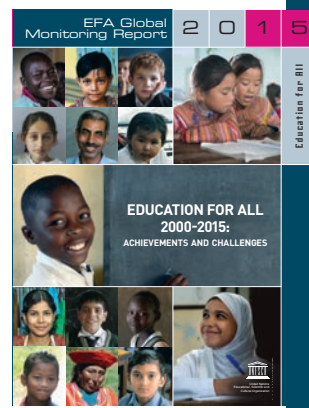
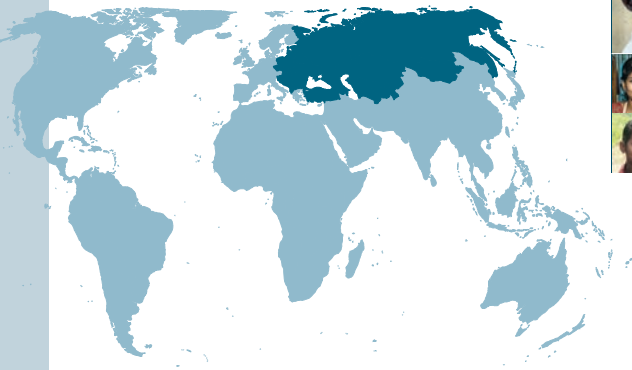




United Nations  
Educational, Scientific and  
Cultural Organization

# Regional overview: Central and Eastern Europe and Central Asia

Central and Eastern Europe (CEE) and Central Asia (CA) have both made significant advances towards Education for All (EFA) since 1999. Many countries in both regions have achieved universal primary enrolment (UPE) and gender parity in both primary and secondary education, while literacy rates, as measured by conventional methods, are high. Enrolment in pre-primary education has also increased, particularly in CA, where the number of children enrolled at this level rose by 48% between 1999 and 2012. Progress was also achieved in secondary school participation in both regions, with impressive increases in CA, both at the lower and upper secondary levels. Yet challenges remain. Nearly 2.4 million children and adolescents remained out of school in 2012 in the two regions, while almost 4.6 million adults were still lacking in basic literacy skills. Levels of learning achievement are low in a number of countries. Geographic, socio-economic and ethnic disparities in education persist. These inequalities must be redressed as the world is defining a new education agenda and if children, youth and adults are to benefit equally from the opportunities education provides, regardless of the circumstances of birth.



In reviewing progress since 2000, this regional overview summarizes findings in response to key questions addressed by the 2015 *EFA Global Monitoring Report*: What are the main EFA achievements and what challenges remain as the world is defining a new education agenda after 2015? Which countries have advanced fastest? Which faced difficulties? Which policy initiatives have been implemented to promote access of both girls and boys to education and improve its quality, especially for the most disadvantaged groups and areas? Have governments and the international community provided adequate support? The 2015 Report shows that despite progress, Education For All remains unfinished business, including in Central and Eastern Europe and in Central Asia. This must be taken into account in the post-2015 agenda.

## EFA progress and challenges

### Goal 1: Early childhood care and education

*Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children.*

#### *Child mortality and nutrition*

- Central and Eastern Europe has made strong progress in child survival and is expected to reach the fourth Millennium Development Goal (MDG) of reducing child mortality rate by two-thirds between 1990 and 2015. The number of children not reaching age 5 fell from 38 per 1,000 live births to 25 between 1990 and 2010, and to 12

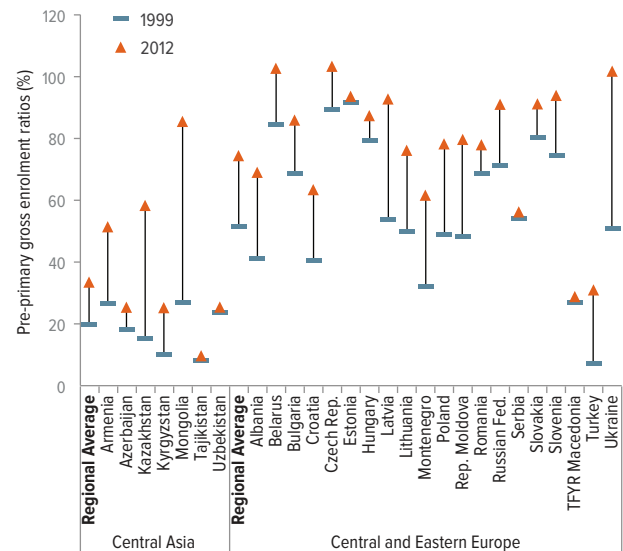
in 2013. Progress has been slower in Central Asia, with the average child mortality rate declining from 82 live births in 1990 to 63 in 2000 and 35 in 2013, not enough to reach the MDG 4 target.

- Important differences in child mortality rates are found between the two regions and across countries. In CEE, the number of children not reaching the age of 5 ranges from 3 per 1,000 live births in the Czech Republic and Slovenia to 16 in the Republic of Moldova. In CA, the average child mortality rate ranges from 20 per 1,000 in Armenia to 70 in Uzbekistan.
- Child mortality rates declined in all countries in both regions with several in CEE, like Estonia, Poland, the former Yugoslav Republic of Macedonia and Turkey expected to reach the MDG 4 target; only Mongolia is likely to do so in CA. In Mongolia, child mortality is projected to decrease from 114 per 1,000 live births to 29 between 1990 and 2015.
- As of 2012, CEE and CA are among the regions with the highest median durations of paid maternity leave, facilitating infant care. Immunization rates are also high in most countries in both regions, with the exceptions of Azerbaijan and Ukraine.
- In 2013, the average percentage of children under 5 suffering from moderate or severe stunting ranged from 8% in CEE, the second lowest rate across the world's regions, to 16% in CA. However, substantial disparities persist across countries with data, with the stunting rate varying from 4% in Belarus to 25% or more in Turkmenistan and Uzbekistan.

### Pre-primary education

- Since 1999, early childhood education services have expanded considerably. The number of children enrolled in pre-primary schools increased by 48% in CA and by 29% in CEE to reach 1.9 million and 12 million, respectively, in 2012. This translated to an increase in participation in pre-primary education, as measured by the gross enrolment ratio (GER), from 19% to 33% in CA, and from 51% to 74% in CEE reversing the strong declining trend observed in both regions during the early years of the transition in the 1990s. GERs increased in all countries with data in both regions, notably in Kazakhstan, Latvia, Mongolia and Ukraine where participation levels have improved by 40 percentage points or more since 1999. In Kazakhstan, the introduction of a compulsory schooling law in 1999 helped increase pre-primary

**Figure 1: Changes in pre-primary education gross enrolment ratios, 1999 to 2012**



enrolment, reducing the gap in participation between the richest and poorest. In Mongolia, the Education Sector Master Plan established culturally and context-appropriate mobile kindergartens housed in *ger* (yurts), which dramatically widened access.

