ministry of Education and Science, Department of Strategic and Analytic Work.

As the following sections demonstrate, Kyrgyzstan is not alone in struggling to find suitable teacher-education students who, upon graduation, will work as teachers. Strikingly, none of the participating countries in the UNICEF CEECIS study on teachers collects data on the full cycle of recruitment into teaching. Nevertheless, data exists for a few of the five indicators, listed above. A discussion of the five indicators for recruitment into teaching, along with a few general findings on the issue, help to understand a few regional patterns and explain the need for a comprehensive strategy for teacher attraction and retention in some of the countries of the region.

3.1. INDICATOR 1: ADMISSION RATE

There are many factors that account for the interest in teacher-education studies, and there is no direct correspondence between demand and supply. In Central Asian states, the governments provide incentives to enrol in teacher-education studies by making a great number of scholarships available in pedagogical specializations. Even though the government scholarships are used up, the university-to-work transition rates are so low that teacher shortage is hardly remedied through this kind of government intervention.

In Uzbekistan, UNDP reported a 35 per cent increase in applicants to pedagogical institutions for the period 2005 to 2008. This was an overall increase from 36,205 to 49,055 applicants in three years. Entrance into these institutes is rigorous, with language, numeracy and subject-specific entrance exams. The popularity of the profession and the rigorous admission criteria are exceptional and atypical for the Central Asian region. They may be interpreted as a reaction to the considerable educational expansion that the country experienced over the past decade.

Strikingly, educational studies are also very popular in Armenia even though there are very few job openings available in urban areas. Students who want to become teachers can obtain pedagogical qualification from six state-run higher education institutions, 27 vocational educational and training institutions (ranging from one- to four-year programmes) and a number of private universities. In 2010, over 18,709 students were enrolled in teacher preparation programmes, either at university level (bachelor's and master's degrees) or vocational pre-service teacher training. The university route for pre-service teacher education is more common: 16,367 students were enrolled in pre-service teacher preparation programmes at the university level and 2,342 students in vocational education institutes. The annual 'output' from both types of institution is over 5,000 graduates: in 2009, over 4,200 (3,308 of them female) students graduated from universities¹⁹ and 972 (953 of them female) from vocational institutions.²⁰

In the past 10 years, the number of students trained in pedagogical specializations has increased significantly. This is due to the fact that in addition to state-run public universities, a number of private universities now also offer teacher-qualification programmes.

Despite the great number of newly qualified teachers, the demand for new teachers in Armenia is very low and most of the publicly announced teacher vacancies are for schools in rural or mountainous areas. In such schools, the teacher shortage issue is being addressed through so-called 'state order' (a 'budget student' programme) and through a government decree on 'Procedures for assigning pedagogical staff to work in remote, mountainous communities', issued in 2003. The decree includes some allowances (e.g., relocation costs, housing allowance, transportation, utility supplements) for teachers from other communities to work and live in remote or high mountainous areas. In addition, since 1996, another government programme permitted recent graduates of pedagogical universities to teach in remote and rural area schools in lieu of traditional military service. Due to reported violations, this decree is, however, no longer in effect.

¹⁹ Armenian Statistical Service of Republic of Armenia (2010). 'Socio-economic situation in Armenia'. January–March 2010, 224. <http://www.armstat.am/file/article/sv_03_10a_5200.pdf>, accessed 29 April 2010.

²⁰ Armenian Statistical Service of Republic of Armenia (2010). 'Socio-economic situation in Armenia'. January–March 2010, 214. <http://www.armstat.am/file/article/sv_03_10a_5190.pdf>, accessed 29 April 2010.

Box 7: High supply and low demand for teachers

There is a great disparity between supply and demand of teachers. In Armenia, for example, the number of students in teacher-education programmes is much higher than the number of teachers hired by schools in the same academic year. In 2009, there were only 1,982 teachers under the age of 25, and in the same year, public and private universities together graduated a total of 4,202 prospective teachers and an additional 972 students obtained a pedagogical certificate from vocational institutions. That is, the supply of recently graduated students qualified to teach by far exceeds the number that eventually gets hired in schools. The number of graduates is more than double the number of teachers of the same age range who are employed in public schools. The demand for new hires drastically dropped as result of the structural adjustment reform, referred to as 'optimization'. In Phase One of the Education Quality and Relevance Project, funded by the World Bank, 7,000 teachers who did not meet qualification standards were laid off. The 'overproduction' of teachers is common throughout the region and has to do with the general expansion in higher education. Compared to other higher education degree programmes, the teacher training programme is relatively easily accessible (low admission scores), is well funded with government scholarships, and in public perception, is regarded as a generalist degree that may be used for a variety of professions.

3.2. INDICATOR 2: ENROLMENT

Several countries have a two-tiered admission system in higher education: They distinguish between government-sponsored students who receive scholarship from the education budget, often referred to as 'budget students', and self-financed students who pay tuition fees. The latter are commonly called 'contract students'. The contract students have become an important source of income for universities and they are admitted in big numbers, in most countries with lower entry examination scores than their 'budget student' counter parts.

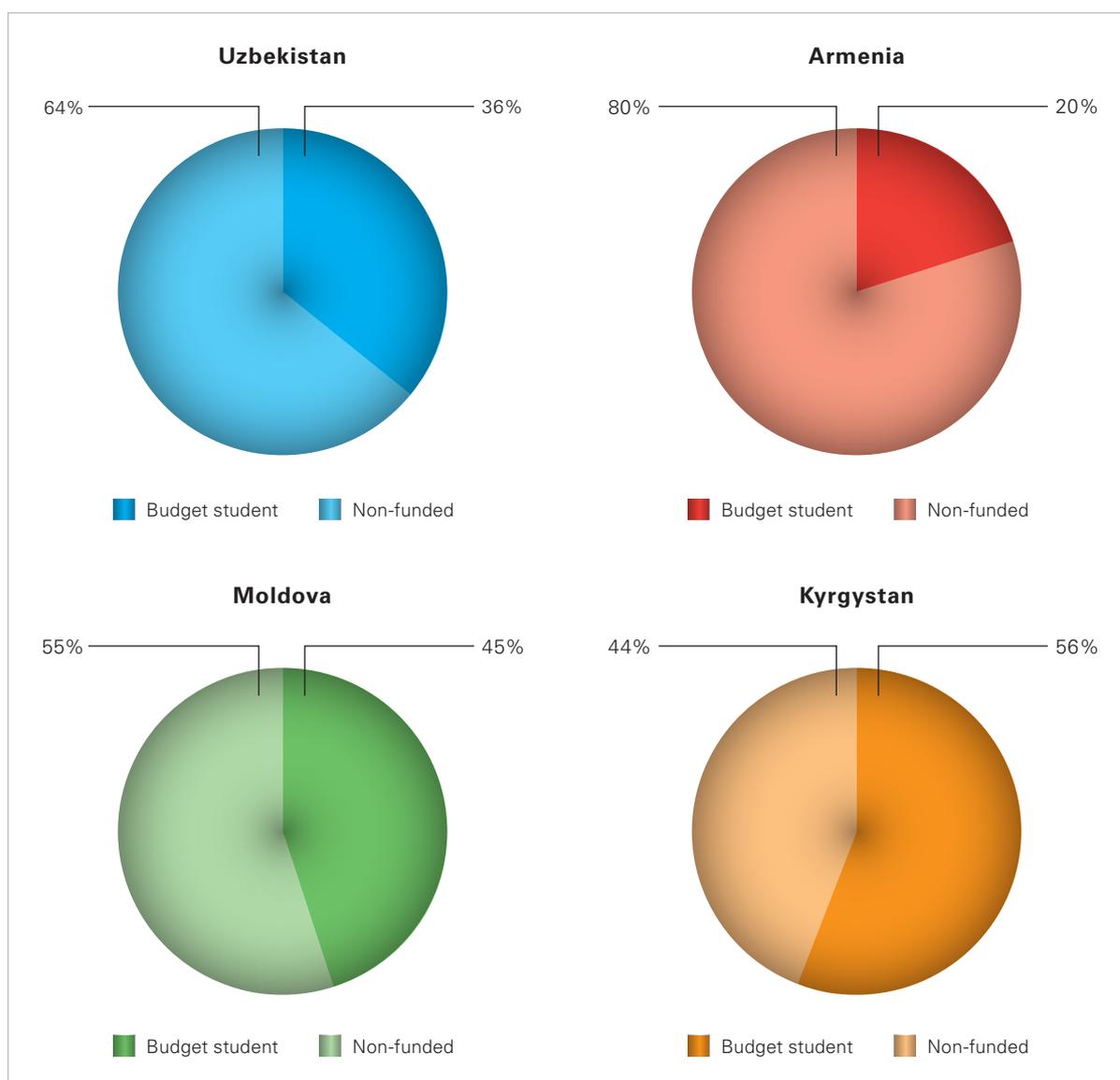
The distinction between scholarship recipients ('budget students') and non-recipients ('contract students') is not made everywhere. In Bosnia and Herzegovina, for example, scholarships are rarely given. Nevertheless, there is a difference between regularly admitted students who study for free and those that pay for their own studies. Results from secondary school are taken into account when students enrol into higher education pedagogical faculties (previously known as pedagogical academies). The score from secondary schools account for 60 per cent of their application credits, whereas the remaining 40 per cent can be achieved at the entrance exam for that particular faculty. Every faculty specifies its own minimum number of credits in two rounds of entrance exams taking place in July and September respectively. In the 2009 entrance exams (July and September), the minimum number of credits for enrolment into regular, free of charge study at the faculty of philosophy (which includes educational studies) was 73.6 out of possible 100 points; in the 2008 (July and September) exams, it amounted to 74.4 out of possible 100 points. In addition, a number of the so-called 'self-financing' students (who cover their own study costs) from the same list are admitted. In 2009 and 2008, these self-financed entrants had to have at least 68.3 and 65.5 credits, respectively. The minimum number of credits is established every year according to the number of candidates that a faculty can admit. Similar to other countries in the region, the academic requirements for self-financed students are lower than for those who study for free. Finally, similarly to other countries in the region, demand and supply issues are taken into account when the number of admitted students is determined. The University of Sarajevo, for example, suggests, in consultation with its faculties and the Sarajevo Canton Ministry of Education, the number of admissions for each programme of study. The decision is influenced both by financial resources as well as by the number of unemployed persons reported at the employment agency.

3.2.1. BUDGET VERSUS CONTRACT STUDENTS

The governments that distinguish between 'budget students' and 'contract students' tend to use the scholarship system to engineer supply and demand on the job market. The scholarship allocation system takes into account the state budget, the merit of the applicants (typically, test scores), but also manpower needs.

Figure 8 compares the two groups of teacher-education students for four of the six countries involved in the UNICEF CEECIS study on teachers. Kyrgyzstan and Armenia are at opposite ends with regard to teacher shortage: Kyrgyzstan experiences a teacher shortage and Armenia a surplus, in particular in urban areas. The allocation of government scholarships to specific fields of study – in our case to teacher-education studies – needs to be interpreted as a modified form of manpower planning. As a result, there is a greater allocation of scholarships for professional fields that are high in demand but low in supply.

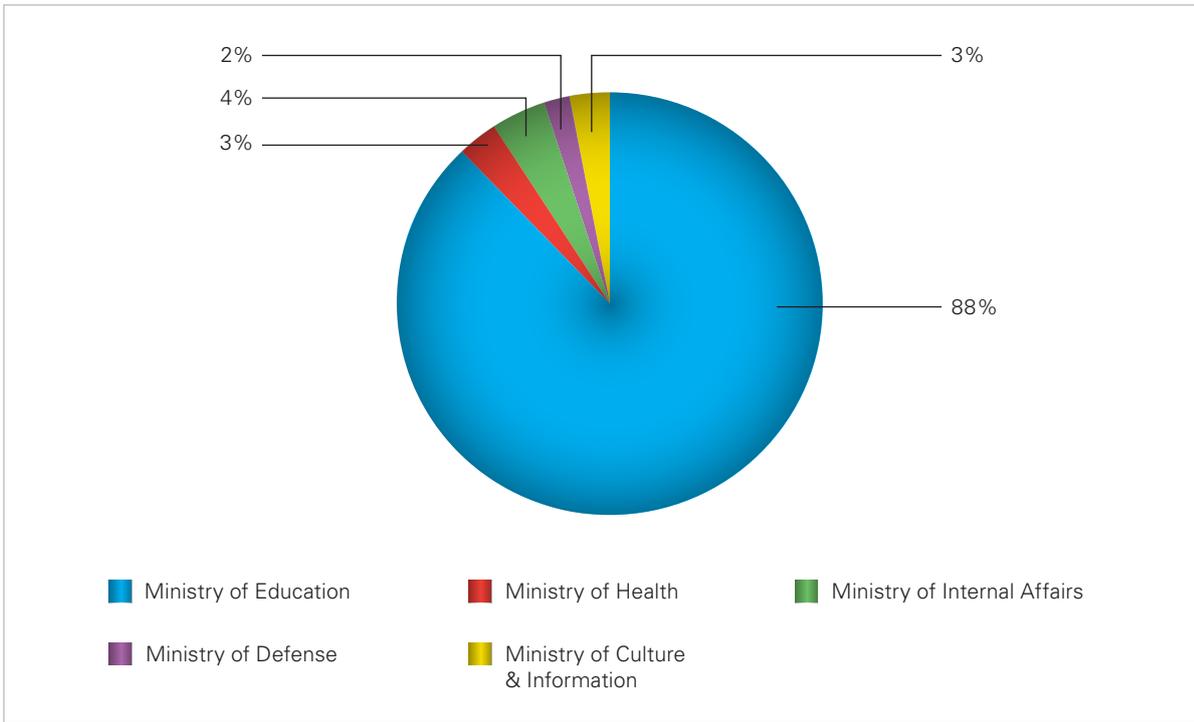
Figure 8: Ratio of budget and contract students in four CEECIS countries



The governments annually develop a distribution key for scholarships and assign them to various line ministries and/or universities. In Kyrgyzstan, for example, the number of scholarships was increased over the past few years to help resolve problems of teacher shortage. In academic year 2008–2009, the Ministry of Education and Science of the Kyrgyz Republic was granted 5,040 scholarships (out of a total of 5,705 scholarships), absorbing 88 per cent of the total of state scholarships allocated in that year. The majority of

them (2,664) were allocated to students in teacher-education programmes.²¹ Figure 9 illustrates how the state scholarships are distributed among the line ministries in the Kyrgyz Republic.

Figure 9: Government scholarships in Kyrgyzstan by line ministries



Source: Ministry of Education and Science, Decree 340, 27 June 2008.²²

Box 8: Deployment of newly qualified teachers to remote rural areas

In Uzbekistan, there are 14 universities and five pedagogical institutions that train teachers. Students enter these institutions through a national exam taken in the final year of their secondary education. Roughly one third score well on this exam and may receive a full tuition scholarship for a four-year degree, with the stipulation that upon graduation they will work in a public school for three years. In the 2009–2010 school year, for example, the five pedagogical institutions had 10,949 ‘budget students’ (36 per cent). The three-year service requirement also exists in other countries that distinguish between ‘budget students’ and ‘contract students’ but is not systematically enforced as it is in Uzbekistan. Throughout the region, the service requirement policy has been used as an instrument to assign newly qualified teachers to unpopular teaching posts in remote rural areas. In contrast to earlier times where all newly qualified teachers were centrally deployed and assigned to their first teaching post, nowadays only those that received a government scholarship (‘budget students’) are subject to mandatory deployment. In practice, however, the requirement is rarely enforced and is increasingly replaced by incentive packages (hardship allowances, deposit schemes, housing, etc.).

3.2.2. ADMISSION SCORES FOR TEACHER-EDUCATION PROGRAMMES

There exist comparative studies on admission requirements for teacher-education programmes in countries of the region. Two systems, in particular, lend themselves to a comparison because they both

²¹ Ministry of Education and Science of the Kyrgyz Republic, Decree 340, 27 June 2008.

²² Ministry of Education and Science and European Commission (2009). ‘Background papers for the preparation of the education development strategy 2011–2020’. Bishkek.

use centralized, standardized university examinations: Kyrgyz Republic and Azerbaijan.²³ In Kyrgyzstan, 25 per cent of students receive a state scholarship. The percentage of students who are able to study for free is higher in Azerbaijan: it comprises 40 per cent of all students in higher education. The test results demonstrate that the academic requirements for entrance to teacher-education studies are very low:

- In Kyrgyzstan, all degree programmes in pedagogical specializations – with the exception of secondary school teacher-education programmes in ICT and English at the Kyrgyz State University and the Osh State University – require a test score that is below that of most other fields of study. At the opposite extreme are degree programmes in international relations, economics and management studies, which require the highest scores. The average score for scholarship recipients in the information and communication technology programme at the Kyrgyz-Russian Slavic University in Bishkek was 218.5, whereas the average score for those admitted into a degree programme for preschool teachers or primary teachers was between 114.7 and 131.5 points.²⁴
- In Azerbaijan, pre-service teacher-education applicants barely pass the minimum test score requirement of 250 points. At the other end of the spectrum are applicants for the Academy of Public Administration (average test score: 609.3 points) and Azerbaijan Medical University (563.2 points). Similar to Kyrgyzstan, pre-service teacher-education scholarship recipients have the lowest test scores required for receiving the state scholarship.
- Similarly, in Armenia, the university admission exam scores needed to enter pedagogical universities are lower compared to other, non-pedagogical disciplines. For example, the minimum admission score for mathematics in Yerevan State University is 31 out of 60, and for Armenian language it is 48.3 out of 60. Armenian State Pedagogical University's minimum admission scores for teachers of mathematics and Armenian language are 29 and 43 respectively. This discrepancy is apparent in other subjects as well.²⁵ It should come as no surprise that pedagogical education does not attract those students who graduate from school with honours.²⁶

Figure 10: Required test scores for universities in Kyrgyzstan, Azerbaijan and Armenia



²³ Silova, Iveta (2009). 'The crisis of the post-Soviet teaching profession in the Caucasus and Central Asia'. *Research in Comparative and International Education*, 4 (4).

²⁴ MoES and EC (2009). *EDS 2011–2020*, Background paper; Silova (2009).

²⁵ Ministry of Education and Science. 'Minimum admission scores for Armenian state universities'. <<http://www.edu.am/DownloadFile/4078arm-ancoxik.pdf>>.

²⁶ UNDP (2007). 'Educational transformation in Armenia'. *National Human Development Report 2006*. Yerevan, 54.

Figure 10 lays out schematically the vast differences in required test scores for university admission in pedagogical and non-pedagogical fields. It presents a comparison of required test scores between the most popular higher education fields of study and teacher-education programmes in Kyrgyzstan, Azerbaijan and Armenia.

In the three countries listed in Figure 10 and in several other countries of the region, teacher education is rarely the student's first choice of study, and more often it is the only possible option if they have low test scores. As a result, many students entering pedagogical universities are low achievers who initially did not intend to become teachers.

3.3. INDICATOR 3: COMPLETION RATE

Statistical information on how many teacher-education students complete their degree on time – that is, within four or five years – is not readily available. Many universities also do not register changes when students switch from one degree programme to another. The offices of the registrar do not typically collect completion information for each field of study. Thus the only available information consists of guesstimates. The Bosnia and Herzegovina country study estimates a completion rate of 80 per cent. In Kyrgyzstan, statistical information exists for the completion rates of 'budget students' in teacher-education programmes: in 2008, 76 per cent of students admitted to teacher-education programmes completed their studies.²⁷ The remaining students switched to other, more demanding degree programmes over the course of their studies. The attrition rate of these teacher-education students is considerable given that they had received a government scholarship in order to enrol and complete a teacher-education programme.

3.4. INDICATOR 4: TRANSITION RATE

The university-to-work transition rate is low throughout the region despite the service requirement imposed on budget students. It is important to bear in mind that government scholarships granted to well-performing students ('budget students') are in effect loans that either need to be repaid in cash or by means of a service requirement – that is, work in a rural school. Table 12 shows that the centralized teacher management system, which assigns budget students to teaching posts, does not work in the Kyrgyz Republic. In 1999, only 24 per cent of the graduated 'budget students' assigned to a teaching position actually entered the teaching profession. Periodically, attempts are made to enforce the service requirement. By 2003, the situation improved, but still only 49 per cent of those with a service requirement ('budget students') actually showed up at the assigned post. Figure 11 illustrates the low university-to-work transition rate for 'budget students' in Kyrgyzstan. Unfortunately, there is no data available for 'contract students'. The transition rate is expected to be much lower for 'contract students' than for 'budget students' because they are the ones who paid the tuition themselves and therefore are not expected to work in the profession upon their graduation.

It is important to bear in mind that the university-to-work transition rate is, in general, low in teacher education, especially for graduates who are trained for work in secondary school. This applies not only to the CEECIS region, but also to OECD countries. As shown in Table 12, the transition rate in Kyrgyzstan was between 24 and 56 per cent in the period 1999–2003 and is now estimated to be much lower. According to the UNICEF CEECIS study on teachers, less than half of the government-sponsored teacher-education students ('budget students') eventually work as teachers. The transition rate in Kyrgyzstan drops to 17 per cent if 'budget students' and 'contract students' are considered.

