Regional overview: Central and Eastern Europe and Central Asia

Central and Eastern Europe (CEE) and Central Asia (CA)¹ have made steady progress in education since 1999. In particular, participation in pre-primary and tertiary education has increased considerably, although wide disparities remain accross the two regions and between countries. While enrolment ratios in primary education are high, renewed commitment is needed to bring into school the remaining 2 million children of primary school age who were not enrolled in both regions combined. These children are concentrated in poor and vulnerable households. Innovative policy solutions are needed to bring them into the education system by 2015. Getting children into school is important, but the ultimate purpose of schooling is to provide children with an education that equips them with the skills and knowledge they need to lead productive lives. A recent international assessment shows that the quality of education varies widely and, for many countries, improvements are desperately needed. With some 9 million adult illiterates in the two regions, literacy also remains a concern in some countries.

Persistent inequalities are hindering progress towards the EFA goals globally, regionally and nationally. The EFA Global Monitoring Report 2009 finds that, within countries, disparities based on wealth, location, gender, immigration or minority status and disability deny millions of children a good-quality education. The Report examines these inequalities and turns the spotlight on the role that education governance can play in overcoming them. It shows that current approaches to education governance reform all too often fail the poor and disadvantaged. This regional overview reveals that, while CEE and CA continue to make progress on most of the EFA goals, wide disparities within countries hold back overall progress.



EFA progress and challenges

Early childhood care and education

The path towards Education for All starts long before primary school. Adequate nutrition, good health and an emotionally secure, language-rich home environment during the earliest years are vital for later success in education and life. Yet a number of children lack these advantages and access to pre-school provision remains limited and unequal in many countries of CEE and CA.

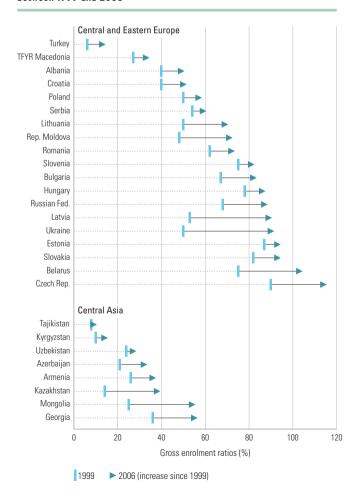
Child mortality is one of the most sensitive barometers of the well-being of children under 5. It captures premature death and provides a view of the health and nutritional status of the next generation of primary school-age children. High levels of child mortality and malnutrition are formidable development challenges in their own right. They are also symptoms of wider problems that directly affect education.

- The most recent under-5 mortality rates in CA show that 62 of every 1,000 children die before their fifth birthday, a rate well above the average for transition countries (38‰). Child mortality rates are particularly high in Azerbaijan (86‰), Tajikistan (78‰) and Turkmenistan (95‰), while at the other end of the spectrum are Armenia (34‰) and Kazakhstan (29‰).
- The under-5 mortality rate in CEE stood at 21‰, with developed countries tending to have lower mortality rates than transition countries. There are large country differences in child mortality rates: the Czech Republic (5‰) and Slovenia (6‰) have the lowest rates and Montenegro (24‰) and Turkey (32‰) the highest.
- Levels of child malnutrition in CA, measured by the percentage of children with moderate or severe stunting, are greatest in Mongolia (21%) and Tajikistan (27%). With the exception of Albania, malnutrition rates in CEE are below 15% among countries where the data are available.

 $[\]overline{\bf 1}.$ This is according to the EFA classification. See the table at the end for countries in the two regions.

- In CA, official programmes of early childhood care and education (ECCE) for children under age 3 exist in all countries but Tajikistan. Such programmes are less frequent in CEE, where fewer than half the thirteen countries with data reported having them.
- Impressive gains in the level of participation in pre-primary programmes have been recorded in CEE and CA since 1999, with pre-primary gross enrolment ratios (GERs) increasing by thirteen percentage points in the former and seven percentage points in the latter to 62% and 28% respectively in 2006.
- Large increases in coverage were noticeable in many countries (Figure 1). Expansion in Belarus and the Czech Republic between 1999 and 2006 led to pre-primary systems capable of enrolling all children between the ages of 3 and 5. However, pre-primary access remains extremely limited in a number of countries, including Kyrgyzstan, Tajikistan and Turkey.

Figure 1: Changes in pre-primary gross enrolment ratios between 1999 and 2006



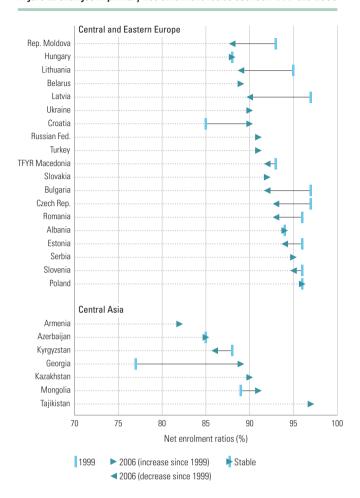
- Although vulnerable children from poor households stand to benefit the most from early childhood programmes. international evidence indicates they are the least likely to have access to them. For example, in 2006 pre-primary attendance rates among 3- and 4-year-olds in Kazakhstan were 3% for children from the poorest households and 45% for children from the richest families. Urban-rural gaps and other geographical disparities are also marked in many countries in Central Asia.
- Attendance in pre-primary programmes varies widely among ethnic and linguistic groups within countries. Roma people living in Serbia have pre-school participation levels less than one-six of those for Serb nationals. In Montenegro, pre-primary attendance rates for 3- and 4-year-old Bosnian Muslim children were less than 10%, compared with 41% for Montenegrin children.