- Despite progress, projections for 2015 indicate that participation in pre-primary education will remain very low with GERs below 30% in the former Yugoslav Republic of Macedonia in CEE, and Azerbaijan, Kyrgyzstan, Tajikistan and Uzbekistan in CA.
- In some countries, living in a rural area and/or being poor and marginalized lessens a child's chances of attending early learning programmes. In Mongolia around 25% of children aged 36–59 months from the poorest households attended some form of organized early childhood education programme in 2010, three times less than the richest children's attendance rate of 80%. However, inequality in attendance due to poverty has reduced significantly since 2000, when the attendance rate of the poorest children was only 2% compared with 47% for the richest children.

### Good quality ECCE

- Teachers are the main determinants of quality and their professional qualifications influence the quality of classroom interaction more than physical settings and resources do. In 2012, the average pre-primary pupil/teacher ratios (PTR) were about 11:1 across both regions, the lowest ratio of the world's regions.

The number of pre-primary pupils per teacher ranged from 6:1 in Belarus in CEE to 27:1 in Kyrgyzstan and Mongolia in CA where the ratios have both risen since 1999, as in Turkey in CEE where the ratio increased from 15:1 to almost 21:1. On the other hand, PTRs declined in many countries with data, including in Montenegro and Serbia in CEE. Countries such as Ukraine in CEE and Kazakhstan in CA have maintained low pupil teacher ratios, each at 9:1, while significantly expanding enrolment in pre-primary education.

- While pre-primary teachers are available in sufficient numbers in both regions, many lack training. In CA, the median percentage of preschool trained teachers was only 89% in 2012, with the percentage only at 46% in Kyrgyzstan in 2011, despite an increase there by fourteen percentage points since 1999. On the other hand, data for 2011 indicated that all pre-primary education teachers were trained in Uzbekistan.
- Curriculum and pedagogy influence the quality of preschooling in addition to teachers. Kazakhstan and Tajikistan in CA offer examples of how countries have improved curriculum and pedagogy for ECCE. Kazakhstan, like many other countries, has reformed its curriculum using the 'Step by Step' system to provide a more child-centred approach focusing on holistic development, including emotional and cognitive elements. Tajikistan, with the support of UNICEF and the Aga Khan Foundation, approved a new curriculum for alternative or community-based early childhood provision in June 2013, using child-centred approaches. The curriculum will be applied in classrooms with teachers trained in the new methods.

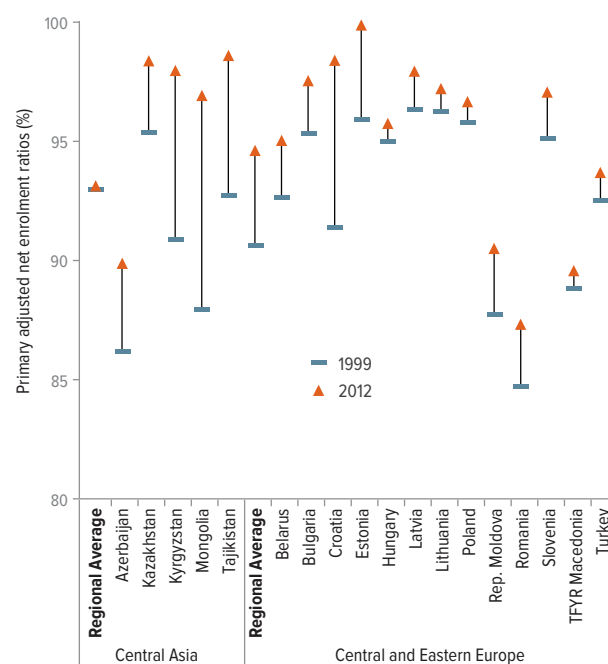
## Goal 2: Universal primary education

*Ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to, and complete, free and compulsory primary education of good quality.*

### School participation

- Almost 20 million children were enrolled in primary school in 2012 in Central and Eastern Europe, and nearly 5.5 million in Central Asia, a decrease of one-fifth in each region since 1999, mainly due to demographic dynamics. However, in CEE the average primary adjusted net enrolment ratio (ANER) has increased from 93% to 96% while it remained high in CA at 95% over the period. At the country level, the primary ANER increased in the majority of countries with data in both regions, in particular in Croatia in

**Figure 2: Changes in primary education adjusted net enrolment ratios, 1999 to 2012**



CEE and Kyrgyzstan, Mongolia and Tajikistan in CA where the ANER rose by more than four percentage points; all four countries had reached universal primary enrolment by 2012. Meanwhile, the level of primary school participation decreased in some countries like Azerbaijan in CA and Estonia in CEE, with the latter decreasing slightly from 100% to less than 97% between 1999 and 2012.

- Trend projections indicate that by 2015, 13 countries with data in the two regions would achieve universal primary enrolment (with an ANER of at least 97%), 3 would be close (an ANER between 95% and 96%), and 7 countries would be in intermediate position (ANER between 80-94%).
- The number of primary school-age children who were out of school more than halved in Central and Eastern Europe to 827,000 in 2012. The decline was lower in CA where about 300,000 children were not enrolled, down from 379,000 in 1999. With 313,000 primary school-age children not enrolled in 2012, Turkey accounted for about 39% of the total number of out-of-school children in CEE. In Uzbekistan, 178,000 children were out of school in 2011, more than one-half of Central Asia's total number.

### Primary school completion

- In most countries with data in the two regions, almost all children who have access to primary education reach the last grade. In Turkey, about 10% of primary school pupils did not reach the last grade. Most countries with data improved school retention, particularly Albania where the survival rate to last grade increased from 90% to 99% between 2000 and 2011. In Mongolia, the survival rate increased by nearly 6 percentage points to 93% in 2011.

### Inequalities within countries

- Progress towards UPE is not uniform. Poverty, ethnicity and location affect primary school participation and attainment. For example in Serbia, the average primary school attainment rate was 96% in 2010, but only about 85% for the poorest children, down from 88% in 2000. In Albania and Mongolia, the average primary school attainment rates improved by over four percentage points, and attainment rates improved significantly more among the very poor.
- In Europe, the Roma people, a diverse group with a population of 10 to 12 million, experience substantial social exclusion. While primary school attendance is compulsory in all EU member states, including in CEE, primary attainment rates for the Roma are very low. A 2011 survey administered to over 20,000 Roma aged 7 to 15 in 11 countries found that at least 10% of those surveyed were not enrolled in primary grades.

### Goal 3: Youth and adult skills

*Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life-skills programmes.*

#### Transition to and participation in secondary education

- As a result of increasing transition rates and higher retention rates, participation in lower and upper secondary education increased since 1999. On average, the lower secondary gross enrolment ratio increased from 92% to almost 97% in 2012 in Central and Eastern Europe, and even more in Central Asia, from about 86% to nearly 96%. GERs have also increased at upper secondary level, from 82% to nearly 89% in CEE. The trend in CA was particularly striking, with the average upper secondary GER increasing by about 23 percentage points, from about 82% to 104% over the period.