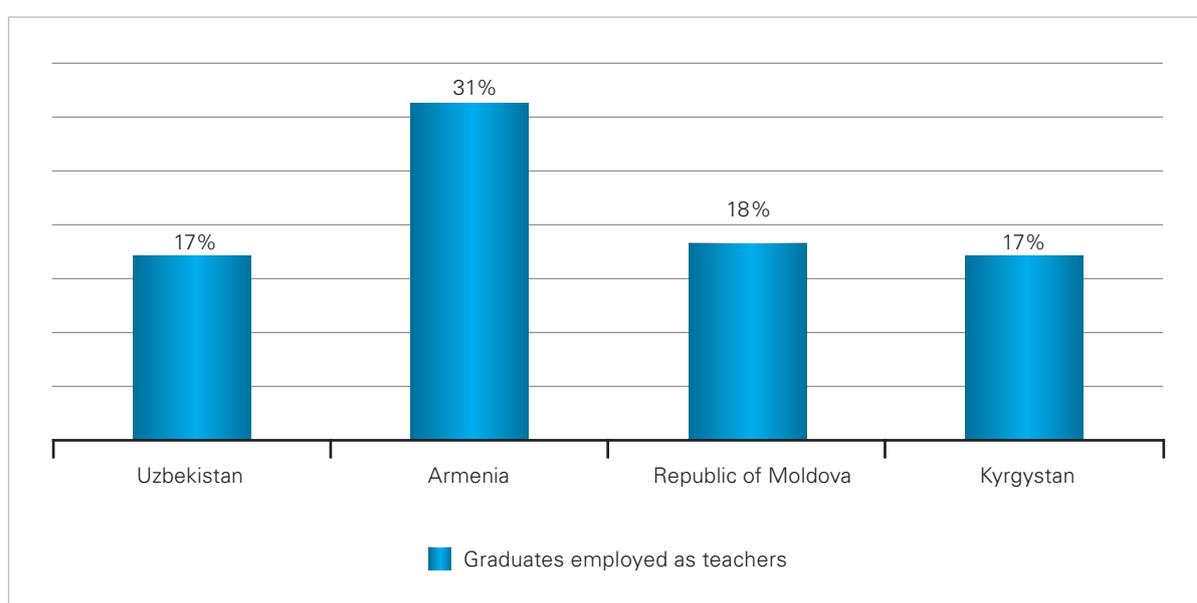
Figure 12 shows the transition rates in three of the subregions: Central Asia (Uzbekistan, Kyrgyzstan), Caucasus (Armenia) and Western CIES (Republic of Moldova). The reasons for the low transition rates vary by subregion and country.

²⁷ Ministry of Education and Science of Kyrgyzstan (2009). 'Education development strategy 2011–2020'. Background paper. Bishkek: Department of Strategic and Analytical Work, MoES.

Table 12: Post assignment of teacher-education graduates ('budget students'), Kyrgyz Republic, 1999–2003

Year	Graduates of teacher-education programmes	Vacancies	Assigned to vacant positions	Appeared at the post (graduates)	Ratio of those that appeared/vacancies
1999	2,525	2,984	1,952	706	24%
2000	2,530	2,332	1,757	691	30%
2001	2,595	3,039	1,930	1,255	41%
2002	2,523	2,580	2,079	1,452	56%
2003	2,433	3,190	1,948	1,580	49%

Source: Brunner and Tillett (2007, 119).²⁸

Figure 11: Transition into teaching: Regional comparison

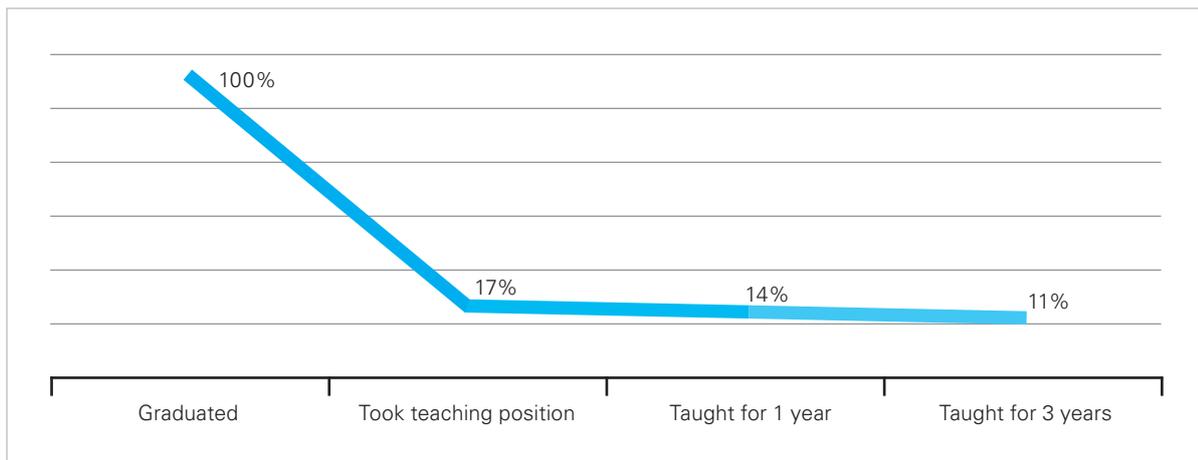
3.5. INDICATOR 5: RETENTION OF NEWLY QUALIFIED TEACHERS

Studies in OECD countries suggest that the greatest attrition of newly qualified teachers (NQT) is in the first three to five years of the profession. As with some of the other indicators for recruitment into teaching, there is a scarcity of data to accurately assess the attrition of young specialists.

For some countries, estimates on the attrition of NQT have been produced. Figure 13 presents the estimates for Kyrgyzstan.²⁹ As Figure 12 demonstrates, the transition rate is low (17 per cent) and there is further attrition in the first few years of employment. Three years into working as a teacher, only 11 per cent of those who graduated from teacher education remain on the post. That is, 9 out of 10 teacher-education graduates end up working in professional fields that are outside of education.

²⁸ Brunner, J.-J. and A. Tillett (2007). *Higher education in Central Asia. The challenges of modernization. Case studies from Kazakhstan, Tajikistan, the Kyrgyz Republic and Uzbekistan*. Washington, DC: World Bank and International Bank for Reconstruction and Development.

²⁹ The estimates have been made in collaboration with the researchers in the Quality Learning Project (funded by USAID) and the Kyrgyzstan education sector strategy development team (funded by the European Commission).

Figure 12: Transition and retention rates of newly qualified teachers, 2002–2005, Kyrgyzstan

3.6. RECRUITMENT INTO TEACHING: CHALLENGES AND BEST PRACTICES IN THE REGION

Statistics on teacher shortage is nearly meaningless if used in terms of national average. Shortage is always geographically localized and subject-specific – that is, it is typically more pronounced in schools that are located in peripheral regions with difficult living and working conditions. In addition, shortage also exists for subject matters that are either very attractive or very unattractive in terms of compensation: at one end of the spectrum are subject matters that are in high demand by the private sector (foreign language teachers, math, science) and at the other end are subjects (music, art, crafts, etc.) with a small allocation of weekly instructional hours making it difficult for specialists in these subjects to take on a full teaching load. Teacher shortage – if examined with regard to location and subject matter – also exists in countries that introduced structural adjustment, rationalization, or optimization reforms (e.g., Armenia and the Republic of Moldova), and where teachers were laid off and hiring restrictions were introduced. However, a concern for marginalized groups and peripheral schools is necessary to detect hidden teacher shortage – that is, teacher shortage that is masked in national statistical averages. As this chapter has demonstrated, there is no shortage in the supply of teachers. Instead, the issue is the ineffectiveness in how teachers are recruited: There is a surplus of newly qualified teachers, but in most countries less than half of them become teachers. As one of the interviewed principals commented:

The term ‘teacher shortage’ is a misnomer. There is no shortage of teachers in our town. I see them everywhere: in the cotton fields, on the market, or in government offices. There are many trained teachers in our village. The only problem is that they don’t want to work for us at the school.

The low university-work transition rate (Indicator 4) creates a nearly insurmountable challenge for the governments in the region. Over the past 20 years, they embarked on a three-pronged strategy to increase the number of newly qualified teachers. The first two strategies assume that an increase in intake in pre-service teacher education will produce a greater number of graduates who will take on teaching posts, including in peripheral locations. The third strategy includes a targeting modality and is geared towards filling specific shortages in select locations.

Strategy 1. Generate greater interest by increasing the number of government scholarships allocated to teacher-education studies;

Strategy 2. Lower the academic entry requirements for teacher education so that a greater pool of applicants is eligible to be admitted;

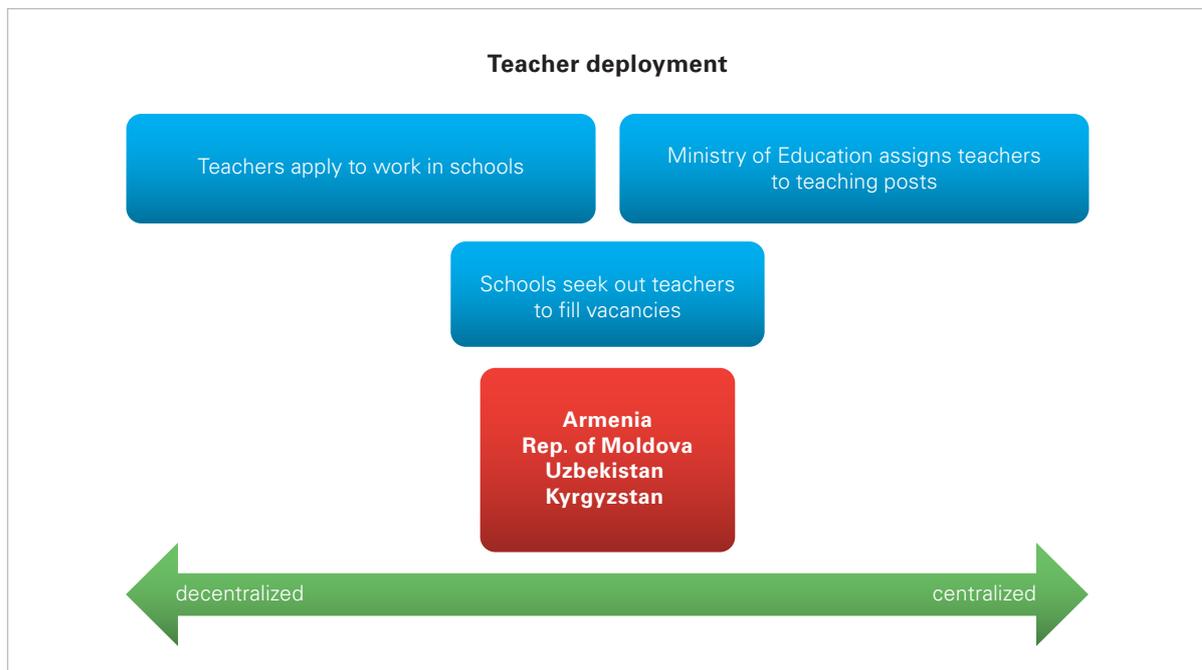
Strategy 3. Tie government scholarship to a service requirement: upon graduation, ‘budget students’ must work for two to three years in remote rural schools or in other schools with teacher shortages.

With few exceptions (e.g., Uzbekistan), governments have not succeeded in systematically enforcing the third element of the strategy. In the wake of decentralization and recentralization reforms, many governments in the region lack the control mechanisms at the regional and district levels to monitor and systematically implement the teacher service requirement. It is impossible to keep track of teacher-education graduates in the current teacher management system. In addition, many district officials do not have enough economic resources to provide additional incentives to teachers (such as housing, land and other material benefits, stipend for transportation and communication, etc.) that compensate for the real and perceived shortcomings of work in the rural schools. Understandably, the previous system of dispatching newly qualified teachers to rural areas has been heavily criticized for being coercive.

Nowadays, the governments in the region distance themselves from a fully centralized system of teacher management where the Ministry of Education assigns teachers to teaching posts. Even in the cases where centralized deployment is supposed to be enforced ('budget students'), mechanisms are not in place to successfully implement the service requirement. The service requirement should be understood as a legacy from the past centralized teacher management system. It is unlikely to survive in the future and most likely will be replaced with a student loan as well as a merit-based scholarship system.

The two prototypes of teacher management and deployment systems are illustrated in Figure 13. In highly decentralized systems, teachers apply directly to a job opening at a school. In such systems, schools are charged with announcing openings and hiring teachers with little interference from the district or central education authorities. In a centralized system, the Ministry of Education (or its representation at province and/or district level) registers newly qualified teachers and assigns them to a teaching post. Without exception, all countries in the region moved from a highly centralized teacher management and deployment system to one that reflects a decentralized system with traces from the old system.

Figure 13: Teacher management and deployment systems



In decentralized teacher management and deployment systems, government offices are not in a position to dispatch teachers and order them to take on positions in less desirable locations. Rather than making use of coercive deployment measures, they need to become creative in how to attract and retain qualified teachers in peripheral areas. The best practices contain elements of targeting strategies, incentive schemes and mentoring support in order to accomplish the following:

- (1) Recruit the right kind of secondary school graduates into teaching;
- (2) Attract newly qualified teachers into schools that are considered challenging;
- (3) Provide support structures and other benefits that make them stay in the peripheral location.

In the following, these three widespread teacher attraction and retention programmes are illustrated with examples.

3.6.1. RECRUITING GRADUATES FROM RURAL SCHOOLS

The recruitment of newly qualified teachers or ‘young specialists’ for rural schools has been a recurrent theme for the educational systems of the region dating back to the socialist period. The governments in the region pursue a comprehensive approach to specifically attract students from rural and semi-urban areas into the teaching profession. The following practices are widespread throughout the region:

- Correspondence studies in higher education that enable teacher-education students to retain their residence in the rural location and periodically attend classes while working part-time at the school
- Branch colleges and universities in provinces
- Quota system that increases the chances of graduates from rural schools to receive government scholarships for teacher education
- Lower admission score requirement in teacher-education studies for graduates from marginalized groups and/or from rural areas

One of the more promising schemes has been to recruit secondary schools from rural areas and establish a contract that is signed by three parties: student/prospective teacher, local government and teacher-education institution. Similar to the regular government scholarship, the recruited teacher-education student benefits from studying for free and, in return, has to teach for three years in a rural school. Different from the general scholarship scheme, however, the student is recruited from the same village to which he or she must return upon graduation. In addition, the service requirement can be enforced more effectively because it is based on a three-party agreement that includes not only the student and the university, but also the local government. Nevertheless, as with the government scholarship scheme, this slightly improved version provokes negative association with manpower planning and social control.

3.6.2. ATTRACTING NEWLY QUALIFIED TEACHERS INTO THE PROFESSION

The Young Specialist Deposit Scheme represents one of the most widespread programmes that attempts to lure newly qualified teachers into the profession. It is one of the ‘traveling reforms’ that has been advocated by the World Bank and the regional banks and is implemented in several countries of the region. The idea of the scheme is similar – offer a very attractive entry salary for a limited time-period – but the technical features of the scheme vary by country. The following explains the features of the Republic of Moldova and the Kyrgyzstan schemes.

In the Republic of Moldova, the scheme for young specialists targets the graduates from medical and educational degree programmes. That is, the target groups are young teachers and young medical doctors. According to the Decree 418-XV of the 2004 Law,³⁰ young specialists who are assigned to work in rural areas receive a number of incentives, including a one-time allowance of 30,000 MDL distributed in equal parts over three years, monthly compensation for 30 kilowatts of electricity, 1 cubic meter of wood annually, 1 metric ton of coal annually and an offer from the local public administration of a free place to live. In order to be eligible for these incentives, the teacher-education institution must certify that the graduate had high academic achievement, benefited from a budgetary scholarship and accepted a position in a rural school. The young specialist is hired based on a contract stipulating the commitment, the payment

³⁰ Number 418-XV of the 2004 Law that replaced the Law on Education no.547-XII of 1995.

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modality for the supplementary stipend, and the allowances granted by local public authorities. The Young Specialist Deposit Scheme is a compelling yet costly programme for attracting young teachers to work in rural areas, and therefore unlikely to be sustained from the national education budget alone. For example, the data collected from the Department of Education in Falesti *raion*, indicates that until now, only 12 young specialists in the entire *raion* completed the programme and benefited from the allowance of 30,000 MDL. As of March 2010, there were 60 teachers with the 'young specialists' status in the Falesti *raion*: 6 began working in 2007, 29 in 2008, and 25 in 2009. There was also a considerable level of uncertainty on whether or not, and for how long, the scheme would be continued given the significant level of required funds.

Similarly, in Kyrgyzstan, the programme is popular among local governments and young specialists, but there is doubt that it can survive without support from external financial sources. In Kyrgyzstan, article 32 of Decree 225 of 28 December 2006 elaborates on the 'social protection of workforce in the system of education' in the Education Law, and encourages district governments to offer incentives to newly qualified teachers for assuming a post in a rural schools: "Young professionals coming to work in rural schools are given, from the local budget, a lump sum of 10 salary rates for household purposes." Naturally, many local/district governments do not possess the necessary resources to fund such a programme and therefore rely on the central government budget or on pilot projects funded by development banks (World Bank, Asian Development Bank). The Young Specialist Deposit Scheme in Kyrgyzstan pays a sizeable supplement to the base salary of newly qualified teachers – deposited in their bank account – provided that the NQT or young specialist remains on the teaching post for three years. During the pilot period of the scheme (funded by the Rural School Project of the World Bank), the young specialist receives an amount of KGS 2,000 (then US\$55) monthly, in addition to the salary. After the three-year period, however, teachers revert back to the basic salary and have to wait another five years for the 'attestation' (promotion) that will give them only an extra monthly supplement of \$3.60, or KGS 133. The Young Specialist Deposit Scheme in Kyrgyzstan was first piloted in two provinces and then implemented nationwide. In the districts of the UNICEF study, the education authorities criticized the scheme for its rigid criteria. Cases were reported in which young specialists who got married during their second or third year of service lost their entitlement to the deposited amount because they moved from one village to the next even though they continued to work as a teacher. Regardless of the problems with implementation, the scheme is expensive and does not offset the flaws of the current teacher salary scheme. Apart from the Young Specialist Deposit Scheme in Kyrgyzstan (funded by the development banks), there exist no noticeable incentives for pedagogical graduates to go into teaching. Young teachers only receive a monthly salary supplement of 200 KGS per month – a very low bonus in comparison with teachers who have five or more years teaching experience, and thus a higher rank, who receive salaries that are 10, 20, or 30 per cent higher. In other words, the monetary incentive provided by the scheme barely compensates for the much lower salary that young specialists make in schools of Kyrgyzstan.

The Young Specialist Deposit Scheme pursues the dual objective of improving the university-work transition and filling vacancies in rural schools. No doubt, the transition rate is improved by means of such schemes. In the short run, more newly qualified teachers assume a teaching post because of the attractive salary supplement paid from the special programme. The findings are inconclusive, however, on whether the newly qualified teachers stay at the school or, more generally, in the profession when the supplemental payments end. Therefore, evaluations of the programme should not only examine the issue of financial sustainability of these expensive pilot programmes, but also the question of effectiveness.

3.6.3. REDUCING THE ATTRITION RATE DURING THE FIRST YEARS OF SERVICE

Clearly, the measures to attract newly qualified teachers into schools are entirely different from those that help them stay in the profession. Until the late 1980s, local governments in the region would provide additional benefits to teachers in order to make them stay on the post. The state factories and agricultural collectives provided the economic foundation to provide these additional funds. Some countries more than others continue with the practice of additional allowances from the local government budget.

Tajikistan and the Republic of Moldova represent good cases in point to illustrate the local salary allowances and additional benefits provided to teachers. The case studies from Bosnia and Herzegovina, The former Yugoslav Republic of Macedonia, and to some extent the Republic of Moldova, demonstrate that there also exist non-material resources and support – such as mentoring and professional support – that are supposed to entice NQTs into remaining in the teaching profession. The following examples present policies and programmes that intend to support newly qualified teachers regardless of the location of their teaching post. In some cases, teachers in rural areas are specially targeted and benefit from the social benefits (e.g., being given a plot of land and apartment/house).

In Tajikistan, a series of social benefits for public servants, such as a discount for utility charges, provision of a plot of land or housing, or in Dushanbe, loans for purchasing an apartment, free public transportation, cash for special holidays, etc., are already in place nationwide. They are paid from the local and not from the republican budget. As a result, the amount of allowances varies considerably across the country and strongly depends on the financial situation of the local government. In Dushanbe, for example, the mayor's office and the local governments of the city provided not only free public transportation, but also contributed to the cost of utility charges, offered loans for purchasing apartments, and paid a cash allowance of 280 TJS in school year 2006/2007, amounting to three monthly base salaries. Thus, a teacher in Dushanbe received in school year 2006/2007 16 monthly salaries: 12 regular ones, the thirteenth monthly salary (which was abolished as of 1 April 2007), and three monthly salaries paid by the local government. There are immense variations in allowances nationwide, depending on the economic situation of the local government.

In the Republic of Moldova, a state-adopted regulation came into action in 2008. The regulation stipulates that the local government provides a dwelling place for the young specialists on the condition that she or he has worked for at least five years in the municipality or village. Afterward, the dwelling place becomes his or her property.

Similar regulations that encourage local financial support for public servants exist throughout the region. In practice, however, only municipalities with a sizeable tax revenue or access to state property are able to provide such incentives. These kinds of regulations have endured from the past. However, in a change from the pre-transition period, the local government often does not have sufficient resources to provide all kinds of benefits for its employees. The UNICEF CEECIS study on teachers shows that there is a large gap that yawns between what the local government is supposed to provide in terms of housing, a plot of land, discounts for utilities, free transportation or communication cost, and what actually is given to employees that have been in public service for 5, 10 or more years. The gap between policy and practice of financial decentralization is important to keep in mind, when figures on the ratio between central and local educational finance are presented. The UNICEF CEECIS report, *Education for some more than others?*, notes that in Uzbekistan, 61 per cent of funds for public education are funded from the local budget. This does not imply, however, that the same ratio of funds originates from local tax revenues. On the contrary, a closer examination reveals that in Uzbekistan, but also in other countries that pursue a fiscal decentralization policy, the central government in practice redistributes funds, and in fact heavily subsidizes low-income provinces and districts.

Additionally, there exist non-material support structures that positively affect the retention of newly qualified teachers. Each and every system in the six-country UNICEF CEECIS study on teachers provides some kind of mentoring support for newly qualified teachers at school level. In some systems, however, the provision is more formalized and clearly regulated than in others. Bosnia and Herzegovina, The former Yugoslav Republic of Macedonia, and to some extent the Republic of Moldova, have elaborate mentorship systems in place for newly qualified teachers. As will be demonstrated later in this report, the professional relationship in the dyad is regulated, the experienced teachers are attributed the mentor status and are accordingly remunerated.

