



United Nations
Educational, Scientific and
Cultural Organization



Education for All

Europe and North America

Education for All 2015 Regional Review

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Preface

The present document is the final synthesis report of the *Education for All 2015 Regional Review for Europe and North America*. The purpose of the review is to take stock of progress made over 2000-2015 towards the Education for All (EFA) goals in terms of education indicators and policy-making at regional and country levels. Based on this, the review identifies key remaining challenges and policy priorities for Europe and North America over 2015-2030.

The report contributes to the preparation for the World Education Forum which will take place in Incheon, Republic of Korea, from 19 to 22 May 2015. A first draft was submitted for comments to countries of Europe and North America in December 2014, and a second, revised draft was presented and discussed at the Regional Ministerial Conference on Education post-2015 for European and North American States, held at the UNESCO headquarters in Paris on 19 and 20 February 2015. The present, final report integrates recommendations made during the Regional Ministerial Conference.

The review covers 27 States in Western Europe and North America^{*} and 25 States in Central and Eastern Europe.[†] It is based on national reports submitted to UNESCO as part of the 2015 Education for All review process,[‡] complemented with statistics from the UNESCO Institute for Statistics (UIS) displayed in the Statistical appendix to the *EFA Global Monitoring Report 2015: What Did We Achieve?*, as well as various other sources.

The review first describes ongoing trends affecting Europe and North America, and discusses their implications for education (Section I). The review then takes stock of progress towards the Education for All goals made in Western Europe and North America and in Central and Eastern Europe since 2000 (Section II), before analyzing key education strategies and policies at the regional and country levels (Section III). Finally the review reflects on policy priorities over 2015-2030 (Section IV).

^{*} 'Western Europe and North America' is defined as Group I of UNESCO's Members States. It comprises 27 countries: Andorra, Austria, Belgium, Canada, Cyprus, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Luxembourg, Malta, Monaco, Netherlands, Norway, Portugal, San Marino, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States of America.

[†] 'Central and Eastern Europe' is defined as Group II of UNESCO's Member States. It comprises 25 countries: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Latvia, Lithuania, Montenegro, Poland, Republic of Moldova, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Tajikistan, the former Yugoslav Republic of Macedonia, Ukraine, and Uzbekistan.

[‡] Twenty-nine reports had been received by 30 April 2015, from 13 Group I countries (Andorra, Belgium: Flemish community and French community, Canada, Cyprus, Finland, France, Greece, Norway, Portugal, Spain, Sweden, Turkey and United Kingdom: England) and 15 Group II countries (Armenia, Bosnia and Herzegovina, Bulgaria, Czech Republic, Estonia, Georgia, Hungary, Latvia, Lithuania, Romania, Russian Federation, Slovakia, Slovenia, the former Yugoslav Republic of Macedonia and Uzbekistan).

Executive summary

Countries of Europe and North America represented at the World Education Forum held in Dakar in 2000 committed themselves to achieving six goals of Education for All by 2015, relating to early childhood care and education, primary education, the learning needs of young people and adults, adult literacy, gender parity and equality, and the quality of education.

It is now time to assess the extent to which countries of Europe and North America kept the commitments expressed at Dakar. By 2000, the region seemed closest than any other to making Education for All a reality, with a few gaps to fill. The Education for All agenda was often understood to be mostly relevant to developing countries, owing to the focus on universal primary education and gender parity, which also belonged to the Millennium Development Goals. Today, a large majority of countries in the region have reached most, if not all, EFA goals.¹ In spite of such achievement, a number of challenges remain to be addressed:

- **Much progress has been made on quantitative indicators of participation at non-compulsory levels of education.** Pre-primary education is better understood by policy makers as a necessary foundation for further learning, and its coverage has expanded. A number of countries have even reached universal participation, or made the last year of pre-primary education compulsory. Access to upper secondary and, especially, tertiary education has broadened dramatically. Meanwhile, participation at primary and lower secondary levels, which was nearly universal in 2000, has remained so.
- **Concerns about the quality and equity of education systems have proved persistent.** The greater availability of data on learning outcomes and on youth and adult skills has revealed a number of gaps. Several countries have seen learning outcomes become more unequal and stagnate, or even decline. Young men represent a majority of young people who leave school early with low skills and/or no qualifications, yet young women still face gender-related barriers translating their educational achievement into professional success. Access to adult education remains limited overall, and very unequally distributed both between and within countries, bypassing the most disadvantaged.

Achieving the education goal being defined as part of the global 2015-2030 sustainable development agenda will require policy efforts from countries of Europe and North America. Targets associated with the education goal cover a broader range of educational policy areas than the Dakar goals, with the explicit inclusion of higher education, or of school resources and teacher qualifications and training. They are in line with strategies adopted since 2010 by the European Union and by countries, which aim to respond to new learning needs resulting from societal, cultural and environmental change. The 2015-2030 global education agenda might thus help mobilize energies in Europe and North America in favour of renewed education policies contributing to solving the current economic and social crisis.

I. Current trends in Europe and North America

Europe and North America is going through contrasted trends. Western Europe and North America arguably remains the most democratic, richest and least conflict-affected part of the world. However, since 2000 the group of countries has gone through a relative economic decline compared with emerging countries. The financial and economic crisis that started in 2008 has also led to divergence between the worst- and least-affected countries. Central and Eastern Europe, having gone through a transition period during the 1990s, converged to some extent with the Western part of the continent during the 2000s, before being impacted by the same crisis. Indeed, public policy is increasingly coordinated at the European level, as seventeen countries of Western Europe and eleven countries of Central and Eastern Europe now belong to the European Union, which develops cooperation and policy frameworks and conducts education programmes extending to the whole continent.

I.1. Demographic, economic, social and environmental trends

Demographic trends

The population of Western Europe and North America has long completed its demographic transition and is now ageing and on the verge of decreasing.² Life expectancy is above 81 years for women in all countries and above 77 years for men in all countries except the United States. The total fertility rate is at or below 1.9 children in 18 out of 23 countries,³ close to replacement level (2.0-2.1) in four, including France and the United States, and high only in Israel (2.9). As a consequence, the population of children aged 0-4 is declining in seven countries – by an estimated 2% a year in Portugal – and nearly stagnating in many others, including the United States. Total population has already started declining in Germany (by 0.1% a year).⁴

Central and Eastern Europe has been going through a demographic crisis for several decades. First, fertility is exceptionally low in international comparison. Total fertility rates range from 1.3 to 1.6 in 18 countries, including those with the largest populations: the Czech Republic, Poland, Romania, the Russian Federation and Ukraine. Second, life expectancy fell in several countries of the former Soviet Union between the mid-1980s and the mid-2000s, before recovering. Male life expectancy, in particular, remains low in international comparison, ranging between 62 and 65 years across Belarus, the Republic of Moldova, the Russian Federation, Tajikistan, Ukraine and Uzbekistan. Third, high unemployment has led to large-scale emigration from several countries. Taken together, these factors explain the decline in total population observed in 16 countries (-0.8% a year in Bulgaria, -0.7% each in the Republic of Moldova and Ukraine).

Population ageing is a challenge. Elderly people often participate actively in society, support the younger generations, and may represent an important group of consumers in countries where they enjoy high living standards.⁵ At the same time, pensions and health care have to be financed from a shrinking working-age population. Young people also comprise a declining share of the electorate, which may bias policy-making away from their interests. Similarly, the concentration of capital amongst the elderly may make it even more difficult for young people to settle in life. Excessive risk aversion may reduce innovation and productive investment in the economy.

Immigration and emigration flows are playing a significant part in population trends. In 2012, 3.4 million persons immigrated to one of the (then) 27 countries of the European Union, while 2.7 million persons emigrated. While 14 countries including France, Germany and the United Kingdom had a positive net migration rate, the other 13 had a negative rate, including countries worst affected by the financial, economic and social crisis (Greece, Ireland, Portugal, Spain) and a majority of Central European countries belonging to the European Union.⁶ Immigration is both an opportunity and a challenge. It mitigates the effects of population ageing, as immigrants are younger on average than the resident population. At the same time, the immigration of foreigners from a wide range of countries, with very diverse cultural and linguistic backgrounds, socio-economic status and education levels is contributing to the transformation of societies, requesting public policies for their integration.

Economic and social trends

Economic growth has been slow in Western Europe and North America for more than a decade.⁷ Growth during the early 2000s was damaged by the crisis that started in 2008. Over 1999-2013, per capita income decreased by 0.1% a year in Italy, and stagnated in other Mediterranean countries including Cyprus and Portugal. It increased by only 0.7% a year in France, 1.0% in the United States, 1.1% in the United Kingdom, and 1.4% in Germany. By 2014, more rapid growth had resumed in the United Kingdom and the United States, but not in continental Western Europe. Meanwhile, emerging economies, including Israel and Turkey, are catching up. For instance, per capita income in Turkey grew at a steady 2.9% a year between 1999 and 2013.

Populations have strongly felt the impact of the crisis that started in 2008, with an unprecedented combination of falling household incomes and rising unemployment. By 2013, 15 out of 23 countries had lower per capita income than in 2007 (by 23% in Greece, 16% in Cyprus, 14% in Ireland, 11% in Italy, 9% in Spain and 6% in the United Kingdom), and per capita income in the United States had just regained its 2007 level. Over the same period, unemployment rates rose in 20 out of 23 countries, the exceptions being Germany, Israel and Malta. By 2013, more than a quarter of the active population were unemployed in Greece and Spain, and 10% to 16% in Cyprus, France, Ireland, Italy and Portugal. By contrast, at 6.3% unemployment in Israel was lower in 2013 than it had ever been since 1999. In Turkey, at 9.0% in 2013, unemployment had regained its 2006 level. In most countries, youth aged 15-24 were two to four times more likely to be unemployed than adults aged 25 and above. By 2013, Western Europe and North America had 9.8 million unemployed youth, including 3.5 million in the United States, 1.0 million in Turkey, more than 900,000 in Spain and the United Kingdom, and 740,000 in France. Youth unemployment rates were extremely high in countries most affected by the crisis, up to 57% in Spain and 58% in Greece. They were high as well in countries including France (24%) and the United Kingdom (20%), and lowest (below 10%) in countries with dual apprenticeship systems, such as Austria (9.1%), Germany (7.8%) and Switzerland (8.8%) – which points to the part education and training policies can play in facilitating the insertion of youth in the labour market.⁸

The global financial and economic crisis has halted the emergence of Central and Eastern Europe. Over 1999-2007, per capita income rose rapidly in all countries, by 4.2% a year in Poland, 4.6% in the Czech Republic, 6.1% in Romania, 7.3% in the Russian Federation, 8.0%

in Ukraine and up to 13.3% in Azerbaijan. The 2008 crisis reversed the trend. Over 2007-2013, per capita income declined in seven countries (-1.7% a year in Croatia, -0.3% in the Czech Republic and in Ukraine) and nearly stagnated in ten more (it grew by 1.6% a year in the Russian Federation). Only a few countries managed to sustain rapid growth, including Poland (2.9% a year) and Tajikistan (4.5%).

The extent of unemployment varies dramatically across Central and Eastern Europe. Owing to rapid growth, unemployment rates declined rapidly – from very high levels – over 1999-2007, and with a few exceptions (the Baltic States, Bulgaria and Croatia) they increased only moderately between 2007 and 2013. However, while countries including the Russian Federation (5.5%), Azerbaijan (6.0%), and the Czech Republic (7.0%) might seem close to full employment, most Central European countries still suffer from high unemployment rates, between 10% and 20%. Three countries in the Balkan (Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia and Serbia) are facing particularly high unemployment, with rates between 20% and 30%. Again, youth unemployment is two to four times higher than adult unemployment. Central and Eastern Europe had 3.9 million unemployed youth in 2013, including 1.0 million in the Russian Federation, 560,000 in Uzbekistan and more than 400,000 in Poland and Ukraine. The youth unemployment rate was highest in five countries of the former Yugoslavia, ranging from 41% in Montenegro to around 50% in Croatia, Serbia and the former Yugoslav Republic of Macedonia, up to 60% in Bosnia and Herzegovina. It ranged between 20% and 30% in most countries of Central Europe belonging to the European Union, and was lowest in Belarus (12%) and in the Russian Federation (15%).⁹

Societies are becoming more unequal, with an increased concentration of income and wealth in the hands of the richest. The trend is most visible in the United States, where the share of the richest 10% in total income increased from 42.7% to 48.2%, and the share of the richest 1% increased from 15.9% to 19.3%, over the 1999-2012 period; by 1980 the same shares were 32.9% and 8.2%, respectively.¹⁰ Inequality in Western Europe and North America in the 21st century may be as strong as it was at the beginning of the 20th century, shortly before the First World War.¹¹ The transition to market economies in Central and Eastern Europe has led to an overall increase in income inequality, with very different patterns across countries. In Lithuania and the Russian Federation, income inequality (as measured by the Gini coefficient) exploded within a couple of years in the early 1990s, before increasing more slowly in the 2000s. In Latvia and Romania, the Gini coefficient has increased continuously for two decades. The four countries are now among the most unequal in Europe. In Hungary, Poland and Slovakia, the initial increase was more moderate, and followed with stabilisation close to the European Union average. Finally, the Czech Republic and Slovenia have been able to keep income inequality close to the lowest levels in the European Union.¹² Initially accepted by public opinion as the counterpart to new economic opportunities, income inequality is now causing widespread discontent, even in a relatively prosperous country such as Poland.¹³

Societies are being undermined by the crisis. European societies are facing an unprecedented rise in poverty, which affects children. By 2011, 27% of children (aged less than 18) living in the European Union were at risk of poverty or social exclusion – the rate increased since 2008 in 21 out of 27 countries. By 2011, in Western Europe, child poverty rates were highest in five countries then going through deep economic recessions: Ireland

(38%), and Greece, Italy, Portugal and Spain (around 30%). In Central Europe, child poverty reached extreme levels in Bulgaria and Romania (about 50%), as well as Latvia and Hungary (40-45%).¹⁴

Environmental trends

Environmental preservation at the country, regional and global level is bound to become a central concern for countries of Europe and North America over the next decades. At the global level, the region has a historical responsibility for alterations to the global environment that are threatening the future of the biosphere and mankind: climate change, pollution, the loss of biodiversity and an increasing scarcity of natural resources. But countries of Europe and North America are also aiming to play a key part in addressing those threats. For instance, the 28 countries of the European Union agreed in October 2014 to curb their greenhouse gas emissions by 40% in 2030 compared to their 1990 levels. The European Union indeed defined a vision of ‘living well within the limits of the planet’ by 2050. The United States committed in November 2014 to reduce their own emissions by 26% to 28% until 2025 compared to their 2005 levels.