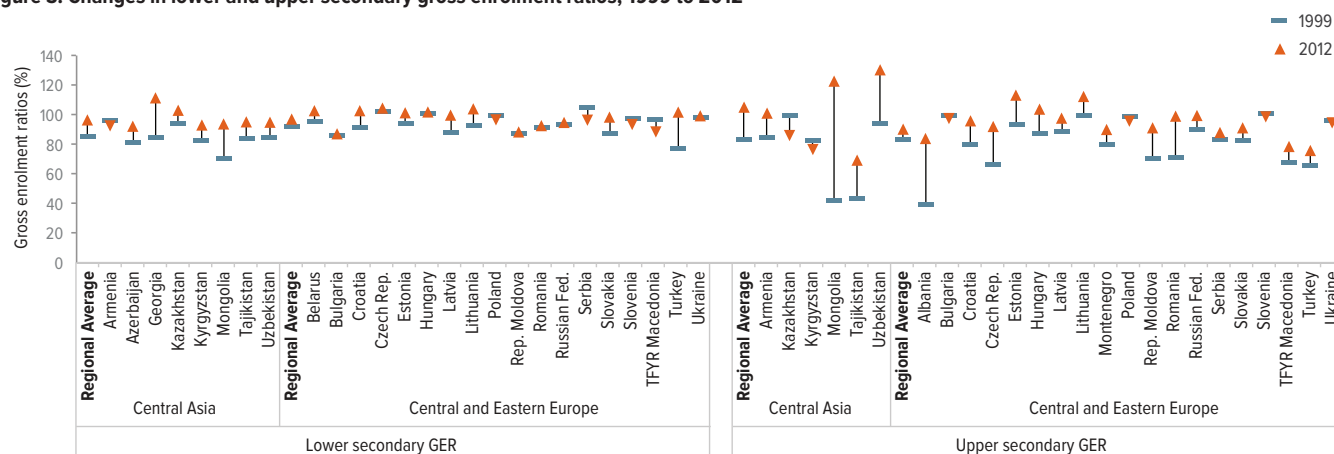
- The lower secondary GER increased in most countries with data in the two regions, particularly in Georgia and Mongolia in CA and Turkey in CEE where the ratios rose by 24 percentage points or more. Large increases were also observed at the upper secondary level in Albania, the Czech Republic and Romania in CEE, and in Mongolia, Tajikistan and Uzbekistan in CA. In Albania, the upper secondary GER increased from 39% to 83% between 1999 and 2012, and almost tripled in Mongolia from 42% to 122%. Despite increases in secondary school participation in most countries, variations across countries are still observed. In 2012, a lower secondary GER below 90% was still reported in Bulgaria, the Republic of Moldova and the federal Yugoslav Republic of Macedonia, all in CEE, while at the upper secondary level, participation was still relatively low, with a GER below 80%, in Bosnia and Herzegovina, the federal Yugoslav Republic of Macedonia and Turkey in CEE, and in Kyrgyzstan and Tajikistan in CA.

#### Technical and vocational skills

- The emphasis on secondary level technical and vocational education (TVE) in these two regions continues to be strong. The average share of TVE in total secondary enrolment increased from 6.5% to 13% in CA and from 18% to nearly 23% in CEE between 1999 and 2012. In most countries with data, the share of TVE increased over time, in particular in countries such as Hungary and Latvia in CEE, and Mongolia in CA where gains of about 10 percentage points or more were recorded. In Hungary, the share of TVE nearly tripled from 5% to 16% between 1999 and 2012; in Mongolia, it increased from nearly 5% to 14%. On the other hand, TVE has lost ground in some countries like Poland where its share of total secondary enrolment decreased from 44% to 29%.

#### Skills acquisition

- The OECD-developed Programme for the International Assessment of Adult Competencies (PIAAC) offers direct measures of learning and skills acquisition that are considered important proxies for progress towards goal 3. The PIAAC survey was carried out in 2012 and based on a sample of 166,000 persons aged 16 to 65 across 25 countries, including the Czech Republic, Estonia, Poland and Slovakia, assessing literacy and numeracy skills and the ability to solve problems in technology-rich environments. There are clear differences in numeracy and literacy scores between adults in vocational education and those who were enrolled in general education and whose last

**Figure 3: Changes in lower and upper secondary gross enrolment ratios, 1999 to 2012**

completed level of education was upper secondary. In Estonia and Poland, differences were wider in recent cohorts (ages 16 to 29) than in older ones (ages 30 to 65).

#### Goal 4: Adult literacy

*Achieving a 50 per cent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults.*

##### Adult literacy rates and illiterates

- Adult literacy levels based on conventional methods have been historically high in both regions, with literacy rates of at least 97% in 2012 in all countries with data except Turkey. Turkey's adult illiteracy rate fell from 13% to 5% between 2000 and 2015, which means it reached the goal 4 target of a 50% reduction in the adult illiteracy rate.
- Despite high literacy levels, almost 4.3 million adults in Central and Eastern Europe, and 262,129 in Central Asia still lacked basic literacy skills in 2012, of which more than three-quarters and about two-thirds, respectively, were women. Despite a decrease by 54% in its illiterate adult population to 2.8 million in 2012, Turkey still accounted for two-thirds of the total number of illiterate adults in CEE.
- The Dakar Framework made explicit reference for goal 4 to be reached 'especially for women'. Gender parity in adult literacy has been achieved in all countries with data in both regions, except in Turkey where, in spite of improvement in women literacy,

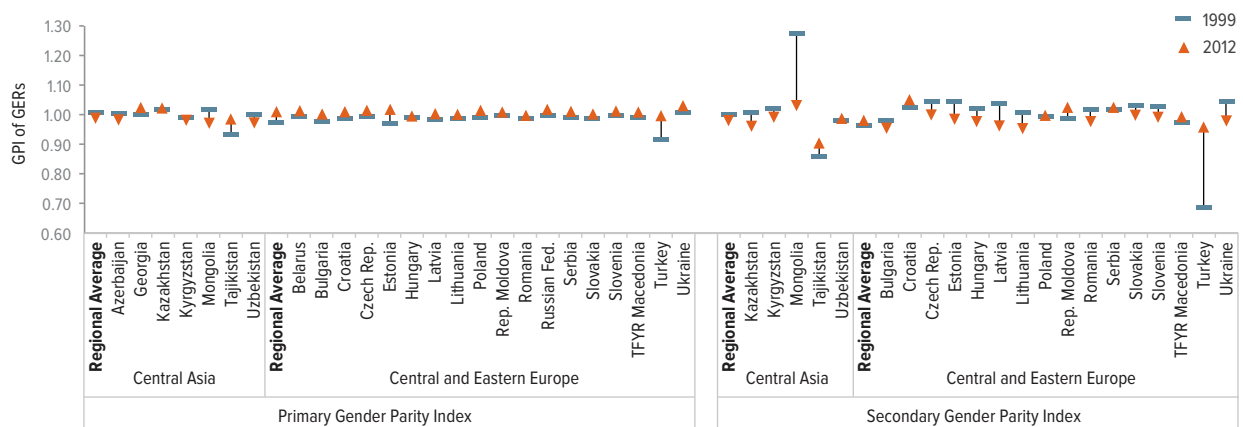
there was still gender disparity with 93 literate adult women to 100 men.