3.7 CHAPTER SYNOPSIS

- This regional study emphasizes the importance of recruiting the ‘right’ school graduates for pre-service teacher education who, upon completion of their degree, will end up working as teachers.
- There are, in total, five indicators that measure effective recruitment into teaching: (1) admission rate, (2) enrolment rate, (3) completion rate, (4) transition rate, and (5) retention rate of newly qualified teachers.
- Ministries of education only collect information on enrolment and completion rates in universities and pre-service teacher training programmes. Information on how many graduates from these programmes actually end up working as teachers and how many of them remain on the post had to be assembled from a variety of other sources.
- In many countries, teacher-education studies represent the degree programme that attracts masses of students, has low admission requirements and provides a disproportionately large number of government scholarships.
- Universities in the Caucasus, Central Asia and Eastern Europe distinguish between ‘budget students’ (recipients of government scholarships) and ‘contract students’ (those who self-finance their studies). A large number of students enrol in teacher-education studies because they were turned down by more popular/competitive degree programmes and because funding was available. As a result, many of the students entering pedagogical universities are low achievers who initially did not intend to become teachers.
- Despite the large output of teacher-education graduates and requirements imposed on budget students, very few transition into the teaching profession. The university-work transition rate in Kyrgyzstan, for example, is only 17 per cent. That is, over four fifths of the graduates – including those who received government scholarships – prefer to be unemployed or work in another profession than to work as a teacher.
- Without exception, all countries in the region have moved from a highly centralized teacher management and deployment system to one that reflects a decentralized approach with traces from the old system.
- The study identified a few pilot initiatives or best practices in the region that attempt to (1) recruit the right kind of secondary school graduates into teaching, (2) attract newly qualified teachers into schools that are considered challenging, and (3) provide support structures and other benefits that make newly qualified teachers stay in the peripheral location.
- Teacher shortage is always geographically localized in peripheral regions with difficult living and working conditions. In addition, shortage also exists for subject matters that are either very attractive or very unattractive in terms of compensation; at the one end are subjects that are in high demand by the private sector (foreign language teachers, math, science), and at the other end are subjects (music, art, crafts, etc.) with a small allocation of weekly instructional hours making it difficult for specialists in these subjects to take a full teaching load.



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CHAPTER 4: **THE PROFESSIONAL DEVELOPMENT OF TEACHERS**

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Throughout the 1990s – and in some countries until today – efforts in teacher developments focused primarily on the in-service training of teachers. It was only with the extension of secondary schooling to 11 or 12 years and the dramatic expansion in higher education that attention was directed toward the reform of pre-service teacher education. The previous in-service teacher-education system entitled each teacher to four to six weeks of professional development every three to five years. The lifelong in-service teacher training system and the comprehensive ECCE system were inherited from the socialist past. Very popular yet expensive, they were among the first provisions that collapsed in the early 1990s. Non-governmental organizations, first the Soros Foundation Network and then others, filled the void that the suspension of the state-run system left behind. In almost each and every country of the CEECIS region, with the exception of Belarus and Turkmenistan, external financial assistance was used to gradually rebuild the in-service training that had fallen apart.

This chapter summarizes developments in pre-service teacher education, induction of newly qualified teachers and in-service teacher training. This chapter ends with a historical sketch of professional development trends and patterns in the region.

4.1. PRE-SERVICE TEACHER EDUCATION

There are typically four areas that are covered in pre-service teacher training:³¹

1. Subject content or academic knowledge: language, science, history, physical education, etc.
2. Pedagogical content or methodological knowledge: methods of language teaching, methods of science teaching, etc.
3. Educational content or professional knowledge: learning theories, history of education, developmental psychology, etc.
4. Teaching practice or practical skills

Subject content. The extension of secondary school from 9 or 10 years to 11 or 12 years has had major repercussions for the reform of the subject-specific content in pre-service teacher-education reform. The school curricula were criticized for having become too fragmented and overcrowded, leaving fewer instructional hours for each subject. Thus, in many countries of the region, curricular reform was used as a window of opportunity to reorganize the curriculum by aggregating individual subjects into subject areas. For example, math (calculus, algebra, geometry, etc.) and sciences (physics, chemistry, etc.) constitute a subject area, and teacher-education students must select a major and minor(s) within a subject area. In countries where the curriculum reform was more erratic and led to abstract standards that neither matched the textbooks nor the student assessment system, pre-service teacher training institutions, introduced (or reintroduced) with the financial support of development partners, multi-subject teaching to address the shortage of qualified teachers in small schools. Pre-service teacher-education curricula in the region have been criticized for placing too much weight on subject content and neglecting the other three important areas. The UNICEF study on pre-service teacher education in Armenia, for example, estimates that 40–60 per cent of the instructional hours are allocated for subject-specific courses.

Pedagogical content. An ongoing challenge in pre-service teacher-education reform has been how to reform the curriculum in ways that would make teacher education move away from being associated with a generalist degree (with a strong emphasis on the first area, that is, subject content) to one that specifically prepares educators and therefore gives greater weight to pedagogical content (second area) and the teaching practice (fourth area).

Educational content. In several countries, there is a blurred line between the second and third content areas – that is, between pedagogical content and educational content. In Tajikistan, for example, the courses in these two content areas are listed in the same rubric entitled ‘general section on specialty’ that includes

³¹ OECD (2005).

both education content (e.g., pedagogical theory and system technology, basic psychology, developmental psychology) and courses that are clearly related to pedagogical content or methodological issues, (e.g., methodology of teaching Russian language). Table 13 provides an example of the courses that future Russian language and literature teachers have to take under the rubric 'general section on speciality.'

Table 13: Pre-service teacher-education curriculum, Tajikistan (excerpt)

GENERAL SECTION ON SPECIALTY
PRACTICUM READING & WRITING
PEDAGOGICAL THEORY & SYSTEM TECHNOLOGY
BASIC PSYCHOLOGY
DEVELOPMENTAL PSYCHOLOGY
PEDAGOGICAL PSYCHOLOGY
METHODOLOGY OF TEACHING RUSSIAN LANGUAGE
METHODOLOGY OF TEACHING RUSSIAN LITERATURE
GENERAL LINGUISTICS

Source: USAID (2007, 47).

As mentioned above, there are far fewer courses that would qualify for pedagogical content (second content area) and educational content (third content area) than for subject content, reinforcing the generalist trend by conceptualizing pre-service teacher-education studies as a generalist degree rather than a pedagogical, professional degree.

Teaching practice or practical skills. Designing an effective teaching practice curricular component requires close cooperation with the schools where the student teachers are placed. The cooperation, in turn, necessitates a myriad of human and financial resources to sustain the close bond between the teacher training institution and the practicum schools. This is not always possible, for a variety of reasons. There is a tradition in the region to have schools affiliated with universities, including with state pedagogical colleges and universities, which serve as laboratories, for observation as well as student teacher practicum sites. According to this traditional model, student teachers would visit the affiliated school in large groups and/or for brief periods of time throughout their studies. During the crisis years – in the 1990s at the height of teacher shortage – teacher-education students in Tajikistan and Kyrgyzstan were encouraged to substitute their last year of studies with teaching at a school and thereby, in effect, shorten the length of teacher education by one year.

4.2. INDUCTION OF NEWLY QUALIFIED TEACHERS

With the exception of the countries of former Yugoslavia, the professional induction of newly qualified teachers only existed on paper but not in practice. In contrast, in the countries of former Yugoslavia, there is a mentoring system in place that pairs newly qualified teachers (NQT) with experienced mentor-teachers. The mentors receive a salary supplement, ranging from 5 per cent of a teacher's salary (Sarajevo Canton in Bosnia and Herzegovina) to 10 per cent of a teacher's salary (The former Yugoslav Republic of Macedonia). A closer examination reveals that there exist different systems in the various countries of the region operating under the label of mentoring or induction of newly qualified teachers.

In the Republic of Serbia, one experienced teacher per school is designated as a mentor and receives a 5 per cent salary supplement. He or she is then expected to mentor the group of newly qualified teachers at the school. In the mentoring system of the Sarajevo Canton, however, the system is more expensive and costly. The salary of a mentor is multiplied by a factor or coefficient of 0.3 with each promotion in mentoring status. There are three salary ranks associated with mentoring: mentor, counsellor, and senior

counsellor. The coefficient for mentoring thus substantially increases the base salary. Teachers are eligible for these distinctions every five years based on an attestation process that considers the evaluation of their performance in several areas. In order to qualify for the next rank, teachers must have passed the evaluation in all areas with the highest marks. The newly promoted teacher begins with the status of mentor. If positively evaluated, the mentor is eligible, after five years, for the counsellor status and eventually for the senior counsellor rank. The implementation of the system is not necessarily enforced at the school level and the interviewed teachers tended to view the mentoring system more as a retention system for experienced teachers (by improving their salaries) rather than an induction system for inexperienced new teachers.

In The former Yugoslav Republic of Macedonia, first-year teachers receive only 80 per cent of their total salary. This is common among all first-year social sector workers in The former Yugoslav Republic of Macedonia. Half of the deducted amount (10 per cent of the regular teacher salary) is supposed to be paid to the new teacher's mentor teacher. Although this is a law, several of the interviewed schools reported not having paid their mentor teachers the additional amount, suggesting that the mentoring payment policy is not being entirely carried out in practice. The other half of the deduction is paid to the Ministry of Education and Science, to use towards instructional technology. Even though the mentoring system is structurally embedded in the teacher salary, there are neither standards for mentoring nor standards for the certification of the newly qualified teacher in place.

Box 9: The teacher career development model of The former Yugoslav Republic of Macedonia

The Ministry of Education and Science in The former Yugoslav Republic of Macedonia is in the process of implementing a teacher career development model for teachers in primary and secondary education. The model's aim is to promote the continuous professional development of teachers. A promotional benchmark approach will be used to measure teachers' status and salary within the education system, by sorting teachers between the following four categories: trainee teacher, teacher, distinguished teacher and mentor teacher. A teacher is in the 'trainee' stage for the first five years. Although they will have a license to teach, they cannot enter the 'teacher' stage until completion of at least six years of teaching. After 12 years they can earn the rank of 'distinguished teacher', and those who are successful in their eighteenth year earn 'mentor' status. Precise indicators will measure acquired competencies, experience, demonstrated quality/success in teaching, student learning, school-related innovations, and participation in extra-curricular activities. The teacher career development model was formulated in 2006, but it has not yet been rigorously enforced.

Several pilot projects are currently being carried out in other countries of the region that attempt to make the professional relationship between the mentor and the mentee meaningful. In Kyrgyzstan and Tajikistan, for example, the Quality Learning Project (funded by USAID) introduced several measures to strengthen the professional tie between experienced and inexperienced teachers at the school level.

4.3. IN-SERVICE TRAINING OF TEACHERS

Perhaps more than other subsectors, in-service training of teachers has undergone fundamental changes in the region over the past 20 years. The lifelong learning of state employees, including teachers – systematically enforced during the socialist period – was expensive and, with a few exceptions (Uzbekistan), was not sustained after the fall of communism.

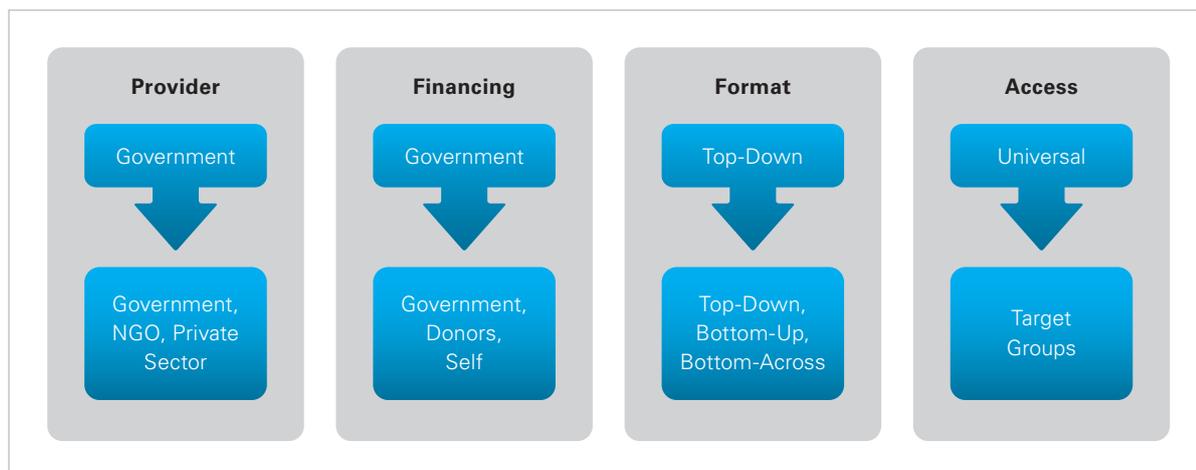
Box 10: Lifelong learning of teachers in Uzbekistan

In Uzbekistan, teachers must attend in-service training every third year for no less than 144 hours, taken over four years. Newly qualified teachers must attend their first in-service training after one year. After the first year, in-service training programmes are subject-specific and are organized by the regional departments of the Ministry of Public Education in Uzbekistan. In most other countries, the lifelong-learning approach to the professional development of teachers existed on paper but was, for lack of funding, discontinued. As outlined in the historical sketch, the periodical training – typically all five years (in Uzbekistan, all three years) – was replaced with other formats.

Figure 14 summarizes the main features of the previous system. Following is a summary of the key traits:

- *Provider*: Governmental institutions –the Ministry of Education and its representations at provincial level, Institute for Teacher Training and/or by state pedagogical universities.
- *Financing*: Fully financed by the Ministry of Education; in-service training was completely free for teachers.
- *Format*: Either organized in the capital or in the provincial centre with content that was determined by the Ministry of Education.
- *Access*: Every teacher not only had access to, but was obliged to attend ‘upgrading’ workshops every three or five (now three) years, which typically lasted for three to six weeks.

Figure 14: Changes over time in in-service training



The last two decades saw a proliferation of various types of in-service training in the region. The countries of the region embarked on different trajectories encompassing a range of in-service training types, broadly summarized in the following:

- *Provider*: Government ceased to be the only provider offering in-service training. As mentioned in the historical sketch, for the first period of the transition, the Soros Foundation (Open Society Institute) was actively involved in providing training on reading and writing for critical thinking, debate, street law, etc. Other NGOs and international organizations followed suit and also offered workshops on a series of topics that complied with the missions of their organizations. In a few countries, such as, for example, in The former Yugoslav Republic of Macedonia, businesses and/or other private sector actors also offer courses for teachers.

- *Financing:* Most countries have a mixed model of financing that reflects the following rationale:
 - Topics that relate to reform priorities, set out in education sector strategies or other official documents, typically are funded from government sources.
 - Topics that match the mission of NGOs, bilateral or multilateral agencies are funded by donors (e.g., civic education, critical thinking, child-friendly schools).
 - Topics that yield a financial return on training (e.g., promotion to a higher salary rank) are fully or partially self-financed by teachers – for example, programmes that lead to an additional qualification.
- *Format:* The format is closely related to the type of provider and available financing modalities. Nowadays, a combination of different formats is in effect, depending on the training objective:
 - Top-down training persists in which the government determines the topic, but is nowadays mostly confined to topics that reflect a reform priority.
 - Many countries of the region have introduced per-capita financing, which enables schools to administer their own funds, including establishing a fund for professional development of teachers or for quality assurance initiatives at school level. Such funds are often used for bottom-up training where schools determine the topic and select the provider and frequently invite trainers for a school-based training.
 - Finally, bottom-across training (training in clusters of schools) has been actively promoted by NGOs and bilateral/multilateral agencies, following a cascade training model: typically one or two schools in a region are selected as teacher resource and training centres. Experienced teachers from those schools are then identified as peer trainers and mentors for the surrounding schools in the region.
- *Access:* Different from previous times, in-service training or lifelong learning of state employees/teachers is, in practice, no longer a right and/or an obligation for each and every teacher. Nowadays, some teachers have more access than others to in-service training. Once the most privileged, teachers of mathematics and the natural sciences benefit the least from the new types of in-service training that are by non-governmental organizations and donors. Today's target groups typically consist of those that teach the subjects most affected by reform priorities, e.g., primary school teachers in early grades (for extension of the school curriculum), English language teachers, social studies, or teachers in subject matters that have undergone reform, established new standards, or produced new textbooks.

As mentioned before, the comprehensive but expensive system of lifelong learning for state employees collapsed in the 1990s and donor support has been indispensable for subsequent in-service training of teachers. Today, two decades later, governments in the region draw on a combination of providers, funding sources, formats and target groups for in-service training.

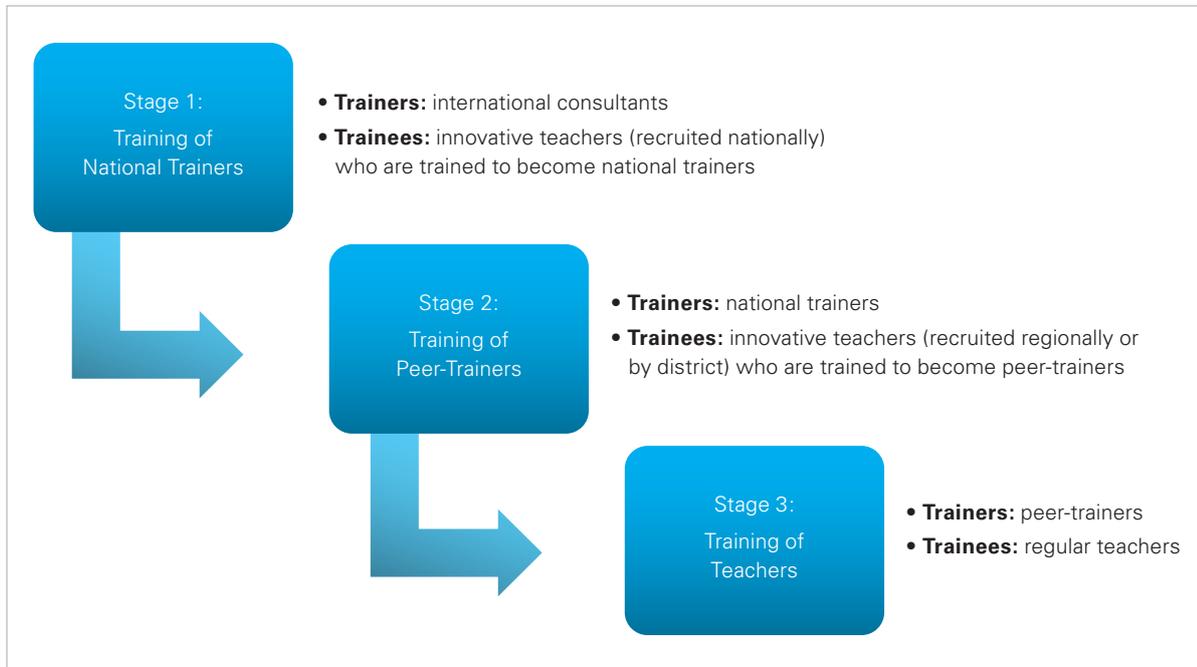
4.4. PROFESSIONAL DEVELOPMENT OF TEACHERS IN THE REGION: A HISTORICAL SKETCH

The history of professional development in the region reflects three distinct phases:

During the first phase, the new in-service training programmes, primarily funded and implemented by international donors and NGOs, focused on innovative teaching methods, child-centred pedagogies, critical thinking, debate skills and formative student evaluation. At the same time, the new in-service providers changed the format of in-service training from central and regional training or self-study to school-based training or training in school clusters. The new training formats required a large number of teacher trainers who were able and willing to work at district and school level. Rather than hiring or rehiring the trainers from the state-funded teacher training institutes, the international donors and NGOs recruited their own trainers from schools and prepared them to train and mentor others. It was believed that this group of innovative teachers would help accelerate change at school level because they knew the realities in schools and were

trusted and respected peers. To facilitate training at the school or district level, some of the schools were selected as resource centres and generously equipped with computers, videos, teaching resources, and books for teachers. As a result, some schools functioned as training hubs for surrounding schools. Figure 15 presents the cascade model that was common throughout the 1990s and in the first years of the millennium.

Figure 15: The cascade model of in-service teacher training



In a cascade dissemination model, trainers train trainers who, in turn, will train regular teachers. Figure 15 presents an example of a train-the-trainers format that was common in the region throughout the 1990s and early years of the millennium: international consultants first train national trainers (stage 1). In a next stage, these national trainers pass on their knowledge and skills to innovative teachers from select regions and districts and prepare them to become peer-trainers (stage 2). Finally, the newly trained peer-trainers provide in-service training workshops for regular teachers, either at school level or district level (stage 3). The cascade model was popular in the early transition phase because it enabled the non-governmental organizations and donors to scale-up innovation at a rapid pace and reach masses of teachers within a relatively short period of time.

In a second phase, the governments re-acclaimed their leadership role for the in-service training of teachers. The exceptions to the rule were the countries of the former Yugoslavia where, due to war and other conflict, the governments were temporarily fragile and teacher development was almost entirely run by non-state agencies. The other governments in the region regulated in-service training offered by non-state actors in various ways. The following typology attempts to capture the different types of arrangements that governments made with non-state agencies and NGOs that helped rebuild the in-service training subsector:

- Non-integrated or parallel in-service training provision: Governments gave permission to – in some countries, actively encouraged – non-state agencies to provide in-service training *in addition* to the fully (re-)developed state system.
- Semi-integration: The government hired non-profit organizations or businesses to provide training on select subject matters and topics or for specific groups of teachers. The training was fully or partially funded from the state budget or from externally funded sources (EFA FTI, grants or loans from development banks). A typical arrangement consisted of having travel and accommodation for participants covered from the state or school budget, and honoraria for trainers paid from an international project.