Universal primary education: nations at the crossroads

Despite high levels of enrolment, progress towards universal primary education (UPE) in both regions has been relatively slow since 1999. With only seven years to the target date for meeting the EFA goals, some governments in CEE and CA may not fulfil their pledge to achieve UPE if they continue on a business-as-usual trajectory. The twin challenge is to accelerate increases in access while strengthening retention, so that all children enter school and complete a full primary cycle.

- As population growth rates in both regions slow, primary school-age populations are declining. Therefore, every year fewer children need to be accommodated in primary school to achieve the targets. This presents a big opportunity for countries to enrol children who are not in school and to increase the financing of primary education systems.
- The net enrolment ratio (NER) is one of the most robust measures of distance from UPE (Figure 2). In both regions the primary NER increased very slowly between 1999 and 2006: from 91% to 92% in CEE and from 87% to 89% in CA.
- The NER has been declining in a significant number of countries with data available, including the Czech Republic, Latvia, Lithuania and the Republic of Moldova in CEE and Kyrgyzstan in CA. This worrying trend points to an urgent need to refocus efforts on achieving UPE by 2015.
- In 2006, some 352,000 children of primary school age were out of school in CA and 1.6 million in CEE. Out-of-school populations have been declining in both regions since 1999 as a result of slight increases in school participation and reductions in overall primary school-age populations.

Figure 2: Changes in primary net enrolment ratios between 1999 and 2006



- Turkey had the largest out-of-school population (729,000 in 2006) in CEE, accounting for 45% of the region's total. Projections for 2015 indicate that 710,000 children will remain out of school in Turkey if recent trends continue.
- The circumstances and characteristics of out-of-school children vary. In CEE half the out-of-school children were expected to enter school later than the official starting age. A further 42% were unlikely to enrol without new policies and additional incentives to address specific structures of disadvantage. In CA 38% of out-of-school children had dropped out, suggesting that policies aimed at retention are crucial to achieving UPE. More than one-third were expected never to enrol and 27% to enrol late.

Progression through school: repetition, dropout, low survival rates

Getting children into school is a necessary condition for achieving UPE, but not a sufficient one. What counts is completion of a full cycle. Survival rates in CEE and CA

- are high. For example, in 2005 the median survival rates to the last grade of primary school were 97% in CEE and 99% in CA.
- With high levels of survival, achieving UPE in these regions, particularly in CEE, will be largely determined by the extent to which access can be extended to children currently out of school.

Disparities within countries and other barriers to UPE

- In many countries the distribution of children not attending school is skewed towards the poor. Poverty interacts with wider inequalities and markers for disadvantage related to gender, location, language and other factors. Breaking down these inequalities is a key to accelerated progress towards UPE in both regions.
- Every country faces its own distinctive set of challenges in achieving UPE, but child labour, ill health and disability are three of the most common. Children with disabilities, for example, are among the most marginalized and least likely to go to school. In Mongolia, attendance rates for children aged 6 to 11 are 41% for children with disabilities and 58% for children without disabilities. While there are no blueprints for accelerating progress towards UPE, five broad lessons can be drawn from the experience of strong country performers:
 - 1. Set ambitious targets.
 - 2. Get serious about equity.
 - 3. Raise quality while expanding access.
 - 4. Strengthen wider anti-poverty commitments.
 - 5. Develop an agenda for equitable governance.

Secondary education and beyond: some gains

Increasing participation in secondary and tertiary education is an explicit part of the Dakar commitment to EFA and of the Millennium Development Goals (MDGs) on gender parity and equality. It is also important because of the incentives it provides for children to complete primary school. In addition, it expands the supply of qualified teachers and improves knowledge and skills for the labour market.

- Almost all children who complete primary school in CEE and CA go on to secondary education, where GERs remain high.
- Participation in secondary education registered some gains in CA between 1999 and 2006, with the average GER rising from 83% to 91%. The indicator remained almost unchanged in CEE, at 88% in 2006.

- At national level, participation increased in most countries in both regions. Important gains were reported in Belarus, Bulgaria, the Czech Republic, Latvia and Mongolia, where secondary GERs rose by more than ten percentage points. Mongolia registered the greatest rise: its GER increased from 58% in 1999 to nearly 89% in 2006. On a less positive note, participation levels in secondary education declined in Armenia, Serbia, Slovenia and Ukraine.
- Regional averages conceal significant differences among countries in both regions, but particularly in CEE. Secondary education remains less developed in Albania and Turkey, which reported GERs below 80% in 2006, while the ratios were close to 100% or even more in Bulgaria, Estonia and Poland. In CA, secondary GERs ranged from about 83% in Tajikistan to 102% in Uzbekistan.
- Technical and vocational education and training (TVET) is relatively developed in CEE. It accounted for 19% of total secondary enrolment, on average, in 2006. Some national shares are much higher - well over 30% in Croatia, the Czech Republic, Romania, Serbia, Slovakia and Slovenia. TVET programmes are less frequent in CA, accounting for 10% of total secondary enrolment, with country shares ranging from 0.3% in Azerbaijan to 23% in Uzbekistan.
- The transition from lower to upper secondary education is a critical dropout point in many education systems. In most countries in CEE and CA, GERs are much higher in lower secondary education than in upper secondary: the gap between the two exceeds thirty percentage points in some countries, including Albania, Belarus, Kazakhstan and Tajikistan. On the other hand, participation levels were higher in upper than lower secondary education in Bulgaria, the Russian Federation, Slovenia and Uzbekistan.
- Within-country inequalities in secondary education are even more marked than inequalities among countries. Secondary education attendance and survival rates are affected by disparities related to factors such as household wealth and language. In many countries, secondary attendance rates are significantly lower among poorer households than among richer one. Speaking a non-official language also remains a core marker for disadvantage. For example, in Turkey, data from household surveys indicate that while 45% of Turkish speakers aged 16 to 49 have completed secondary education, less than 21% of Kurdish and Arabic speakers have done so.
- Tertiary education enrolment expanded by more than 60% in both regions between 1999 and 2006. However, the 2006 tertiary GERs were very different: 60% in CEE and 25% in CA.