##### Direct assessment of literacy

- Most literacy data available in CEE and CA are based on non-tested measures or self- or third-party declarations that tend to understate the extent of illiteracy. Countries and international agencies are conducting more sophisticated investigations to gauge not only whether adults are 'literate' or 'illiterate' but also their level of literacy and the consequences for individuals and societies. Among these is the PIAAC survey whose results show persistent pockets of illiteracy in participating countries. In Poland, for example, around 4% of adults scored below level 1 of literacy proficiency, and around 6% below level 1 of numeracy proficiency.

##### Continuing and adult education

- International differences in adult literacy are not only related to differences in education attainment. Adults continue to learn and adapt to the needs of their occupations. Yet, PIAAC results show that in nearly every participating country, the odds of receiving some type of adult education within the previous 12 months are much lower for adults who did not complete secondary school than for adults with secondary education. For example in Slovakia, adults with secondary education were nearly three times more likely to have benefitted from adult education opportunities than those without secondary education.

**Figure 4: Gender parity indices in the primary and secondary gross enrolment ratios, 1999 and 2012**

## Goal 5: Gender parity and equality

*Eliminating gender disparities in primary and secondary education by 2005, and achieving gender quality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality.*

### Gender disparity in primary and secondary education

- In primary education, gender parity was achieved by 2012 in all countries with data in both regions; this was already the case in 1999, with the exception of Turkey in CEE and Tajikistan in CA which both reached the target over the period. Boys and girls stand an equal chance of completing primary school, with gender parity achieved in survival rates to last grade in most countries.
- In secondary education, gender parity was also achieved on average in both CEE and CA, with gender parity indices (GPI) of at least 0.97 in 2012. Some gender disparities were observed at the expense of boys in Armenia (a GPI of 1.21), and of girls in Tajikistan (a GPI of just below 0.90). Some countries like Turkey dramatically improved girls' enrolment in secondary education, with the GPI increasing from 0.68 to nearly 0.95 in 2012. According to projections, Turkey will have achieved gender parity in secondary education by 2015. In countries such as the Czech Republic, Estonia and Ukraine in CEE, less boys than girls were enrolled in secondary education in 1999 but

parity was reached by 2012. This was also the case of Mongolia where the situation of boys has significantly improved from a GPI in 1999 of 1.27 to likely achieving gender parity by 2015.

### Gender equality

- Achieving gender equality in education requires not only that girls and boys have an equal chance to participate in education, but also that students benefit from a gender-sensitive learning environment.
- The proportion of female teachers is often employed an indicator of progress towards gender equality. In 2012, the average share of female teachers in primary education was high: ranging from 83% in CEE to nearly 90% in CA. At the secondary level, women were still over-represented in the teaching staff in most countries, varying from some 69% in CA to almost 72% in CEE. Variations across countries were quite striking, with the share of female secondary teachers in CEE ranging from 47% in Turkey to 82% in Latvia and the Russian Federation, while in the CA the percentage varied from 46% in Tajikistan to 85% in Kazakhstan.
- The EFA movement provided new impetus for donors and governments to address gender bias in education. But despite attempts to provide greater gender balance, recent studies show bias in textbooks remains pervasive in many countries, including Georgia, where another challenge found was that the key professionals responsible for providing

guidelines for textbook production and approving the use of textbooks lack adequate knowledge regarding gender sensitivity.

- Learning assessments highlight gender differences in subject performance. The OECD's Programme for International Student Assessment (PISA) surveys, which assess the performance of 15-year-old students, show a widening gap in reading, with girls performing significantly better than boys in all locations surveyed. A comparison of the subset of countries that took part in both the 2000 and 2012 surveys shows that the gender gap widened in 11 countries, including Bulgaria and Romania, largely due to a decline in boys' performance. Boys are heavily over-represented among those who fail to show basic levels of reading literacy. The PISA 2012 results also show gender differences in mathematics, with boys performing better than girls in the majority of countries, although the gap has narrowed in countries such as Montenegro and Slovakia.
- Lower achievement, negative aspirations and low career expectations may help explain the continued under-representation of women enrolled in science and mathematics-related subjects in post-secondary education, including subjects in great demand in the labour market such as computing and engineering. In 2012, the median share of female tertiary students enrolled in science was 41% in CEE and 50% in CA. In the field of engineering, manufacturing and construction, the share of female students was lower, with a median share of only 28% in CEE and 23% in CA. In Tajikistan and Uzbekistan, less than 10% of the students enrolled in this field were female.

### *Attitudes to gender equality*

- Values and attitudes to gender equality are transferable skills all young people and adults must be equipped with to improve their individual lives and social cohesion. One of the values that EFA prioritizes is gender equality. For over 20 years, the World Values Survey has included a question that indirectly allows an analysis of adult attitudes to gender equality across countries and over time. In particular, respondents have been asked whether they agree with the statement that 'a university education is more important for men than for women.' In Ukraine, the percentage of those with positive attitudes increased from 64% in 1996 to 83% in 2011. However, in other countries such as Kyrgyzstan and Turkey, attitudes towards gender equality deteriorated. In Kyrgyzstan,

the percentage of those with positive attitudes decreased from 72% in 2003 to just 59% in 2011, and from 74% in 1996 to 69% in 2011 in Turkey.

### **Goal 6: Quality of education**

*Improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills.*

#### *Monitoring progress in learning outcomes*

- Worldwide many more countries are carrying out national assessments. In Central and Eastern Europe and Central Asia, the percentage of countries that carried out at least one national assessment increased significantly from 13% in the 1990-99 period to 83% in the 2000-13 period. National assessments focus more on grades 4 to 6 than on grades 1 to 3 or 7 to 9. They are predominantly curriculum-based and subject-oriented, with language and mathematics by far the predominant subjects. In addition to the growing use of national assessments, countries have increasingly participated in cross-national surveys of student achievement such as PISA, the IEA Trends in International Mathematics and Science Study (TIMSS) and the IEA Progress in International Reading Literacy Study (PIRLS). In recent years, Armenia, Azerbaijan, Croatia, Georgia, Kazakhstan, Lithuania, Macedonia, the Russian Federation, Slovakia, Slovenia, Serbia and Ukraine have all participated in TIMSS.
- The PISA 2012 learning assessment carried out for 15-year-old students shows how disadvantage in learning outcomes is associated with language and poverty. In Turkey, 15-year-olds speaking a non-Turkish language, predominantly Kurdish, were among the lowest performers, and only around 50% of poor non-Turkish speakers achieved the minimum learning benchmarks in reading compared with the national average of 80%.
- PISA participation has also helped build national capacity for using data through the drafting of national reports, analysing results and assessing a wider range of skills. Learning assessments have influenced curricular and instructional reform in many countries. In Kyrgyzstan, educational reform in response to PISA 2006 results included a reorganization of instructional time and improvement to teaching standards and performance.