- Full integration: non-state in-service training providers were treated equally to state-run in-service training institutes. Regardless of their affiliation, all providers had to seek accreditation for their courses. As a result, NGOs, state in-service training institutes, businesses, or universities offered courses that were subject to the same regulation mechanism, quality assurance, and in some countries, the same level of funding. In some countries of the region (e.g., Russia, Kyrgyzstan), this particular type was labelled the 'voucher system', for the following reasons:³²
 - Choice: Teachers themselves, rather than the school or the education authorities, registered the teacher for a particular course
 - Quasi-market regulation: There was no restriction on which organization was eligible to submit a course proposal for review and accreditation. Any course could be offered as long as the course was accredited by the body in charge of quality assurance in higher education (or specifically in teacher education) and a sufficient number of teachers registered for the course. The idea was quasi-market regulation with minimal state interference would propel quality improvement because, ideally, low quality courses or courses with unattractive content would get discontinued in the following year due to not being accredited or low demand.
 - Nominal value of vouchers: the voucher was not only a piece of paper, but there was a nominal value attached to the voucher. That is, each in-service provider would receive the same amount of subsidy per participant or per voucher. As a result, providers that attracted a greater number of participants, had additional sources of funding (from associations, international NGOs, etc.), and had low infrastructure and other costs were at an advantage. In a voucher model, the state in-service training institutions are at a disadvantage because they do not rely on additional funding, employ permanent staff and must deal with high infrastructure cost.

The third phase marks the beginning of an era when governments and international donors draw greater attention to a reform of pre-service teacher education. Compared to teachers, lecturers in pre-service teacher education were orphaned when it came to their own professional development. In Tajikistan, for example, 72 per cent of all university lecturers had not engaged in any form of professional development between 1995 and 2005, and only 18.5 per cent had received some form of professional development ('retraining') between 2000 and 2005.³³ An exception to the rule has been the Quality Learning Project (QLP), a USAID-funded project in Tajikistan and Kyrgyzstan. QLP prioritized pre-service teacher-education reform and financed professional development opportunities for pre-service lecturers in the two Central Asian countries. With the exception of Uzbekistan, where the Ministry of Public Education directly manages five pedagogical institutes and requires that all staff attend in-service training every three years, the other participating countries in the UNICEF CEECIS study of teachers report that pre-service teacher education has only recently become a reform priority.

The disparity between the stagnant and the progressive has led to an innovation gap between pre-service education and in-service training over the last several years. An interesting USAID study on professional development and curriculum reform in Tajikistan and Kyrgyzstan identified an innovation gap between the pre-service and in-service training of teachers.

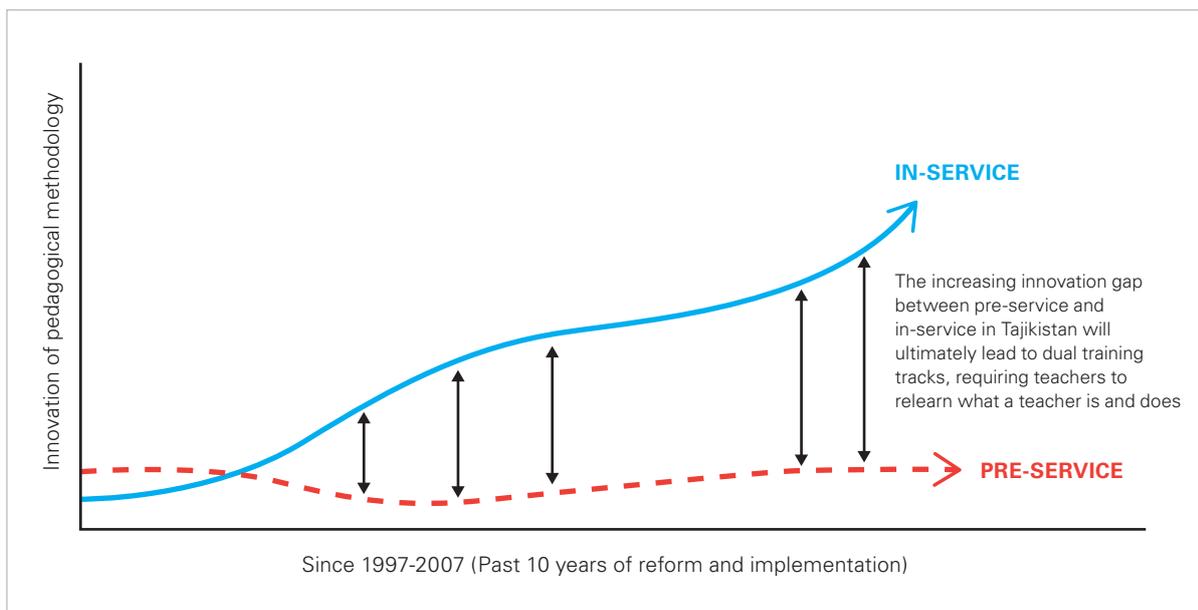
³² Ivanov, Alexandr and Valentin Deichman (2008). 'A voucher system for teacher training in Kyrgyzstan'. In Iveta Silova and Gita Steiner-Khamsi (2008). *How NGOs react: Globalization and education reform in Central Asia, Caucasus, and Mongolia*. Kumarian Press.

³³ PULSE (2006). 'Baseline study of higher education in the Republic of Tajikistan'. Dushanbe: PULSE NGO.

Box 11: The innovation leap in in-service teacher training: Unanticipated side-effects

Throughout the 1990s, in-service training was exposed to many more new and innovative practices than pre-service training institutions and educational reform in general. The curriculum, textbooks, assessment system, salary system and a host of other systemic changes lagged behind the innovations in in-service teacher training. As one of the executive directors of an international NGO commented, “We are in the absurd situation that we are funding the in-service training of teachers in innovative and student-centred teaching methods so that teachers can teach old content, outdated books, and rigid test requirements in a more effective manner.” The accomplishments in in-service training created pressure on curriculum reform. In the beginning stages of curriculum reform, subject matters – such as civic education, environmental education, health education and other subjects actively promoted and funded by international donors – were simply added to a curriculum that already was overcrowded and fragmented into many different subject matters. In particular, the curriculum in grades 6 through 9 is, according to a UNESCO study on instructional time, ‘overloaded’. That is, there are more than 10 subjects taught, each with little instructional time.³⁴ In the new millennium, educational reform in many countries had to catch up with the innovation leap in the in-service training subsector and speed up with systematic curriculum reform, student assessment reform and other reforms that, throughout the 1990s, were periodically discussed and piloted but not implemented in large scale.

Figure 16: The innovation gap between pre-service and in-service teacher training



Source: USAID (2007, 54).

As the innovation disparity widens, as illustrated in Figure 16, the situation will, according to the authors of the USAID study, escalate to a ‘dual-training’ system, where pre-service education will be virtually outdated and in-service training will be considered a fundamental ‘retraining’ of teachers.³⁵

³⁴ Aaron Benavot (2004). ‘A global study of intended instructional time and official school curricula, 1980–2000’. Background paper for the *EFA Global Monitoring Report 2005*. Paris: UNESCO. See Table 12.

³⁵ USAID (2007). *Curriculum, student assessment, pre-service teacher training: An assessment in Tajikistan and Kyrgyzstan*. Almaty, Kazakhstan: USAID Office of the Kazakhstan and Central Asia Region. Prepared by Gita Steiner-Khamsi, Sina M. Mossayeb and Natasha Ridge.

The new emphasis on pre-service teacher-education reform is due to several factors that affected the countries in the region to various degrees. The three most relevant developments that generated reform pressure on pre-service teacher education are the following:

- Rapid expansion of private universities that led to a boom in enrolments, increase in tuition fees as well as coexistence of accredited and non-accredited degree programmes in teacher education.
- Adaptation of the Bologna Agreement and introduction of the two-cycle model (3 year BA, 1 year MA), eventually replacing the four- or five-year 'specialist diploma' in teacher education.
- Dissolution of stand-alone in-service training institutes and transfer of staff and resources to universities or state pedagogical universities who either offered in-service training themselves, or were put in charge of accrediting courses offered by others. In some countries, the accreditation was done literally – that is, credit-bearing courses were introduced and teachers could accumulate the credits towards a certificate or a degree programme.

The last point deserves special attention as it helped pre-service teacher-education institutions to diversify their sources of revenue and, significantly, generated additional income.

Arguably, any historical sketch of the teacher development provision in the CEECIS region oversimplifies developments in a particular subregion or a country. Nevertheless, it captures the main changes that have taken place in this subsector over the past two decades.

4.5 CHAPTER SYNOPSIS

- Previous in-service training systems entitled each teacher to four to six weeks of professional development every three to five years. With a few exceptions (e.g., Uzbekistan) this comprehensive but expensive system only exists on paper or has been discontinued.
- Non-governmental organizations, first the Soros Foundation Network in the early 1990s and then others, filled the void that the suspension of the state-run system left behind.
- Pre-service teacher-education reform lagged behind and was only treated with priority after external funding was channelled into higher education and secondary schooling was extended to 11 or 12 years.
- The innovation gap between in-service teacher-education reform and reform in other subsectors of education (including pre-service education reform) widened over the years and generated reform pressure in the areas of standards, curriculum, student assessment and textbook development.
- One of the neglected areas is the reform of the current salary structure. The teaching load (*stavka*, in Russian) system pays teachers by the teaching hour and compensates them additionally for grading student notebooks and other pedagogical and non-pedagogical tasks. The current salary structure – in operation in the Caucasus, Central Asia and Eastern Europe – perpetuates the belief that teachers should be compensated for everything additionally, including for other pedagogical tasks.
- Pre-service teacher education is widely criticized by many for its generalist orientation and low regard for pedagogical knowledge and teaching practicum.
- Two good practices for the induction of newly qualified teachers exist in Bosnia and Herzegovina and The former Yugoslav Republic of Macedonia, where experienced teachers are paired with novice teachers and mentoring is clearly regulated and also financially compensated.
- The professional development of teachers, especially with in-service training, has become 'demonopolized' and has undergone a major transformation over the past 20 years. Governments are facing challenges with how to deal with changes with regard to providers, financing modalities, format and access to in-service teacher training.



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CHAPTER 5: **SALARIES OF TEACHERS**

One of the least studied topics in the region is teacher salary. This chapter will demonstrate in great detail that the salary structure in the CEECIS region is fundamentally different from salary structures in Western Europe and other parts of the world. As mentioned in chapter 2, almost all countries in the region have the teaching load (*stavka*) system in place, in which teachers are paid by the (teaching) hour. The weekly workload system (40 hours of work per week) constitutes the norm in Western Europe but only exists in a few countries of the region. In fact, in the six-country study, only Bosnia and Herzegovina and The former Yugoslav Republic of Macedonia have the weekly workload system in effect. The educational systems in the three countries of the Caucasus, the five Central Asian countries, and the Eastern European countries (including the Republic of Moldova, Russia, Ukraine, etc.) all operate under the *stavka* system. The neglect of this important topic is incomprehensible given that salaries constitute three quarters or more of the recurrent expenditures in education. In addition, the remuneration of teachers not only has repercussions for the status of the profession, but also determines how much time teachers spend for pedagogical work. For all these reasons, the UNICEF CEECIS study on teachers examined in great detail the features of the teacher salaries in the region.

5.1. TEACHER SALARIES: ABSOLUTE AND RELATIVE VALUES

This section provides information on the nominal value of teacher salaries in the region. These represent absolute values converted into US dollar amounts.³⁶ Additionally, this section presents the nominal value of teacher salaries against the background of salaries in other public sector professions as well as relative to the average national wage.

5.1.1. AVERAGE TEACHER SALARIES: ABSOLUTE VALUES

The data on teacher salaries has been collected in the six-country UNICEF CEECIS study on teachers. In addition, findings from two other empirical studies are included (Georgia and Tajikistan) that applied a similar methodology – that is, retrieved information on teacher salaries at the school level.³⁷ Thus, the estimates in this section either draw from actual data from 10 schools in each country or from national statistical information in the six participating countries of the UNICEF study on teachers. In cases where statistical information was used, the average salary applies to teachers with a higher education degree.

The average monthly base salary of a teacher ranges from US\$20 to \$398 in the eight examined countries of the CEECIS region. In countries with the *stavka* system (all countries in Table 14 except for Bosnia and Herzegovina and The former Yugoslav Republic of Macedonia), a distinction needs to be made between the average base salary and the actual monthly salary ('total pay'), which is based on the real number of hours taught and supplements received. If one adds the various salary supplements and the average number of hours taught by teachers in the six countries, different figures for monthly salary emerge. In the two countries with the lowest teacher salaries, Tajikistan and Kyrgyzstan, the total pay slightly increases but is still at a low of \$26 or \$86 per month, respectively. In the Republic of Moldova and Kyrgyzstan, the total pay of teachers is much higher than the base salary because teachers tend to take on additional teaching hours and receive substantial salary supplements. In the Republic of Moldova, the average total pay for a teacher in the middle age category with a higher education degree is 1.7 higher than the average base salary, and in Kyrgyzstan is 2.7 times higher. The contrary applies to Armenia where most of the teachers teach less than one teaching load/*stavka* of 22 hours per week, thereby lowering the total pay, sometimes to a level below the base salary for one teaching load.

³⁶ This means that neither the Atlas method nor the PPP method was used. We used conversion rates of April 2011 to convert the amount in local currency into US dollars.

³⁷ Kobakhidze (2010) for the figures on Georgia; Steiner-Khamsi (2007) for the figures on Tajikistan. Note: the data for Tajikistan is from the year 2007; for all other countries the figures are from 2010.

Table 14: Monthly teacher salary

Country	Average base salary, local currency	Average base salary, US dollars	Average total pay, local currency	Average total pay, US dollars
Armenia	116,000 AMD	\$314	81,591 AMD	\$221
Bosnia & Herzegovina	691 BAM	\$498	691 BAM	\$498
TFYR Macedonia	19,300 MKD	\$448	19,300 MKD	\$448
Georgia	245 GEL	\$144	307 GEL	\$181
Kyrgyzstan	1,441 KGS	\$30	3,908 KGS	\$82
Republic of Moldova	2,200 MDL	\$184	3,760 MDL	\$315
Tajikistan	88 TJS	\$20	118 TJS	\$26
Uzbekistan	261,402 UZS	\$154	329,940 USZ	\$195

5.1.2. RELATIVE TEACHER SALARY

It is important to compare the absolute amount of a teacher's salary with the national wage average as well as with other comparable professions that require a higher education degree. One of the background papers for the *Global Monitoring Report 2010* presents estimates on relative teacher salaries in the Caucasus, Central Asia and Mongolia based on a combination of desk reviews and empirical studies.³⁸ With the exception of Turkmenistan (data not available) and Mongolia (relatively high teacher salaries), teacher salaries in all the countries of the Caucasus and Central Asia are below the national wage average. In the three countries of the Caucasus (Armenia, Azerbaijan, Georgia), teacher salaries are only 53 to 68 per cent of the average wage, and in the Central Asian republics, 60 to 70 per cent of the average wage, including both the private and public sectors.

An example from Tajikistan illustrates the relative wage of teachers as compared to other professions. Table 15 lists the salary in the education sector as a percentage of the national average salary and also lists, for comparison, average salaries in other sectors. The teaching profession is, along with health and agricultural professions, among the three lowest paid jobs. In 2004, average salaries in the education sector were 70.4 per cent – that is, close to 30 per cent lower than the national average salary. In Tajikistan, as in other countries of the region, teacher salaries have been periodically raised. In Tajikistan, for example, there was a fivefold salary increase in the period 2003–2007, yet the wages for teachers have remained below the national wage average.

An interesting study from Georgia compares the salary of teachers with the subsistence level over time, as well as with the salary of policemen.³⁹ Similar to other countries of the region, the teacher salaries were periodically raised over the past few years, but the teacher salary remains nevertheless close to subsistence level – that is, to the minimum level of pay needed for the most basic living expenses. In contrast, the average salary for policemen is three times higher than that of teachers (see Figure 17). This example from Georgia demonstrates the limited validity of rates of return analyses in the region: there is no direct correspondence between educational attainment and income level. There are obviously other factors that determine the salary and the status of a profession.

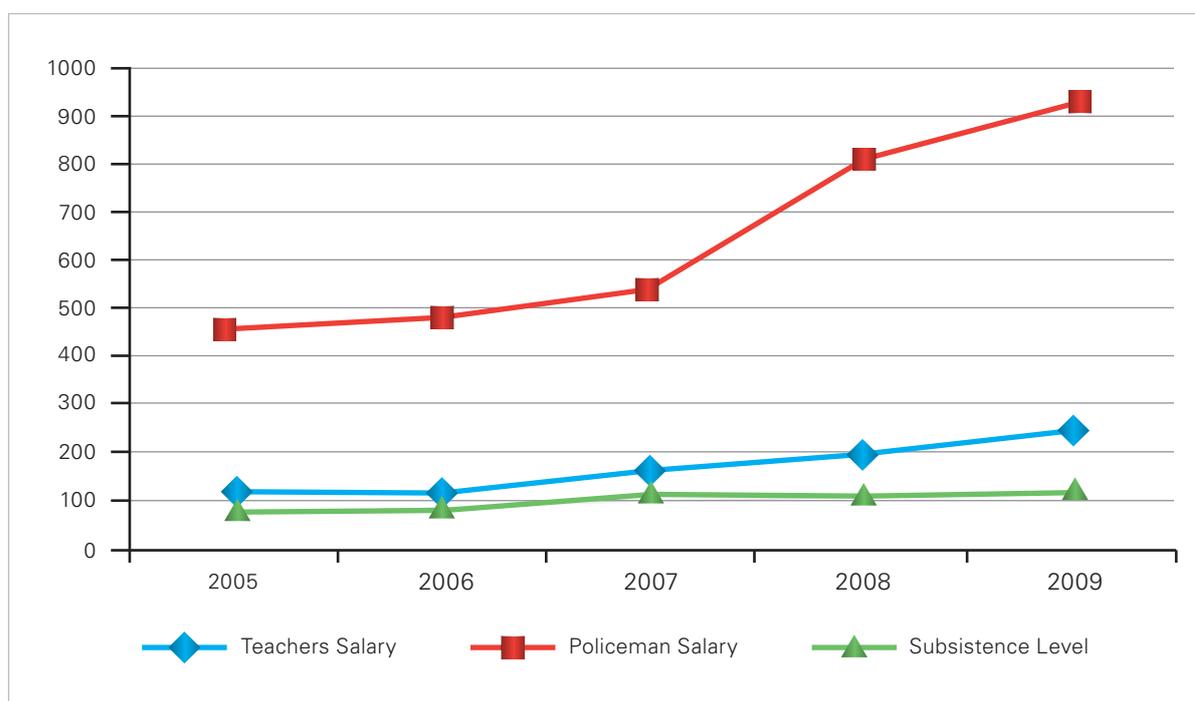
³⁸ Steiner-Khamsi, Gita, Christine Harris-van Keuren, with Iveta Silova and Ketevan Chachkhiani (2009). 'Decentralization and recentralization reforms: Their impact on teacher salaries in the Caucasus, Central Asia and Mongolia'. Background paper for the *EFA Global Monitoring Report 2009*. Paris: UNESCO.

³⁹ Kobakhidze, Magda Nutsa (2010). 'Teacher incentives and the future of merit-based pay in Georgia'. *European Education*, 42 (3), 68–89.

Table 15: Relative teacher salary in Tajikistan, 1998-2004

	1998	1999	2000	2001	2002	2003	2004
<i>Wages in sectors in % of national average</i>							
Economy	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Industry	309.1	308.5	304.6	303.1	284.0	255.9	236.1
Agriculture	57.4	46.3	50.0	58.3	58.2	60.5	57.4
Construction	242.5	319.0	249.9	235.7	146.8	224.2	247.5
Transport	175.9	200.0	198.8	207.9	213.9	226.6	242.6
Communication	211.2	246.9	246.9	253.5	292.6	334.0	324.8
Trade, Catering and Procurement	90.1	102.2	108.3	98.3	100.4	103.3	81.4
Health	33.4	38.5	43.2	37.7	39.8	38.3	35.8
Education	70.2	65.6	74.2	73.4	78.6	77.2	70.4
Social Protection	33.4	38.5	43.2	37.7	39.8	54.9	73.1
Public Administration	175.8	196.3	153.2	127.4	151.0	141.9	110.8
Credit and Insurance	221.8	421.4	492.7	385.1	363.9	393.0	378.7

Source: World Bank (2005, 97). *Tajikistan: Civil and public service wage note, Annex 1.*

Figure 17: The relative teacher salary in Georgia, 2005–2009 (in GEL)

Source: Kobakhidze (2010, 75).

Even though the teacher salary is low compared with the average national wage or with other professions, it is important to keep the broader economic context in mind. A key difference between the various countries of the region is the transition from a planned to a market economy. The growth of the private sector over the past 20 years varies greatly across the region. For example, in the early 1990s, the private sector's share of GDP was less than 10 per cent. It has since grown to over 50 per cent in the countries of the region, at varying national levels. Private sector development grew slowest in Uzbekistan (45 per cent) and Turkmenistan (25

per cent), where its share of the GDP is still below the 50 per cent mark. Throughout the region, secondary school teachers with specializations in the sciences or foreign languages, in particular, are at risk for being absorbed by the private sector.