Regional averages hide large disparities in participation in tertiary education. In CEE, Albania had a GER of 19% in 2006, well below the regional average, while Latvia, Lithuania, the Russian Federation, Slovenia and Ukraine reported levels above 70% or 80%. In CA, Kazakhstan had a tertiary GER of 51% in 2006, some twenty-six percentage points higher than the CA regional average, while the level of participation in Turkmenistan was below 10%.

Adult literacy

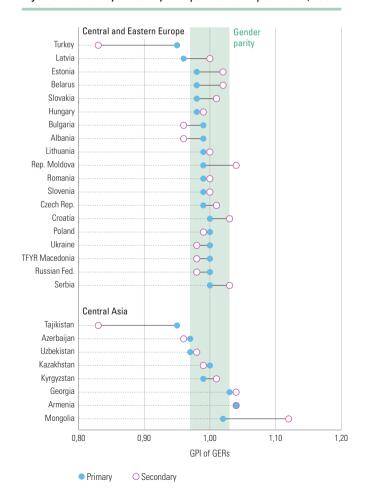
Reading, writing and calculating are essential skills for today's world. Literacy and numeracy expand people's choices, give them more control over their lives, increase employment opportunities and the ability to participate in society, and enhance self-esteem. Despite these advantages for individuals and societies, however, literacy remains a neglected goal in some countries.

- While adult literacy rates were high in CEE, according to conventional measures, averaging 97% during the 2000-2006 period, an estimated 8.2 million adults were still unable to read and/or write, with understanding, a simple statement in a national or official language. Turkey alone accounted for some 76% of these adults.
- In CA, the estimated adult literacy rate in 2000–2006 was 99%. Uzbekistan had the lowest adult literacy rate in the region, about 97%, with an estimated 565,000 adult illiterates - 72% of the regional total.
- Gender parity in adult literacy has been achieved in almost all countries in both regions. The notable exception is Turkey, where important gender disparities at the expense of women were still observed in 2006: the gender parity index (GPI) of adult literacy was 0.84.
- Disparities in adult literacy are also linked to other markers of disadvantage, such as poverty, place of residence, ethnicity, language and age. Achieving the EFA adult literacy goal implies paying sustained attention to inequalities.

Assessing gender disparities and inequalities in education

- Among the countries with data, 21% in CEE and half of those in CA did not achieve the 2005 goal of gender parity in primary and secondary education by 2006.
- Most countries in the two regions have achieved gender parity in primary education, the exceptions being Armenia, Latvia, Tajikistan and Turkey (Figure 3). In Turkey and Tajikistan, the small gender disparities observed were at the expense of girls (GPI of primary GER at 0.95 in 2006) while slightly more girls were enrolled in primary education in Armenia (GPI of 1.04).
- In all countries with data in both regions, girls are as likely as boys to repeat grades, or less so. Often, girls also have a greater chance of surviving to the final grade of primary education. However, in Azerbaijan and Turkey, girls' survival rates to the last grade are lower than those of boys.

Figure 3: Gender disparities in primary and secondary education, 2006



- Gender disparities are more prevalent in secondary education. Tajikistan and Turkey had relatively large gaps in favour of boys at this level in 2006, while Mongolia had a significant gender gap in favour of girls.
- The rapid increases in tertiary education experienced in both regions since 1999 benefited women more than men. Between 1999 and 2006 the tertiary GPI in CA increased from 0.93 to 1.10, indicating that by 2006 more women than men were attending tertiary programmes. In CEE, the advantage for women further increased, with the GPI of tertiary GER rising from 1.18 to 1.25. Thus both regions are moving away from gender parity at this level.
- Reducing gender disparities in formal education does not automatically translate into gender equality in educational opportunities and outcomes. Girls and boys achieve very different outcomes in school, not just in overall performance but also by subject. Education systems and classroom practices partly explain these differences, but such school-based factors interact with wider social, cultural and economic forces that structure expectations, aspirations and performance along gender lines. Four distinctive themes emerge from a compilation of recent research and assessments:
 - Girls continue to outperform boys in reading literacy and language arts in many countries.
 - Historically boys have outperformed girls in mathematics in all primary and secondary grades, but there is some evidence from the two regions that this is changing. For example, grade 4 girls outperformed boys in mathematics in Armenia and the Republic of Moldova in the 2003 Trends in International Mathematics and Science Study.
 - The science gap is often small, though boys tend to maintain an advantage.
 - *Subject choice* in tertiary education is still marked by strong gender selection effects.
- Social conditioning and gender stereotyping can limit ambition and create self-fulfilling expectations of disparities in outcomes. Recent research underlines a strong association between the degree of gender equality in society at large and the size of gender gaps in mathematics achievement. Teacher attitudes and practices that translate into different treatment of boys and girls can also affect cognitive development and reinforce gender stereotyping. So can gender bias in textbooks.

Quality of education

Getting all children through a full basic education cycle is an important goal, but the ultimate purpose of schooling is to provide children with an education that equips them with the skills, knowledge and wider perspectives they need to participate fully in the social, economic and political lives of their countries.