## Investing in teachers

- The total number of primary school teachers in CEE decreased by 14% since 1999 to nearly 1.2 million in 2012, mainly due to demographic dynamics. In CA by contrast there was a slight increase by 4% to 340,000 teachers. The average pupil/teacher ratio (PTR) was 17:1 in CEE and 16:1 in CA in 2012, the lowest average PTRs across all world regions, clearly indicating that the supply of teachers in both regions is not a major challenge.
- Teacher training remains an issue in some countries, particularly in Central Asia. While almost all primary school teachers were trained in the majority of the five CA countries with data for the school year ending in 2012, in Kyrgyzstan only 72% of teachers were trained according to national standards. However, the percentage of trained teachers has improved significantly since 1999, increasing by 24 percentage points. This was also the case in Tajikistan where the share of trained teachers increased from 82% to 94% between 2001 and 2012.
- Total teacher numbers and average pupil/teacher ratios can conceal unequal distributions of teachers within countries, raising equity concerns. In Mongolia, while the average primary education PTR was 29:1 in 2012 and almost all teachers were trained, students in disadvantaged schools are often taught by teachers with less preparation than those in wealthier ones.

## Instructional time

- Instructional time has been shown to enhance learners' exposure to knowledge and result in significant learning gains. In the late 2000s, countries in CEE and CA mandated an average of 545 hours of instructional time per year in the early primary grades, the lowest number across the world's regions, increasing to about 860 hours in grade 8.
- In some countries, there has been an increase in private tutoring, which only richer families can afford. In Azerbaijan and Georgia, over 80% of students report receiving some type of private tutoring in the last year of secondary school.

## Government policies and actions to accelerate progress towards EFA goals since 2000

Varying policy approaches have been designed and implemented over the past 15 years to expand quality ECCE programmes, increase equitable access to education, improve school completion and education quality, and promote gender equality in education. Box 1 indicates some of the policies and strategies that governments in Central and Eastern Europe and Central Asia have put in place to tackle the twin challenges of equity and quality.

### Box 1: Examples of policies implemented over the past 15 years to:

#### INCREASE ACCESS

##### ► Making education compulsory:

- **Pre-primary education:** Governments have put in place laws to mandate participation that have expanded pre-primary education. By 2014, 40 countries worldwide had instituted compulsory pre-primary education. CEE showed one of the strongest growths in pre-primary enrolment ratios between 1999 and 2012. It is also one of the regions that has the most countries with compulsory pre-primary schooling, many of which, such as Bulgaria, Latvia, Serbia and Slovenia,

adopted related laws a few years after the World Education Forum in Dakar in 2000.

##### ► Extending educational opportunities for the marginalized:

- **Policies to address social and education exclusion of Roma** have had mixed success. The Roma have long been segregated from the rest of the population; over-represented in special needs schools and remedial education; and experienced higher drop out rates. In response, a multinational interagency initiative, the Decade for Roma Inclusion

2005–2015, was launched to support their integration. In Bulgaria, outreach, extracurricular activities and financial incentives helped increase attendance and retention. Despite these efforts, discriminatory practices continue in much of Europe and lack of detailed data hampers efforts to address the needs of Roma children.

- **Improving inclusion of disabled children:** Children with disabilities are at higher risk of educational exclusion. Those who attend school are more likely to be excluded in the classroom and to drop out. Various barriers by governments, schools, communities



and families limit disabled children's access to schooling. These include a lack of understanding about forms of disability and disabled children's needs; insufficient resources to accommodate diverse needs, including a lack of teacher training and physical facilities; discriminatory attitudes towards disability and difference; and poor data upon which to build policy. Varied strategies are used to improve inclusion of disabled children. In CEE, countries such as Lithuania strongly encourage inclusive education, while others still rely on special education infrastructure. In practice, most countries have hybrid policies and are improving their inclusionary practices incrementally.

### PROMOTE GIRLS' EDUCATION AND GENDER EQUALITY

- ▶ **Promoting girls' education:** National education coalitions, representing civil society in political forums, can support advocacy for girls' education and gender equality. Campaigns that have proved particularly effective engage partners from multiple sectors, are supported by national planning and policy, and directly involve grass-roots organizations and communities. In Turkey, the inclusion of multiple stakeholders in a national campaign launched in 2003 to promote girls' education resulted in increased enrolments in the provinces targeted. However, the example also underlines the challenges of entrenched social discrimination. Despite the increased levels of schooling among young women supported by this campaign, attitudes towards gender equality have not improved more broadly. Women's rights are still not fully protected in Turkey's constitution and penal code. High levels of domestic violence against women persist and women's participation in the political arena and the labour market remains poor.
- ▶ **Improving boys' participation:** The needs of millions of boys around the world are not adequately met by formal education systems, a fact sometimes overlooked in light of the disproportionate disadvantage that girls face. In many countries boys are at a higher risk of failing to progress and complete a cycle of education. Mongolia, where the gender

gap at the expense of boys in secondary enrolment has been reduced substantially since 1999, provides a rare example of policy supporting boys' access to education. Government policy issued in 2004 explicitly targeted high male dropout rates. And yet, the most recent education action plan makes no specific reference to boys or other disadvantaged groups.

### IMPROVE QUALITY

- ▶ **Fostering child-friendly schools:** One of the most important requirements for better quality education is an improved learning environment, encompassing the physical school infrastructure and the interaction between children and teachers. In the past 15 years, several countries have adopted the UNICEF child-friendly school model. This model emphasizes the school as a place that provides learning opportunities relevant to life and livelihood, in a healthy, safe environment that is inclusive and protective, is sensitive to gender equity and equality, and involves the participation of students, families and communities. The model has offered an entry point for overcoming disadvantage and enhancing equity, as in the case of ethnic minorities in the former Yugoslav Republic of Macedonia. But evaluation of child-friendly schools has highlighted challenges to effective implementation such as poor school infrastructure and lack of maintenance.
- ▶ **Developing a relevant curriculum and emphasizing skills and competencies:** A good quality education depends on not just inputs but also on processes. The Dakar Framework urged improvement of teaching and learning practices, including through a curriculum that is relevant and inclusive. Curriculum reform is a result of both global and local influences. In Turkey, the primary education curriculum was revised in 2004 to respond to changes in the labour market; also, as a candidate for European Union membership, Turkey had a clear political motive for adopting EU education standards and perspectives. The 2004 curriculum also adopted a competency-based approach instead of the traditional knowledge-based curriculum, emphasizing skills such as communication, inquiry, entrepreneurship

and the use of information technology. Yet, curriculum reform has had challenges. It was not always in line with existing policy. For example, examination practices were not aligned with curriculum objectives, entrenching the perception that schooling was not enough to guarantee educational success and leading to an increased demand for private tutoring.