At the regional and country level as well, ongoing environmental trends are a cause for concern despite improvements resulting from policy initiatives taken since the 1970s. A recent official assessment of the environment in the European Union paints a contrasted picture. Despite recent reductions in air and water pollution, Europe’s natural capital is not well protected, with a loss of soil functions and land degradation. Overall, 60% of protected species and 70% of protected habitat types are in unfavourable conservation status. Indicators of resource use efficiency are more satisfactory, as greenhouse gas emissions have already decreased by 19% since 1990, and fossil fuel use and emissions of some pollutants have also declined. However, many of these trends remain insufficient to achieve targets set by the European Union for 2050. Finally, there are concerns about the impact of environmental degradation on health – through air and noise pollution and the growing use of chemicals in particular.¹⁵

I.2. Implications for education

Ongoing trends offer opportunities for the development of education in Europe and North America:

- **Investments in quality are facilitated by demographic trends.** Stagnation or decline in child and youth populations liberate resources that can be used to improve school infrastructure and teacher training while controlling education expenditure and without raising pupil/teacher ratios.
- **Recent progress in education participation at non-compulsory levels is boosting the demand for further education and training.** The rapid expansion of pre-primary education in many countries since 2000 may be expected to help improve learning outcomes in the near future, as new cohorts of pupils will be better prepared for primary school. Meanwhile, the current generation of youth has higher educational attainment than any other before, and expresses a strong demand for higher education and technical and vocational education and training.

- **The spread of information and communication technology can facilitate access to learning**, including for youth and adults who have left the school system. ICT is deeply renewing distance learning, for instance through massive open online courses.
- **The mobility of students in higher education and technical and vocational education and training has increased**, particularly through European Union programmes and policies such as the Bologna process.
- **The position of women in society is improving**, in line with their massive participation in higher education.
- **The perspective of lifelong learning is gaining ground**, as workers and employers are increasingly aware of the need for continuous training in a rapidly transforming economy associated with less stable employment relationships.
- **Education and training policies have a key part to play in making development sustainable**. Curricula need to be adapted to promote environmental awareness and training should be developed in skills necessary to the emergence of a green economy.

At the same time, education systems in Europe and North America are facing significant challenges:

- **Learning outcomes are stagnating or declining in many countries** (as illustrated, for instance, by 2012 PISA scores in mathematics). This may reflect deep changes in the functioning of families and societies which threaten the transmission of knowledge through schooling. Schools as social institutions are weaker, knowledge is being valued less for its intrinsic value than for its instrumental roles, and the authority of teachers is contested.¹⁶ The recent decline in learning outcomes in Finland has been explained by changes in society, which result in young people being less motivated for learning. School is no longer seen 'as a forum for self-actualisation, an enabler for social advancement or as a guarantor for a good future.'¹⁷ In Lithuania, during the past decades, 'the lack of willingness to study became one of the most serious problems of general education.'¹⁸
- **The rise in poverty is reducing the ability of students from vulnerable families to learn** in primary and secondary education, and the ability of their families to support their learning. In Cyprus, the impoverishment of vulnerable families caused by the financial crisis called for specific measures. Already existing universal policies such as the provision of free transportation to pre-primary and primary schools and free textbooks have been complemented with targeted measures including the provision of free breakfast to 12,000 school children and the introduction of a yearly financial allowance to low income families.¹⁹ Higher education risks becoming unaffordable for many, as illustrated by the student loan crisis in the United States and controversies about the student loans system recently introduced in the United Kingdom.
- **Education systems need to adapt to changing societal contexts**. First, population trends require adjustments in the school infrastructure. Several countries are going through a rapid decline in their school-aged population, which is occurring at different paces in urban and rural areas, and across regions, as in Estonia or Latvia, calling for a rationalization of the school network.²⁰ In other countries, such as Belgium (Flemish community) demographic growth is concentrated in urban areas, necessitating the

opening of new schools or classrooms.²¹ Second, due to immigration, schools have to integrate significant numbers of children and youth whose home language differs from the medium of instruction. Third, the spread of information and communication technology (ICT) transforms the lives of students, their relationship with teachers, their learning needs and their prospects for lifelong learning. The mastery of ICT skills may now be considered part of the core curriculum, while the use of ICT can complement teaching in other fields.

- **The redistributive function of education has been declining.** The impact of family background on educational achievement remains strong, and the impact of achievement on labour market outcomes tends to increase in a context of rising income inequality coupled with declining demand for low-skilled workers. This puts pressure on schools as institutions which shape lifelong destinies.²²
- **Large numbers of youth and adults have low literacy or numeracy skills,** making it difficult for them to fully participate in social or professional life. According to the OECD Survey of Adult Skills (PIAAC), 10% to 30% of adults are in that situation across 21 countries in the region.²³ Functional illiteracy has been recognized as major societal issue and as a policy priority at the European Union level, with high potential returns to investing in the quality of initial education and remedial programmes: ‘On past trends, if Europe achieved its current benchmark of functional literacy for 85% of 15-year-olds, this could lead to an aggregate GDP gain of EUR 21 trillion over the lifetime of the generation born in 2010.’²⁴
- **Workers need access to continuing education and training to upgrade and update their skills.** In a context of high unemployment, it is crucial to ensure that unemployed workers do not lose their skills, and can acquire new skills in demand on the labour market. In this perspective, the European Union faces a formidable challenge: More than 73 million adults aged 25-64 do not have qualifications above upper secondary level.²⁵
- **Educational policies are constrained as governments are striving to reduce fiscal deficits.** The quality of education and the availability of training are jeopardized by the combined effects of fiscal tightening and uncertain private sector funding. Several countries in Europe are freezing or cutting public expenditure on higher education and research – even though these are priorities on the European Union agenda – while emerging countries are investing massively.

Consequently, two key priorities facing policy makers in the areas of education and training over 2015-2030 can be stressed for Europe and North America:

- **Improving the quality and equity of education and training systems.** Policies at pre-primary, primary and secondary levels need to ensure that all students – irrespective of their family background – achieve sufficient skills in literacy, numeracy and other areas to receive further education and training, and to be able to fully participate in society. Countries need to reflect on the use of information and communication technology to complement teaching. A related concern is to ensure that general and TVET curricula at secondary and higher education levels remain relevant to rapidly evolving labour market needs. Countries also need to mainstream education for global and for national citizenship, as well as education for sustainable development, at all levels of education.

- **Developing education and training systems beyond their current reach at non-compulsory levels:**
 - strengthening pre-primary education as the foundation for further learning;
 - investing in higher education; facilitating the international mobility of students; and tightening the links between higher education, public and private research and innovation to foster the creation of new activity sectors; and
 - broadening access to initial and continuing technical and vocational education and training and to adult education in a lifelong learning perspective.

II. Progress towards Education for All

From a broad, quantitative perspective, Europe and North America was closer than any other region to having achieved the six goals of Education for All in 2000. However, the region was facing challenges in terms of the quality and equity of education systems at all levels, and in terms of access to pre-primary education. An examination of current education indicators pertaining to each EFA goal shows that, while much progress has been made as far as pre-primary education is concerned, quality and equity issues persist.⁵

EFA goal 1: Early childhood care and education

Western Europe and North America

All countries in Western Europe and North America have comprehensive public policies providing for the care of young children. The average under-5 mortality rate is 5‰,²⁶ and the median rates of immunization of children aged under 1 against diphtheria, pertussis, tetanus and against polio are both 97%. There are significant disparities within the region, though. Nordic countries have the lowest under-5 mortality rates (2.5‰ in Iceland, 2.7‰ in Finland, and 2.9‰ in Sweden), and the United States has the highest (6.8‰). Austria stands apart as the only country where immunization is far from universal (83% for both vaccines). Turkey has considerably improved early childhood care over the past twenty years but is still not as advanced as Western Europe, with 9% of births not attended by skilled health personnel, and an under-5 mortality rate of 15.2‰.

Most countries are moving towards universal access to pre-primary education, now understood as a necessary foundation for compulsory education. Pre-primary education is particularly expected to benefit children at risk and to facilitate the integration of children from immigrant families. In Norway, kindergartens are expected to identify children who do not receive sufficient care and attention from their family, or suffer from maltreatment. Municipalities organize and finance the attribution of personal assistants to children living with disabilities or else 'needing special attention and follow up.' Targeted measures were introduced to raise attendance among children from immigrant families, which increased from 72% in 2005 to 90% in 2012 in the 3-5 years-old age group, and has thus nearly caught up with the rest of the population.²⁷ In Sweden, owing to large-scale immigration, the

⁵ Unless stated otherwise, indicators in this section are UNESCO Institute for Statistics data drawn from Statistical appendix (long version) to *EFA Global Monitoring Report 2015: What Did We Achieve?* and they are for the school year ending in 2012 (or the most recent year available).

number of pre-primary pupils whose mother tongue is not Swedish more than doubled within a decade, to 99,800 in 2012, or about 20% of pupils.²⁸

However, the capacity of pre-primary education institutions remains insufficient to accommodate all young children in Western Europe and North America, as the weighted average gross enrolment ratio reached only 89% in 2012 (up from 76% in 1999).²⁹ Countries have distinct national traditions:

- **In France and Belgium participation has long been universal.** While not compulsory, pre-primary education is considered a public service and is free.

In Belgium, more than half pre-primary pupils (up to 70% in the Flemish community) attend schools that have a private legal status, but those are non-profit foundations that are publicly recognized and funded, and are subject to the same legislation and quality assurance system as government schools. In the Flemish community, no tuition fees are charged, learning materials are provided by schools, and the amount that can be charged for extra-curricular activities has been capped at a low level by a 2008 law. Special study grants are allocated to lower income families conditional on their children attending regularly – for at least 150 to 220 half days per school year, depending on the child's age.³⁰

In France, 100% of children aged 3-6 attend pre-primary school even though it is not compulsory, 87% of them in government schools. A 2005 law provides that the school system must accommodate all children from the age of 3 whose parents want them to attend. The 2013 education law redefined the three grades of pre-primary school as a single cycle in which young children socialize and prepare for primary school. A new curriculum introduced in 2014 is thus structured around five key activities: mastering language, living together, acting and expressing oneself with one's body, discovering the world, and practicing artistic activities. Pre-primary education is meant to prevent the apparition of learning difficulties, to help identify young children living with disabilities, and to compensate for inequalities in family background.³¹

- **Eight countries of Western Europe are close to universal participation**, with net enrolment ratios above 90%, including Nordic countries, Italy and Spain, as well as Israel. In Norway and Sweden, this results from a dramatic expansion of pre-primary schooling since 1999, when only three quarters of young children of the official age group were enrolled at this level. The share of the private sector varies widely across those countries, from 11% in Israel to 46% in Norway.

In Germany, 94% of all children aged 3 to 6 attend pre-primary education. In the last ten years, the expansion of quality pre-primary education for children aged below 3 years has been a priority. A 2013 law makes it compulsory for municipalities to offer day care for children from the age of 1 if parents require it.³²

In Norway, a broad political consensus has allowed a sustained expansion of kindergartens, bringing the enrolment of children aged 3-5 from 78% in 2000 to 97% in 2013. Almost all children now attend for more than 33 hours a week. Public and private kindergartens operate in the same way, and receive financial support from municipalities which are also responsible for their supervision and quality control. Kindergarten attendance among young children aged 1-2 is also extremely high in international comparison (80% in 2013).³³

In Sweden, pre-primary education has been made part of the education system since the late 1990s, and the 2010 education act made it compulsory for municipalities to offer pre-primary education for children from the age of one if the child or her parents require it. Attendance in the 1-4 age group went up from 72% in 2002 to 84% in 2012. 95% of children aged 4 and 5 now attend pre-primary school, and Sweden plans to universalize attendance from age 3.³⁴

- **Other European countries have net enrolment ratios between 70% and 90% and are thus still far from universal participation**, although some, especially Portugal, made considerable progress between 1999 and 2012. The share of the private sector varies from 4% in Switzerland to 47% in Portugal. Three countries in which only half young children were enrolled in pre-primary schools in 1999 have caught up with that group: net enrolment ratios in Cyprus, Finland and the United States are now close to 70%. Progress has been particularly impressive in Finland, which now aims for universal enrolment, as the other Nordic countries, but relies mostly on public provision (92% of enrolment).

In Cyprus, since 2004/05, one year of pre-primary education is compulsory for young children aged 5, and free in public kindergartens. For younger children, aged 3-4, attendance in public kindergartens is not compulsory and not fully free (parents have to pay a low fee). Priority is given to children at risk and children with special needs, who are to be integrated in mainstream kindergartens. Other children may attend community or private day care centres. Community day care centres operate where public kindergartens have insufficient capacity and receive public subsidies, thus they levy much lower fees than private centres. Cyprus aims to enrol 95% of young children by 2020.³⁵

In Finland, the responsibility for day care centres was transferred from the Ministry of Social Affairs and Health to the Ministry of Education and Culture in early 2013, with the aim of establishing 'a complete educational continuum between the pre-primary education in day care, pre-primary education and basic education'. 98% of children aged 6 attend the last year of pre-primary education, which has become compulsory.³⁶

In Greece, attendance at pre-primary school has been compulsory for young children aged 5 since 2006, with the aim of preparing pupils for primary education, supporting working parents, and reducing educational and social disparities.³⁷

In Portugal, the recent expansion of enrolment has been facilitated by cooperation between the State and social partners, whereby private, not-for-profit kindergartens receive public funding, in the form of grants calculated per pupil and per month.³⁸

Within the United Kingdom, England gradually extended entitlement to state-funded early education from 1998 to 2013. 2-year-olds whose parents meet certain income-related criteria as well as all 3- and 4-year-olds are now entitled to receiving 15 hours of early education per week. By January 2014, 13% of 2-year-olds and 97% of 3- and 4-year-olds benefitted 'from some funded early education'.³⁹

- **In Ireland**, the net enrolment ratio is 52% at ages 3-4, with very limited public provision of pre-primary education (98% of pupils attend private schools).
- **In Turkey pre-primary education started expanding only in recent years.** Kindergartens and preschools of the Ministry of National Education account for 95% of enrolment, but

they are not free, and households still contribute 65% of total funding, despite recent increases in public funding. The Strengthening Pre-School Education Project started in 2010 by the Ministry of National Education with support from the European Union and UNICEF led to an expansion of day care services and pre-primary education, particularly for disadvantaged children, targeted via community-based provision. Quality standards were tested in a pilot phase and will be implemented through a new legal framework and control procedures.⁴⁰

Across Western Europe and North America, the number of years the average young child can expect to spend in pre-primary education varies depending not only on access to pre-schools, but also on the duration of the curriculum. This is typically shorter in Anglo-Saxon countries which also tend to have lower enrolment ratios; hence a young child would receive only 1.1 year of pre-primary education in Ireland, 1.7 in the United Kingdom, and 2.2 in the United States. This contrasts with the much longer duration of pre-primary schooling for the average young child in France (3.3 years) and Belgium (3.5 years), Spain or Sweden (3.8 years in each country).

Central and Eastern Europe

Health outcomes of young children vary greatly across countries of Central and Eastern Europe although average health indicators are better than for any other group of countries except Western Europe and North America. In most countries, almost all births are attended by skilled personnel, and more than 90% of children aged 1 are immunized against diphtheria, pertussis, tetanus and against polio.⁴¹ Under-5 mortality rates have been declining rapidly in all countries since 2000, and in most Central European countries that belong to the European Union they are lower than in the United States. Owing to deficient health systems and family poverty, under-5 mortality rates are much higher in the Balkan and in Eastern Europe (where they range from 10.0‰ in Montenegro to 16.4‰ in the Republic of Moldova), and especially in the Caucasus and Central Asia (reaching 20.3‰ in Armenia and up to 70.1‰ in Tajikistan), where reducing child mortality should be considered a policy priority.