- Results from PISA, which tests 15-year-old students in various subjects, highlight deep deficits in learning outcomes in many countries. Two-thirds of CEE countries participated in the most recent PISA assessment on science literacy, in 2006. It showed learning outcomes varying considerably by country. About half of students in Montenegro, Romania and Turkey scored at or below level 1, the lowest level in the PISA science ranking. On the other hand, Estonia ranked second among all 54 participating countries, with less than 8% of students scoring at or below level 1.
- Only two countries in CA participated in PISA 2006: Azerbaijan and Kyrgyzstan. Both performed worse than most other countries in the study: over three-quarters of their students scored at or below level 1.
- Unequal learning outcomes, typically related to socioeconomic status and other indicators for disadvantage, are most pronounced within countries. They exist at every level: between regions, communities, schools and classrooms. Three key factors influence within-country disparities:
 - Student background. Apart from inherent ability, student achievement is the product of social, economic and cultural circumstances, such as household income, parental education, gender, ethnicity and home language. These student endowments significantly influence how much children actually learn and the extent of variation in learning outcomes.
 - System-level factors. The way an education system is organized and governed - including promotion policies, school leaving exams, ability grouping and multigrade teaching - can significantly affect learning outcomes. Practices such as extended ECCE provision can increase equity, while others, such as selective academic streams, can lead to greater disparities.
 - School-based factors. Sufficiently resourced schools, effective teachers, an effective school learning environment and dynamic classrooms are also important determinants of learning.

Teachers

Delivery of good-quality education is ultimately contingent on what happens in the classroom, and teachers are on the front line. The profile of teachers, and the governance systems through which they are recruited, trained and deployed, have a critical bearing on learning outcomes and on equity.

- Primary school teacher numbers have been decreasing in CEE and CA since 1999. This has been the result of declines in overall school-age populations rather than higher pupil/teacher ratios (PTRs). In 2006, primary PTRs were less than 20:1 in both regions. Only in Mongolia was the PTR relatively high (33:1).
- At secondary level, the average numbers of students per teacher in 2006 were even lower. Indeed, the secondary PTRs of 11:1 for CEE and 12:1 for CA were the world's lowest.
- National PTRs, while they can shed light on the state of particular education systems, can also obscure disparities in teacher assignment associated with location, income and school type. These disparities affect the extent to which a country truly gives everyone the opportunity to receive an education of good quality.

Education for All: measuring composite achievement

The EFA Development Index (EDI) is a composite measure that captures overall EFA progress. Ideally, it should include all six EFA goals, but due to serious data constraints, it currently focuses only on the four most easily quantified goals, attaching equal weight to each: UPE, adult literacy, gender parity and equality, and education quality, each proxied by a relevant indicator.2

For the school year ending in 2006, the EDI could be calculated for sixteen of the twenty-one CEE countries and seven of the nine CA countries. Table 1 summarizes the positions of these countries in relation to full EFA achievement (an EDI value of 1).

Table 1: Mean distance from the four EFA goals

	A achieved een 0.97 and 1.00)	Close to EFA (EDI between 0.95 and 0.96)
		CEE (4): Albania, Belarus, Bulgaria, Romania CA (2): Armenia, Mongolia
CA (4): Georgia Kyrgyzstan, Ta		
	ediate position een 0.80 and 0.94)	Far from EFA (EDI below 0.80)
CEE (2): Repub Turkey	lic of Moldova,	None
CA (1): Azerbai	jan	

Raising quality and strengthening equity: why governance matters

Education governance is not an abstract concept. It affects whether children have access to well-resourced schools that are responsive to local needs. It is also concerned with ensuring that teachers are trained and motivated, and that teachers and schools are accountable to parents and communities for learning outcomes. Education governance is about how policies are formulated, priorities identified, resources allocated, and reforms implemented and monitored.

Governance reform is a prominent part of the EFA agenda. The Dakar Framework for Action sets out broad principles. which include creating responsive, accountable and participatory education systems. The widely held conviction is that moving decision-making away from remote government agencies and making the process more localized and transparent will make education service providers more responsive to the needs and concerns of the poor. However, experience in both the developed and developing world points to highly variable results. Two key findings emerge. First, there is no blueprint for good governance: each country has to develop its own national and local solutions to governance problems. Second, governments across the world have attached insufficient weight to equity in their design of governance reforms. There is an urgent need to ensure that the interests of the poor, marginalized and vulnerable are placed firmly at the centre of the governance agenda.

The 2009 Report focuses on four areas which highlight some of the most important currents in governance reform.

Financing education for equity

Additional funding is needed if the world is to achieve the Dakar goals. But increasing funding is part of a broader set of education policy challenges. Countries also need to improve efficiency and develop strategies addressing inequalities in education finance if EFA is to be achieved.

- In many countries, corruption is a major source of both inefficiency and inequity - the former because it means more public money provides fewer inputs and the latter because the costs of corruption invariably fall most heavily on the poor. Monitoring the use of funds through the tracking of public expenditure can help reduce corruption.
- Public spending on education has the potential to redress inequalities but often reinforces them instead. In some

^{2.} UPE (goal 2) is proxied by the total NER (includes children of primary school age who are enrolled in either primary or secondary education); adult literacy [goal 4] by the literacy rate of those aged 15 and above; gender parity and equality [goal 5] by the gender-specific EFA index, an average of the GPIs for primary and secondary GERs and the adult literacy rate; and quality of education (goal 6) by the survival rate to grade 5. The EDI value for a given country is an arithmetic mean of the four proxy indicators. It falls between 0 and 1, with 1 representing full EFA achievement.

cases, the contours of unequal financing follow ethnic lines. For example, in the former Yugoslav Republic of Macedonia, schools whose students are of Albanian ethnicity receive almost 20% less in per-student funding than the national average. In rural areas they receive almost 37% less than schools whose students are of Macedonian ethnicity. In other contexts, governments have developed approaches aimed at making spending more equitable, such as providing school grants and devising formula funding whereby allocations are adjusted according to need. However, outcomes have been mixed.