- ▶ **Moving towards a learner-centred pedagogy:** The past decade has seen a move away from teacher-dominated instructional practices to learner-centred pedagogy. This approach promotes critical thinking, with teachers expected to help students actively construct knowledge through activities, group work and reflection. The move towards learner-centred pedagogy has significant implications for initial teacher education and ongoing training. Without sustained and coherent support, teachers largely teach the way they were taught. In Central Asia, many teachers were unprepared or ill prepared to overcome the challenges of implementing a learner-centred pedagogy.
- ▶ **Decentralizing education governance:** The decentralization of education governance has become more common since 2000. Over the past few decades, most countries have transferred responsibility away from central governance. The transfer has taken various forms, including assigning tasks to lower levels within ministries, devolving decision-making to elected representatives at subnational levels and investing authority and responsibility in schools and communities. While the promised benefits of decentralization of education governance were enticing, implementation has been uneven, with a mixed record on equitable learning. In the Russian Federation, 1994 reforms passed more responsibility and autonomy to local governments and gave them some control over health and education spending. Fiscal decentralization did not increase secondary education resources, but led to significantly better average regional scores on national examinations in language and mathematics, a result attributed to strengthened accountability and local financial incentives.

## Financing Education for All

*Mobilize strong national and international political commitment for education for all, develop national action plans and enhance significantly investment in education.*

### Domestic expenditure on education

- Although Central and Eastern Europe has stepped up its investment in education, the share of national income invested in education in Central Asia remains at one of the lowest levels in the world. The share of education expenditure as a proportion of total government expenditure also remains far below the average for middle income countries.
- In 2012, half of countries with data in CEE spent less than 4.9% of GNP on education, and in CA the median percentage of national income spent on education was only 3.4%, among the lowest percentage in the world. Disparities between countries were also observed, with public spending on education as a percentage of GNP ranging in CEE from 3% in Romania to 7.8% in Republic of Moldova, and in CA from 2% in Georgia to 7.4% in Kyrgyzstan.
- The share of national income devoted to education increased between 1999 and 2012 in the majority of the countries with data in both regions, with increases by two percentage points or more in Kyrgyzstan, the Republic of Moldova, Tajikistan and Ukraine. In Kyrgyzstan, public spending on education as a percentage of GNP increased from 4.3% to 7.4% between 1999 and 2011. On the other hand, the share declined in several countries, including in Azerbaijan where it went from 4.3% to 2.6%.
- In 2012, the median share of total government expenditure on education was 11.7% in CEE and 13% in CA. The percentage of the government budget on education has even decreased in a number of countries, including in Estonia and Lithuania in CEE, and in Azerbaijan, Georgia and Mongolia in CA where it dropped by more than 3 percentage points. In Azerbaijan, the share of government expenditure on education decreased from 18.5% to 7.2% between 2000 and 2012.

- The allocation of education expenditure by sector is quite uneven in many countries. For example, in Georgia while primary education accounts for nearly 38% of the total education expenditure in 2011, the share of pre-primary education was only 15%. The difference was particularly striking in Serbia where primary education received nearly 46% of the total public expenditure, while pre-primary education's share was only 11%.

### International development assistance

- Aid to education for Central and Eastern Europe increased from US\$202 million to US\$519 million over the past decade, with the annual growth rate of disbursements averaging 10% between 2002 and 2012. This increase was allocated almost entirely to levels of education above basic education. Aid to basic education for the region has remained relatively static over the past decade reaching US\$71 million in 2012.
- In Central Asia, the total aid to education increased from US\$94 million to US\$348 million between 2002 and 2012, with an annual average growth rate of 14%. Levels of aid to basic education grew slower, but still considerably above the global average: growing at 9% per annum, aid reached US\$99 million in 2012.

**Table 1: Education for all development index (EDI) and prospects for education for all goals 1, 2, 4 and 5**

MEAN DISTANCE TO EFA OVERALL ACHIEVEMENT AS MEASURED BY THE EDUCATION FOR ALL DEVELOPMENT INDEX (EDI), 2012	
<b>Overall EFA achieved</b> (EDI between 0.97 and 1.00)	(15): Belarus, Bulgaria, Croatia, Estonia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Poland, Russian Federation, Serbia, Slovenia, Tajikistan and Ukraine
<b>Close to overall EFA</b> (EDI between 0.95 and 0.96)	(5): Azerbaijan, Mongolia, Republic of Moldova, Romania and Uzbekistan
<b>Intermediate position</b> (EDI between 0.80 and 0.94)	(2): Montenegro and Turkey
<b>Far from overall EFA</b> (EDI below 0.80)	None
<b>Not included in the EDI calculation</b> (insufficient or no data)	(8): Albania, Armenia, Bosnia and Herzegovina, Czech Republic, Georgia, Slovakia, TFYR of Macedonia and Turkmenistan
PROSPECTS FOR EDUCATION FOR ALL GOALS 1, 2, 4 AND 5	
Goal 1 – Likelihood of countries achieving a pre-primary gross enrolment ratio of at least 80% by 2015	
<b>High level</b> (GER: 80% and above)	(14): Belarus, Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Mongolia, Poland, Republic of Moldova, Russian Federation, Ukraine, Slovakia and Slovenia
<b>Intermediate level</b> (GER: 70–79%)	(2): Albania and Romania
<b>Low level</b> (GER: 30–69%)	(6): Armenia, Croatia, Kazakhstan, Montenegro, Serbia and Turkey
<b>Very low level</b> (GER: <30%)	(5): Azerbaijan, Kyrgyzstan, Tajikistan, TFYR of Macedonia and Uzbekistan
<b>Not included in the prospects analysis</b> (insufficient or no data)	(3): Bosnia and Herzegovina, Georgia and Turkmenistan
Goal 2 – Country prospects for achieving universal primary enrolment by 2015	
<b>Target reached</b> (ANER: 97% and above)	(13): Mongolia, Tajikistan, Kazakhstan, Georgia, Lithuania, Ukraine, Montenegro, Latvia, Hungary, Slovenia, Croatia, Russian Federation and Kyrgyzstan
<b>Close to target</b> (ANER: 95–96%)	(3): Bulgaria, Poland and Turkey
<b>Intermediate position</b> (ANER: 80–94%)	(7): Azerbaijan, Belarus, Estonia, Republic of Moldova, Romania, Serbia and TFYR of Macedonia
<b>Far from target</b> (ANER: <80%)	None
<b>Not included in the prospects analysis</b> (insufficient or no comparable data)	(7): Albania, Armenia, Bosnia and Herzegovina, Czech Republic, Slovakia, Turkmenistan and Uzbekistan
Goal 4 – Country prospects for achieving the adult literacy target of halving the adult illiteracy rate by 2015 <sup>1</sup>	
<b>Adult literacy rate:</b> 97% and above	(25): Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Mongolia, Montenegro, Republic of Moldova, Romania, Russian Federation, Serbia, Slovenia, Tajikistan, TFYR of Macedonia, Turkmenistan, Ukraine and Uzbekistan
<b>Target achieved</b> (adult illiteracy halved or reduced by more)	(1): Turkey
<b>Close to target</b> (adult illiteracy rate reduced by 40–49%)	None
<b>Intermediate position</b> (adult illiteracy rate reduced by 30–39%)	None
<b>Far from target</b> (adult illiteracy rate reduced by less than 30%)	None
<b>Not included in the prospects analysis</b> (insufficient or no comparable data)	(4): Czech Republic, Hungary, Poland and Slovakia
Goal 5 – Country prospects for achieving gender parity in primary and secondary education by 2015	
<i>Gender parity in primary education</i>	
<b>Target reached</b> (GPI: 0.97–1.03)	(26): Azerbaijan, Belarus, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Mongolia, Montenegro, Poland, Republic of Moldova, Romania, Russian Federation, Serbia, Slovenia, Slovakia, Tajikistan, TFYR of Macedonia, Turkey, Ukraine and Uzbekistan
<b>Close to target</b> (GPI: 0.95–0.96 or 1.04–1.05)	None
<b>Intermediate position</b> (GPI: 0.80–0.94 or 1.06–1.25)	(1): Armenia
<b>Far from target</b> (GPI <0.80 or >1.25)	None
<b>Not included in the prospects analysis</b> (insufficient or no data)	(3): Albania, Bosnia and Herzegovina and Turkmenistan
<i>Gender parity in secondary education</i>	
<b>Target reached</b> (GPI: 0.97–1.03)	(19): Azerbaijan, Czech Republic, Estonia, Hungary, Kyrgyzstan, Lithuania, Mongolia, Montenegro, Poland, Republic of Moldova, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Turkey, TFYR of Macedonia, Ukraine and Uzbekistan
<b>Close to target</b> (GPI: 0.95–0.96 or 1.04–1.05)	(2): Kazakhstan and Latvia
<b>Intermediate position</b> (GPI: 0.80–0.94 or 1.06–1.25)	(5): Albania, Armenia, Bulgaria, Croatia and Tajikistan
<b>Far from target</b> (GPI <0.80 or >1.25)	None
<b>Not included in the prospects analysis</b> (insufficient or no data)	(4): Belarus, Bosnia and Herzegovina, Georgia and Turkmenistan