The coverage of pre-primary education ranges between minimal and universal. Out of 20 countries with data for the net enrolment ratio in 2012 in the UIS database:

- **In five countries of the Balkan, the Caucasus and Central Asia, net enrolment ratios in pre-primary education are amongst the lowest in the world.** Ratios have stagnated or even declined since 1999, and range between 7% in Tajikistan and 25% in the former Yugoslav Republic of Macedonia (down from 27% in 1999).

In Armenia, the devolution of pre-primary education to local communities in 1996 weakened the system, which by 2008 covered only 14% of young children in rural areas and 39% in urban areas. A strategic programme was adopted for 2008-2015 with the aim of bringing enrolment to 90% of children aged 5-6, but more than 400 communities still have no pre-primary school.⁴²

In Bosnia and Herzegovina, different statistical sources give similarly low enrolment figures, for instance 13% in 2011/12, or 14% in 2012/13 including pre-primary schools and other forms of day care. Although the Federation of Bosnia and Herzegovina adopted a strategic plan for 2013-2017, only four of the twelve local governments in charge with implementing

the policy have their own strategy. Awareness of the benefits of early childhood care and education is limited among policy-makers. The quality of pre-primary education depends on resources available to local governments: Municipalities with the most limited resources charge higher fees, which excludes young children from the poorest families, generating a vicious circle of poor social development.⁴³

In Georgia, by contrast, a number of initiatives have been taken in recent years, often in cooperation between the government and UNICEF, international or local NGOs. These include a programme for the inclusion of young children from linguistic minorities (facilitating their acquisition of the Georgian language) started in 2011/12, the abolition of fees in 2013, and the examination by Parliament in 2014 of a comprehensive new law on early childhood care and education. NGOs have been particularly active in the areas of curriculum design and teacher training. However, the pre-primary school infrastructure will need to expand – fee abolition has led to a rapid increase in attendance, and the capacity of existing schools has been stretched.⁴⁴

The former Yugoslav Republic of Macedonia considers early childhood a priority, and has cooperated with the European Union, UNICEF and other international organizations to expand pre-primary education and improve its quality. Measures have included reviews of legislation and funding processes, a greater involvement of local authorities in service provision, the construction of new kindergarten buildings, and capacity building for pre-primary teacher trainers. However, enrolment remains low (almost inexistent among Roma children: 4%), and the network of kindergarten largely insufficient.⁴⁵

In Uzbekistan, only 19% of children aged 3 to 6 attended some form of pre-school in 2012/13 ('Sunday schools', 'short-stay groups', 'early development centres', 'groups in out-of-schools institutions', 'home-based education' and 'groups under *mahalla*', i.e. neighbourhood cultural centres). Early childhood care and education is widely considered a family responsibility, involving parents and grand-parents, but institutional weaknesses have also constrained the expansion of centre-based programmes: a lack of regulation and standards, the absence of a well-defined curriculum and a corresponding shortage of teaching/learning materials, and the lack of trained teachers, especially in rural areas. Recent initiatives to strengthen pre-primary education include the development with UNICEF of a national curriculum (*Bolajon*), implemented since 2011/12.⁴⁶

- **In four other countries of the Balkan, nearly one-half to two-thirds of young children are enrolled.** These include Albania, Croatia, Montenegro and Serbia.
- **In seven countries of Central or Eastern Europe, including Hungary, Poland, Romania and the Russian Federation, enrolment was widespread but not quite universal** by 2012 (between 74% and 85%).

In Bulgaria, pre-primary education is delivered by kindergartens from the age of 3 until entry into the first grade of primary education. A course preparing young children for primary education is mandatory from the age of 5, and its duration was extended from one year to two years by the Public Education Act of 2010. The objective is to reach a 90% enrolment ratio, and indeed the net enrolment ratio jumped from 67% to 84% between 2000/01 and 2013/14. The National Roma Integration Strategy 2012-2020 and the 2010 Strategy for

Educational Integration of Children and Students from Ethnic Minorities aim to increase participation from Roma young children, for instance through 'desegregation of kindergartens in the separate Roma residential areas'.⁴⁷

The Czech Republic had adopted an ambitious objective for 2015: universalizing access to pre-primary education by making it compulsory for municipalities to accommodate all young children whose parents require it, including young children living with disabilities and those from disadvantaged families (with an allowance covering fees). Pre-primary education was to become the basis for compulsory education. A newly created bachelor's degree was made the minimum qualification required for pre-primary school teachers, to ensure they mastered the 'the broad range of specialist educational and social knowledge of skills' needed to teach young children – and to enhance their professional status. However, these objectives have not been fully met. The rates of participation at ages 3 and 4 have stagnated for a decade (around 77% and 88%, respectively), and participation at age 5 *declined* steadily from 96% in 2005 to 88% in 2012. 12% of teachers still do not have the required qualification. The Czech Republic now aims to expand its network of public kindergartens (which enrol 98% of pupils) and to reach children at risk of social exclusion, in order to make the last year of pre-primary education compulsory.⁴⁸

In Hungary, kindergarten participation increased very little during the 2000s (from 72% in 2002 to 74% to 2011 at age 3, and from 90% to 93% at age 4), and the number of kindergartens was reduced by more than 300 owing to the decline in the young child population.⁴⁹ . Several projects supported by the European Union aim to improve the kindergarten infrastructure, as attendance for children aged 3 to 6 will be compulsory by September 2015.⁵⁰ According to national statistics, enrolment reached 95% of 4- and 5-years olds in 2013/14.⁵¹

In Romania, the gross enrolment ratio increased only slightly between 2005/06 and 2011/12, from 75% to 78%, but the gap between rural and urban areas decreased, from 9.1 to 5.5 percentage points.⁵²

Lithuania contrasts with the previous three countries, as the enrolment ratio of children aged 3-6 progressed from 56% in 2000 to 82% in 2012. In 2013, 93% of pupils entering grade 1 of primary education had attended some form of pre-primary education. A simplification of rules for the opening of pre-primary schools, coupled with per capita funding of both the public and private sectors, facilitated the creation of new institutions.⁵³

In the Russian Federation, where the gross enrolment ratio went up from 71% in 1999 to 91% in 2011, the State programme on the Development of Education aims to expand and modernize the pre-primary school infrastructure, so that it can accommodate all children aged 3 to 7 by 2016, and meet federal quality standards by 2018. In 2013-2014, regions received federal support to renovate existing pre-schools, reclaim former pre-school buildings used for other purposes, and construct new buildings. Teacher salaries are to be raised to be on par with those of teachers in general education (i.e. the primary and lower secondary levels) – since 2013, pre-primary education has become a level of general education.⁵⁴

- **Four more countries are close to universal participation**, with ratios ranging from 90% in Latvia to 92% in Estonia and Slovenia, and up to 97% in Belarus.

In Estonia, pre-primary education is not compulsory, but local governments have the legal obligation to accommodate all children aged 1.5 to 7 years, if their parents want to enrol them. 90% of kindergartens are municipal institutions, and local governments may also subsidize private kindergartens or child-care services for the under-3 where there is a shortage of space in public kindergartens. Over 2007-2013 a government plan using European Structural Funds supported local governments in creating new kindergartens or renovating existing ones; it is being continued over 2014-2020. A new national curriculum for pre-school child care institutions was introduced in 2008.⁵⁵ A similar policy orientation has led to a rapid increase in the number of pre-schools and in enrolment in Latvia since the early 2000s.⁵⁶

In Slovenia as well, municipalities have the legal obligation to provide access to kindergartens to all children aged 11 months to 6 years, as pre-primary education is considered an integral part of the education system, even though it is not compulsory. The obligation may be fulfilled through public kindergartens, private kindergartens that are fully subsidized and implement the national curriculum, or other private kindergartens. A centralized waiting list system exists to handle possible shortages of kindergarten places; in 2010 the Kindergarten Act was amended to facilitate the opening of new places.⁵⁷

Owing to variations in enrolment ratios and the in the length of pre-primary education curricula, young children can expect to receive two years of pre-primary education in the Balkan, and more than three years elsewhere, up to 3.6 in the Russian Federation and 3.7 in Latvia and Estonia.

Benefits of early childhood care and education

Past and recent research highlights the benefits for young children – and for society – of participation in ECCE programmes of good quality:

- **The first three years of life are a sensitive period** in the formation of the brain, and more broadly of personality. A safe physical and emotional environment, providing appropriate stimulation and free of negative experiences (such as deprivation of care or ill treatment) is essential. ECCE programmes can provide such an environment, especially for children at risk of suffering from undernutrition, poor health, or limited language development, owing to family circumstances. They can thus limit the extent of inequalities among infants, which have lifelong consequences.⁵⁸
- **Pre-primary education lays the foundations for further learning.** PISA 2012 data show that, controlling for differences in family background, students aged 15 who attended pre-primary school for at least one year perform better than those who did not. Mathematics scores are significantly higher in 22 of 23 countries of Western Europe and North America and in 11 of 15 countries of Central and Eastern Europe that participated in PISA 2012. The impact of pre-primary education depends on the number of years of attendance, on pupil/teacher ratios and on public expenditure per pupil.⁵⁹ The short duration of pre-primary education in Ireland, and perhaps its poor quality in the early 2000s in Croatia, Estonia, Latvia and Slovenia may explain why it makes no significant difference to achievement at age 15 in those countries. PIRLS and TIMSS 2011 data also

show that the reading and mathematics achievement of grade 4 pupils increases with the length of their participation in pre-primary education; children who never attended pre-primary education are particularly disadvantaged.⁶⁰

- **Research on ECCE in the United States finds long-term impacts** – while impacts of interventions in primary or secondary education often fade away after a few years. An evaluation of Head Start, the publicly funded national early childhood programme that focuses on poor children, found that participation in the programme increased the likelihood of graduating from secondary school by 9% and decreased by 7% the likelihood of not being in school and reporting zero wages around the age of 20.⁶¹ Longitudinal research finds extremely high economic returns to investing in ECCE programmes, over the life cycle, owing to higher rates of graduation from secondary school, higher individual earnings and thus higher tax revenue for the state, reduced dependency on welfare programmes, and reduced crime. Economists of education emphasize public investment in ECCE programmes as more productive than investment in remedial education for secondary school students.⁶²

EFA goal 2: Universal primary education

Western Europe and North America

All countries in Western Europe and North America had achieved universal primary education long before 2000. For instance, Cyprus states that ‘universal access to free primary education has been well established in the Republic of Cyprus and no specific difficulties have been encountered.’⁶³ Governments played a major part in developing modern education systems and remain the main providers of primary and to a lesser extent secondary education (92% of pupils attend government primary schools in the United States, and 96% in Germany).⁶⁴

Almost all children enter primary school, complete the curriculum without repeating grades and enter secondary education. While a significant share leave the school system before completing upper secondary education (see EFA Goal 3 below), many more will graduate from that level and enter higher education. On average, children can expect to spend 16.4 years in the school system – less in countries such as Austria or Switzerland that rely on apprenticeship for vocational training, but up to 18.7 years in Iceland.⁶⁵

In technical terms, the gross intake rate in primary education is 100% for the group of countries as a whole, the adjusted net enrolment ratio in primary education ranges from 93% to 100% across countries, and indicators of internal efficiency – drop out and grade repetition are negligible in comparison with other regions. The median rate of survival to grade 5 is 98%, and the rate of transition to general secondary education is above 97% in all countries. Gross enrolment ratios in secondary education are close to or even above 100%, indicating that education systems have the capacity to accommodate all adolescents. Grade repetition and drop out are issues at that level, though, and significant numbers of youth leave the school system with no more than lower secondary education. Early school leaving in the United Kingdom and in the United States may account for the gross enrolment ratios in upper secondary education of respectively 86% and 89% – among the lowest in Western Europe and North America.

Turkey has achieved mass participation in lower secondary education, and more recently in upper secondary education. Conditional aid for education was introduced in 2001 and modified in 2007, targeting the poorest 6% of the population. Aid is conditional on enrolment at pre-primary, primary or lower secondary level, and higher for female than for male students. Evaluations conducted in 2006 and 2007 found that this aid had been particularly effective at raising female enrolment in lower secondary education, especially in rural areas.⁶⁶ A 2012 law extended compulsory education from eight to 12 years, including four years each of primary, secondary and high school. The compulsory entry age into primary education was lowered to five and a half, and parents may even enrol their children at age five.⁶⁷

A first concern for governments at primary and lower secondary levels is to reduce inequalities between schools. Several countries have established priority education zones in disadvantaged areas, where schools receive extra resources. In Cyprus, these zones target areas with a high incidence of early drop out, functional illiteracy or youth delinquency, or with a large share of immigrant families. They comprise a lower secondary school and the main kindergartens and primary schools in its catchment area. Pupils in these schools benefit from measures including class size reduction, free breakfasts and lunches, the appointment of teachers speaking the mother tongue of immigrant children, or longer school hours including extra-curricular activities in the afternoon. Each zone is coordinated by two specially appointed teachers. This policy has helped reduce grade repetition and drop out.⁶⁸ In France, priority education zones were amended by the 2013 education law. Among other measures, teachers in these zones receive specific training and incentives to work in pedagogical teams, initiatives are taken to enhance cooperation between parents and teachers, and schools have more non-teaching staff, including nurses. The objective is to reduce the gap in learning outcomes between school in the priority education zones and other schools to less than 10%.⁶⁹ Portugal's TEIP programme operates in a similar way in clusters of schools located in disadvantaged areas, performing significantly below national average, and suffering from higher levels of violence and child work.⁷⁰

Other countries have introduced funding mechanisms based on pupils' characteristics. In the Flemish community of Belgium, since 2008/09, funds which public and publicly-funded private schools receive for their operating costs (not for infrastructure investment of staff salaries) vary according to the cultural background, financial capacity, linguistic and cultural capital, and social capital of their pupils' families. Those are approximated by indicators such as mother's educational attainment, entitlement for study grants, language spoken at home and place of residence. The share of the school budget concerned by this mechanism is increasing gradually until 2019, to 15.5% at primary and 11% at secondary level.⁷¹

A second concern for governments is to reduce inequalities between students by adapting schools to their individual learning needs. A first set of measures aims to facilitate the attendance of children living with disabilities. In France, the 2013 education law provides that all children have to be accommodated in schools, without any distinction. By 2013/14, about 240,000 children without disabilities were enrolled at primary and secondary level, supported with the equivalent of 18,000 full-time education assistants. Teachers and administrative staff are to receive specific training on disabilities.⁷²

A second set of measures concerns children from immigrant families, or belonging to ethnic or linguistic minorities. In Norway, those children may receive ‘strengthened Norwegian language training’ (45,000 pupils), ‘basic Norwegian for linguistic minorities’ (15,000 pupils), or ‘mother-tongue language learning and training’ (17,100), offer in 100 languages. In 2013, as many as 25% of pupils in compulsory grades in Oslo were receiving strengthened Norwegian language training.⁷³ In Sweden, Sami schools covering the first six grades of compulsory education can be attended by children of Sami families, and other children who have specific reasons to do so.⁷⁴ Yet the country with the most advanced practice of multilingual might be Andorra, where three school systems coexist – French, Spanish and Andorran. In Andorran schools, Catalan in the first medium of instruction, yet French and Spanish are used as second languages, and English is taught as well from primary level onwards. Primary grades are taught simultaneously by two teachers, one speaking exclusively in Catalan, the other exclusively in French, ensuring bilingualism among their pupils.⁷⁵

A third set of measures is universal rather than targeted, and aims to provide individualized support to all pupils. Particularly advanced in that respect, Finland aims to ‘increase students’ well-being, sense of community and chances to participate’ through high quality counselling to students in primary and secondary education, the creation of student bodies in each school that have to be consulted before decisions affecting students are made, and student participation in the preparation of the school-specific curriculum and regulations. These practices complement more standard measures including class size reduction (between 2009 and 2013, the proportion of ‘large’ teaching groups was halved) and the adaptation by 2015 of fiscal transfers to local governments according to local adult education levels, unemployment rates and numbers of immigrant families.⁷⁶

Central and Eastern Europe

Countries of Central and Eastern Europe have been able to preserve universal primary education. Historically, mass education started later in Central and Eastern Europe than in Western Europe and North America, but was a priority of the Socialist regimes. Education systems proved resilient to political change and economic transition, so that primary education was nearly universal in the group of countries in 1999, and has remained so.⁷⁷ Private education remains marginal in the region, comprising less than 1% of primary pupils in 12 out of 25 countries with data, and enrolling a maximum of 4.7% in Hungary.