Financial decentralization can exacerbate the gaps between rich and poor areas. Unless central governments retain a strong role in redistributing financial resources from richer to poorer areas, the financing gaps in education are likely to widen.

Choice, competition and voice: school governance reform and EFA

School governance reforms aim to strengthen the voice of the poor and increase their choices by transferring responsibility to communities, parents and private providers. An overarching lesson from experience is that these reforms are not a substitute for government's responsibility to ensure that the public education system is of good quality.

- *School-based management* describes a range of reforms that aim to give teachers, parents and communities more autonomy over decision-making in schools. In some cases, these reforms have improved learning achievements and strengthened equity. More widely, though, there is limited evidence of improvements in either learning outcomes or teaching practices.
- Encouraging the *participation of parents and communities* in decision-making can make schools more responsive to local needs. However, local power structures associated with poverty and social inequality can still limit the influence of the poor and marginalized.
- Expanding school choice is widely viewed as an incentive for schools to improve their performance. Some governments use vouchers and other instruments to facilitate transfers from public to private providers of education, or *contract* the management of government schools to non-public *providers*. However, these reforms have not unambiguously raised academic achievement standards. Often they have actually widened inequalities.

■ Low-fee private schools are changing the education landscape in some parts of the world. Their rapid growth is a symptom of failure in the availability or quality of government schools. However, they risk widening the gap between those who can and cannot afford to pay. There are also questions about the quality of education they provide.

Strengthening teacher governance and monitoring

Many school systems fail to provide an education that meets even the most basic standards for quality and equity. To address this, attention needs to be paid to teacher recruitment, deployment and motivation, together with school supervision and effective use of information from learning assessments.

- From one perspective, teacher salaries are viewed as crowding out spending on learning materials and other aspects of education provision. From an alternative perspective, they are seen as too low - near or below the poverty line in some countries – with obvious implications for teacher motivation and standards.
- Hiring contract teachers can help address teacher shortages at lower cost. However, relying on contract teachers can weaken quality by lowering the standard of the teaching staff or reducing overall teacher morale.
- Teacher deployment is often inequitable within countries. which can worsen inequality in learning. Prioritizing training of teachers from under-represented groups, together with local recruitment, can make a difference.
- Some governments see performance-related pay as a strategy to improve teacher performance, including by reducing teacher absenteeism. But there is little evidence that it produces positive results – and some evidence that it has perverse effects, such as leading teachers to focus on the best-performing students. Moreover, political and administrative obstacles can prevent the effective implementation of performance-related pay reforms, as Mongolia's experience demonstrates (Box 1).
- Using information from learning assessments to monitor quality standards and equity is one of the keys to improving learning outcomes. Increasingly, information from learning assessments is being used to identify problems and inform policy, with encouraging results.
- School supervision is an essential aspect of monitoring, not only to oversee teacher and school performance but also to identify and support needed quality improvements.

Box 1: Problems in Mongolia's teacher bonus system

Introducing performance-related pay is not a simple administrative matter. In Mongolia, large bonuses – up to 25% of annual salary or three months' pay - were introduced in 2006 with the aim of acknowledging outstanding teacher performance. In the first year of the reform, schools received central funding with which to give bonuses to selected teachers. In subsequent years schools were to raise their own funds or deduct money from salary supplements for some teachers to reward others. The idea of bonuses was abandoned a year after its inception, for several reasons:

- a strongly held belief in social redistribution that prohibits rewarding a few at the expense of others;
- concerns that the plan would emphasize a hierarchical structure between those who are monitored (teachers) and those who monitor (head teachers):
- the heavy load of documentation and paperwork that resulted from close and continuous monitoring over the course of a year.

An integrated approach to education and poverty reduction

Sustained progress towards EFA depends on the effective integration of education planning with wider poverty reduction strategies, for an obvious reason: poverty, poor nutrition and ill health are significant barriers to success in education.

- Poverty reduction strategy papers have failed to make the link between education and poverty reduction, with a weak relationship to the EFA agenda, limited consideration of equity in target-setting, and poorly integrated with broader governance reforms and cross-sector approaches.
- Social protection programmes are making a strong contribution to education by addressing problems in health. nutrition and child labour.
- Political commitment, together with consultation processes that provide opportunities for civil society organizations to participate in policy discussions, is crucial. The challenge is to extend participation to make sure the voices of the poor and vulnerable are heard.

Financing education

Dismal learning outcomes and high levels of inequality are possible at low, medium and high levels of spending. Rapid increases in spending do not necessarily lead to improved achievement levels. Yet financing thresholds are important. Students need access to a minimum level of resources and materials. Even with improved efficiency, chronic financing gaps in many countries contribute to inadequate access, poor quality, insufficient teacher recruitment and low teacher morale.

National financing

- Among the two-thirds of CA countries with data, the median share of public education expenditure in GNP was 3.4% in 2006, below the value of 3.9% for countries in transition as a whole. For CEE, education's median share in GNP was 5.3%, similar to the average for high-income countries.
- National commitments to education varied significantly, particularly in CEE, where the share of GNP devoted to education ranged from 3.6% in Romania to 6.6% in the Republic of Moldova. In CA, Azerbaijan reported the lowest percentage in 2006 (2.4%) and Mongolia the highest (5.3%).
- Progress in the share of GNP devoted to education in the two regions has been mixed, with the numbers of countries devoting more to education being similar to those of countries maintaining or decreasing commitments. For example, between 1999 and 2006, Georgia, Kyrgyzstan and Tajikistan increased the proportion of GNP devoted to education by about one percentage point. In Azerbaijan, Kazakhstan and Mongolia the share devoted to education fell by 0.7 percentage points to about 2%. In CEE, the Republic of Moldova and Ukraine have shown impressive increases in education spending, increasing its share of GNP by 2 and 2.7 percentage points, respectively. On the other hand, declines were reported in Estonia, Latvia and Slovakia.
- The share of education in total public expenditure is a more direct measure of government commitment to education than the share in GNP. The median share of government spending on education in CEE (12.7%) was among the lowest for world regions but higher than the developed country average (11.8%).
- Government commitment to education in 2006 varied widely in the two regions. In CA, of the three countries with data available, Georgia devoted 9.3% of government

spending to education, compared with 19% in Tajikistan. In CEE, Bulgaria allocated 6.2%, compared with 20.2% in the Republic of Moldova.