1: Countries included are those where the adult literacy rate estimated in the period 1995–2004 was lower than 95%, and where both the baseline estimates and the 2015 projections are based on the method of self-declaration or declaration on behalf of others.

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

Country or territory	Total population (000)	GNP per capita PPP (US\$)	Compulsory education Age group	EFA Development Index (EDI) 2012	Adult literacy								Early childhood care and education								
					Adult literacy rate (15 and over)				Adult illiterates (15 and over)				Child survival and well-being			Pre-primary education			Primary adjusted NER		Out-of-school children <sup>2</sup>
					Total (%)	GPI (F/M)	Total (%)	GPI (F/M)	Total (000)	% Female	Total (000)	% Female	Under -5 mortality rate (%)	Moderate or severe stunting (%)	GER (%)	GER (%)	Total (%)	Total (%)	Total (%)	Total (%)	Total (000)
					1995–2004 <sup>1</sup>	2005–2012 <sup>1</sup>	1995–2004 <sup>1</sup>	2005–2012 <sup>1</sup>	2000	2015	2008–2012 <sup>1</sup>	1999	2012	1999	2012	1999	2012	1999	2012	1999	2012
					2000	2015	2008–2012 <sup>1</sup>	1999	2012	1999	2012	1999	2012								
<b>Central and Eastern Europe</b>																					
Albania	3,197	9,280	6-14	...	99	0.99	97	0.98	30	69	78	69	28	15	19	41	69	93	...	20	
Belarus	9,260	14,960	6-15	0.979	100	1.00	100	1.00	33	77	31	72	15	7	4	85	103	96	94	19	
Bosnia and Herzegovina	3,820	9,650	6-14	...	97	0.95	98	0.97	104	86	59	86	12	8	9	...	16	...	...	...	
Bulgaria	7,113	15,450	7-16	0.975	98	0.99	98	0.99	121	66	105	63	18	10	...	69	86	98	96	8	
Croatia	4,255	20,200	7-15	0.989	98	0.98	99	0.99	68	83	32	80	8	6	...	40	63	93	99	14	
Czech Republic	10,777	25,480	6-15	...	...	...	...	...	...	...	...	...	6	3	...	90	103	...	...	...	
Estonia	1,280	23,280	7-17	0.984	100	1.00	100	1.00	3	57	1	50	12	5	...	92	93	100	97	0.1	
Hungary	9,911	21,350	6-18	0.984	...	...	...	...	...	...	...	...	10	6	...	80	87	96	97	19	
Latvia	2,031	21,820	7-16	0.980	100	1.00	100	1.00	5	63	2	49	16	8	...	54	92	97	98	4	
Lithuania	2,999	23,540	7-16	0.984	100	1.00	100	1.00	10	54	5	50	11	6	...	50	76	97	98	6	
Montenegro	622	14,590	6-15	0.940	...	...	98	0.98	...	...	8	82	15	10	7	32	61	...	98	...	
Poland	38,222	21,760	6-18	0.984	...	...	...	...	...	...	...	...	10	6	...	49	78	97	97	92	
Republic of Moldova	3,437	3,630	7-16	0.961	97	0.97	99	0.99	105	72	27	79	27	16	10	48	80	93	91	19	
Romania	21,579	17,650	6-16	0.954	97	0.98	99	0.99	495	71	258	67	22	12	13	69	77	88	90	165	
Russian Federation	142,098	22,800	6-18	0.981	99	1.00	100	1.00	676	75	386	61	23	12	...	71	91	...	97	...	
Serbia	9,424	11,430	7-15	0.970	...	...	98	0.98	...	...	147	80	18	12	7	54	56	...	93	...	
Slovakia	5,458	25,430	6-16	...	...	...	...	...	...	...	...	...	10	6	...	81	91	...	...	...	
Slovenia	2,079	28,240	6-15	0.991	100	1.00	100	1.00	6	57	5	54	5	3	...	75	94	96	98	4	
The former Yugoslav Rep. of Macedonia	2,109	11,540	6-19	...	96	0.96	98	0.98	63	77	43	75	16	10	5	27	29	91	92	11	
Turkey	76,691	18,390	6-14	0.939	87	0.84	95	0.93	6089	82	2,830	84	41	15	12	7	31	94	95	367	
Ukraine	44,646	7,180	6-17	0.987	99	0.99	100	1.00	230	80	105	65	20	14	...	51	101	...	98	...	
<b>Central Asia</b>																					
Armenia	2,989	6,860	7-16	...	99	0.99	100	1.00	14	75	9	64	35	20	19	26	51	...	...	...	
Azerbaijan	9,613	9,310	6-17	0.965	99	0.99	100	1.00	66	79	16	68	72	45	25	18	25	92	89	57	
Georgia	4,305	5,790	6-14	...	100	1.00	100	1.00	13	69	9	63	36	21	11	35	...	...	99	...	
Kazakhstan	16,770	11,790	7-18	0.990	100	1.00	100	1.00	52	77	32	62	46	29	13	15	58	96	99	44	
Kyrgyzstan	5,708	2,220	7-16	0.984	99	0.99	99	0.99	41	74	28	69	53	40	18	10	25	93	98	34	
Mongolia	2,923	5,020	6-17	0.967	98	1.00	98	1.00	35	56	35	48	59	29	15	27	86	91	98	24	
Tajikistan	8,610	2,180	7-16	0.981	99	1.00	100	1.00	19	71	13	64	93	70	26	8	9	94	99	40	
Turkmenistan	5,373	9,070	7-17	...	99	0.99	100	1.00	31	73	14	66	71	57	19	...	...	...	...	...	
Uzbekistan	29,710	3,670	7-18	0.968	99	0.99	99	1.00	211	70	106	68	63	51	19	24	25	...	91	...	
	<b>Sum</b>	<b>Median</b>				<b>Weighted average</b>		<b>Sum</b>	<b>% F</b>	<b>Sum</b>	<b>% F</b>	<b>Weighted average</b>	<b>Median</b>	<b>Weighted average</b>	<b>Weighted average</b>	<b>Weighted average</b>	<b>Weighted average</b>	<b>Sum</b>			
Central and Eastern Europe	401 008	18,390	...	...	97	0.97	99	0.99	8,574	80	4,288	78	25	12	...	51	74	93	96	1,763	
Central Asia	86 001	5,790	...	...	99	0.99	100	1.00	482	72	262	64	63	46	19	19	33	95	95	379	
Countries in transition	305 946	9,295	...	...	99	0.99	100	1.00	2,061	77	1,144	69	38	28	13	46	67	92	96	1,412	
Developed countries	1 040 886	35,195	...	...	...	...	...	...	...	...	...	...	7	6	...	75	88	98	96	1,427	
Developing countries	5 944 265	4,820	...	...	77	0.84	80	0.87	775,715	64	771,717	64	82	67	29	27	49	82	90	102,930	
World	7 291 097	8,370	...	...	82	0.89	84	0.91	786,523	64	780,682	64	75	49	25	33	54	84	91	105,769	