Almost all children enter primary school, complete the curriculum without repeating grades, and enter secondary education. Most will study until they graduate from upper secondary school, and a majority will have access to higher education. Children in the region can expect to spend more years in the school system than in any other group of countries except Western Europe and North America, with significant disparities between countries. In poorer countries including Azerbaijan, the Republic of Moldova, Tajikistan and Uzbekistan, children can expect to receive 11 to 12 years of education, compared with 14 to 15 years in most of Central Europe, and more than 16 years in the Czech Republic, Estonia, Lithuania, and Slovenia.

In technical terms, the gross intake rate in primary education is close to 100% in all countries with data, the adjusted net enrolment ratio in primary education ranges from 89% to 100%

across countries, and indicators of internal efficiency are satisfactory. Grade repetition rates and drop-out rates are very low in most countries, and more than 93% of students reach the last grade of primary school, with the exception of Montenegro (80%), where early drop out seems to be an issue. More than 97% make the transition to secondary education, except in Bosnia and Herzegovina (84%). Gross enrolment ratios in lower and upper secondary education range between 90% and more than 100% in most countries, indicating that education systems nearly have the capacity to accommodate all adolescents. Exceptions include a few poorer countries of the Balkan (Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia), Eastern Europe (the Republic of Moldova), and Central Asia (Tajikistan). Early school leaving is an issue acknowledged by country governments, and some of the few countries with data have sizeable numbers of out-of-school adolescents, including Tajikistan (50,000) and Uzbekistan (181,000) in Central Asia, but also Poland (50,000) and Ukraine (80,000).

Some countries in the region have developed bilingual education for their linguistic minorities. In Latvia, the medium of instruction in most public schools is Latvian, but private schools and public schools with programmes for linguistic minority students can use other languages of instruction. By 2013/14, 67% of primary and general secondary schools used Latvian as the medium of instruction, 24% used Russian, and 8% followed a bilingual Latvian and Russian curriculum.⁷⁸ In Slovenia, in the area of Prekmurje, schools use both Hungarian and Slovenian as medium of instruction, while in Slovenian Istria, schools use either Italian or Slovenian, the other language being compulsory as a subject. In 2014/15, training projects were initiated to raise the minority language competences of teachers in these regions.⁷⁹

However, pockets of educational deprivation persist among marginalized populations and in countries in fragile situations⁸⁰. In Bosnia and Herzegovina, the functioning of primary education is constrained by multiple factors related to the post-conflict situation of the country: a dearth of public resources, an 'irrational network of primary schools', a poor school infrastructure lacking facilities for children living with disabilities, and a context of poverty, unemployment and low levels of parental education. Even though measures such as free textbooks, free transportation to school and school-based health care have been introduced, significant numbers of children 'remain excluded from education' or 'leave education before finishing primary school'. 8% of pupils fail to complete primary education, up to 11% in rural areas. 31% of Roma children are not enrolled at primary level.⁸¹ Throughout Central and Eastern Europe, participation in education at compulsory levels is far from being universal among Roma populations. Slovenia has a Roma Education Strategy adopted in 2004 and revised in 2011 and a National Programme of Measures for the Roma 2010-2015, under which a wide range of measures have been taken including the publication of textbooks in Roma dialects, the introduction of Roma culture as an optional subject, the creation of networks of teachers teaching Roma pupils and training seminars.⁸²

The situation of children living with disabilities is also difficult in several countries. In Armenia, estimates put the number of children with special educational needs at 8,000, but administrative figures find only 4,000 of them enrolled either in inclusive schools (i.e. mainstream schools adapted to accommodate them) or in specialized institutions. It is not clear how many of the other 4,000 are excluded from education, or attend school with their special needs being identified.⁸³ In the Russian Federation, following the ratification in 2012

of the 2006 Convention on the Rights of Disabled Persons, the network of separate education institutions for children living with disabilities is being complemented with measures to include more of those children in ordinary schools, for instance to appointment of teaching assistants, the design of adequate textbooks and teaching methods, and the adaptation of school buildings (with the aim of making 20% of schools fully accessible by 2015). Of the 426,000 children living with disabilities enrolled in Russian general education in 2014/15, more than half attend inclusive schools.⁸⁴

The existence of separate school streams reinforces social and educational inequalities in several countries. For instance, in the Czech Republic, pupils at primary and secondary levels are streamed either to selective schools or to general schools (*gymnázia*), with schools competing to attract the better pupils. Streaming contributes to the country's wide inequalities in learning outcomes, and the 2004 Education Act attempted to promote inclusive education by abolishing the distinction between the two types of schools and promoting 'inclusive education'. However, this move was resisted by families, as 'the public shares the view that streaming children into selective and non-selective branches is appropriate', and tends to see inclusive education 'as filling classrooms with diverse students at all levels of ability while sticking to existing methods and resources'.⁸⁵

EFA goal 3: Learning needs of young people and adults

In comparison with other regions, countries in Europe and North America provide a wide range of learning opportunities for young people and adults. However the quality of the education and training provided varies, and access tends to be inequitably distributed within countries, leaving out disadvantaged persons with the greatest learning needs.

The learning needs of youth and adults include:

- completion of upper secondary education;
- technical and vocational education and training;
- higher education; and
- adult education in a lifelong learning perspective.

Completion of upper secondary education

Early school leaving has been identified as a policy issue in the European Union. By 2013, 12.0% of youth aged 18-24 in the Union had at most lower secondary education and were 'not in employment, education or training' (NEET), down from 14.2% in 2009. Young men were more likely than young women to be in that situation (13.6% vs. 10.2%), and foreign-born youth were much more affected than native-born youth (22.6% vs. 11.0%). The share varied dramatically across countries, however. It was below 7% in six countries of Central Europe (Croatia, the Czech Republic, Lithuania, Poland, Slovakia and Slovenia) and in Luxembourg, and higher than the European Union average in only seven countries, including the United Kingdom (13.5%) and six countries of Southern Europe (Bulgaria, Italy, Malta, Portugal, Romania and Spain). Nearly one in five youth were concerned in Portugal, and nearly on in four in Spain.⁸⁶ The European Commission's Europe 2020 strategy aims to bring the share of youth dropping out of education and training down to 10% by 2020 at the Union level, with country-specific targets. For instance, Bulgaria reduced the same share from 14.7% in 2009 to 12.5% in 2013, and its target for 2020 is 11%.⁸⁷ Building on a series of

programmes implemented over 2007-2013, the country defined a strategy for 2013-2020. The focus is on retaining youth from ethnic minorities or with special educational needs in the education system, and improving their learning outcomes.⁸⁸

Disadvantaged youth are particularly at risk of leaving school early. Teenage pregnancy was estimated to reduce the probability of being in school after the age of 16 by 24% in the United Kingdom.⁸⁹ In Latvia, 19% of rural male youth aged 18-24 left school early, compared with 4% of urban female youth.⁹⁰ In Romania as well, drop out varies dramatically between urban areas, where 95% of youth aged 14 graduate from lower secondary school, and rural areas, where only 71% do. The lack of upper secondary schools deprives one-fifth of rural youth from access at that level.⁹¹

Countries are trying to reach NEET youth via active education and labour market policies. In France, the priority is to address early school leaving *per se*, with education measures including the announced recruitment of 60,000 additional teachers over 2012-2017, the reform of education priority zones mentioned above, and specific measures to bring early school leavers back into the system. A task force offered support to 11,000 youth in 2013 and 2014 to re-enrol and prepare for national examinations, and another aims to reach 25,000 youth in 2014 and offer them either training or work as part of the national civic service.⁹² Within the United Kingdom, England has extended compulsory education by two years, to the age of 18 by 2015.⁹³

Nordic countries rely on individualized career guidance coupled with skills development programmes. In Norway, students who leave the education system after completing compulsory education are contacted by a follow-up service and proposed either enrolment in upper secondary education, a combination of education and work, or job placement. Upper secondary students receive study counselling and career guidance, and those who drop out at that level may later register as private candidates at examinations. The Norwegian Labour and Welfare Administration also runs target training courses of the unemployed.⁹⁴ In Finland, where 'every individual who drops out from education and the labour market is seen as a tragedy and a significant cost to society', the share of NEET youth is low and has not increased much since the 2008 crisis. The country's Youth Guarantee brings together the government, employer and youth organization to offer 'each young person under 25 and recently graduated people under 30 a job, on-the-job training, a study place, or a period in a workshop or rehabilitation within three months of registering as unemployed'. The Guarantee relies on a series of measures aimed to reduce drop out from vocational education, develop workplace-based learning for youth with low qualifications, and prepare youth with severe illness or disabilities for 'work and independent life'. A Skills Programme for Young Adults (2013-2016) further targets youth under the age of 30 with no qualifications, and provides them with a vocational qualification. By January 2014, 80% of participants had been NEET when they joined the programme, which thus seemed to reach its target.⁹⁵

In Georgia, the Ministry of Education and Science operates several programmes for youth held in penitentiary establishments. General education is provided by public school teachers or specific, contract teachers, with the aim of allowing participants to study further once

they are released from prison. Vocational education has been recently introduced, with the aim of facilitating re-integration in civil society.⁹⁶

In Romania, a second-chance education programme started in 1999/2000 was gradually expanded and has been operating nationwide since 2007/08. The programme targets youth who dropped out of compulsory education and gives them both general education and vocational training, based on an assessment of their skills.⁹⁷

Technical and vocational education and training

Countries of Western Europe and North America follow distinct national traditions regarding technical and vocational education and training (TVET). In 2012, within Western Europe, the share of upper secondary students attending pre-vocational or vocational programmes varied from less than one-third in Ireland to three-quarters in Austria. It was high in countries with dual apprenticeship systems, including Germany (48%) and Switzerland (65%) – where about nine in ten vocational students attended programmes combining school-based and work-based training – as well as in Nordic countries, Belgium (73%) and Italy (59%). It tended to be lower in other Mediterranean countries, where most programmes were school-based only. France was in an intermediate position, with 44% of upper secondary students in vocational programmes, but 73% of those in school-based programmes. In stark contrast with Western Europe, almost all upper secondary students in Canada and in the United States attended general programmes.⁹⁸ Finally, technical and vocational education and training has expanded rapidly in Turkey, from 32% of upper secondary students in 2002/03 to 46% in 2013/14.⁹⁹ Turkey has a Vocational and Technical Education Strategy Document and Action Plan (2014-2018) comprising three main policy axes: Access to vocational and technical education; capacity in vocational and technical education; and employment with vocational and technical education.

Technical and vocational education and training accounts for 20% of secondary school enrolment in Central and Eastern Europe,¹⁰⁰ ranging from 1.4% in Tajikistan to 39% in Bosnia and Herzegovina. Countries with a strong TVET track (close to or above 30%) are the six countries of the former Yugoslavia, and five other countries of Central Europe (Bulgaria, Czech Republic Poland, Romania and Slovakia). TVET is less developed in Eastern Europe, the Caucasus and Central Asia, though with large variations (Russian Federation: 17%, Ukraine: 9%).

Several countries are planning to expand TVET. For instance, Estonia aims to reach 40% of upper secondary enrolment in TVET by 2020 and to make it as attractive to students as the general track. A new curriculum was introduced in 2013, aligned with the national qualifications framework, and more work-based learning is to be provided (the share of apprentices among TVET students should increase to 7% by 2020).¹⁰¹ With the aim of promoting youth employment, Latvia seeks to bring the share of secondary students in TVET to 50% by 2020, along with structural reforms of the sector – for instance, occupational standards and basic vocational qualifications are being redefined in cooperation with employers and experts.¹⁰²

The quality of technical and vocational education and training is crucial. If weaker students are tracked to TVET and the labour market relevance of TVET is poor, tracking risks

perpetuating social inequalities, by translating initial disadvantage in terms of family background and educational achievement into long-term disadvantage in the labour market.¹⁰³ In the Czech Republic, students tracked to TVET tend to be those with lower cognitive skills, especially in reading literacy. TVET is offered with narrow specializations which do not respond to expectations of students, leading to high levels of dissatisfaction and low completion rates. Qualifications are not matched to labour market demand, hence youth holding a vocational certificate instead of an upper secondary school degree have the highest risk of being unemployed, both in the short term and in the long term.¹⁰⁴

- Countries tend to delay the age at which students are separated into the general track and the TVET track, and provide a common curriculum for all up to the age of 15. This helps ensure that as many students as possible acquire core skills that are necessary in both tracks. Countries in Europe which conducted that reform, such as Poland, saw the average performance of their students increase, and made their TVET systems more attractive to high performing students.
- Some countries are making the separation between general education and TVET less rigid, by offering TVET students routes back into general education, or by including more general education subjects in the TVET curriculum. In Switzerland, a special one-year programme allows TVET graduates to catch up on academic subjects and enter university – in 2010 about 13% of 21-year-olds were participating in the programme.¹⁰⁵

Dual apprenticeship systems succeed in delivering quality TVET and facilitating access to employment, but they represent country-specific traditions that are difficult to replicate elsewhere. In Germany, dual apprenticeship is open to all students who completed lower secondary education at age 15, and lasts two to three and a half years. Apprentices are employees, paid by the company where they receive structured training; they also attend part-time classroom tuition in vocational and general subjects. The system operates on a very large scale, as 60% of youth enter apprenticeships, which are offered in around 340 occupations, whether in manufacturing, trades or services. 57% of those who complete their apprenticeship are immediately hired by their training company, hence the system contributes to Germany's success in keep youth unemployment at low levels. The system has existed for decades and depends on cooperation between federal and local governments, employers and employees; it responds to the needs of Germany's many export-oriented, small and medium-sized industrial firms that have a strong demand for high-skilled employees.¹⁰⁶

France aims to expand and renovate its apprenticeship system. Youth trained as apprentices are more likely to find employment than those who received school-based training in TVET institutions. However, the system still operates on a much smaller scale than in Germany. The number of apprentices increased rapidly between 2004 and 2008, but stagnated until 2010, to increase again to 463,300 in 2011/12. The policy objective is to reach 500,000 apprentices by 2017. In 2014 the French training levy was amended to increase resources in apprentice training centres.¹⁰⁷

Cyprus is also trying to introduce dual apprenticeships. First, since 2012-13 a 'new modern apprenticeship' has been introduced as a pilot, which should offer training in specialisations

forecast to be on demand in the labour market in the future, using new and advanced technologies. Second, a 'skills enhancement' programme targets youth aged 15-24 with low skills, offering them apprenticeships in private enterprises coupled with vocational training in public and private institutions. The aim is to reach 1,250 youth and to address skills gaps in specific technical professions. Third, over 2014-2020, the curriculum of initial TVET is to be reformed to include practical experience through placement in industrial firms, which should receive incentives to employ TVET students. These measures however are challenging, as apprenticeship has a low image among students and their families, and there is no formal agreement as yet between the government and social partners to increase the provision of work-based training.¹⁰⁸

Higher education

Access to higher education varies dramatically across countries of Western Europe and North America. Finland has made it nearly universal, with a gross enrolment ratio in tertiary education of 94%. In most other countries, the ratio ranges from 55% to 80%, with lower values in large Western European countries (France: 58%, Germany, Italy and the United Kingdom: 62% each). Besides the expansion of higher education, high ratios in Spain (85%) and, especially, Greece (114%) might reflect the impact of the crisis on youth employment – some youth extend their education to delay their entry in the labour market. The high ratio in the United States (94%) results from a wide diversity of institutions addressing students with different academic achievement and income levels. The country's universities also hosted 740,000 foreign students in 2012 – 33% of all foreign students in Western Europe and North America.