The UNICEF CEECIS national case studies mention several factors that explain why the teaching profession is in some countries of the region considered attractive *despite* the low salary:

- Secure income: The unemployment rate in the region continues to be high, especially among the first-time job seekers and the younger population (between 15–24 years). The Republic of Moldova had, with 28 per cent, the highest annual unemployment rate in this age group of job seekers that are vulnerable to unemployment. Belarus was similarly high in 2007 (27 per cent). Other countries with unemployment rates above 20 per cent among the young working population are Kyrgyzstan, Albania and Tajikistan.⁴⁰ It is important to note that the poorest countries tend to underreport unemployment because unemployed persons, at any age, may temporarily afford to live on a household income and, given the low benefits of potential jobs, do not necessarily seek work. For ILO to consider someone unemployed, however, one has to be unemployed *and* be seeking work. For this reason, it must be assumed that unemployment is higher than officially reported. Compared to the private sector, the teaching profession is considered a secure position with predictable income. In rural areas, government jobs are the only secure jobs.
- Civil service positions, including the teaching profession, provide pensions but also other wide-reaching social benefits. In many regards, the teaching profession functions as a social safety net that enables other members of the household to take on riskier jobs in the private sector. In Tajikistan, it is not out of the ordinary that workers in the private sector also take on a few hours per week as a teacher, drawing on the social benefits of the teaching profession.
- There is a public awareness in the region that the salaries for health and education workers are low, yet their professions are respected. Different from medical doctors, however, teachers are in most countries not permitted to directly accept fees from parents except for fees for special classes. Therefore, the total teacher income ends up being much lower than that of medical doctors.
- In countries with the *stavka* system where teachers are compensated by the number of hours taught at school, the teaching profession is attractive for the option to work part-time. The Kyrgyzstan UNICEF study on teachers in fact found that all teachers, with the exception of those who work 1.5 teaching loads or more, have another job in addition to teaching. The problem with seasonal absences (during harvesting season) is especially relevant for this group of teachers whose livelihood depends on multiple sources of income.

5.2. SALARIES AND INSTRUCTIONAL TIME: REGIONAL AND INTERNATIONAL COMPARISON

Four of the benchmarks of the EFA FTI Indicative Framework deal with service delivery and directly relate to teacher salaries. Table 16 lists the indicators and the benchmarks, recommended by EFA FTI, and notes the trends for countries in the CEECIS region.

A comparative perspective reveals that the instructional time in the CEECIS region is lower than in other world regions. There are several reasons for the short school day and/or school year in the region. From the host of reasons, two explanations stand out: first, a shortage of school facilities, which leads to an organization of classes in two shifts, morning and afternoon. And second, the long summer break for younger students, or for those that do not have to take standardized tests in the last few weeks of the school year, contributes to the relatively short annual instructional duration in the region. Table 17 presents a summary of the study on annual instructional time, carried out by UNESCO International Bureau of Education (IBE), and complemented with additional data from Tajikistan. The UNESCO IBE study does not include countries in every region, just those that provided information to the IBE research team.

⁴⁰ UNICEF CEECIS (2009). 'Child protection resource package', statistics cited from TransMONEE 2009. See also, UNICEF CEECIS (2007). *Education for some more than others?* Geneva: UNICEF CEECIS.

Table 16: Trends in service delivery in the CEECIS Region: A comparison with the EFA FTI indicative framework

INDICATOR	BENCHMARKS RECOMMENDED BY EFA-FTI	TREND IN CEECIS REGION
Pupil-teacher ratio in publicly financed schools	40:1 or less	↓ Lower than 40:1; especially low in rural schools
Average annual salary of primary school teachers as a multiple of GDP per capita	3.5	↓ Much lower than a multiple of 3.5 of the GDP per capita
Recurrent spending on items other than teacher remuneration as % of total recurrent spending on primary education	33%	↑ Budget for salaries accounts for more than 67 per cent of total recurrent spending
Annual instructional hours	850 – 1,000 hours	↓ Average for countries in the Caucasus and Central Asia: 513 (grade 1) – 842 hours (grade 9)

Table 17: Instructional time by selected world regions, grades 1–9

Region	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	1 to 9
Western Europe & North America (N=22)	765	784	802	802	840	840	900	915	925	7,573
East Asia & the Pacific (N=15)	765	791	816	840	840	842	933	944	933	7,704
South & West Asia (N=6)	675	675	734	750	750	879	882	882	900	7,127
Central & Eastern Europe (N=19)	545	569	604	630	720	788	788	816	850	6,310
Caucasus and Central Asia, including Tajikistan (N=7)	536	587	630	668	765	791	816	816	842	6,451

Sources: UNESCO IBE (2007).⁴¹

A breakdown by country and type of schools brings to light the substantial differences within the two examined regions. As Table 18 demonstrates, students of primary school and lower secondary school in Azerbaijan have only 465–744 hours of class time per year, which is significantly less instructional time than students in Georgia and in the countries of Central Asia. Students in Tajikistan spend less time in school than students in any of

⁴¹ The estimates of intended instructional time over the first nine years of schooling are from: Massimo Amadio and Nhung Truong (2007). 'Worldwide tendencies in the use of the term "basic education" in K–12 educational programmes at the start of the twenty-first century'. Background paper for the UNESCO *EFA Global Monitoring Report 2008: Education for All by 2015: Will we make it?* Geneva: UNESCO-IBE. Note that we have supplemented this list with information on the official curriculum in Tajikistan. For a more detailed description of the methodology to examine intended instructional time, see Benavot, Aaron (2005). 'A global study of intended instructional time and official school curricula, 1980–2000'. Background paper for the UNESCO *EFA Global Monitoring Report 2005: The quality imperative*. Paris: UNESCO.

the other four Central Asian countries, and significantly less than in countries of Central and Eastern Europe. In contrast to Tajikistan, where the school year is only 34 weeks, other Central Asian educational systems have a longer school year. Students in Tajikistan have 5,882 instructional hours in grades 1–9. By comparison, students in Kyrgyzstan have 6,870 hours, and students in Kazakhstan have 6,261 hours. It is important to note that there are vast differences between private and public schools, as well as with regard to the language of instruction. Private schools tend to have a more packed class schedule or more instructional time, respectively.

Table 18: Instructional time in Central Asia and the Caucasus, grades 1–9

Country	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	1 to 9
Turkmenistan	630	630	630	735	814	840	971	998	971	7,219
Kyrgyzstan	545	612	714	740	765	816	867	893	918	6,870
Georgia	536	587	663	689	791	791	816	816	842	6,531
Uzbekistan	495	561	612	612	765	816	842	867	893	6,463
Kazakhstan	545	619	644	668	791	791	765	714	714	6,251
Tajikistan	376	560	612	637	637	714	765	765	816	5,882
Azerbaijan	465	488	512	512	674	651	721	744	744	5,511
Median instructional time (N=7)	513	579	626	656	748	774	821	828	842	

Sources: UNESCO IBE (2007).

5.3. TEACHER SALARY REFORM

Teacher salaries absorb three quarters or more of the recurrent cost in national education budgets. There is a great awareness in the region that salaries need to be raised. Base salaries of civil servants and teachers are both a public and a political concern given the great number of employees in the public sector. The salary raises of civil servants periodically surface in action programmes of political parties, especially during election years. As Table 19 illustrates, the base salaries of teachers were regularly raised over the past decade.

Table 19: Salary increases of civil servants and teachers

Country	Increase in salaries
Armenia	Teacher salaries have risen approximately 100% between 2004–2006
Azerbaijan	Teacher salaries have been increased nine times in the period 1997–2007
Georgia	Teacher salaries have risen approximately 150% between 1997–2007
Kazakhstan	Salaries of civil servants increased by 75% between 2004–2008
Kyrgyzstan	Salaries have risen approximately 70% between 2003–2006
Tajikistan	Fivefold increase in the amount of base salaries in the period 2003–2007
Turkmenistan	In 2007: 40% salary increase for teachers and 10% for other civil servants
Uzbekistan	Salaries have increased approximately 185% between 2004–2006

Source: UNESCO (2009).⁴²

⁴² The following sources were used for the compilation of the table: Ministry of Education and Finance (2007). *Armenia medium-term expenditure framework 2007–2009*; Ministry of Education and Science, Georgia; Ministry of Education, Turkmenistan (2008). Interview with two department heads, 22 April 2008; World Bank (2005). *Uzbek public expenditure report*; UNDP (2007). *Uzbek supply and demand*; Steiner-Khamsi (2007); World Bank Azerbaijan. For full references, see Steiner-Khamsi, Gita, Harris-van Keuren, Christine with Iveta Silova and Ketevan Chachkhiani (2009).

The salary increases need to be interpreted as a government effort to respond to the competitive salaries offered in the private sector. Even though the salary increases have been substantial, the base salaries of teachers (not including supplements, allowances and bonuses) have remained low in relative terms. As mentioned above, a good case in point is Tajikistan, where the real salary increased fivefold (taking into account the inflation rate during that period), yet the relative base salary is only 70.4 per cent of the average monthly salary in Tajikistan. All teachers, regardless of rank, had a fivefold real salary increase in the period 2003 to 2007.

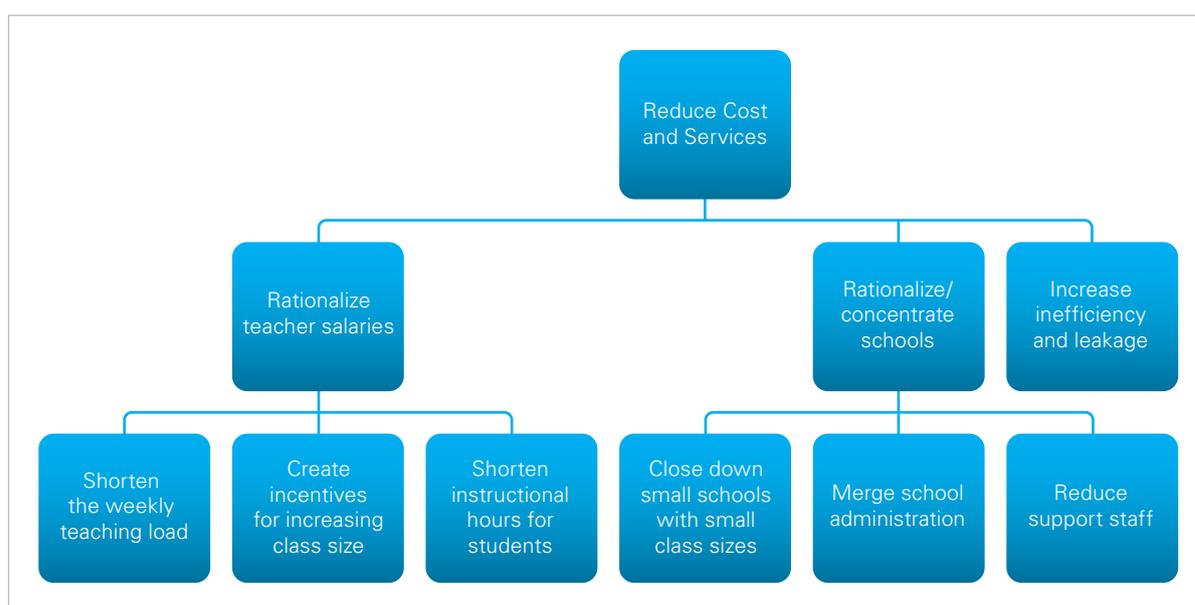
The list of policy strategies that attempt to improve the status and the salary of teachers is long. Many of them are traveling reforms, promoted by development banks, and therefore may be found in several countries of the region. The governments in the region have tried a series of measures to increase teacher salaries within the constraints of their national education budgets. The measures may be grouped into three strategies or approaches:

- Reduction: Cut down on services and educational provision, reorganize schools, and eliminate inefficiencies.
- Targeting: Only raise the salary of a select group of teachers (high-performing teachers, newly qualified teachers, etc.) but preserve the salary level of the others.
- Financial diversification: Encourage financial contributions from parents (fees for special classes), local government (allowances), and social funds (social benefits), and consider these funding sources as integral parts of a teacher's income.

The first approach was rigorously enforced throughout the region. The second approach has in many countries only been implemented at a pilot stage (bonus for high-performing teachers, Young Specialist Deposit Scheme, performance-based salary reforms) and is not ubiquitously carried out. Finally, there is a pendulum that swings with regard to financial diversification: governments go back and forth on whether, and under what circumstances, they agree to charge fees from parents, decentralize finance, and increase or decrease the social benefits for civil servants. There is no clear trend with regard to the third strategic approach. Attempts have been made to decentralize educational finance, but many local governments (municipalities or rural districts) lack the financial resources to subsidize the teacher salary with additional salary allowances.

The first strategic approach – reduce cost and services – is illustrated in Figure 18.

Figure 18: Reform measures that reduce cost and services



The rationalization measures have been controversial. The argument has been repeatedly made that the rationalization of schools – also known as reorganization, concentration, or structural adjustment – has had a negative impact on rural schools and greatly contributed to the rapid urbanization in the region. There are far fewer studies that examine the rationalization of teacher salaries.

The rationalization of teacher salaries has been a striking phenomenon of the CEECIS region that is barely documented and rarely analysed. On one hand, development partners in the region have propelled reforms that replace incremental budgeting with per capita financing and school-based management of financial resources. These reforms are supposed to create incentives for schools to reduce staff, cut inefficiencies, and attract additional funding. On the other hand, the governments with a *stavka* system have systematically lowered the weekly teaching load of teachers from 28 hours or more to 22 hours or less. The lowering of the weekly teaching load of teachers implied, in effect, a salary raise for teachers (higher rate per hour) and greater flexibility both for the teacher but also for the school. Small schools in rural areas with few classes, for example, are able to hire a subject teacher for half a *stavka*, or schools in semi-urban centres may hire a math teacher for 1.5 *stavkas*. At the moment, there is a huge gap between the statutory teaching load (18–22 hours per week) and the average actual teaching load of teachers. They are compensated proportionally to the size of their actual teaching load. Precisely because there is a disconnect between policy and practice, observers have noted that the lowering of the weekly teaching load should be interpreted as an attempt of government to selectively increase the salary of teachers without raising the salary of all other groups of civil servants and without stirring a public debate.

The fluctuation in teaching load is well manifested in the developments of the teacher salary in Tajikistan.⁴³ Since 2004, the statutory teaching load, or pedagogical *stavka*, is 18 hours for primary school teachers and 16 hours for teachers in grade 5–11. During Soviet times, the pedagogical *stavka* was 24 hours for primary school teachers and 18 hours for grade 5–11 teachers. It reached its low in 2004 with 16 hours and 14 hours, respectively. In 2004, the load was again raised by two hours. In practice, however, teachers teach a decimal or a multiple of pedagogical *stavkas*, ranging from 0.2 to 2 *stavkas* and higher. The average *stavka*/teacher rate in Tajikistan is 1.27.

Naturally, the lowering of the teaching load led to curricular or pedagogical changes. At the primary level, the same teacher is in charge of all instructional hours. A lowering of the teaching load means less instructional time for students in primary school. Many of the reduced hours were for extra-curricular activities, circles and clubs that used to be an integral part of schooling. By lowering their teaching load, primary school teachers end up teaching fewer hours of extra-curricular activities, a fact that is applauded by some and condemned by others. The differentiation between education and formation used to be one of the most significant markers of the educational systems in the region. In the wake of the social and cultural changes, as well as cuts in educational expenditures that took places over the past 20 years, the holistic approach to education has become difficult, if not impossible, to pursue in public schools.

5.4. COMPOSITION OF THE TEACHER SALARY

Even though there exists a plethora of in-service teacher training initiatives that aim to introduce student-centred teaching, only a few studies examine the varied pedagogical roles and employment modalities of teachers in the region that, in effect, limit the systematic implementation of student-centred teaching. In the *stavka* system – in use in Central and Eastern Europe, the Caucasus, and Central Asia – the teacher is paid for the number of hours he/she is teaching per week. The base salary is defined in terms of the statutory teaching load (*stavka*). All other activities, including pedagogical ones – such as grading student notebooks, managing a laboratory, serving as a homeroom teacher, etc. – are regulated, noted and compensated separately. These peculiarities and other features of the teacher salary structure are presented in this section of the report.

⁴³ Steiner-Khamsi (2007).

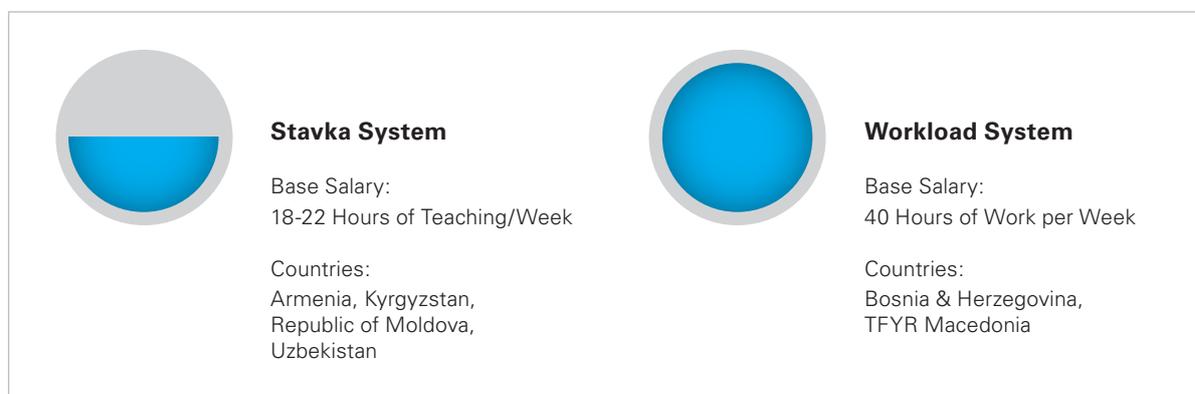
5.4.1. THE BASE SALARY DIVIDE: WEEKLY WORKLOAD VERSUS TEACHING LOAD

As Figure 16 illustrates, the two employment systems differ significantly. In the weekly workload system, teachers are hired as employees who work eight hours per day and five days per week, or 40 hours per week. Teachers in Bosnia and Herzegovina and in The former Yugoslav Republic of Macedonia are hired under the workload system. Their workload consists of 40 hours per week, of which 18–24 hours (Bosnia and Herzegovina) or 20–23 hours (The former Yugoslav Republic of Macedonia) are for teaching and the remainder of the time is used for lesson planning, substitute teaching for absent teachers, assisting struggling students, meeting with parents, doing administrative work and preparing for Olympiads (academic competitions).

In stark contrast, teachers who are hired under a weekly teaching load (*stavka*) system are compensated per teaching load. The statutory teaching load, depending on the grade level (primary versus lower/upper secondary school), is typically 18–22 hours per week. The system is extremely flexible and teachers are employed from 0.25 of a *stavka* to 1.5 *stavkas*, or in locations with severe teacher shortage, for 2 *stavkas*. They are compensated for all additional functions separately. Additional functions may include grading student notebooks, working as a homeroom teacher, mentoring other teachers, and taking on additional hours as a substitute teacher for absent teachers. Teachers expect to be remunerated for these additional functions and they are not expected to stay on the school premises to engage with students, parents or other colleagues after school. Many initiatives that attempt to strengthen student-centred teaching methods do not sufficiently consider the limitations of the *stavka* system in terms of additional pedagogical work. Not surprisingly, teachers in the region complain about the additional work that student-centred teaching requires, such as additional lesson planning and student evaluation for which they are not compensated.

As Figure 19 illustrates, the base salary for one teaching load of 18–22 hours is naturally much lower than the base salary of teachers hired under the 40-hour weekly workload system.

Figure 19: The divide: The two teacher salary systems

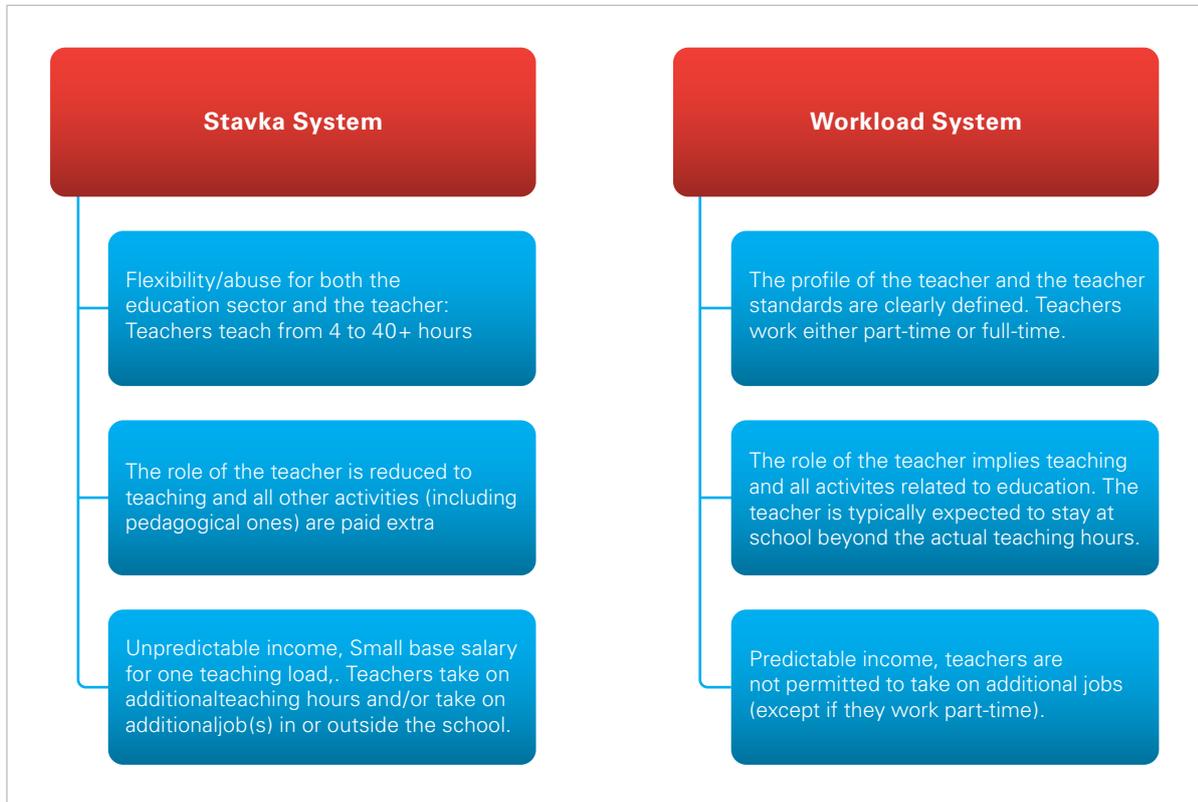


Precisely because the base salary in the *stavka* system *only* covers the number of teaching hours taught per week, it is important to add the additional functions in the total pay of teachers. Depending on the relative wage of public servants in the country, the *total pay* of teachers is often substantially higher than the base salary, but may still be low compared to the national wage average.