Sources: EFA Global Monitoring Report 2015, statistical and aid tables; UNESCO Institute for Statistics database; CRS online database.

Note: See source tables in the EFA Global Monitoring Report 2015 for detailed country notes.

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 or adjusted net enrolment ratio (ANER) of primary school age children, which measures the proportion of those who are enrolled either in primary or in secondary schools.

3. Based on headcounts of pupils and teachers.

4. Values for total aid disbursements to education and to basic education for regional and other country groups do not always sum up to world totals because some aid is not allocated by region or country.

(-) Magnitude nil or negligible

(.) The category is not applicable or does not exist.

(...) No data available.



## Abbreviations

**ANER: adjusted net enrolment ratio.** ANER measures the proportion of children of primary school age who are enrolled either in primary or in secondary schools.

**ECCE: early childhood care and education.** ECCE are 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 usually 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.

**EFA Development Index (EDI).** EDI is a composite index aimed at measuring overall progress towards EFA. At present, the EDI incorporates four of the six EFA goals – universal primary education, adult literacy, gender parity and equality, and education quality – each with a proxy indicator. The index value is the arithmetic mean of the four indicators and ranges from 0 to 1.

**GER: gross enrolment ratio.** GER is the 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 older than the secondary school leaving age. The GER can exceed 100% due to late entry and/or repetition.

**GNP: gross national product.** GNP is the 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.

**GPI: gender parity index.** GPI is the ratio of female to male values of a given indicator. A GPI between 0.97 and 1.03 indicates parity between the genders. A GPI below 0.97 indicates a disparity in favour of males. A GPI above 1.03 indicates a disparity in favour of females.

**PIRLS:** Progress in Reading Literacy Study.

**PISA:** Programme for International Student Assessment.

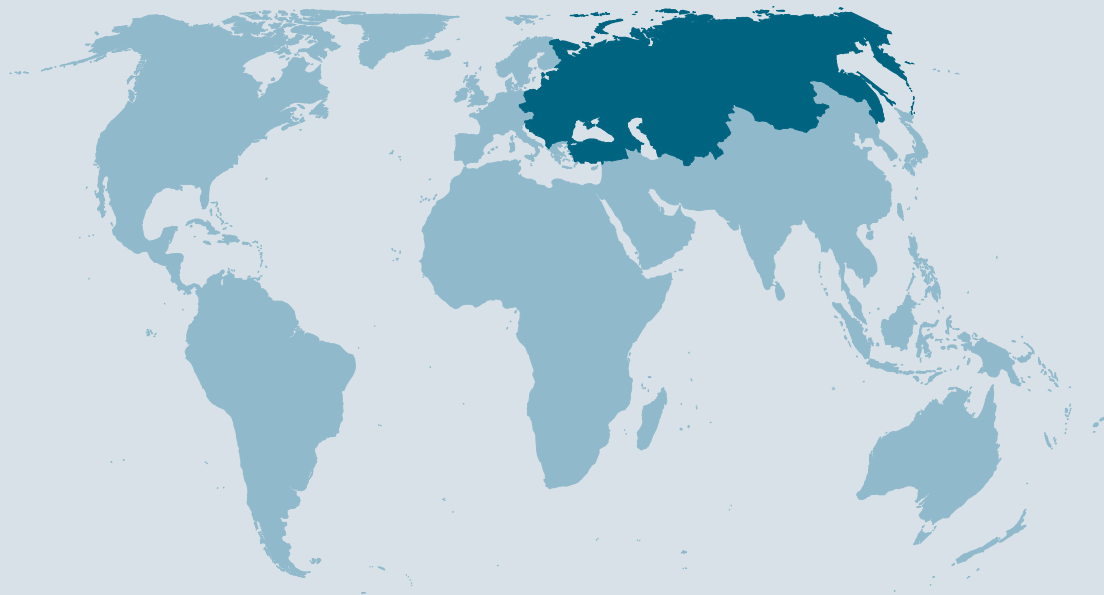
**PPP: Purchase parity power.** An exchange rate adjustment that accounts for price differences between countries, allowing international comparisons of real out and income.

**TIMSS:** Trends in International Mathematics and Science Study.



United Nations  
Educational, Scientific and  
Cultural Organization

# Regional Overview: Central and Eastern Europe and Central Asia



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