Access to higher education has increased dramatically since 1999 in most countries of Central and Eastern Europe. It is now nearly universal in Belarus (gross enrolment ratio of 91%), and in Slovenia (86%). Enrolment has converged with Western European levels (55% to 80%) in thirteen other countries, including Poland: 73% and the Russian Federation (76%). In the Czech Republic, quantitative expansion (the net enrolment ratio went up from 30% in 2011 to 65% in 2011) has been accompanied with a diversification of courses offered, with the development of technical and vocational higher education, and with the creation of bachelor's programmes followed up with master's programmes, replacing earlier programmes which were all leading only to a master's degree.¹⁰⁹ Higher education has been progressing as well in South-Eastern Europe, where 40% to 50% of youth enrol. In stark contrast, the situation of higher education in the Caucasus and Central Asia is a cause for concern, as enrolment ratios are low and have stagnated or even decreased since 1999 (from 36% to 28% in Georgia and from 13% to 9% in Uzbekistan). With 144,000 foreign students, the Russian Federation is a higher education hub, hosting 44% of all foreign students in Central and Eastern Europe.

The quantitative expansion of higher education in Europe has been accompanied with wide-ranging curriculum and institutional reforms under the Bologna process initiated in 1999. This led to the creation in 2010 of the European Higher Education Area, which includes almost all countries of the continent (Section III.1).

Adult education in a lifelong learning perspective

Access to adult education and training is contrasted and favours adults with the highest initial skills levels.¹¹⁰ For instance, within the European Union, access to continuing education and training among adults aged 25-64 in 2008 varied from 1% in Bulgaria to 33% in Sweden. In Western Europe, continuing education and training was well-developed in Nordic countries (reaching one-fifth to one-third of adults), as well as in the United Kingdom and the Netherlands. In other countries, only 5% to 10% participated, with the lowest rates in Southern Europe (less than 5% in Greece and 4% in Turkey). In Central and Eastern Europe, across twelve countries with data, participation was below 5% in eight, reaching more than 10% only in Estonia and Slovenia. In all countries, workers with low skills were considerably less likely to receive on-the-job training than those with high skills. Data from the United States also show participation in work-related courses among adults to increase with education levels, household income and occupation status, and to favour full-time employees over part-time employees and, especially, the unemployed.

Several countries in Western Europe are designing lifelong learning strategies and national qualifications frameworks. Cyprus has a Lifelong Learning Strategy for 2014-2020, with four axes: expanding access to lifelong learning, improving its quality, focusing on the employability of learners, and promoting research and development. Reflection is under way for the recognition of work experience (informal and non-formal learning). A national qualifications framework is being developed; after a first phase (2006-2009) covered only five standards of vocational qualifications, a second phase (2007-2015) will cover 80 standards in a wide range of sectors, from hotels and restaurants to systems and networks of communication. The framework will be consistent with the European Qualifications Framework.¹¹¹

In Greece, a new law on lifelong learning was adopted in 2010 following public consultations, leading to the adoption of a national qualifications framework and the establishment of a national qualifications certification authority. Among other measures, the law provides for special leave for employees to participate in lifelong learning programmes, and the introduction of individual training accounts to which both employers and employees contribute.¹¹²

In Norway, the agency for lifelong learning (Vox) promotes formal, non-formal and informal adult education, and subsidizes study associations, distance learning institutions and study centres. In 2013, 493,000 adults attended a course provided by a study association, of whom 42% were above 50 years, and 57% were women. Lifelong learning is also part of the integration of refugees and immigrants. Under the guidance of the Directorate of Integration and Diversity, municipalities have to provide a compulsory 'introduction programme' to refugees and their families, which includes an introduction to Norwegian language and society, and a preparation for entering the labour market. Participants receive financial support (equivalent to US\$15,000-20,000 a year).¹¹³

Turkey has a strategy paper, and an action plan for the years 2014-2018, with six priorities for lifelong learning (awareness in society, opportunities and services, access, guidance and counseling, recognition of prior learning, monitoring and evaluation). The six priorities translate into 29 measures which are being carried out by different stakeholders such as

Ministries, other public institutions, the Union of Municipalities, Workers' and Employers' Union Confederations and relevant non-governmental organizations. Turkey is also developing a Turkish Qualifications Framework in line with the European Qualifications Framework.¹¹⁴

Countries of Central and Eastern Europe are moving in the same direction, although the shares of adults participating in lifelong learning remain lower and the preparation of national qualifications frameworks is usually less advanced. Bosnia and Herzegovina has adopted a strategy for lifelong learning and adult education (2014-2020), as part of its cooperation with the European Union, and is preparing for its participation in the Erasmus+ programme and the Platform for Adult Learning in Europe. A national qualifications framework is being developed over 2014-2020, which will be compliant with the European Qualifications Framework.¹¹⁵

Estonia's lifelong learning strategy aims to bring the share of adults participating to 20% by 2020, up from 10.5% in 2010, and to reduce the share of adults without any vocational training.¹¹⁶

Lithuania adopted a lifelong learning strategy in 2008, a Lithuanian Qualifications Framework in 2010, and a new law on non-formal education in 2012. However, these initiatives are yet to reach their objective of bringing participation in lifelong learning to 15% – the current level is 5.2%. Multiple causes have been identified, from the lack of lifelong learning institutions, to quality gaps in existing courses ('means of adapting curricula to adult mentality; application of andragogy knowledge, flexibility, relevance of courses'), a lack of motivation among adults, and a lack of recognition of non-formal education by employers.¹¹⁷

In Romania, a national lifelong learning strategy has been in preparation since 2013, structured by three pillars: access and incentives for participation, quality and relevance, and 'partnership for a better information'. The strategy should have been finalized by the end of 2014. At present, lifelong learning is under-developed in Romania, with only 1.6% of adults participating in 2011. A survey revealed difficulties including low levels of confidence among participants with low qualifications, high costs of training for participants receiving no support from their employer, and training courses that were too long and not flexibly timed.¹¹⁸

Slovakia adopted a lifelong learning strategy in 2007, which was revised in 2011, with the identification of key learning needs (financial literacy, business skills, communication in world languages and active citizenship). The country is currently developing a system of further education, in which vocational schools, mainly, will provide adults with 500- to 600-hours courses aimed to gain desired qualifications. The quality of further education and the recognition of learning outcomes are priority areas, as prerequisites to increasing participation in adult learning courses. Slovakia is thus starting to develop a national qualifications framework.¹¹⁹

Slovenia as well adopted a lifelong learning strategy in 2007. In 2010, a National Programme of Adult Education defined objectives such as 18% of the population aged 25-64 participating

in lifelong learning, or one-third of adults with no qualification completing an equivalent to basic education.¹²⁰

Uzbekistan is developing a national qualifications framework in cooperation with the European Training Foundation. The existing supply of continuing vocational training to adults through centres run by the ministries of Labour and of Higher Education has been complemented with programmes conducted in cooperation with Switzerland and Germany. For instance, between 2002 and 2006, the German organization dvv ran 500-class period courses for unemployed adults on the premises of vocational colleges, upon completion of which 70% of participants returned to employment.¹²¹

EFA goal 4: Adult literacy

Despite the development of its education systems, Europe and North America still has large numbers of adults with poor literacy and numeracy skills. Admittedly, conventional literacy figures stating whether a person is 'literate' or 'illiterate' paint a positive picture:

- Countries in Western Europe and North America have a very small share of adults who are unable to read and write at all. Adult literacy figures are available only for six countries of Southern Europe, where the adult literacy rate ranged between 92% (Malta) and 99% (Italy) over 2005-2012. In countries with larger populations, this corresponded to significant numbers of illiterate adults (aged 15 and above), for instance in Spain (833,000 persons), Italy (510,000) or Portugal (495,000). However, there were almost no youth aged 15-24 among them: Aside from the immigration of illiterate persons, full illiteracy should keep receding rapidly over the next decades in the group of countries. Turkey stands apart from Western Europe and North America in this respect, with an adult literacy ratio of 92% for women, and 2.8 million illiterate adults, 84% of whom are women.
- Adult literacy is nearly universal in Central and Eastern Europe as well. Adult literacy rates for 2005-2012 (available for 21 out of 25 countries) ranged between 97% in Albania and 100% in eleven countries including the Russian Federation. Nevertheless, a few of the same countries report significant numbers of adult illiterates, up to 258,000 in Romania and 386,000 in the Russian Federation. Central and Eastern Europe would thus have a total of 1.45 million illiterate adults. Again, numbers of illiterate youth are much lower (160,000 for the group of countries), and the numbers of fully illiterate adults should keep decreasing in the future. In the Russian Federation, 'the majority of the illiterate population is composed of people aged 60 and above; the great majority of other illiterate persons have serious physical and mental deficiencies.'¹²²

There are two qualifications. First, difficulties faced by several education systems during the 1990s and early 2000s with the closing down of schools and a reduction in education budgets may have translated into an increase in illiteracy among persons who attended school in those years. In Bulgaria, 2.27% of young adults aged 20-29 were found to be illiterate in a recent survey, compared with 1.14% of older adults aged 30-64.¹²³ Second, pockets of illiteracy will likely persist in marginalized social groups in the poorest countries. In Bosnia and Herzegovina, a 2013 survey showed that 2% of men and 12% of women aged 15-24 whose highest level of education was primary school were unable to read a statement shown to them, and the share went up to 31% among Roma women.¹²⁴

Literacy in Roma communities remains low in most countries of Central and Eastern Europe.

Conventional literacy figures underestimate the share of adults living in Europe and North America who are functionally illiterate, i.e. face difficulties in everyday life or at the work place in applying reading and writing skills, in performing simple mathematical operations, or in solving problems. Most of these persons were enrolled in basic education, but left school early with low skills, and have lacked opportunities to upgrade them. National assessments of adult skills show functional illiteracy to affect a significant share of the population. In Germany, a 2010 assessment found that 14.5% of the population aged 18-64, or 7.5 million persons, were functionally illiterate. Only 0.6% could not read at all (the conventional definition of illiteracy), but as many as 10%, while being able to read single sentences, were unable to understand a text.¹²⁵ In France, a 2011 survey found that 7% of persons aged 18-65 who had been educated in France were functionally illiterate, or 2.5 million persons (excluding overseas territories).¹²⁶ A similar assessment put functional illiteracy at 8% of the adult population in Scotland. In the French community of Belgium, a permanent steering committee on adult literacy was created in 2005, bringing together concerned ministries, public administrations and non-government organizations. The committee has published six status reports with detailed information on institutions and programmes that offer youth and adult literacy courses. However, there are no data on actual skills levels, so that needs for such courses have to be estimated from educational attainment – by 2010, 700,000 persons without any qualification or no more than primary education were considered at risk of being illiterate, representing more than one in five persons aged 15 and above and no longer in education. Recent years have seen efforts to collect better data and to improve the coordination of course providers.¹²⁷

France recognized the issue of '*illettrisme*' in the 1980s, and in 2000 the French government created a national agency responsible for collecting data and coordinating interventions from the state, local authorities and social partners, with the following objectives: informing teachers, developing ties between schools and families, improving school learning and the mastery of language, and develop state-NGO partnerships in the field of adult literacy.¹²⁸

In Germany, the federal government and the *Länder* adopted in 2011 a Joint National Strategy for Literacy and Basic Education for Adults in Germany 2012-2016. The strategy reaches out to institutions of continuing education as well as to the professional and social environment, involving municipalities and trade unions.¹²⁹

International surveys of adult literacy skills show that an even larger share of adults have poor literacy and numeracy skills. Building up on the International Adult Literacy Survey (IALS) conducted in 1994, 1996 and 1998 in 20 countries and on the Adult Literacy and Life Skills (ALL) surveys conducted in 2003 and 2006-2008 in ten countries, the OECD collected the Survey of Adult Skills (PIAAC) in 2011-2012. Twenty-four countries participated globally, including sixteen in Western Europe and North America¹³⁰ and five in Central and Eastern Europe.¹³¹ A second round (2012-2016) will add data from nine countries, including three in Western Europe and North America (Greece, Israel and Turkey) and two in Central and Eastern Europe (Lithuania and Slovenia). The survey focuses on measuring literacy, numeracy and problem-solving skills as relevant to working in 'technology-rich environments'.¹³²

In the first round of the Survey of Adult Skills, one in seven adults had poor literacy skills, and one in five had poor numeracy skills. 3.3% scored below Level 1 on the literacy scale. They were only able to 'read brief texts on familiar topics and locate a single piece of information identical in form to information in the question or directive'. A further 12.2% of adults scored at Level 1. They could 'read relatively short digital or print continuous, non-continuous, or mixed texts to locate a single piece of information, which is identical to or synonymous with the information given in the question or directive' – but no more. Numeracy skills appear to be tightly correlated with literacy skills. 5.0% of adults scored below Level 1 on the numeracy scale, and 14.0% at Level 1.

- Western Europe and North America appears to have a large population of adults with poor literacy and numeracy skills, despite universal school participation and either non-existing or high conventional literacy rates. In most countries, 10% to 20% of adults score at or below Level 1 on the literacy scale, and 12% to 25% on the numeracy scale. These shares are consistently lowest in Finland and the Netherlands. Conversely, France, Italy, Spain and (in the case of numeracy) the United States stand out, with one-quarter to one-third of their adults scoring at or below Level 1 – 28% of Italian adults have poor literacy skills and 32% poor numeracy skills.
- The five participating countries of Central and Eastern Europe face a less formidable challenge. Poland has relatively high shares of adults with poor skills (19% in literacy and 24% in numeracy). In clear contrast, the Czech Republic, Estonia, the Russian Federation¹³³ and Slovakia have fewer adults with poor skills than most countries of Western Europe and North America (less than 15% on either scale).