Contribution of external aid to EFA

- Total commitments of official development assistance (ODA) for CEE declined slightly, from US\$6.1 billion in 1999-2000 to US\$5.5 billion in 2005-2006 (in constant 2006 dollars).³ Over this period, Albania, and Bosnia and Herzegovina saw their ODA decline by more than half, while Turkey experienced a 64% increase.
- Between 1999–2000 and 2005–2006 total ODA commitments to CA increased from US\$2.0 billion to US\$ 2.3 billion (constant 2006 dollars). Armenia, Georgia and Tajikistan were the main beneficiaries of this increased aid commitment
- CEE received an annual average of US\$370 million in aid to education in 2005-2006, down from US\$409 million in 1999-2000. Aid to basic education also declined, from 32% of total education aid in 1999-2000 to 11% in 2005-2006.
- In CA, average annual aid to education increased from US\$102 million in 1999-2000 to US\$163 million in 2005–2006 (constant 2006 dollars). The share devoted to basic education also increased from 24% to 39% over the period.

DUCATION FOR

ECCE: early childhood care and education. Programmes that, in addition to providing children with care, offer a structured and purposeful set of learning activities either in a formal institution (pre-primary or ISCED 0) or as part of a non-formal child development programme. ECCE programmes are normally designed for children from age 3 and include organized learning activities that constitute, on average, the equivalent of at least 2 hours per day and 100 days per year.

GPI: gender parity index. Ratio of female to male values (or male to female, in certain cases) of a given indicator. A GPI of 1 indicates parity between sexes; a GPI above or below 1 indicates a disparity in favour of one sex over the other.

GER: gross enrolment ratio. Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the population in the official age group corresponding to this level of education. For the tertiary level, the population used is that of the five-year age group following on from the secondary school leaving age. The GER can exceed 100% due to late entry or/and repetition.

GNP: gross national product. Gross domestic product plus net receipts of income from abroad. As these receipts may be positive or negative, GNP may be greater or smaller than GDP. This latter indicator is the sum of gross value added by all resident producers in the economy, including distributive trades and transport, plus any product taxes and minus any subsidies not included in the value of the products.

NER: net enrolment ratio. Enrolment of the official age group for a given level of education, expressed as a percentage of the population in that age group.

PISA: Programme for International Student Assessment.

PTR: pupil/teacher ratio. Average number of pupils per teacher at a specific level of education, based on headcounts for both pupils and teachers.

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Table 2: Central and Eastern Europe, and Cenral Asia, selected education indicators

					Adult lite (15 and			Earl	y childhood care a	nd education	ı
								Child survival	and well-being	Pre-primar	y education
	Total population	Compulsory education	EFA Development Index					Under-5 mortality rate	Moderate and severe stunting	G	ER
	(000)	(age group)	(EDI)	1985-	-1994 ¹	2000-		(%)	(%)	1999	2006
Country or territory	2006		2006	Total (%)	GPI (F/M)	Total (%)	GPI (F/M)	2005–2010	1996–2006 ¹	Total (%)	Total (%)
Central and Eastern Europ)e										
Albania ⁴	3 172	6-13	0.952			99	0.99	22	22	40	49
Belarus	9 742	6-15	0.969	98	0.97	100	1.00	12	3	75	103
Bosnia and Herzegovina	3 926					97	0.95	14	7		
Bulgaria	7 693	7-14	0.963			98	0.99	14		67	82
Croatia	4 556	7-14	0.989	97	0.96	99	0.98	8	1	40	50
Czech Republic	10 189	6-15	0.979					5		90	114
Estonia	1 340	7-15	0.980	100	1.00	100	1.00	10		87	93
Hungary	10 058	7-16	0.979					8		78	86
Latvia	2 289	7-15	0.972	99	0.99	100	1.00	14		53	89
Lithuania	3 408	7-15	0.970	98	0.99	100	1.00	11		50	69
Montenegro	601		0.370		0.00			24	5		
Poland	38 140	7-15	0.981					8		50	57
Republic of Moldova ⁴	3 833	7-15	0.948	96	0.96	99	0.99	19	8	48	71
•											
Romania	21 532	7-14	0.965	97	0.96	98	0.98	18	10	62	72
Russian Federation	143 221	6-15	•••	98	0.97	100	1.00	21	13	68	87
Serbia	9 851	7-14						14	6	54	59
Slovakia	5 388	6-15	0.971					8		82	93
Slovenia	2 001	6-14	0.988	100	1.00	100	1.00	6		75	81
TFYR Macedonia	2 036	7-14	0.976	94	0.94	97	0.97	17	9	27	33
Turkey	73 922	6-14	0.909	79	0.76	88	0.84	32	12	6	13
Ukraine	46 557	6-17				100	1.00	16	3	50	90
Central Asia											
Armenia	3 010	7-14	0.967	99	0.99	99	1.00	34	13	26	36
Azerbaijan	8 406	6-16	0.948			99	0.99	86	13	21	32
Georgia ⁴	4 433	6-14	0.970					41	12	36	55
Kazakhstan	15 314	7-17	0.995	98	0.97	100	1.00	29	13	14	38
Kyrgyzstan ⁴	5 259	7-15	0.976			99	1.00	64	14	10	14
Mongolia ⁴	2 605	7-15	0.952			97	1.01	54	21	25	54
Tajikistan ⁴	6 640	7-15	0.971	98	0.98	100	1.00	78	27	8	9
Turkmenistan	4 899	7-15				99	1.00	95	15		
Uzbekistan	26 981	7-15				97	0.98	66	15	24	27
	Sum					l average			d average	Weighte	d average
Central and Eastern Europe	403 456		• • •	96	0.96	97	0.97	21	•••	49	62
Central Asia	77 546			98	0.98	99	0.99	62		21	28
Countries in transition	278 295			98	0.98	99	1.00	38		46	62
Developed countries	1 015 689			99	0.99	99	1.00	7		73	79
Developing countries	5 284 165			68	0.77	79	0.85	81	32	27	36
								1		T. Control of the Con	1