As mentioned previously, in most EU countries as well as in two of the participating countries – Bosnia and Herzegovina and The former Yugoslav Republic of Macedonia – the weekly workload system is in effect. In the other participating countries of the UNICEF CEECIS study on teachers – Armenia, Kyrgyzstan, Republic of Moldova and Uzbekistan – teachers are hired under the *stavka* system. The *stavka* system is a carryover from communist times, and has existed for many decades in the Caucasus, Central Asia, Eastern Europe and the Commonwealth of Independent States. In combination with the low salary, the *stavka* system has in effect turned the teaching profession into a part-time job that encourages teachers to teach excessively (1.5 teaching loads and more), take on an additional job, or look for additional sources of income in or

outside the school. The part-time job situation of teachers has generated a host of problems, ranging from private tutoring of students after regular class hours to active resistance to implementing student-centred teaching methods that require extensive lesson preparation or formative student evaluation. Figure 20 highlights a few key differences between the two salary systems.

Figure 20: The main distinctions between the two salary systems



5.4.2. SALARY SUPPLEMENTS IN THE STAVKA SYSTEM

The teacher salary structure in the *stavka* system is fragmented, complex and difficult to administer. This section presents four case studies illustrating the types of supplements paid as part of the teacher's total pay. Two of the case studies are from countries with the *stavka* system (Tajikistan, Republic of Moldova) and one of the case studies is from The former Yugoslav Republic of Macedonia, where the weekly workload system is in place.

The most common salary supplements in the *stavka* system are the following:

- Notebook checking
- Homeroom teacher
- Managing a *cabinet*, laboratory, or resource centre at the school
- Maintenance of computers
- In charge of school garden or other special school facilities
- Subject-specific supplement (e.g., English language/literature teacher, Russian language/literature teacher) or grade-specific supplement (subject teachers in upper secondary school)
- Supplement for multi-grade teaching
- Teacher in a minority school
- Hardship supplement (sometimes counted as an allowance) for teaching in a mountainous or remote rural area
- Student achievement (students who won in Olympiads/student competitions)

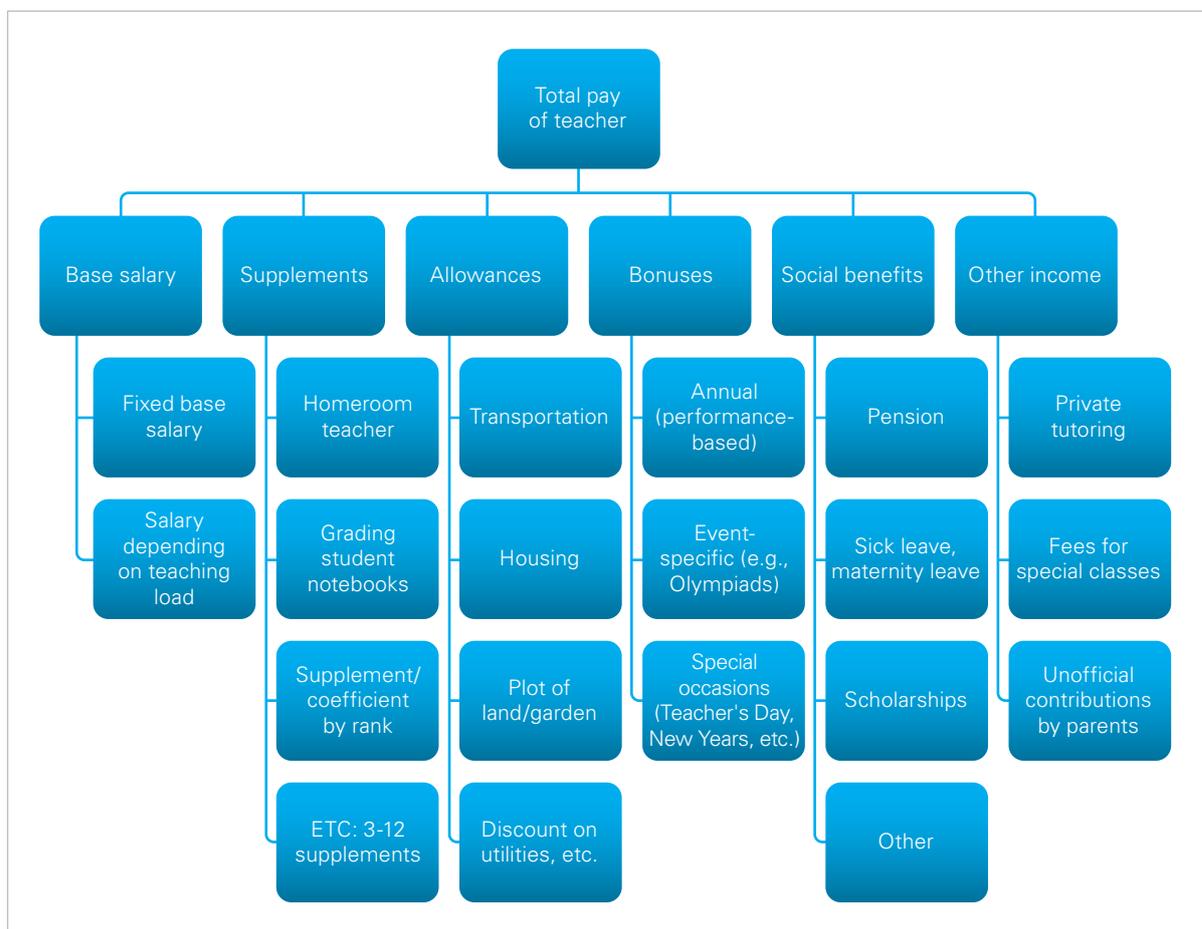
Attempts have been made in several countries to replace the supplement for student achievement with a performance-based bonus system that takes into account overall student performance in a teacher's class rather than the performance of a few high-performing students.

The teacher's educational background and years of work experience matter in all countries of the region. They are the prime factors for determining the size of the teacher salary. In some of the countries, work experience is conceptualized as a salary supplement and functions as a coefficient to calculate the size of all salary supplements. For example, the nominal value of the salary supplement 'notebook checking' would be higher for a teacher with 15 years of work experience than for a teacher with 5 years of work experience.

5.4.2.1. The semi-integration of salary supplements: The Tajikistan example

The teacher salary structure of Tajikistan, summarized in the following (see Figure 21), was examined in great detail for a study funded by the World Bank.⁴⁴ It is an interesting case of a reform that integrated the various supplements (over 10 supplements) into two supplements (homeroom teacher, notebook checking).

Figure 21: Total pay of teachers: The Tajikistan example



In April 2007, the Government of Tajikistan simplified the salary structure in that the base salaries became semi-integrated: the number of supplements was reduced to two. According to Presidential Order #219 of 16 March 2007 (paragraph 6), teachers receive a supplement of 15 per cent of their base salary for a class teacher, and a supplement of 20 per cent of their base salary for checking notebooks. These two supplements are not paid as lump sums; instead, they vary depending on the teacher's educational

⁴⁴ Steiner-Khamsi (2007).

attainment and rank (category) as well as on the number of pedagogical *stavkas* taught. For example, a seventh grade Tajik language teacher, with a higher education degree, at the rank of category 1, who teaches 1.5 pedagogical *stavkas* (24 hours per week) receives 180 TJS in salary (1.5 multiplied by 120 TJS) and additional 36 TJS for the notebook grading supplement (20 per cent of salary). Table 20 demonstrates the remuneration for salary supplements before and after 1 April 2007, using the example of teachers with a college degree at the rank of category 1, category 2, and without a category.

Table 20: Teacher salaries in Tajikistan, before and after the reform of April 2007

	BEFORE APRIL 2007										AFTER APRIL 2007			
	# of pedagogical <i>stavkas</i>	Tariff/remuneration per <i>stavka</i> (= base salary), in TJS	Class teacher (15%)	Notebook checking (20%)	Books & Newspapers (10%)	Head of cabinet (10%)	Medical supplement (1/12)	Premium/bonus (2%)	Other supplements (10%)	Subtotal (<i>stavka</i> with suppl.)	Tariff per <i>stavka</i> (= base sal.)	Class teacher (15%)	Notebook checking (20%)	Subtotal (<i>stavka</i> with suppl.)
Teachers with college degree without category (lowest)														
Grade 1–4 teachers	9,680	57.3	8.6	11.4	5.7	5.7	4.7	1.1	5.7	100.2	85.0	12.7	17.00	114.7
Grade 5–11 teachers	17,584	54.0	8.1	10.8	5.4	5.4	4.5	1.0	5.4	94.6	80.0	12.0	16.00	108.0
Teachers with college degree and category 2 (middle)														
Grade 1–4 teachers	5,652	63.1	9.4	12.6	6.3	6.3	5.2	1.2	6.3	110.4	90.0	13.5	18.00	121.5
Grade 5–11 teachers	5,005	59.4	8.9	11.8	5.9	5.9	4.9	1.1	5.9	103.8	85.0	12.7	17.00	114.7
Teachers with college degree and category 1 (highest)														
Grade 1–4 teachers	3,622	65.9	9.8	13.1	6.6	6.6	5.5	1.3	6.6	115.4	95.0	14.2	19.00	128.2
Grade 5–11 teachers	3,886	62.1	9.3	12.4	6.2	6.2	5.1	1.2	6.2	108.7	90.0	13.5	18.00	121.5

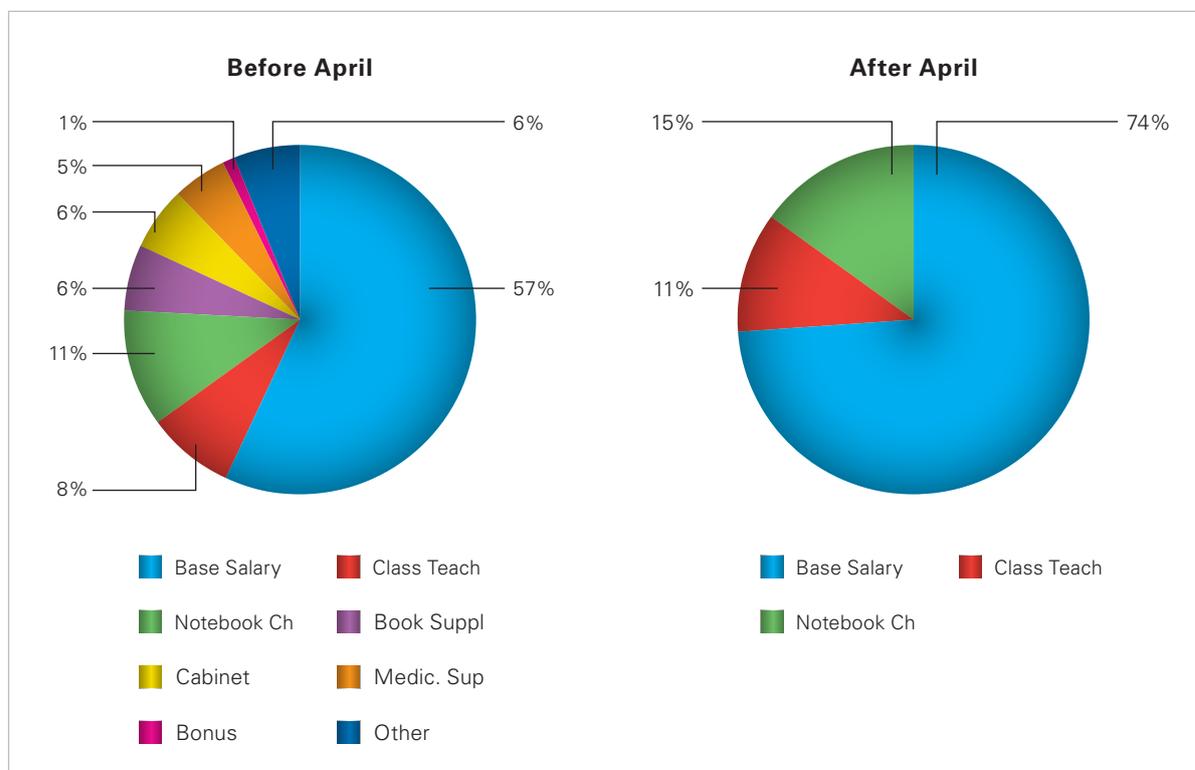
Source: Steiner-Khamsi (2007).

The reduction in the number of supplements has impacted the salary structure. As of April 2007, the base salary as a percentage of total income had grown from 56 per cent to 74 per cent. Figure 22 illustrates the changes in the salary structure, using the example of teachers with a college degree and category 2 (the middle category).

The semi-integration of the salary supplements into the base salary reflects the plan of the Government of Tajikistan to move towards a more transparent structure of civil and public servant salaries. As part of the 2007 teacher salary reform, five of the seven supplements were integrated into the base salary. The two supplements that have been preserved are the supplement for class teacher (15 per cent of the base salary) and the supplement for notebook checking (20 per cent of the base salary). In practice, there is great confusion as to which teachers are entitled to receive the supplements for class teacher and notebook checking. According to the Ministry of Finance, 90 per cent of all teachers receive the supplement for class

teacher, and 80 per cent receive the supplement for notebook checking. The study on the *stavka* system in Tajikistan (funded by the World Bank) provides sufficient evidence to suggest that school principals arbitrarily determine which teachers are entitled to receive salary supplements.

Figure 22: Salary structure in Tajikistan, before and after the April 2007 reform



Source: Steiner-Khamsi (2007).

In the past, only teachers of specific subjects were entitled to the supplement for notebook checking: Resolution #550, issued in 1993 and reinforced on 31 December 1998, determines clearly which teachers are entitled to receive a supplement for notebook checking: all language and literature teachers (Tajik, Russian, foreign languages), math, physics, chemistry and technical drawing. The new regulation that went into effect on 1 April 2007 (Presidential Order #219, 16 March 2007) cancelled Resolution #550 because it listed all the 10 supplements. As a result, there has been some uncertainty as to which teachers are entitled to receive the two remaining supplements under the new regulation.

5.4.2.2. The regulation of salary supplements: The Republic of Moldova example

In some countries, the entitlement to the various salary supplements is monitored quite closely. Different from Tajikistan, the salary supplement for notebook checking is laid out in detail in the Republic of Moldova. The entitlement to the notebook checking supplement is highly regulated even though the nominal amount is rather small, ranging from 20–50 MDL (\$1.70–\$4.20). With an average base salary of 2,200 MDL in the Republic of Moldova, the notebook checking supplement amounts to only 0.9–2.2 per cent of the base salary. Table 21 provides the list of supplements given to teachers in the Republic of Moldova.

Table 21: Supplements and other payments for additional work in the Republic of Moldova

	Recipient of supplement	Unit: MDL (1 MDL = US\$0.084)
1.	Supplement for homeroom teacher	
	Forms 1–4	80
	Forms 5–12, colleges	150
2.	Supplement for notebook checking⁴⁵	
	Forms 1–4	40
	Native language and literature in forms 5–12	50
	Moldovan (Romanian) language and literature in non-native groups	30
	Mathematics	40
	Chemistry, physics, biology, foreign language, stenography, linear drawing (graphics), technical mechanics, modelling, painting, music and theoretic subjects in music and art schools, lycees (high schools), colleges	20
3	Management of cabinets, laboratories, resource centres For administration of the classrooms for physics, chemistry, biology and informatics (computer science) from schools and boarding schools of all types, music and fine arts schools, art schools, gymnasiums, lycees (high schools), colleges and vocational secondary education institutions	50
4	Institutional supplement For staff from institutions, groups organized for children (pupils/students) with mental or physical disabilities	400
	For staff from institutions for the pupils/students that need special educational conditions	400
	For staff from special preschool institutions of sanatorium-type for children infected with tuberculosis, or with mild and attenuated forms of tuberculosis	400
	For staff from vocational schools attached to the correctional labour institutions	500
	For staff from the institutions for orphans and children left without parental care and general education boarding schools: Teaching staff Other staff	400 220
5	Computer maintenance supplement Teachers or other specialists who ensure the service and maintenance of the computer network, for each computer in operational state	5 per computer
6	Teacher in charge of the school garden/agricultural plot Teachers, for administration of the experimental land plots (for the whole period of agricultural works)	50
7	Labour training teachers Teachers for labour training subjects that are also masters in training workshops where the labour classes take place, in didactic workshops from schools, gymnasiums, lycees (high schools) and boarding schools	100
8	Extra-curricular activities Head of the hobby groups/workshops from the extra-school institution for the administration of the section (provided that the section comprises at least 10 hobby groups/workshops of the same profile). If there is the position of chief in the section, the supplement is not paid.	50

⁴⁵ Note: the figures for notebook checking represent the maximum values. A deduction is made (by half of the amount) if the teacher checked, evaluated and graded less than 50 per cent of student notebooks. Similar rules for deductions also apply to other countries with a stavka system.

5.4.2.3. *School-based supplementary payments and bonuses: The Uzbekistan example*

In 1997, Uzbekistan began a three-stage reconstruction of its educational system. During phase I (1997 to 2001), the Law on Education broadly laid out the reform plan to be followed. In the same year, legislators also passed the National Programme for Personnel Training. Together, these two reforms created national educational standards; mandated curricula reform; developed new textbooks and teaching materials; introduced a monitoring and rating system that evaluates school performance and student achievement; allowed private schools into the educational system; and introduced the two-tiered system of bachelor's and master's degrees.

Uzbekistan's educational system changed the most, however, during phase II (2001–2005) as reform programmes were implemented and ministry responsibilities shifted. Previously, the Ministry of Public Education oversaw grades 1–11, and now it oversees grades 1–9, while the Ministry of Higher Secondary and Special Education oversees lyceums and colleges (grades 10–12). Education through grade 12 remains free and compulsory. In the new system, students complete primary and secondary school in only nine grades, and the remaining three years they go to either a lyceum or vocational college. Notably, 90 per cent of students finishing ninth grade are funnelled into vocational colleges, and only 10 per cent into academic lyceums.

To keep pace with this educational expansion, during phase II, legislators passed the National Programme for School Education Development (NPSED), which, between 2004 and 2009, built 325 new schools, reconstructed 2,313 old schools, and repaired 5,838 existing schools.⁴⁶ Additionally, the NPSED established the current system of teacher retraining and shortened the time between each in-service teacher training from five to three years.

During stage III (2005–2009), by presidential decree, the 'Director's Fund' was established. This extra-budgetary fund provides an additional 15 per cent of a school's personnel budget for teacher incentive payments, described in greater detail below. In 2006, 43 per cent of all teachers in Uzbekistan received incentive payments. Officially, up to 50 per cent of a school's teachers are eligible to receive a supplement, sized between 10 and 15 per cent of the base salary, for conducting extra-curricular activities, and between 15 and 25 per cent for 'pedagogical mastery'. According to the Ministry of Public Education, the Director's Fund is responsible for attracting 1.6 per cent of teachers who left the teaching profession before 2005 back to work in schools between 2005 and 2009.

The school-based incentive scheme helped to make the teaching profession more attractive, but at the same time made teachers dependent on the school director.

5.4.2.4. *Mentoring supplement: The former Yugoslav Republic of Macedonia example*

The former Yugoslav Republic of Macedonia and Bosnia and Herzegovina have an intriguing mentoring system in place that entitles the mentors to receive a salary supplement. In The former Yugoslav Republic of Macedonia, the supplement amounts to 10 per cent of the mentee's salary (deducted from the salary of the newly qualified teacher). In both countries, the mentor status is performance-based and requires an attestation process. As mentioned earlier, the mentors are not necessarily supervised and there were doubts in some of the visited schools whether they really mentored the newly qualified teachers assigned to them.

Other countries also assert a methodological supervisory or mentoring role to more experienced teachers. For example, the heads of department in Armenian secondary schools receive an added 20 per cent of their base salary for their extra work.

⁴⁶ In 2006, there were 9,796 schools in Uzbekistan.

5.4.3. ALLOWANCES

Allowances are paid from the local government budget, and their amount entirely depends on the economic situation of the locality. In Dushanbe, the capital of Tajikistan, for example, allowances include: three additional monthly salaries, free public transportation, discount for utility charges and loans for purchasing an apartment. In rural areas, teachers receive, depending on the economic situation of the district, a plot of land and access to free or discounted housing. More often than not, however, the local governments do not have plots or houses available to distribute among the newly employed civil servants. In The former Yugoslav Republic of Macedonia and in Bosnia and Herzegovina, an allowance for transportation is given to teachers who live at a distance from the school or teach in several schools at the same time.

In decentralized educational systems, municipalities and districts that are economically well off are able to top up the salaries of their civil servants with allowances. Galina Monusova presents the findings from a study on teacher salaries in the Russian Federation published with the Iurii Levada Analytical Centre and the Interdisciplinary Academic Centre of the Social Sciences in Moscow.⁴⁷ Monusova collected salary information from 400 schools in the following regions of Russia: Tambovsk, Kursk Omsk, Krasnodarsk and the Bashkiria Republic (see Table 22). Even though the teacher salaries in Russia are also below the national average wage – they are 60 per cent of the national average wage – there exist vast regional differences due to the allowances (*nadbavka*) provided by the regional and local governments. Despite the Unified Tariff System across the Russian Federation, teachers' full incomes vary considerably depending on the economic situation of the *oblast* and *rayon* in which they are located. The following table presents a few economic indicators for the six regions in Russia, along with figures on average teacher salaries.

Table 22: Average teacher salaries in the Russian Federation by region

RF oblasts	Tambovsk	Kursk	Krasnodarsk	Omsk	Bashkiria	Sverdlovsk
GDP per capita (in rubles)	43,604	48,691	53,944	60,811	68,256	70,314
Average salary (in rubles)	4,081	4,889	5,155	5,482	5,389	6,928
Average salary in education (rubles)	3,005	3,055	3,299	3,389	3,248	4,425
Average teacher salary (in rubles), of which:	2,398	2,808	2,512	2,925	3,246	3,161
Tariff (base salary)	1,733	2,093	1,864	1,951	2,579	2,063
Regional allowances	106	15	57	338	299	384
School allowances	483	598	483	509	277	546
Bonuses	48	78	79	161	107	100
Other	28	24	29	34	16	68
Tariff/teacher base salary as % of average teacher salary	72%	75%	74%	67%	79%	65%

Source: Monusova (2007, 8ff).