Considering Europe and North America as a whole, mean literacy and numeracy scores are highest in Northern European countries (Finland, the Netherlands, Norway and Sweden), followed by countries of Central and Eastern Europe except Poland. They are lowest in countries of Southern Europe (including France), as well as Ireland and the United States, both among adults aged 16-65 and among youth aged 16-24.

Inequalities are much larger within countries than between them. Governments should not only be concerned with the mean score of their country, but also make reducing skills gaps a policy priority. Persons who are significantly more likely to have low skills include adults with educational attainment below upper secondary level, adults whose parents had low educational attainment, workers in elementary occupations, immigrants with a foreign-language background, as well as older adults.

Adults with poor skills face multiple sources of disadvantage. They are more likely to be out of the labour force, or to be unemployed; those employed receive lower wages. They also find it more difficult to participate in society, e.g. they are more likely to have lower levels of trust in others, to believe that they have little impact on the political process and not to participate in associative or volunteer activities. Finally, they are more likely to be in poor health.

EFA goal 5: Gender parity and equality

School participation in Europe and North America does not show major gender disparities at pre-primary, primary or secondary level. Education indicators are broadly consistent with

official statements such as: 'Equal access to education is ensured by law, policies and practice at all levels'¹³⁴, with two qualifications:

- Boys are more likely than girls to drop out from upper secondary school, especially in disadvantaged social groups. In 2013, the share of youth aged 18-24 with at most lower secondary education who were not in further education or training was higher among males than among females in 26 out of 28 countries of the European Union.¹³⁵ In the Czech Republic, the combination of the gender gap and class differences results in 'bimodal' education of boys: 'Education works as a mechanism that holds men from elite social groups at top levels of the social ladder, while men from disadvantaged social groups are kept at the bottom.'¹³⁶
- Girls are severely disadvantaged in some marginalized social groups. In Bosnia and Herzegovina, the attendance of Roma children is low at primary level (68% of girls and 71% of boys attend) and becomes much lower at secondary level, with a wide gender gap: only 18% of girls attend secondary education and 4.5% complete high school, compared with 27% and 9.2% of boys, respectively. Extreme educational deprivation among Roma women echoes low levels of female education in the country more generally.¹³⁷

In higher education, young women outnumber young men. Beyond upper secondary education, a striking gender gap in participation appears in almost all countries of Europe and North America. Young women make up a majority of higher education students in 19 of 22 countries with data in Western Europe and North America, and in 23 of 25 countries in Central and Eastern Europe – up to 60% of students in Iceland, Norway and Sweden, and in Lithuania, Poland and Slovakia. The Russian Federation alone has nearly 800,000 more female than male students, and Poland nearly 400,000.

In contrast with the situation that prevailed a few decades ago, women thus tend to have higher attainment than men in most of Europe and North America. Today, a girl can expect to spend more years in education than a boy in 16 of 19 countries with data in Western Europe and North America, especially in Anglo-Saxon and Nordic countries (for instance, 0.9 year in the United Kingdom, 1.6 in the United States, and up to 2.3 in Iceland) and 17 of 20 countries with data in Central and Eastern Europe (for instance, 0.8 years in Romania, 1.6 in Poland, and up to 2.0 in Estonia). In the French community of Belgium, the initial female disadvantage in education was reversed within two generations. Among persons aged 65 and above, only 11% of women aged 65 and above were highly qualified, compared with 19% of men; among persons aged 25-34, 49% of women are, compared with 42% of men.¹³⁸ In Latvia, change has been dramatic. By 2000, about 14% of the population had received higher education, whether women or men; by 2013, the share had risen to 20% among men, but 31% among women.¹³⁹ In the United Kingdom, 41% of adults had earned a tertiary qualification by 2012, reaching 48% among 25-34 year-olds and up to 50% among young women. In England, in 2011/12, 54% of females aged 17-30 participated in higher education, compared to 45% of men.¹⁴⁰

Turkey differs from Western Europe and North America as far as gender disparities are concerned. The country nearly eliminated gender disparities in primary and lower secondary education between 1999 and 2012 as girls' enrolment ratios caught up with boys'. Gender

parity at upper secondary level was in sight, with gross enrolment ratios of 71% for girls and 78% for boys in 2012, according to UIS. According to national statistics, it had been nearly achieved by 2013/14, with 95 girls enrolled for 100 boys. A Project for Increasing Enrolment Rates Especially for Girls (ISEG) was run between 2011 and 2013 in 16 provinces of Eastern Turkey where female enrolment ratios were particularly low. A Project for Promoting Gender Equality in Education started in 2014.¹⁴¹ Participation in higher education has progressed quickly for both genders since 1999, but young men still outnumber young women, with gross enrolment ratios of respectively 75% and 64% in 2012, according to UIS. Boys can expect to spend 1.2 years more than girls in the school system.

Tajikistan and Uzbekistan differ from the rest of Central and Eastern Europe in a similar way, with much lower participation in tertiary education among young women – the gross enrolment ratio is as low as 15% for young women in Tajikistan, compared with 29% for young men.

Girls tend to outperform boys in terms of learning outcomes, but the difference varies across fields of study and countries. The latest internationally comparable data are from PISA 2012,¹⁴² which covered students aged 15 in all countries of Western Europe and North America except Malta,¹⁴³ and in fifteen countries of Central and Eastern Europe.¹⁴⁴

- **Girls are better readers than boys.** The average reading score of girls was significantly higher than the score of boys in all countries that participated in PISA 2012. In half of Western Europe and North America and all of Central and Eastern Europe (except Albania), the difference was equivalent to at least one year of schooling. In Western Europe and North America, the gap was widest in Finland where the average score of girls exceeded the score of boys by 12.5%, and narrowest in the United Kingdom (5.1%). In Central and Eastern Europe, the gap was widest in Bulgaria (17.3%) and narrowest in Albania (3.8%). Wide gender gaps were found in countries with either high or low average scores, and there were no obvious sub-regional patterns. However, there was a clear time trend: The gender gap widened in all countries which participated in PISA in 2000 and 2012 (again with the exception of Albania).
- **Boys tend to outperform girls in mathematics**, although the difference is not always significant and in any case much smaller than in reading. In PISA 2012, boys outperformed girls in 15 countries of Western Europe and North America, but there was no significant difference in six countries, and girls outperformed boys in one country (Iceland). In Central and Eastern Europe, boys outperformed girls in six countries and there was no significant difference in nine countries. There was no uniform trend over 2003-2012.
- **Girls and boys have the same learning outcomes in science.** Gender differences were not significant in 13 countries of Western Europe and North America and nine countries of Central and Eastern Europe. When significant, gender differences could favour either girls or boys, were not large, and had not evolved noticeably in most cases since 2006.¹⁴⁵

However, gender inequalities persist in European and North American societies, in education and beyond:

- **Despite efforts to remove them, gender stereotypes have not fully disappeared from curricula, textbooks and classroom practices.** In that respect, it should be noted that, throughout Europe and North America, the share of women among teachers decreases as the level of education and the age of students increase. Women comprise nearly all

teachers at pre-primary level, more than 80% at primary level, around two-thirds at secondary level, but less than half at tertiary level. The choice of fields of study also reflects enduring gender stereotypes. Around three-quarters of students in education and in health and welfare are young women, compared with only one-quarter in engineering and construction and two-fifths in science.

The French community of Belgium started an action plan for promoting gender equality in 2005. Among other aims, the plan sought to remove gender stereotypes from textbooks, reduce gender disparities in vocational training programmes and in the teaching profession, and promote women's participation in science and research. These objectives were re-affirmed in the *Déclaration de politique communautaire* for 2009-2014.¹⁴⁶

In France, girls make up nearly 80% of students who take general high school graduation exams in literature, compared with 61% in social sciences and 46% in sciences. Boys comprise 68% of youth in dual apprenticeship, and 72% of higher education students receiving an engineering degree.¹⁴⁷

Estonia succeeded in bringing the share of women among science graduates to 42% in 2009, well ahead of the European Union average. However, this was in a context of particularly low male participation in higher education – 70% of all graduates were women, and up to 90% in educational and welfare services fields.¹⁴⁸

Education was one of the areas covered by the former Yugoslav Republic of Macedonia's 2007-2012 National Action Plan for Gender Equality. Besides changes in the curriculum at primary and secondary levels, the emphasis was on training teachers to help them identify gender stereotypes and prejudices.¹⁴⁹

- **Women face barriers participating in politics and in the labour force**, among other areas, which prevents them from reaping benefits from their education. In Western Europe, labour force participation rates are particularly low in Southern countries (only 53% of women are in the labour force in Italy, 59% in Greece) as well as Ireland (62%). The labour force participation rate is higher than 75% only in the four Scandinavian countries and in Switzerland. In Central and Eastern Europe women are least likely to participate in the labour force in the poorer countries of South-Eastern Europe (42% in Bosnia and Herzegovina and 43% in the Republic of Moldova); participation is higher in Central Europe per se, in the Russian Federation (68%) and particularly in the Baltic states (up to 72% in Estonia and Latvia). With a female labour force participation rate of only 32%, Turkey is an exception in the region.

EFA goal 6: Quality of education

Improving the quality of education is the greatest challenge facing countries of Europe and North America. Several countries in East Asia and the Pacific now have higher learning outcomes than any country in the region. Learning outcomes are stagnating or decreasing in several countries, reflecting a deep crisis in teaching and learning. Even though pupil/teacher ratios are low, teacher recruitment is a concern in several countries as large numbers of teachers will retire in the coming decade, and the profession is not attractive enough. Besides, policy answers are needed to improve teacher education, training and management.

Learning outcomes

Learning outcomes in primary and secondary education are well documented for Europe and North America as most countries conduct regular national assessments and participate in international assessments. The most recent international data available are:

- The 2012 round of PISA (Programme for International Student Assessment), collected by the OECD in its 34 member states as well as 31 partner countries or sub-national entities.¹⁵⁰ PISA 2012 focused on the mathematics performance of students aged 15, but also covered reading and science. All countries in Western Europe and North America participated, except Malta, which had participated in previous rounds. In Central and Eastern Europe 15 countries participated;¹⁵¹ four more had participated in previous rounds.¹⁵² The next round will take place in 2015.
- The 2011 rounds of PIRLS (Progress in International Reading Literacy Study) and TIMSS (Trends in International Mathematics and Science Study), collected by the IEA (International Association for the Evaluation of Educational Achievement) in respectively 49 and 63 countries or sub-national entities.¹⁵³ PIRLS covers reading for grade 4 pupils and TIMSS mathematics for grade 4 and grade 8 pupils. 19 countries of Western Europe and North America and 16 countries of Central and Eastern Europe participated in at least one of the surveys. The next rounds will take place in 2015 (TIMSS) and 2016 (PIRLS).

PISA 2012 results confirmed PISA 2009 rankings: Selected East Asian countries obtain the highest scores. Shanghai (China) had the highest mean score in mathematics (613), followed by six other countries or entities of East Asia. Besides Liechtenstein, the Netherlands (523) and Switzerland (531) were the only countries of Europe and North America among the top ten performers.

- In Western Europe and North America, nine countries had mean mathematics scores significantly higher than the OECD average of 494, including Nordic countries (Finland: 519), German-speaking countries (e.g. Germany: 514, Austria 506) and Canada (518). Five were close to the OECD average, including France and the United Kingdom. Nine countries were performing below that average, including most Mediterranean countries (Greece, Israel, Italy, Spain, Turkey), Sweden (478) and the United States (481).
- In Central and Eastern Europe, only three countries, Estonia (521), Poland (518) and Slovenia (501), had mean mathematics scores above the OECD average, and two were close to that average. Eight countries had mean scores comparable with those of Southern Europe or the United States, notably the Russian Federation (482) and Romania (445). Two countries of the Balkan (Albania and Montenegro) had much lower mean scores, comparable with those of Latin American countries.

Results for reading and science were broadly comparable.

Several countries in Europe and North America have large shares of students who do not reach the baseline proficiency level necessary for further education and access to employment – Level 2 on the PISA mathematics scale. In Western Europe and North America, that share is above one-quarter in six countries including the United States (25.8%), Sweden (27.1%) and Turkey (42.0%). In Central and Eastern Europe, nine countries are concerned, including Hungary (28.1%) and Romania (40.8%) – the share culminates at 60.7% in Albania. Unless they receive remedial education, these adolescents are likely to face major difficulties as youth and adults in their everyday life, in accessing employment or at the work place.

Trends in PISA scores differ across countries. In Western Europe and North America, several Nordic countries are affected by a decline in mean scores over 2000-2012 in reading, mathematics and science: Finland, Iceland and Sweden. In Finland, the decline in mean scores has been compounded by an increase in inequality: the relationship between students' socio-economic background and their scores has strengthened, and a group of schools now have scores below the OECD average. Working groups were appointed in 2014 to identify the causes for this situation and 'find ways to make students feel more motivated and enjoy schools', which should lead to a reform of basic education. A programme was also introduced in upper secondary schools to promote psychosocial well-being and life management skills, and to reduce bullying.¹⁵⁴

Meanwhile, several Mediterranean countries are making rapid progress: Mean scores on the three scales have been increasing in Italy and in Portugal – and even more rapidly in Israel and in Turkey, which are catching up with the rest of the region. Mean scores have stagnated in countries with large populations that had average or low mean scores in 2000, such as France, the United Kingdom and the United States. Germany is an exception: Reading and mathematics scores have increased continuously since the country suffered an initial 'PISA shock', with 2000 rankings below expectations.

In Central and Eastern Europe, Poland stands out with rapid increases in reading, mathematics and science. Countries of South-Eastern Europe which still have the lowest scores may be catching up with the rest of the region: Scores are increasing rapidly in Romania and Serbia for instance, and even more rapidly in Albania and Montenegro. Elsewhere, scores have either remained constant or increased somewhat, as in the Russian Federation. Only a few countries have to face declining PISA scores (the Czech Republic, Slovakia and Slovenia).

TIMSS 2011 data confirm the East Asian lead: The five top performers in both grade 4 and grade 8 mathematics were the Republic of Korea, Hong Kong (China) and Singapore, followed by Chinese Taipei and Japan. East Asian grade 4 pupils surveyed in 2007 were outperforming pupils from Europe and North America. Between 2007 and 2011 they made much more progress, so that the gap had widened when the same cohort was surveyed as grade 8 students in 2011: 49% of grade 8 pupils in Chinese Taipei reached the TIMSS 'advanced benchmark' in mathematics, and 27% in Japan, as compared with 14% in the Russian Federation and 12% in Israel – the best-performing countries in Central and Eastern Europe and in Western Europe and North America, respectively.

Several countries express concerns regarding the limitations of international assessments.