Data underlined are for 2003. Data in italics are for 2004. Data in bold italics are for 2005. Data in bold are for 2007 or 2006 for survival rate to last grade.

Source: EFA Global Monitoring Report 2009, statistical tables; UNESCO Institute for Statistics; CRS online database (OECD-DAC, 2008).

^{1.} Data are for the most recent year available during the period specified.

^{2.} Data reflect the actual number of children not enrolled at all, derived from the age-specific enrolment ratios of primary school-age children, which measure the proportion of those who are enrolled in either primary or secondary school (total primary NER).

 $^{{\}bf 3}.$ Based on headcounts of pupils and teachers.

^{4.} Fast Track Initiative (FTI): countries with endorsed sector plans.

	Pupil/teacher ratio ³		% of trained teachers	grade al	Survive to last tot (%	Out-of-school children ²	SER	G of 6 (F/	al	NER total (%)	
Country or territory	2006	1999	2006	2005	1999	2006 (000)	2006	1999	2006	1999	
Central and Eastern Europe											
Albania 4	21	23		90	92	15	0.99	0.98	94	94	
Belarus	16	20	100	99	99	39	0.98	0.99	89		
Bosnia and Herzegovina											
Bulgaria	16	18		95	93	17	0.99	0.98	92	97	
Croatia	17	19		100	100	2	1.00	0.98	90	85	
Czech Republic	16	18		100	98	37	0.99	0.99	93	97	
Estonia	11	16		96	99	2	0.98	0.97	94	96	
Hungary	10	11		98	97	23	0.98	0.98	88	88	
Latvia	12	15		98	97	7	0.96	0.98	90	97	
Lithuania	14	17		97	99	13	0.99	0.98	89	95	
Montenegro											
Poland	11			98	98	100	1.00	0.98	96	96	
Republic of Moldova 4	17	21		97	95	17	0.99	1.00	88	93	
Romania	17	19		94	96	40	0.99	0.98	93	96	
Russian Federation	17	18			95	337	1.00	0.98	91		
Serbia	13	17				15	1.00	0.99	95		
Slovakia	17	19		97	97	19	0.98	0.99	92		
Slovenia	15	14				3	0.99	0.99	95	96	
TFYR Macedonia	19	22		98	97	3	1.00	0.98	92	93	
Turkey				94		729	0.95		91		
Ukraine	17	20	100		97	161	1.00	0.99	90		
Central Asia											
Armenia	21		77	99		12	1.04		82	• • • •	
Azerbaijan	13	19	100	97	97	82	0.97	1.00	85	85	
Georgia 4	15	17	•••	100	99	33	1.03	1.00	89	77	
Kazakhstan	17		***	100		9	1.00	1.01	90		
Kyrgyzstan 4	24	24	61	99	95	29	0.99	0.99	86	88	
Mongolia ⁴	33	32	***	<u>91</u>	87	7	1.02	1.04	91	89	
Tajikistan ⁴	22	22	93	99	97	19	0.95	0.95	97		
Turkmenistan											
Uzbekistan	18	21	100	99	100		0.97	1.00	•••		
	average	Weighted		Median		Sum	l average	Weighted	average	/eighted	
0 . 1 . 15					07						
Central and Eastern Europe	18	19	***	97	97	1 611	0.98	0.96	92	91	
Central Asia	19	21	93	99	97	352	0.98	0.99	89	87	
Countries in transition	18	20	100	99	97	899	0.99	0.99	90	88	
Developed countries	14	16	• • •	98	98	2 368	1.00	1.00	95	97	
Developing countries	28	27	85	81	•••	71 911	0.94	0.91	85	81	
World	25	25		88		75 177	0.95	0.92	86	82	

Table 2 (continued)