⁴⁷ Monusova, Galina (2007). 'Skolko 'stoit' shkolni uchitel? Formirovanie zarabotnoi plati v obsheobrazovatelnykh shkolakh' ['How much does a schoolteacher cost? The composition of salaries in schools']. *Journal of Public Opinion*, 3 June 2007, no. 2. <http://edu.of.ru/profil/news.asp?ob_no=21712>, accessed 26 July 2007.

As Table 22 illustrates, teachers in the Bashkiria Republic with a high GDP per capita earn 1.35 times more than teachers in the Tambovsk region. The variation is explained by regional and school-level allowances (*nadbavkas*). Accordingly, for teachers in Tambovsk, the base salary accounts for 72 per cent of their total income, whereas in Bashkiria, the base salary only amounts to 65 per cent of what they earn in total. The regression analysis, provided in the Russian study, reaches the same conclusion that the author succinctly summarizes:

From all factors, the teacher salary is determined first and foremost by the region of residence. Against this background, the qualification of the teacher and the actual teaching load are secondary, and supplements for additional school activities (such as supplements for class teacher, notebook checking, etc.) are the least important determinants of a teacher salary. Such a system of teacher salary stimulates teachers to move to richer regions, get as many hours as possible and avoid additional school activities.⁴⁸

5.5. ADDITIONAL INCOME OF TEACHERS

Given the low base salary in countries with the *stavka* system, teachers rely on taking on additional teaching hours or teaching special classes to boost their salary or, if those are not available, engaging in private tutoring. There is variation with regard to the prevalence of private tutoring and also the level of regulation. Private tutoring has been well studied and documented in the region.

Several countries revised their legal framework for general education in ways that permit schools to charge fees from parents for funding building maintenance, teaching and learning resources, library resource rental, or for special classes.⁴⁹ In Uzbekistan, the household contribution to education has reportedly been one of the highest in the region.⁵⁰ In 2004, these private contributions included both official fees (tuition for special classes), purchase of textbooks and school supplies, as well as informal fees.

Fees for special classes have been regulated in several countries to prevent abuse and over-charging, but also to generate revenue. Schools that offer academic tracks within lower and upper secondary levels (*gymnasiums*) in Uzbekistan, Kazakhstan, the Kyrgyz Republic and Tajikistan request tuition fees from parents. The State Anti-Monopoly Agency of the Kyrgyz Republic issued two decrees in 2007 (Decree 385/1 and 71) that regulate parental fees for 'additional educational services' and for 'additional classes', respectively. The fees are demand and supply driven: The most expensive additional classes are foreign language classes and sports lessons, and the least expensive are the arts lessons.

Parental fees for these regulated, special or additional classes are minimal compared to what parents pay for unregulated private tutoring by teachers and in the form of bribes to have their child admitted to a specialized school or a prestigious university. A 2004 Georgian study estimates how much money families in Georgia had to pay to place their child in a university before the era when unified entrance exams were introduced:⁵¹ on average, parents paid up to \$2,100 for private tutoring to have their child prepared for the three to four subject tests in the university entrance exams. Additionally, parents were requested to pay bribes if their child scored below the required minimum marks. For example, bribes cost, on average, \$8,000–\$9,000 for admittance to the journalism faculty at Tbilisi State University (TSU). The most expensive bribes were for the law faculty at TSU (\$20,000–\$30,000), but when the new State Technical University opened a competitor law degree programme, the law faculty at TSU had to lower their bribes to \$10,000–\$15,000 per admitted student.

Staying in the classroom when classes have ended to privately tutor students is a daily routine for many teachers. The last section of this report examines in greater detail the negative correlation between teacher

⁴⁸ Monusova (2007).

⁴⁹ Asian Development Bank (2004). *Education reforms in countries in transition: Policies and processes. Six country case studies commissioned by the Asian Development Bank in Azerbaijan, Kazakhstan, Kyrgyz Republic, Mongolia, Tajikistan and Uzbekistan*. Manila, Philippines: ADB.

⁵⁰ World Bank (2005). *Republic of Uzbekistan public expenditure review*. World Bank, Poverty Reduction and Economic Management Unit, Europe and Central Asia.

⁵¹ Rostiashvili, Ketevan (2004). *Corruption in the higher education system of Georgia*. Tbilisi: American University Transnational Crime and Corruption Centre, Georgia Office, Starr Foundation, and IREX.

salary and professionalism, forcing teachers to seek additional sources of income, including privately tutoring their own students.

Private tutoring constitutes a substantial part of the teacher's income and should not be neglected as one of the benefits of the teaching profession. This is not to suggest that private tutoring is inextricably linked to teacher corruption. It is more accurate to suggest that only some forms of private tutoring are corrupt, notably when teachers withhold the prescribed curricular content or purposefully do not prepare students for tests during class time in order to get paid extra, outside of school, for test preparation. The income generated from private tutoring is substantial and may range from \$20 to \$2000 per month, depending on the subject and the qualifications of the tutor. In Azerbaijan, for example, the tutors who collect the highest fees for private tutoring are those who, besides teaching, also work as test writers for the centralized university entrance examinations.⁵²

When teachers are under pressure to secure sufficient financial resources to survive and provide for their families, they may be tempted to engage in unethical behaviour. The existence of a wage differential and the fact that classroom teaching can only be imperfectly monitored are likely to encourage schoolteachers to teach school lessons poorly in order to create a demand for income-generating private tutoring after school hours. While there were many cases of corruption in the education area during the socialist period, the unethical use of private tutoring as an income-generating activity among teachers was a new phenomenon of the post-socialist transformation period.⁵³ An overview of qualitative data on private tutoring practices in Central Asia reveals that the unethical use of private tutoring involves teachers pressuring (and sometimes blackmailing) their own students to take supplementary private tutoring with them after school hours, often threatening students with lower grades if they refuse. Compared to Central/South-East Europe, Central Asian countries have the largest proportions of students tutored by their own class teachers: 51.2 per cent of students in Tajikistan, 39.6 per cent in Kazakhstan, and 39.3 per cent in Kyrgyzstan. By contrast, the percentage of students tutored by their own teachers is less than 10 per cent in Croatia and Poland and less than 20 per cent in Lithuania, Slovakia, Bosnia and Herzegovina, Georgia, and Ukraine.⁵⁴

Table 23 shows how widespread the practice of class teachers tutoring their own students is in select countries of the Caucasus and Central Asian subregions. The incidence of teachers tutoring their own students may be partially explained by factors such as the lack of tutors in small towns and rural areas. Indeed, the data indicate that the percentage of teachers tutoring their own students is higher in rural areas (over 50 per cent) compared to urban areas (33.5 per cent in Kazakhstan, 34.5 per cent in Kyrgyzstan, and 42.2 per cent in Tajikistan). In urban settings where other teachers would be available for supplemental classes, requesting money from one's own students for private may be interpreted as a form of corruption.

Table 23: Identification of private tutors by students

Country	Class Teacher	Other teacher from school	Teacher from other school
Azerbaijan	25.6	16.5	36.9
Georgia	19.3	8.6	16.3
Kazakhstan	39.6	8.8	22.0
Kyrgyzstan	39.3	8.6	14.6
Tajikistan	51.2	7.6	14.3

Source: UNESCO (2009), cited in Silova et al. (2006).

⁵² Silova, I., & E. Kazimzade (2006). 'Private tutoring in Azerbaijan'. In Silova, I., V. Budiene, and M. Bray (eds.). *Education in a hidden marketplace: Monitoring of private tutoring*. Budapest, Hungary: Education Support Programme of the Open Society Institute, 113–142.

⁵³ Silova, I., V. Budiene, and M. Bray (eds.). *Education in a hidden marketplace: Monitoring of private tutoring*. Budapest, Hungary: Education Support Programme of the Open Society Institute.

⁵⁴ Ibid.

5.6. SALARY INEQUALITIES

The *stavka* system has been criticized for being fragmented, non-transparent and to some extent, unpredictable given that school directors or deputy directors assign additional teaching hours or deductions from salary supplements at will. Teaching additional hours and/or receiving salary supplements and bonuses are very popular and there are multiple ways in which teachers try to increase their chances of being selected for these much needed income add-ons. In the Kyrgyzstan-1 study, teachers reported on how disagreements surfaced amongst the teaching staff when vacant hours were unevenly assigned to teachers. The distribution of teaching hours can be very contentious and typically older and more experienced teachers are the first to be assigned as substitute teachers, for absent teachers or for vacant posts. Younger and less experienced teachers see themselves at a disadvantage: not only is their base salary much lower because of the lack of work experience, but they are also denied opportunities to boost their income with additional teaching hours and supplements for specific functions.

Similarly, teachers in small schools (typically located in rural areas) are at a disadvantage compared to teachers working in large schools. In large schools, teachers not only are more likely to receive sizeable allowances from the municipal government, they are also able to take on additional hours, both in the form of additional teaching hours during the school day, as well as in the form of private tutoring after school.

The six-country UNICEF study on teachers gathered information on the lowest and highest salaries in each of the 60 visited schools. Teachers who have the lowest salaries in Bosnia and Herzegovina, as well as in The former Yugoslav Republic of Macedonia, are those that teach a partial teaching load (*norma*). Thus, in Bosnia and Herzegovina, the lowest-paid teachers are those that only teach a quarter of a full *norma*. The average monthly salary for this group of teachers equals 243 BAM (\$176), which corresponds roughly to one third of the average teacher salary in Bosnia and Herzegovina. Similarly, in The former Yugoslav Republic of Macedonia, the lowest-paid teachers in a school are typically those that work only part-time – that is, fewer than 20–23 hours. They earn on average 13,719 MDK per month (\$319) – that is, one third less than the average teacher salary in The former Yugoslav Republic of Macedonia. Similarly to Bosnia and Herzegovina, part-time teachers are typically young teachers below the age of 30.

The situation in countries with the *stavka* system is different. The findings from the Kyrgyzstan-1 UNICEF study on teachers offer a good case in point to demonstrate the unattractiveness of the teaching profession for newly qualified teachers, also known in the region as ‘young specialists’. The breakdown of teacher salaries lays bare three factors that determine the total pay of teachers:

- Teaching hours: calculated as a multiple of the statutory teaching load of 16/18 hours/week
- Educational background of the teacher: standard in Kyrgyzstan is the Higher Education Specialist Diploma
- Teaching experience (*ped stazh*) which, in effect, is a proxy for age or seniority.

The supplements contribute to the fragmentation and non-transparency of teachers’ salaries but, in effect, contribute very little in financial terms to the total pay of teachers. Of all the supplements, the skill supplement (foreign language teachers, IT/computer teachers) and the class teacher supplement (15 per cent of the base rate for 1 *stavka*), are relatively the highest-paid supplements, but are still low in terms of nominal value. Allowances (plot of land, housing, discount on utilities, etc.) and social benefits are sizeable but difficult to assess in monetary terms.

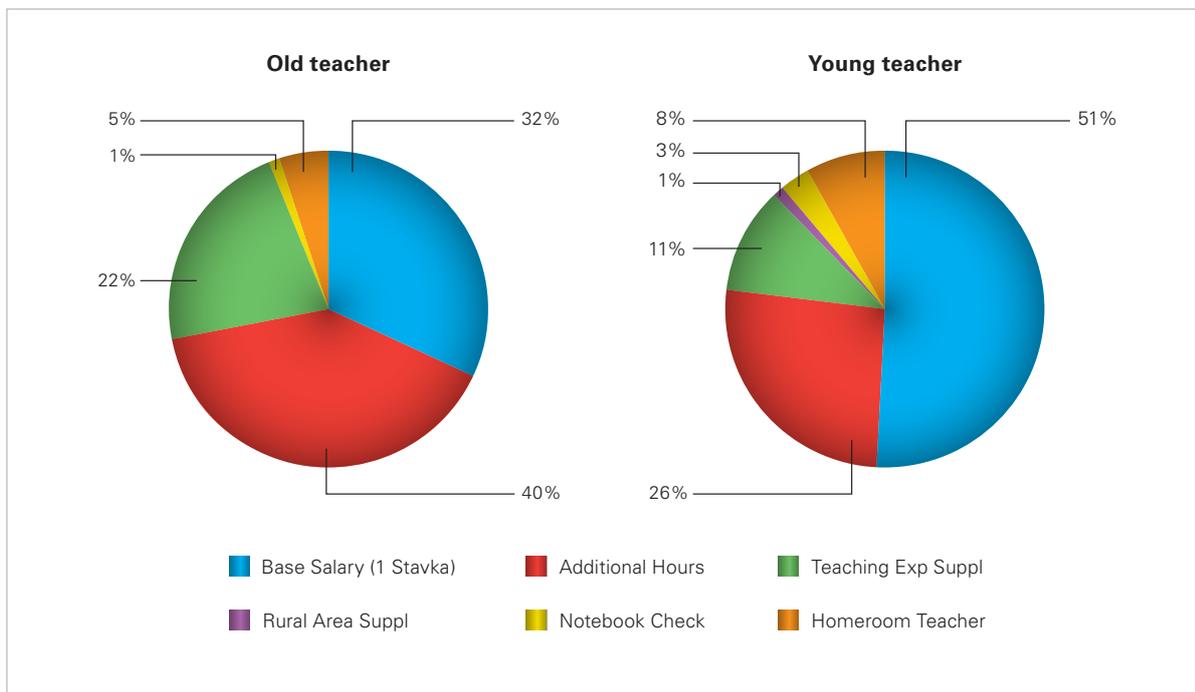
Two of the three factors that contribute most to the teacher’s total pay mentioned above – total number of teaching hours and teaching experience – put inexperienced or newly qualified teachers at a disadvantage compared to experienced teachers. Not only are experienced teachers more likely to be assigned to teach additional hours, but their base salary is ranked at a higher salary rate or step (Russian: *razriad*) based on years of teaching experience. The salary scale in Kyrgyzstan is, for a variety of reasons, (including the young retirement age) very short: teachers can receive the highest salary step within the first 15 years of their career – that is, by the time they are in their late thirties or early forties. Retention of experienced

teachers is a problem, especially in urban and semi-urban areas. There are few incentives to stay in the teaching profession unless the experienced teacher switches to an administrative position, becoming a deputy principal or school director.

In contrast, the salaries of young specialists in Kyrgyzstan are low for three reasons: first, the basic salary rate is much lower because they start at salary level 4, whereas the older teachers with a higher education specialist diploma are, after just a few years, in the highest category and on level 12 of the salary scale. Second, the young teachers' basic salaries and teaching hours are not multiplied by 10, 20 or 30 per cent for teaching experience (*ped stazh*), but instead they only receive 200 KGS in the form of a supplement for the first three years. Last and less well known: younger teachers are typically assigned fewer teaching hours because they lack experience and, from the perspective of the principals, the competence to teach more hours. As mentioned repeatedly throughout the Kyrgyzstan-1 UNICEF study on teachers, low salaries and in particular the low starting salaries for (young) teachers is a well-known cause of public concern.

As shown in Figure 23, the Kyrgyzstan-1 UNICEF research team compared the average typical salary for a young teacher with one year of teaching experience with the typical salary for an older teacher with 20 years of teaching experience; both with the same educational background (higher education specialist diploma). The computed percentages, presented in Figure 22, apply to teachers' salaries in rural and semi-urban areas where the village government or the municipality lacks the funds needed to boost the salaries of public employees by means of additional allowances or bonuses. The figures represent averages for teachers across 10 schools in the provinces of Batken and Jalal-Abat of the Kyrgyz Republic, where most of the experienced, older teachers were teaching more than 1.5 teaching loads.

Figure 23: Total pay of teachers in two provinces of the Kyrgyz Republic: Comparison between young and old teachers



Source: UNICEF Kyrgyzstan (2009).

The total monthly pay of young teachers is on average only 1,776 KGS. In comparison, the total monthly salary of the older teacher is, on average, 3.4 times more: 6,040 KGS per month.

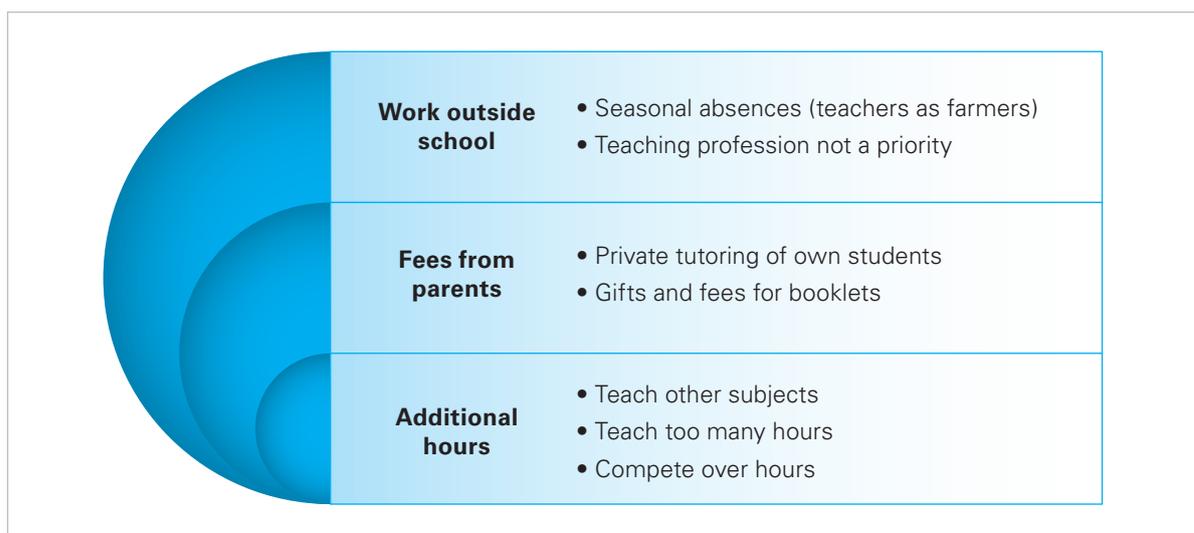
5.7. THE SALARY-INDUCED QUALITY EROSION IN THE REGION

There are two different salary systems in place in the region: the workload system and the teaching load system. The teaching load, or *stavka*, system has been in place for many decades. Even though it has undergone incremental revisions, the main features of the system have remained intact. It is a salary system that has one positive feature – it is flexible with regard to teaching hours – and several negative features:

- low with regard to the base salary (salary for one teaching load)
- fragmented with regard to the various components of the total pay
- non-transparent and unpredictable
- unattractive for newly qualified teachers (low starting salary)
- unattractive for very experienced teachers (salary ceiling after 15–20 years of work)

Clearly, the salary for one teaching load (base salary) is not sufficient to make a living or financially support a household. As a result, teachers in the region have developed all kinds of compensation strategies to offset the shortcomings of the *stavka* system. They seek additional income from (1) teaching additional hours, (2) collecting fees from parents at school, and/or (3) taking on additional work outside of school. Figure 24 presents these three types of compensation strategies and also lists some of the negative consequences of these strategies.

Figure 24: Effects of teachers' compensation strategies



A few comments on the negative consequences of the compensation strategies may be useful here:

- Additional hours: The three most striking negative consequences are listed in Figure 25 and will be reiterated in greater detail in the next chapter. The first two practices directly impact the quality of education:
 - Teachers teach additional hours – sometimes voluntarily to boost their income, sometimes imposed because of a shortage of teachers – in subjects for which they were not trained. The ‘redistribution’ of vacant hours among the teaching staff of a school is widespread and is detrimental to quality instruction.
 - Another compensation strategy for the low base salary is to take on as many hours as possible. Even though the statutory teaching load per week is 18–22 hours, it is common that teachers in the region teach an additional half a teaching load (9–11 hours) for extra remuneration. A teaching load of up to 30 hours/periods per week is not necessarily out of the extraordinary and in fact common in OECD countries (e.g., Switzerland, USA), but it is the excessive teaching load, along with the teaching in non-specialist subjects, that contribute to the low teaching quality.

- Finally, teachers depend on the goodwill of their school director and deputy director, and in some countries also on the collective goodwill of teachers, when vacant teaching hours are redistributed among the teaching staff. Naturally, teachers with more experience and better relations with the school leadership are at an advantage as compared to new teachers. As a result, young teachers who already suffer from the lowest salary represent the group that benefits the least from the flexibility of the *stavka* system. Strikingly, there also is an incentive for leaders to save positions and to redistribute vacant hours among teachers rather than to hire additional subject specialists. The per capita financing formula, in particular, promotes school-based financial management and decision-making and, in principle, enables school directors to use the unused funds for other self-identified priorities at the school.

Box 12: Mongolia's salary reform 2007: The move from the teaching load to the workload system

An interesting study on teacher salaries in Mongolia revealed that teachers in urban and semi-urban areas earn considerably more than teachers in rural areas for the following three reasons:⁵⁵ First, teachers in small schools, typically located in rural areas, are not able to accumulate additional teaching hours and get paid extra for them. Second, promotion from one rank to another (regular teacher, methodologist, leader, advisor) requires visits by external reviewers. Promotion and the receipt of the rank supplement (10–20% of the base salary) are more likely in schools that employ teachers with better qualifications as well as in schools that are close to the capital or the province centre. The third reason is related with the first two issues: schools in rural areas are, for a variety of reasons including non-availability of additional hours and difficulty of getting promoted, not able to attract that many qualified teachers. Even though Mongolia is, according to the classification of the United Nations, not located in the CEECIS region, it had until 2007 – due to its socialist past and close association with the Soviet Union – the *stavka* system in place, and its salary structure was identical with those in Caucasus, Central Asia, and Eastern Europe. In 2007, the Government of Mongolia replaced the *stavka* system with the weekly workload system, prohibited teachers from taking on additional jobs and almost tripled the salary of teachers. The structural salary reform of 2007 benefited all teachers and, in particular, young teachers and teachers in rural areas. As the UNICEF Mongolia study on teachers demonstrates, the shortage of teachers in rural areas disappeared soon after the fundamental salary reform of 2007 was introduced.⁵⁶

- Fees from parents: There exist several studies on the private cost of education that result from tuition paid for private tutoring as well as other formal and informal fees. The UNICEF CEECIS study on teachers did not focus on this aspect of the teacher income because sufficient evidence already exists from other studies that teachers of core subjects (language and math) that teach in upper secondary grades and live in urban areas have a better chance of improving their income from private tutoring than other teachers. This aspect of the salary supplement affects the marginalized and poor population the most and reduces the chances of their children passing standardized tests in secondary school and university entrance exams that require high scores.
- Work outside of school: The need to rely on additional income from economic activities outside of school applies specifically to teachers in rural areas. In urban and semi-urban areas many teachers are able to compensate for their low base salary by teaching additional hours. In rural areas, teacher absences during harvesting season are common and tolerated by the school and the community. For a few weeks of the year, the second job absorbs so much of the teachers' time that they temporarily redefine their professional identities and primarily see themselves as farmers or merchants, and only secondarily as teachers with a part-time teaching job at school.