Belgium (Flemish community) argues that a broader perspective on quality than measureable cognitive skills could be adopted, relating quality with critical thinking and the preparation of students to active participation in democratic societies.¹⁵⁵ Norway states that taking into account other subjects than literacy and numeracy and measuring more than academic achievement would result in a very different picture: 'There are other international tests ... that monitor students' values, attitudes and democratic competencies, indicating that Norwegian education is doing well on these targets. Both girls and boys give strong support to gender equality and equal rights to all ethnic groups, and to major democratic processes. Norwegian students learn to participate in open discussions and take active part in democratic processes.'¹⁵⁶ Similarly, Sweden, while acknowledging relatively low and declining PISA scores, contends that 'the Swedish education system has other aims that are not highlighted by the international studies, both subject goals and overall curriculum goals such as, for example, desire to learn, responsibility and influence. The international studies are thus insufficient for drawing conclusions on trends in the results of the Swedish education system as a whole.'¹⁵⁷

Several countries are strengthening their national assessment systems. Among other examples:

- Armenia established an Assessment and Testing Centre in 2004 and introduced unified school leaving and university entrance examinations over 2007-2009. A national assessment covered Armenian language and literature and Armenian history in 2010, and physics and chemistry in 2011. Rules for classroom assessment were modified in 2008, following the adoption of a new curriculum for general education.¹⁵⁸
- Bulgaria conducted a first national assessment of grade 4 students in 2006/07 in four subjects (Bulgarian language and literature, mathematics, Man and nature, Man and society). Since 2009/10 grade 7 students as well take the assessment in six subjects (the four subjects above, plus civic education and religion, and a foreign language).¹⁵⁹
- Cyprus envisages creating national standardized tests at the end of each education level as part of the answer to relatively low PISA scores. The Centre for Educational Research and Evaluation already conducts a national survey of achievement in language and mathematics in grades 3 and 6 of elementary school, to identify pupils at risk of being functionally illiterate by the time they complete compulsory of education. Yet the country still lacks 'established, formal education standards against which the performance of pupils can be measured'.¹⁶⁰
- In Germany, the Standing Conference of the Ministers of Education and Cultural Affairs adopted a comprehensive strategy for educational monitoring including four interconnected areas: Participation in international comparative studies of student achievement, central review of the achievement of educational standards, comparative studies in order to review the efficiency of individual schools, and joint education reporting by the Federation and the *Länder*.¹⁶¹
- Hungary has an annual National Assessment of Basic Competences, which covers all pupils in grades 6, 8 and 10 and covers all pupils, and measures language and mathematics skills. Since 2008, data collection processes make it possible to track a

student's progress from one grade to the next. Besides, results at the class and school level are made public, parents can obtain their child's individual results.

- Slovakia recently ran a national assessment, Testing 9-2014, which confirmed results from international assessments: girls have better scores than boys in Slovakian or Hungarian language and literature, but also in mathematics, there are large disparities in average scores across districts, which are strongly correlated with socioeconomic factors such as unemployment.¹⁶²
- The former Yugoslav Republic of Macedonia introduced a national assessment in 2012/13, which covers all students in grades 4 to 9 of primary education and grades 1 to 4 of secondary education.¹⁶³
- Turkey has prepared a National Education Quality Framework, defining learning outcomes in 14 areas, such as mathematics or human rights and citizenship, and is developing corresponding assessment tools.¹⁶⁴

Some countries have defined a core curriculum content all students should master. Bosnia and Herzegovina defined a common core curriculum in 2010, with achievement standards for grades 3 and 6 of primary education in subjects including Bosnian, Croatian and Serbian languages, mathematics and natural sciences.¹⁶⁵ France has set policy objectives in terms of learning outcomes. Upon completion of compulsory education at age 16, all students should have acquired core knowledge and skills in seven areas: French language, one foreign language, mathematics and scientific and technological culture, usual information and communication technology, humanist culture, social and civic skills, autonomy and initiative.¹⁶⁶

Teacher policies

Teachers are central to improving learning outcomes. While social and family background shapes a student's potential achievement, attending a well-functioning school can compensate for disadvantage. TIMSS 2011 data show how schools that provide a safe and orderly environment and emphasize learning – by setting rigorous curricular goals, motivating pupils and gaining parental support – are the most likely to succeed. Resources associated with higher achievement include buildings and equipment, and pedagogical resources (from libraries to computers), but teachers are the key resource.¹⁶⁷ In Finland a country with high learning outcomes (even after their recent decline in PISA), 'teachers are highly educated in all levels of education (teachers are required to have a Master's degree), and they have strong autonomy and authority to implement their work. The teacher profession is valued, and the people applying for teacher education are highly motivated.'¹⁶⁸

Most countries have low average pupil/teacher ratios. In Western Europe and North America, average pupil/teacher ratios are 13:1 at pre-primary, 14:1 at primary and 13:1 at secondary level. There are two exceptions. First, additional recruitments would be needed to universalize pre-primary education in countries including the United Kingdom (present ratio of 19 pupils per teacher), and especially Turkey (21:1). Second, the policy of hiring 60,000 teachers in France may be justified, as the country has some of the highest pupil/teacher ratios in Western Europe and North America (21:1 at pre-primary, 18:1 at primary, 13:1 at secondary level), and one of the highest fertility rates. In Central and Eastern Europe, pupil/teacher ratios have usually declined since 1999, owing to the reduction in the number

of pupils. Pupil/teacher ratios are now below 14:1 at pre-primary level in all countries with data (except in Romania and in Albania), below 20:1 at primary level (except in Tajikistan) and below 15:1 at secondary level.

Teacher recruitment and deployment still requires policy attention. First, owing to the retirement of large cohorts in the coming years, some countries will need to recruit. Second, an uneven distribution of teachers between schools, grades and subjects may result in large actual class size even if the country-level pupil/teacher ratio is low. Third, in many countries existing arrangements for teacher deployment result in unexperienced teachers being positioned in schools with the most difficult working conditions – whether in disadvantaged urban neighbourhoods or in remote rural areas. Countries may need to amend such arrangements, or else ensure that teachers receive adequate initial training and participate in induction programmes.¹⁶⁹

Teacher characteristics vary widely across countries in the region. In TIMSS 2011 data, 99% of grade 8 pupils in the Russian Federation were taught mathematics by a teacher who had completed a postgraduate university degree, compared with 1% in the former Yugoslav Republic of Macedonia, Norway and in Slovenia. About 80% of grade 8 pupils in Ukraine and 75% in the United States were taught by teachers who had received professional development in the past two years, in mathematics content, pedagogy, or curriculum, compared with one-quarter to one-half in Italy. The average grade 8 teacher had 25 years of professional experience in Georgia, Lithuania and Romania, but only 12 in England and 9 in Turkey.¹⁷⁰

Investing in teacher initial education, pre-service training and professional development helps achieve high learning outcomes. With large numbers of teachers due to retire in the coming years, many countries in the region have a window of opportunity to train future teachers so as to promote improvements in the quality of teaching. In Finland, teacher education focuses on pedagogical content knowledge. Cooperation between teacher education faculty and academic subject faculty results in the development of teaching methods adapted to each subject. Future teachers are trained in identifying students with learning difficulties. They have to write a research-based master's degree dissertation, and are encouraged to reflect on their professional practice throughout their career. They are positioned for a one-year practicum in a 'model school' associated with their university. These model schools also test innovative teaching practices and conduct research in pedagogy.¹⁷¹ In Germany, future teachers receive extensive preparation at university, with a focus on identifying and addressing the specific problems faced by students with low achievement. They then go through an induction programme with an experienced teacher, upon successful completion of which they can apply for a teaching position. The quality of teacher training facilitated the implementation of education reforms undertaken after PISA 2000 had revealed German students were performing slightly below the OECD average. By 2012, reading, mathematics and sciences scores had improved and were now significantly higher than the OECD average.¹⁷² In Norway, teacher training was reformed in 2010, with two distinct programmes for grades 1-7 and 8-10, to allow for greater specialization. Both programmes last for four years but may be extended to five.¹⁷³

Other countries are investing in teacher training. The French community of Belgium is planning to bring pre-primary and primary school teacher education from the current duration of three years to five years (master's degree level).¹⁷⁴ After a few years during which pre-service training had been neglected, France created new teacher training institutes (*Écoles supérieures du professorat et de l'éducation*) in 2013, which deliver a two-year master's degree in 'teaching, education and training professions', based on dual training with internships in schools.¹⁷⁵ In Georgia, the Teacher Professional Development Centre started a nationwide teacher induction programme in 2010/11, after pilot programme in 2008-2010 had proven successful. Interactions with a mentor teacher facilitate the acquisition of pedagogical skills by beginning teachers and their adaptation to the school environment. Successful completion of the induction period is a prerequisite for certification.¹⁷⁶ Within the United Kingdom, the introduction of new mathematics curriculum and examinations in England has been accompanied with measures to recruit the best mathematics graduates as teachers (for instance the Initial Teacher Trainee bursaries) and with the creation of 'Math hubs' to facilitate teacher training.¹⁷⁷

Teacher salaries increased during the 2000s before decreasing in recent years, following the financial and economic crisis. According to OECD data, the real salaries of teachers with 15 years of experience increased in most countries belonging to the OECD between 2000 and 2010, whether at primary, lower secondary or upper secondary level. They decreased between 2010 and 2012 in 13 to 16 (depending on the education level) of 20 countries with data in Western Europe and North America, and four out of five countries in Central Europe. The largest decreases were in Mediterranean countries worst affected by the financial and economic crisis, which conducted drastic austerity policies. Within a couple of years, primary school teachers' real salaries declined by 26% in Greece, 16% in Portugal and 9% in Spain. In Central Europe, real salaries declined by 13% in the Czech Republic and 12% in Estonia. However, primary school teacher real salaries remained higher in 2012 than in 2000 in almost all countries with data, if by only 1% to 3% in England, Italy, Spain and the United States. Besides Greece, where salary cuts after 2009 more than cancelled all increases between 2000 and 2009, two striking exceptions are France and especially Hungary, where real teacher salaries have been continuously decreasing for a decade. By 2012, primary school teachers were earning 11% less than in 2000 in France in real terms, and 29% less than in 2005 in Hungary.¹⁷⁸ Trends at lower secondary and upper secondary levels were similar. Hungary however reversed the trend in 2013, by switching 180,000 teachers to a new career path and wage scale, associated with a 35% salary increase. An additional, gradual increase by 30% is planned until 2017.¹⁷⁹

European Commission (Eurydice) data, which do not pertain to teachers with 15 years of experience but to minimum statutory salaries, paint a similar picture of the impact of the crisis on teacher salaries. Between 2009 and 2014, teacher salaries decreased in real terms in a majority of 30 countries or sub-national entities belonging to the European Union – in 18 at primary level, 19 at lower secondary level, and 17 at upper secondary level. In Western Europe, minimum statutory salaries were most reduced in Greece (by 41% at all three levels), followed by Ireland (15% to 17% depending on the level) and Spain (13% to 15%). In Central and Eastern Europe, only two countries cut minimum statutory salaries by more than 10%: Romania (16% in secondary education) and Slovenia (17% at all levels).¹⁸⁰

Teacher salaries are lower than those of other professions with comparable education and training requirements. Across OECD countries, in 2012, teachers earned between 80% (pre-primary school teachers) and 92% (upper secondary school teachers) of the average earnings for 25-64 year-olds with tertiary education. In countries such as Austria the Czech Republic, Hungary, Italy and Slovakia, the ratio ranged between 35% and 69% depending on the country and education level.¹⁸¹ Lower salaries for teachers can compromise teacher recruitment and lead to teacher attrition. In recent years, France could not recruit as many secondary school teachers as planned in several fields, including mathematics and English (as a foreign language). Low salaries may be one reason for this, along with perceptions regarding working conditions and the social status of teachers. In the United States, higher salaries in other occupations lead teachers with less than six years of experience to quitting the profession.¹⁸² In the long term, the decline in teachers salaries, whether in absolute terms or relative to salaries in other professions, will put the quality of education at risk.

Main lessons learnt

Since 2000, Europe and North America has made quantitative progress towards the Education for All goals:

- **Goal 1: Rapid progress in pre-primary school participation** is the most noticeable change in the region over the period. The experience of several countries shows that net enrolment ratios can raise by 20 to 25 percentage points within a dozen years. Most countries now envisage pre-primary education as the necessary foundation for primary and secondary education, and are either aiming for universal participation or making at least the last year of pre-primary education compulsory.
- **Goal 2: Countries in the region have maintained universal primary and lower secondary education**, and those lagging behind in 2000 have moved towards massive participation at upper secondary level. Early school leaving has receded in recent years in the European Union.
- **Goal 3: Higher education has expanded rapidly**, especially in Central and Eastern Europe, and is now almost universal in a few countries. Lifelong learning strategies and national qualifications frameworks have been adopted or are being designed throughout the region.
- **Goal 4: A knowledge gap has been filled as major initiatives have been taken to document youth and adult skills** beyond conventional literacy figures, through the OECD Survey of Adult Skills implemented in more than half the countries in the region, and through several national surveys.
- **Goal 5: Gender parity has been maintained** as far as participation at pre-primary, primary and lower secondary level is concerned.
- **Goal 6: Learning outcomes have improved steadily in several countries, including some with the lowest initial achievement levels**, and remain high in international comparison in other countries where they stagnated or declined. Learning outcomes are more regularly measured than they were before 2000, owing to the development of both international and national assessments. Europe and North America also has comparatively strong policies for teacher recruitment, education and training.

However, the equity and quality of education are still causing concern, especially as the financial and economic crisis has weakened education systems and societies:

- **The transformative power of early childhood care and education is not fully exploited.** Young children living in the poorest countries in the Balkan, the Caucasus, and Central Asia and in marginalized populations in other countries of the region still have poor health and nutrition outcomes, and many do not have access to pre-primary education.
- **School systems tend to reproduce social inequality at the expense of students from disadvantaged families.** Besides, the extent to which children, youth and adults with special needs or living with disabilities can participate in education and training varies greatly across countries, and rarely guarantees equality of opportunity.
- **Pockets of educational deprivation persist**, which affect Roma populations in Europe, indigenous people in North America and other marginalized populations.
- **The quality of higher education varies greatly across countries**, and is unequally distributed within them.
- **Participation in lifelong learning remains insufficient among adults**, and favours those in employment and with the highest initial education and training levels. Given the share of adults with poor cognitive skills revealed in many countries by recent surveys, remedial programmes are needed on a much larger scale than at present.
- **Gender stereotypes and inequalities persist in education systems**, but above all in society. Young men are more likely than young women to drop out early with low skills and low or no qualifications. Yet young women, who are more likely to complete upper secondary and tertiary education, face disadvantage in family, social and professional life.
- **Societal, cultural and environmental change questions the essence of education** and requires an adaptation of curriculum contents, teaching methods and a renewed social and professional status for teachers.

III. Education strategies, policies and finance

Education and training systems are increasingly coordinated at the European level, with policy dialogue and cooperation extending beyond the European Union to the whole continent. Yet, in many countries, the implementation of ambitious strategies and policies formulated during the Education for All period of 2000-2015 has been affected by the contraction of public expenditure in the context of the financial and economic crisis that started in 2008.