				Secondary	education					tiary ation	
		n lower Indary		n upper ndary		GER in tota	R in total secondary			ER	
	20	006	20	006	19	999	2006		20	2006	
Country or territory	Total (%)	GPI (F/M)	Total (%)	GPI (F/M)	Total (%)	GPI (F/M)	Total (%)	GPI (F/M)	Total (%)	GPI (F/M)	
Central and Eastern Europe	9										
Albania ⁴	97	0.98	56	0.93	71	0.98	77	0.96	19	1.60	
Belarus	109	0.97	71	1.19	85	1.05	96	1.02	66	1.37	
Bosnia and Herzegovina											
Bulgaria	91	0.95	123	0.97	91	0.98	106	0.96	46	1.21	
Croatia	98	1.02	85	1.04	84	1.02	91	1.03	44	1.23	
Czech Republic	100	1.00	92	1.03	83	1.04	96	1.01	50	1.22	
Estonia	110	0.95	92	1.10	93	1.04	100	1.02	65	1.67	
Hungary	97	0.98	94	1.00	94	1.02	96	0.99	69	1.47	
Latvia	103	0.97	93	1.06	88	1.04	99	1.00	74	1.80	
Lithuania	100	0.98	95	1.06	95	1.01	99	1.00	76	1.56	
Montenegro											
Poland	101	0.98	98	0.99	99	0.99	100	0.99	66	1.40	
Republic of Moldova ⁴	93	1.01	82	1.13	83	0.98	89	1.04	39	1.38	
Romania	98	0.98	77	1.03	79	1.01	86	1.00	52	1.30	
Russian Federation	80	1.00	91	0.94			84	0.98	72	1.36	
Serbia	97	0.99	80	1.07	93	1.01	88	1.03		1.00	
Slovakia	96	0.99	92	1.03	85	1.02	94	1.01	45	1.42	
Slovenia	92	1.00	98	1.00	100	1.03	95	1.00	83	1.46	
TFYR Macedonia	9 4	1.01	75	0.95	82	0.97	84	0.98	30	1.38	
Turkey	88	0.88	72	0.79		0.57	79	0.83	35	0.75	
Ukraine	93	1.00	94	0.75	98	1.03	93	0.03	73	1.23	
Okidille	33	1.00	34	0.33	30	1.03	33	0.30	/3	1.23	
Central Asia											
Armenia	93	1.02	81	1.09	91		90	1.04	32	1.18	
Azerbaijan	90	0.96	66	0.95	76	1.00	83	0.96	15	0.94	
Georgia ⁴	93	1.03	74	1.06	79	0.98	85	1.04	38	1.13	
Kazakhstan	103	1.00	71	0.94	92	1.00	93	0.99	51	1.44	
Kyrgyzstan ⁴	91	1.01	75	1.03	83	1.02	86	1.01	43	1.27	
Mongolia ⁴	94	1.09	81	1.19	58	1.27	89	1.12	47	1.57	
Tajikistan ⁴	94	0.89	55	0.61	74	0.86	83	0.83	19	0.37	
Turkmenistan											
Uzbekistan	97	0.98	115	0.98	86	0.98	102	0.98	10	0.71	
		Moightos	l average			Maighta	d average		Maighta	d average	
Central and Eastern Europe	89	0.98	85	0.94	87	0.98	88	0.96	60	1.25	
Central Asia	95	0.97	84	0.93	83	0.98	91	0.96	25	1.10	
Countries in transition	89	0.99	88	0.94	90	1.01	89	0.97	57	1.29	
Developed countries	103	0.99	99	1.00	100	1.00	101	1.00	67	1.28	
Developing countries	75	0.94	46	0.93	52	0.89	60	0.94	17	0.93	
World	78	0.95	53	0.95	60	0.92	66	0.95	25	1.06	
vvoriu	/0	0.90	33	0.90	OU	0.92	00	0.90	20	1.00	

Data in italics are for 2004. Data in bold italics are for 2005. Data in bold are for 2007 or 2006 for survival rate to last grade.

Source: EFA Global Monitoring Report 2009, statistical tables; UNESCO Institute for Statistics; CRS online database (DECD-DAC, 2008).

 $^{{\}bf 1.}\ {\bf Data}\ {\bf are}\ {\bf for}\ {\bf the}\ {\bf most}\ {\bf recent}\ {\bf year}\ {\bf available}\ {\bf during}\ {\bf the}\ {\bf period}\ {\bf specified}.$

^{2.} Data reflect the actual number of children not enrolled at all, derived from the age-specific enrolment ratios of primary school-age children, which measure the proportion of those who are enrolled in either primary or secondary school (total primary NER).

^{3.} Based on headcounts of pupils and teachers.

^{4.} Fast Track Initiative (FTI): countries with endorsed sector plans.

		Education finance		
	Total aid to basic education per primary school-age child (constant 2006 US\$)	Total aid to basic education (constant 2006 US\$ millions)		Total public on educa of G
Country or territory	2005–2006 annual average	2005–2006 annual average	2006	1999
Central and Eastern Europe				
Albania 4	31	7		
Belarus	1	0	6.2	6.0
Bosnia and Herzegovina	11	2		
Bulgaria			4.5	
Croatia	1	0	4.6	
Czech Republic			4.7	4.1
Estonia			5.4	7.0
Hungary			5.8	5.0
Latvia			5.2	5.8
Lithuania			5.3	
Montenegro				
Poland			5.7	4.7
Republic of Moldova	34	6	6.6	4.6
Romania			3.6	3.6
Russian Federation			3.9	
Serbia				
Slovakia			4.1	4.2
Slovenia			6.0	
TFYR Macedonia	44	5		4.2
Turkey	0	3	4.1	4.0
Ukraine	0	1	6.4	3.7
Central Asia				
	00			0.4
Armenia	28	4		3.1
Azerbaijan	4	2	2.4	4.3
Georgia '	23	8	3.2	2.0
Kazakhstan	2	2	2.5	4.0
Kyrgyzstan '	27	12	5.0	3.7
Mongolia '	72	18	5.3	6.0
Tajikistan '	16	11	3.5	2.2
Turkmenistan Uzbekistan	1 3	0 7		
Uzbekistan	3	/		
	Weighted average	Sum	lian	Med
Central and Eastern Europe	4	41	5.3	4.4
Central Asia	11	64	3.4	3.7
Countries in transition	7	53	3.9	3.7
Developed countries	19	14	5.3	4.9
•				
Developing countries	6	3 595	4.4	4.5
World	8	4 376	4.9	4.5



Regional overview: Central and Eastern Europe and Central Asia





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