⁵⁵ World Bank (2007).

⁵⁶ UNICEF Mongolia (2011). *Recruitment into teaching, teacher development and retention of teachers*. Ulaanbaatar: UNICEF.

As highlighted in the first section of this chapter, several policy solutions have been tried to address the shortcomings of the *stavka* system, such as, for example, integrating the salary supplements into the base salary, creating additional incentives for newly qualified teachers to enter the profession (Young Specialist Deposit Scheme), putting pressure on local governments to increase their financial support for teachers (allowances), and creating performance-based promotion schemes and bonuses. An improvement of the teacher salary system is both urgent and challenging given that the bulk of recurrent expenditures in education budgets is still allocated for salaries. Understanding the complexity of the teacher salary structure may be a first step in the right direction of finding policy solutions that are beneficial to teachers and sensitive to varied contexts.

5.8. CHAPTER SYNOPSIS

- The remuneration of teachers impacts the status of the profession and determines how much time teachers spend for pedagogical work other than simply teaching.
- There are two salary systems in place in the region: the workload system and the teaching load system (known as the '*stavka* system') that has been in place in the Caucasus, Central Asia, and Eastern Europe for decades. Even though it has undergone incremental revisions, the main characteristics of the *stavka* system have remained intact, with one positive feature: it is flexible with regard to teaching hours. However, it has several negative features: (1) low with regard to the base salary (salary for one teaching load); (2) fragmented with regard to the various components of the total pay; (3) non-transparent and unpredictable; (4) unattractive for newly qualified teachers (low starting salary); and (5) unattractive for very experienced teachers (salary ceiling after 15–20 years of work)
- In the eight examined countries, the average monthly base salary for one teaching load of 18–22 hours ranges from \$20 to \$398.
- In countries with the *stavka* system (all countries in the regional study except for Bosnia and Herzegovina and The former Yugoslav Republic of Macedonia), a distinction must be made between the average base salary and the actual monthly salary or total pay, which is based on the actual number of hours taught and supplements received.
- In the two countries with the lowest teacher salaries, Tajikistan and Kyrgyzstan, the total pay is still at a low of \$26 or \$86 per month, respectively.
- In the Republic of Moldova and Kyrgyzstan, where teachers tend to take on additional teaching hours and receive substantial salary supplements, the average total pay for a teacher in the middle age category with a higher education degree is 1.7 higher and 2.7 times higher, respectively, than the average base salary.
- In Armenia, most of the teachers teach less than one teaching load (*stavka*) of 22 hours per week, thereby lowering the total pay, sometimes to a level below the base salary for one teaching load.
- More important than the actual salary is the relative salary of a teacher as compared to the national wage average, or as compared to other professions that require the same level of qualification. In Tajikistan, the average salary in education was 30 per cent lower than the national wage average. In Georgia, the average salary for policemen is three times higher than that of teachers.
- Despite being low, the teacher salary is in many countries considered attractive for a variety of reasons, including secure income, pensions and social benefits, the possibility to collect fees for private tutoring and other services (in some countries more than in others), and the possibility to boost income by teaching additional hours.
- The low teacher salary, in combination with the low statutory teaching load (18–22 hours), has turned the teaching profession into a part-time job, encouraging teachers to either take on additional hours in the school, seek additional income from parents, or take on additional jobs outside the school.
- There is a great salary differential between young and old teachers that makes it difficult to attract newly qualified teachers into the profession. Last but not least, teachers in small schools (typically rural schools) are at a disadvantage with the *stavka* system because they are not in a position to take on additional teaching hours that would lift their salary.



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CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

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The six-country UNICEF CEECIS study on teachers should be seen as a contribution to policy research on teacher recruitment, development and retention. It began with a pilot study on teacher shortage in Kyrgyzstan. There, the Russian term *krizis pedagogicheskogo kadra* ('crisis of the pedagogical cadre') was frequently used, referring to a situation characterized by massive teacher shortage, ineffective teaching, low teacher morale and low teacher salary. As mentioned in the introductory chapter of this report, the realities did not necessarily match the official statistics. Despite the crisis talk about teachers, the official statistics in Kyrgyzstan only report a teacher shortage of 4.2 per cent. There is a need to make the crisis talk more specific in terms of teaching quality. A school-level analysis revealed much higher levels of latent teacher shortage – that is, teacher shortage covered up at the school level by hiring retired teachers, correspondence teachers, substitute teachers and a host of other practices that help to fill vacancies. In total, 10 such indicators of latent teacher shortage were identified. This chapter summarizes the findings for the 10+1 ('+1' are actual vacancies) indicator framework to the CEECIS region and presents a series of recommendation that were put forward in chapters 2–5 of this report.

6.1. ANALYSING TEACHER QUALITY AT SCHOOL LEVEL

Table 24 represents a summary of the 10+1 indicators that were found in the UNICEF CEECIS study on teachers.

Table 24: 10+1 indicators in the six-country UNICEF CEECIS study on teachers

Indicators	ARM	B&H	TFYR MAC	REP OF MOL	UZB	KYR
1. Teachers with no pedagogical training (professionals that teach)	✓	✓	✓			✓
2. Pedagogical specialists who teach subjects for which they were not trained (redistribution of hours)	✓	✓	✓	✓	✓	✓
3. University students who teach at the school	✓	✓	✓	✓	✓	✓
4. Teachers at retirement age	✓			✓	✓	✓
5. Teachers hired from another school	✓			✓	✓	✓
6. Teachers with more than 24–27 teaching hours/week	✓			✓	✓	✓
7. Teachers who do not split the class into groups despite being entitled to do so	✓				✓	✓
8. Teachers with prolonged absences or irresponsible absenteeism						
9. Teachers who teach for a shorter duration than officially prescribed			✓			✓
10. Teachers who are listed in the lesson plan without holding the actual lessons				✓		✓
11. Cancelled subjects	✓			✓	✓	

Indicator 8 – teachers with prolonged absences or absenteeism – was difficult to assess in the empirical studies. It constituted a taboo topic and the administrators and teachers in the 10 schools of each country avoided speaking about the subject or only provided vague information. However, teachers in the region are closely monitored by deputy school directors and it must be assumed that the school leadership either tacitly acknowledges the absences or is directly involved in making them acceptable to other teachers on the staff.

As mentioned earlier, the redistribution of hours to untrained teachers is common in most of the countries in the region. Table 25 provides estimates for the most common of the 10+1 indicators. The estimates are based on the information that the six research teams gathered on the composition of the teaching force at the school level. The figures are presented as percentages of the teaching workforce in the sample of 10 schools per country.

Table 25: Prevalence of the most common 10+1 indicators in the six-country UNICEF CEECIS study

Indicators	ARM	B&H	TFYR MAC	REP OF MOL	UZB	KYR
Teaching without pedagogical training	10.2	0.3	0.3	1.6	0.0	15.4
Redistribution of hours to non-specialist teachers	21.5	0.0	7.0	10.6	5.0	26.6
University students working as teachers	9.7	1.2	2.0	1.2	3.0	5.6
Retired teachers who teach	5.4	0.0	0.1	24.8	6.0	22.5
Teachers who teach more than the statutory teaching load	5.4	1.5	0.1	55.6	13.0	60.6

The six-country UNICEF CEECIS study on teachers proposes a move away from defining teacher shortage in terms of vacancies alone. Keeping the importance of teacher quality in mind, the report suggests the adoption of a pedagogically-based notion of teacher shortage; one that frames it in terms of the shortage of *qualified* teachers. Thus, in the CEECIS region, but also in other regions, a distinction should be made between qualified, underqualified and non-qualified teachers. The main reason that underqualified and non-qualified teachers are hired is often because there is a shortage of qualified teachers for particular subjects, grades, types of schools or for particular provinces and districts in the country.

Box 13: High turnover rate in preschools in Kyrgyzstan

The UNICEF Kyrgyzstan-2 study on preschool teachers supplemented the initial list of 10+1 indicators of teacher shortage with an additional indicator: high teacher turnover. This indicator did not exist in the original study, but was added to the list of 10+1 indicators because of its prevalence in the ECCE sector and its subsequent effects on the quality of early education. 'Teacher turnover' is defined as the rate at which teachers leave the preschool. The UNICEF Kyrgyzstan-2 research team defined teacher turnover as the number of teachers that left a preschool in a given school year. Based on data from the past five years, teacher turnover was 36 per cent per year in the preschools visited. The high turnover rate is mainly caused by recent graduates of teacher training programmes who work in the preschool for only a few months before switching to other positions that have higher salaries and less demanding schedules. One preschool claimed to have up to 15 teachers come, stay for a short while and leave within the course of one school year. This revolving door of teachers has implications on the social development of young children. Strikingly, preschool directors tended to view the hiring of retired teachers and of mothers as assistant teachers/educators as a cure for high teacher turnover. Not surprisingly, 55 per cent of the teacher workforce had more than 15 years of experience, of which three fourths had been teaching more than 25 years. Often, directors choose to hire mothers of children that attend the preschool and they become teachers or support staff, respectively. This arrangement guarantees loyalty to the preschool for at least a few years. Mostly, these mothers have received an education, but very few have a specialization in education. Though not the focus of this report, the teaching force in ECCE institutions of Kyrgyzstan has exacerbated conditions concerning recruitment into teaching, teacher quality and the working conditions described in the UNICEF Kyrgyzstan-1 study on teachers.

6.2. TEACHERS FOR THE MARGINALIZED: A TENTATIVE REGIONAL PERSPECTIVE

Compared to other regions of the world, the teaching workforce in primary and secondary schools in the CEECIS region is well trained. The majority of teachers either have a university degree (over 70 per cent) or completed a vocational-technical college with a specialization in preschools or primary education (3–28 per cent). These statistical figures, however, rest on one assumption and one fallacy: the assumption that teachers with a formal qualification perform better than those without a formal qualification, and the fallacy that the degree requirements in higher education or in vocational-technical are rigorously enforced. Their first assumption, which deals with the quality of pre-service teacher education, will be addressed later in this chapter. The second point hints at the low standards in correspondence studies and deserves a brief reiteration over the next paragraph.

There exists a relatively large group of young teachers with ‘incomplete higher education’ who work part-time while enrolled in correspondence studies. This group amounts to 3.2–14 per cent of the teaching workforce in the region, with the percentage being much higher in rural schools. Former alumni of the school, they work in their village or small town as part-time teachers and do not shy away from difficult work conditions or in schools that in other regions of the world may be called peripheral or marginalized. An analysis of the teaching workforce at school level reveals the great number of former correspondence students who are now considered qualified and therefore listed under the category of teachers with a higher education specialist diploma. For a variety of reasons, the quality of correspondence studies is inferior to that of full-time studies. To make things worse, attendance in the courses and mentoring at school are not rigorously enforced, raising doubts about the learning outcomes in correspondence studies.

A second group of teachers who work under difficult conditions in schools that nowadays are considered marginalized are those who teach in schools with minority languages. A legacy from the Soviet past, most countries have a multi-ethnic education system. The emigration of minorities in the 1990s made the supply of qualified teachers problematic. Tajikistan is perhaps an extreme case, where non-Tajik residents flocked out of the country during the civil war. But other countries in the Caucasus, Central Asia, and Eastern Europe also face difficulties with maintaining high-quality teacher training programmes, let alone schools taught in minority languages. The preparation and recruitment of teachers who work in schools that use a language of instruction other than the state language deserve special attention.

6.3. EFFECTIVE RECRUITMENT INTO TEACHING

The educational systems of the region moved from a highly centralized management and coercive deployment system to one where teacher-education graduates have a choice on where they want to work as teachers and, in fact, whether they want to work as teachers at all. The end of manpower planning mechanisms has created a mismatch between supply and demand and created serious challenges, ranging from countries with a surplus where teachers bribe their way into the profession, to countries with a shortage, where retired teachers, university students, and any university or college graduate with a profession are lured into accepting a teaching post.

It is essential to differentiate between supply and output of teachers. The teacher training programmes typically represent the single largest study programme in a given country, yet less than half of their graduates ever work as teachers. The number of graduates of pre-service teacher training is very large as compared to those who are actually interested in pursuing a career in teaching. The university-work transition rate is small, explaining the short supply of new teachers.

The concept of recruitment into teaching is relatively new in the region even though there is great concern that so many university graduates are unemployed – after having paid exorbitant tuition fees in some countries – and do not end up in the profession for which they received training. Recruitment into teaching is typically assessed with five indicators: rates of admission, enrolment, completion, transition

and retention. Apart from enrolment and completion rates, there is in most countries of the region only incomplete information available on the other three indicators. In particular, the admission rate and the transition rate are important to measure as they greatly impact educational quality.

The admission rate is too high or too non-selective. Currently, the teacher-education programmes attract students for the wrong two reasons. They attract students who, based on their low university admission test scores, did not make it into other, more attractive degree programmes. Additionally, in all countries of the region, teacher training constitutes a high priority for the governments. As a result, there is a disproportionately large allocation of government scholarships for students enrolled in pre-service teacher training. Many students chose pre-service teacher education over other degree programmes because of the availability of scholarships. Nevertheless, it is important not to generalize. Among the many who enrol, there are those who do academically well, are highly motivated to become teachers and need or do not need a government scholarship to pursue their studies. However, given the large number of unmotivated or 'wrongly motivated' students in pre-service teacher-education programmes, this small group of students has to resist peer pressure in order to pursue the professional goal of becoming teachers. There is a need to reassess the admission requirements with regard to test scores and professional aptitude.

The second indicator – the low school-work transition rate – should be a cause for public concern and for policy action. There is a huge wastage of government scholarships involved in pre-service teacher-education studies. The low transition rate has a dual cause: it has to do with the 'wrong motivation' for enrolment in teacher education mentioned above, but also with the generalist outlook of the pre-service teacher-education curriculum. It is a generalist degree with little allocation for pedagogical and educational content. The great bulk of instructional hours are reserved for subject content – and in vocational-technical tracks of teacher training of general knowledge. The teaching practicum exists but there is no rigorous curriculum, assessment and organization of the practicum. Very often, large groups of students are assigned to a laboratory school or model school attached to the university, and regular attendance is difficult to monitor.

6.4. THE INNOVATION GAP BETWEEN IN-SERVICE AND PRE-SERVICE TEACHER EDUCATION

The in-service teacher training that ensured lifelong learning for teachers – intensive multi-week courses every three to five years – was comprehensive and expensive and, with a few notable exceptions such as Uzbekistan, not sustained. International NGOs, agencies and donors filled the void and, in the early transition period, set up their in-service training programmes. Mostly following a cascade model of dissemination, they trained their own trainers, established their own quality criteria, and in some organizations, had their teachers undergo a certification process based on rigorous standards that they established themselves (e.g., Reading and Writing for Critical Thinking, Step by Step Programme, and others funded by the Soros Foundation Network). The first decade of the new millennium was characterized by attempts by governments to regulate a subsector that was flourishing due to external financial assistance and intervention. The outcome was mixed and, depending on the country context, the in-service teacher training system continues to be mainly run by non-state actors, shared or semi-integrated or fully integrated. The integrated models are worth analysing in detail as they typically transform the role of the state from being an implementer to an accreditor of courses that are offered by a variety of organizations: state institutions, non-governmental organizations and businesses. In areas that represent reform priorities – typically those that are outlined in the education sector strategy – the state also provides subsidies to training providers.

The UNICEF CEECIS study on teachers observes an innovation gap between pre-service and in-service teacher training. It is only in the past few years that some countries have drawn greater attention to pre-service teacher education at vocational-technical colleges and at universities. The latter benefited from higher education reform and from the pressure to systematically and urgently reform teacher training in light of the extension of schooling to 11 and 12 years, and the introduction of new standards, new curricula, new assessment methods and new textbooks.

The importance of pre-service teacher-education reform for the quality of education cannot be overstated. For example, the problematic yet widespread practice of redistributing teaching hours within the teaching staff at schools would not be cause for such great concern if universities would prepare the future teachers to teach a subject area (e.g., natural sciences) rather than one subject only (e.g., chemistry). Quality erosion due to teachers not being prepared to teach multiple subjects (in secondary school) or multiple grades (in rural primary school) could be entirely avoided with a reform of pre-service teacher education that takes into account the realities at school level.

6.5. USES AND ABUSES OF THE TEACHING LOAD SYSTEM

The teaching load, or *stavka*, system makes teachers vulnerable and dependent on the goodwill of the school principal and, in effect, promotes non-formal evaluation criteria and non-professional decisions in scheduling the teaching hours of the staff. The statutory teaching load of 18–22 hours is extremely low compared to OECD countries and the base salary is too low to make a living, let alone financially support a household or a family. The *stavka* system, in effect, assumes that teachers do not live on a regular teacher salary alone. The teacher depends on taking on additional hours (in one's own subject specialty or, in small schools, in any other subject), soliciting official and/or unofficial fees from parents for all kinds of services in school, and/or taking on another job outside the school. The low commitment to the profession is the root cause for the low quality of teaching and education in the region.

Alternatively, teachers may choose to only work part-time or less than a *stavka* – as is, for example, the case for the majority of teachers in Armenia. For teachers in Armenia, Georgia, Tajikistan and many more countries where there are a great number of part-time workers, the teaching profession is only one of two or more jobs. Whether teachers make the bulk of their income from private tutoring after school hours (e.g., in Georgia) or whether they only take on four hours a week (e.g., in Tajikistan), an important function of the teacher salary is, for masses of teachers, not the actual income, but rather the job safety and the social benefits it provides.

As discussed in great detail in this report, there are serious constraints for teacher effectiveness under the *stavka* system. The system only values teaching, but not lesson preparation, formative student evaluation, meeting with parents and colleagues, and a host of other activities that are important for effective teaching. Teachers leave the school premises as soon as they complete their teaching. The only room they are able to use for lesson preparation, grading or meetings is the teacher's room, because the classrooms are usually used for the other shift.

Another feature of the teaching load system is the allocation of supplements and, possibly less known, the arbitrary deduction of salary supplements. The supplement for notebook checking exists in all countries of Caucasus, Central Asia, and Eastern Europe, and is given to teachers in some subjects (those deemed labour-intensive with regard to grading student notebooks) and primary teachers. They receive a very small salary supplement for each notebook that has been graded. The composition of the teacher salary also includes supplements for being a homeroom teacher, offering extra-curricular classes, organizing a resource room/cabinet and a few other supplements. Different from the base salary that is prescribed by law, the remaining salary supplements are unpredictable and non-transparent. Deputy school directors are in charge of closely monitoring teachers and they have the authority to deduct the salary supplements if they find the work of teachers unsatisfactory. The *stavka* system generates a culture of surveillance and report writing that distracts teachers from their actual work.

One of the problems that educational systems in other regions face is non-existent in the CEECIS region: teacher absenteeism. Deputy school directors are in charge of controlling teachers and they take notes when teachers arrive late, leave early or miss classes. Teachers are paid by the number of taught hours. The system is not without its problems. Absences of teachers do exist, but they are not such an issue as compared to countries in other regions.

Finally, the salary structure also creates inequality among teachers who are of the same age, qualification and rank, but are based in different locations. Teachers in small schools are unlikely to accumulate as many additional teaching hours as their peers in urban and semi-urban schools. Additionally, local governments that have tax revenues – typically based in municipalities and cities – are able to provide an additional allowance to teachers that compensates for some of the shortcomings of the base salary.

The UNICEF CEECIS study on teachers analysed the structure of the teacher salary in great detail because it is a topic that is severely understudied, yet has vast pedagogical repercussions. This study purposefully pursued a school-level analysis of teacher quality because the statistical averages, provided by national statistical offices, mask the subtle practices that schools and teachers use as coping strategies to deal with the difficult work environment of teachers and their low, fragmented and non-transparent salary.

APPENDIX A. SIX-COUNTRY UNICEF CEECIS STUDY ON TEACHERS

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- Ainura Molodokmatova, UNICEF consultant
- Gulzhamal Sheripkanova-MacLeod, UNICEF consultant
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1. Teacher quality and teacher work conditions in Armenia

- Ruben Petrosyan, Yerevan State University, Armenia
- Alvard Poghosyan and Armine Ter-Ghevondyan, UNICEF Armenia
- Tigran Tovmasyan, Yerevan State Linguistic University, Armenia
- Raisa Belyavina, Teachers College, Columbia University
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2. Teacher quality and teacher working conditions in Bosnia and Herzegovina

- Adila Pasalic-Kreso, Azemina Vukovic, Sanja Kabil, UNICEF BiH
- Amritpal Sandhu, Teachers College, Columbia University
- Latika Young, Teachers College, Columbia University

3. Survival strategies of preschools in the Kyrgyz Republic: A school-level analysis of teacher shortages

- Saltanat Builasheva, Chinara Kumenova, Rahat Orozova, UNICEF, Bishkek
- Farida Ryskuleva, former head of planning, Ministry of Education
- Saima Gowani, Teachers College, Columbia University

4. Teacher quality and working conditions in The former Yugoslav Republic of Macedonia

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