III.1. Strategies and policies at European level

Although governments of the region have endorsed the Education for All agenda, the European agenda has been a more potent driver for their initiatives since 2000. Institutions of the European Union play a key part as they design common strategies, manage common programmes. Countries that are candidates to European Union membership¹⁸³ are aligning their systems with those of the Union. Finally, policy dialogue and several programmes now extend beyond the European Union to other countries in Central and Eastern Europe, playing a key part in preserving peace and cooperation across the continent.

Education is one of the pillars of ‘Europe 2020’, ‘A strategy for smart, sustainable and inclusive growth’ proposed by the European Commission in 2010. Building on the earlier Lisbon Strategy, Europe 2020 comprises five main targets for employment, research and development, greenhouse gas emission, education, and poverty reduction. The education target is to ‘reduce the share of early school leavers to 10% from the current 15% and increase the share of the population aged 30-34 having completed tertiary education from 31% to at least 40%.’¹⁸⁴

In 2012, the European Commission proposed ‘Rethinking Education’, an analysis of policies needed to combat youth unemployment in the midst of economic recession. The document concluded on a list of priority actions to be taken by member States as well as the European Union itself, which was endorsed by the European Council in 2013. The role of education in the Europe 2020 strategy should be strengthened with measures aimed at: ‘raising the performance of education and training systems’, ‘promoting excellence in vocational education and training’, ‘improving the performance of young people at high risk of early school leaving’, ‘reducing the number of low-skilled adults’, ‘introducing measures to develop transversal skills and competences’, ‘revising and strengthening the professional profile of the teaching profession’, ‘optimising ICT-supported learning and access to high quality Open Educational Resources’ and ‘prioritising, and where possible strengthening, investments in education and training’.¹⁸⁵

The European Union has further adopted ‘Education and Training 2020’, a strategic framework for European cooperation and national policy making. The four objectives of the framework are very broad: ‘making lifelong learning and mobility a reality’, especially with the development of national qualifications frameworks linked to the European Qualifications Framework and the application of the European Quality Charter for Mobility, ‘improving the quality of education and training’, ‘promoting equity, social cohesion and active citizenship’, and ‘enhancing creativity and innovation, including entrepreneurship, at all levels of education and training’.¹⁸⁶

By 2014, despite the prolonged financial and economic crisis, the European Commission considered the education target to be ‘broadly achievable by 2020’. The share of early school leavers had fallen down from 15.7% in 2005 to 12.7% in 2012, and the share of young people having completed tertiary education had increased from 27.9% to 35.7% over the same period. Both trends were understood to result from structural change in education systems and were expected to continue to 2020.

The European Union has conducted programmes aimed to promote lifelong learning and the international mobility of higher education students. Among those, Erasmus (the European Action Scheme for the Mobility of University Students) has provided scholarships to support the mobility of students, professors and other higher education staff, as well as co-funding to transnational cooperation projects conducted by higher education institutions. Erasmus extends beyond the European Union, to countries including Norway, Switzerland and candidate countries such as the former Yugoslav Republic of Macedonia and Turkey. Tempus (the Trans European Mobility Program for University Studies) supports the modernization of higher education in countries of the Western Balkan, Eastern Europe, Central Asia and the Mediterranean region, and their convergence with higher education

systems of the European Union. After the completion of their 2007-2013 phase, seven such programmes have been merged into a single, integrated programme, Erasmus+, which covers education, training, youth and sport over 2014-2020, in three key policy areas: 'learning mobility of individuals', 'cooperation for innovation and exchange of good practices' and 'support for policy reform'. The programme has been allocated a budget of €14.7 billion, plus €1.7 billion for cooperation with countries outside the European Union. 43% should be allocated to higher education, 22% to vocational education and training, 15% to schools, and 5% to adult education. The programme has ambitious quantitative targets, for instance 2 million higher education students and 650,000 vocational students should spend part of their curriculum abroad, and 25,000 partnerships should be established involving 125,000 institutions.¹⁸⁷

A European Higher Education Area was created in 2010, as the outcome of the Bologna process initiated in 1999 with the aim of harmonizing higher education systems.¹⁸⁸ The Bologna process involved actions including the re-organization of curricula into a three-year cycle oriented to the labour market, followed with a two-year cycle leading to master's degree, the introduction of academic degrees that are recognized internationally, the creation of a system of accumulation and transfer of credits and cooperation in quality assurance. Forty-seven countries now belong to the Area, including all countries of Western Europe (except Israel, Monaco and San Marino) and of Central and Eastern Europe (except Belarus, Tajikistan and Uzbekistan).¹⁸⁹

III.2. Strategies and policies at country level

Only a few countries adopted explicit Education for All action plans over 2000-2015, yet national strategies and policies have displayed common concerns that have been in line with the EFA agenda. Initiatives in the areas of vocational and higher education and training follow developments at the European Union level listed above.

Western Europe...

Most national reports do not mention the existence of an EFA action plan. Norway states that 'The adoption of the EFA agenda in 2000 ... did not imply any major new objectives or challenges to the Norwegian national education system. Even if the EFA has been well known in all institutions and organizations with interests in international education, the EFA label has never been used in our domestic system. Norway never presented an explicit national EFA strategy.'¹⁹⁰ There are two exceptions. Sweden held consultations between governmental agencies, NGOs, teachers' and head teachers' organizations, which led to an EFA action plan adopted in 2002, in partnership between the Ministry of Education and Research, the Ministry of Foreign Affairs and the Swedish International Development Cooperation Agencies. The action plan focused on the quality education (goal 6), as it was found that Sweden had achieved the other goals already.¹⁹¹ Finland followed in 2004, with an EFA action plan jointly prepared by the Ministry of Education, the National Board of Education, the Ministry for Foreign Affairs and the Finnish National Commission for UNESCO. The key policy framework remains the country's four-yearly Development plan for education and research (KESU, currently for 2011-2016).¹⁹²

However, key strategies and policies highlighted by most countries are consistent with the Education for All agenda. France's 2013 education law thus re-organized early childhood

care and education, provided for the inclusion of all children at compulsory education levels, especially those with disabilities or special needs, addressed early school leaving, aimed to develop dual apprenticeship, set objectives in terms of learning outcomes, reformed the curriculum, and created new institutions for initial teacher training.¹⁹³ In Greece, the 20 strategic objectives defined by the Ministry of Education and Religious Affairs in 2014 cover education at all levels, ranging from the universalization of pre-primary education from age 3, to curriculum and teaching reforms (the 'New School') at primary and secondary education, and to the establishment of a national qualifications framework linked to the European Qualifications Framework.¹⁹⁴ Turkey's 10th Development Plan 2014-2018 list priorities including the expansion of pre-primary education focusing on disadvantaged households and regions, gender parity in access to and completion of primary and secondary education, the monitoring of learning outcomes, teacher training reforms, among many others.¹⁹⁵ Within the United Kingdom, England reports that its recent priorities for education policy included the quality of education for 3-19 year-olds, through 'ambitious curricula' and 'a rich provision of classroom and extra-curricular activities that develop character and resilience'; the inclusion of children with special educational needs or disabilities; teacher training and management especially at pre-primary and upper secondary level.¹⁹⁶

The quality of education is the common focus of reforms conducted over 2000-2015 in Western Europe, which often share Finland's objectives 'to ensure everyone, regardless of origin, background and wealth equal opportunities and rights for civilisation, high-quality free education and everything that being a fully-fledged citizen requires' and 'to narrow down the gap in learning outcomes, participation in studies and completing studies between genders and to reduce the inheriting of education.'¹⁹⁷ Cyprus undertook a comprehensive curriculum reform, with the appointment from 2003 onwards of several committees that reviewed syllabuses in all school subjects, and the introduction of a new curriculum, first as a pilot in 2011/12, then in all public schools in 2011/12, complemented with teacher training delivered by the Cyprus Pedagogical Institute.¹⁹⁸ Sweden created a new agency in 2008 to monitor school quality, the Swedish School Inspectorate, before the 2011 Education Act introduced new curricula, syllabuses, grading scales and methods for national assessment, as an answer to the country's declining learning outcomes.¹⁹⁹ Spain's 2006 Organic Law for Education (LOE) is being complemented with the Organic Law for the Improvement in the Quality of Education (LOMCE), which seeks to adapt education to ongoing social change.²⁰⁰

... and North America

The United States Department of Education published a draft strategic plan for 2014-2018,²⁰¹ structured around six goals, each of which includes three to five objectives and a list of indicators allowing measurement of success in reaching the goal:

- 'Goal 1: Postsecondary Education, Career and Technical Education, and Adult Education. Increase college access, affordability, quality, and completion by improving postsecondary education and lifelong learning opportunities for youths and adults
- Goal 2: Elementary and Secondary Education. Improve the elementary and secondary education system's ability to consistently deliver excellent instruction aligned with rigorous academic standards while providing effective support services to close achievement and opportunity gaps, and ensure all students graduate high school college- and career-ready

- Goal 3: Early Learning. Improve the health, social-emotional, and cognitive outcomes for all children from birth through 3rd grade, so that all children, particularly those with high needs, are on track for graduating from high school college- and career-ready
- Goal 4: Equity. Increase educational opportunities for and reduce discrimination against underserved students so that all students are well-positioned to succeed.
- Goal 5: Continuous Improvement of the U.S. Education System. Enhance the education system's ability to continuously improve through better and more widespread use of data, research and evaluation, evidence, transparency, innovation, and technology.
- Goal 6: U.S Department of Education Capacity. Improve the organizational capacities of the Department to implement this strategic plan.²⁰²

The United States Department of Education further developed an international education strategy for the years 2012-2016, with four objectives:

- 'Objective 1: Increase the global competencies of all U.S. students, including those from traditionally disadvantaged groups.
- Objective 2: Enhance federal, state and local education policy and practice applying lessons learned from other countries to drive excellence and innovation in the U.S. and abroad.
- Objective 3: Advance U.S. international priorities in strategically important countries through active education diplomacy.
- Objective 4: Develop, monitor and continuously improve [the Department of Education's] international activities in an integrated and coordinated manner.'²⁰³

Major national policies in the United States include:

- **Head Start**, an early childhood care and education programme started in 1965 targeted to young children (aged 0 to 5) from low-income families, which aims to promote school readiness by enhancing cognitive, social and emotional development. Head Start extends beyond education to provide health and nutrition services.²⁰⁴
- **No Child Left Behind**, an act passed in 2001 that required all schools receiving federal funding to test all students annually, using tests standardized at the state level, with the aim of reducing gaps in achievement by identifying schools 'in need of improvement' and increasing their accountability to parents. Criticisms of the implementation of No Child Left Behind led to a policy change in 2011, as states were allowed 'flexibility regarding specific requirements' conditional on 'rigorous and comprehensive State-developed plans designed to improve educational outcomes for all students, close achievement gaps, increase equity, and improve the quality of instruction.' Almost all states have now obtained 'flexibility'.²⁰⁵
- **Race to the Top**, one of the many education recovery plans under the broader American Recovery and Reinvestment Act adopted in 2009. Race to the Top awards federal granting to state governments, on a competitive basis, depending on how much their policies score on a complex formula.²⁰⁶ Race to the Top received much media attention, but the very principle of competitive funding based on quantitative criteria has attracted intense criticism.

Central and Eastern Europe

Few countries have adopted Education for All action plans. The only country mentioning such a plan in its national report is Lithuania, where a National Education Forum was set up soon after the World Education Forum and a national EFA action plan was adopted for 2003-2015. The plan listed targets to be achieved by 2007 and by 2015, translating the Dakar goals into goals directly relevant to the country context. At the same time, a new law on education was voted, leading to a National Education Strategy for 2003-2012, complemented by a lifelong learning strategy in 2004, and implemented through the Programme of Pre-School and Primary Education Development (2007-2012).²⁰⁷

National strategies are in line with the Education for All agenda. For instance, Bosnia and Herzegovina adopted Strategic Directions for Development of Education in BiH and an Implementation Plan for 2008-2015, with short-, medium- and long-term objectives for 2008, 2008-10 and 2011-15. Priorities include 'raising the level of education of the population and the competence of the workforce, improving the effectiveness of education and training, prevention of social exclusion among children and youth and expanding opportunities for adult education and training, as well as quality assurance and revitalization of research in education'.²⁰⁸ As the country's national report states, 'the Education for All (EFA) objectives are in a certain way recognized and incorporated into the document.'²⁰⁹ Likewise, the Czech Republic adopted a National Programme for the Development of Education in 2001, drawing on consultations with social partners, civil society representatives, teacher representatives, and on national and OECD statistics. Implemented by the Ministry of Education, Youth and Sports, the programme lists objectives that can be associated with each of the Dakar goals and therefore 'meets the requirements for a National EFA Action Plan.'²¹⁰ The Russian Federation 'has been methodically implementing the strategy of the "Education for All" programme up to 2015'. Recent developments include the 2012 law 'On education in the Russian Federation', which re-organized federal education policy, and the corresponding decree taken in 2014, the 'State Programme on the Development of Education'.²¹¹ The quality of education and education and training for youth are among the priorities in the three countries. Slovenia states that 'Progress towards Education for All is one of the defining development challenges of the 21st century', and lists a number of 'national strategies, policies, plans and targets for education' that are in line with the EFA agenda.²¹²

III.3. Public expenditure on education **

Countries in Western Europe and North America devote a large share of their resources to education.²¹³ The median share of total public expenditure on education in gross national product (GNP) is 6.2% – slightly higher than the international benchmark of 6% – and the median share of education in total government expenditure is 12.7% – lower than the international benchmark of 20%, but drawn from large budgets. Some of the most populated countries spend the least – France, Germany, Italy and Spain devote 4.5% to 5.6% of their GNP and 8.6% to 10.7% of their budget to education – while Nordic countries and the smaller island countries of Cyprus and Malta spend the most.²¹⁴ In a majority of countries, resources devoted to education increased over the past decade, with a few exceptions. In Israel, the share of education in GNP went down from 7.5% to 6.2% in a context of sustained

** See Table 1 for figures on public expenditure on education in Europe and North America.

economic growth. The United States cut education spending from 14.7% to 12.7% of government expenditure, and France from 11.1% to 10.2%.

The share of resources devoted to education in Central and Eastern Europe is lower, and has declined since 1999 in half the countries with data. The median share of total public expenditure on education in gross national product is 4.9%, and the median share of education in total government expenditure is 11.7%, lower than in Western Europe and North America and drawn from smaller budgets. The Republic of Moldova, where resources devoted to education have increased dramatically since 1999, is the only country in the region reaching both international benchmarks. Most governments in Central Europe devote only 4% to 5.5% of their GNP and 9.5% to 14% of their budget to education, with contrasted trends since 1999 – large increases in countries such as Bulgaria, the Czech Republic and Poland, large decreases in the three Baltic states. In comparison, education appears under-resourced in the three countries of the Caucasus and in Romania, where it receives only 2% to 3% of GNP, and about 7% of the budget in Azerbaijan and Georgia, in sharp decline since 1999. By contrast, Tajikistan increased public education expenditure to 4.0% of GNP and 16.3% of the budget, from low levels in 1999.²¹⁵

Resources available per student vary dramatically across countries, mirroring variations in the quality of education and in national income levels:

- In Western Europe, they are lowest in Israel and Southern Europe, close to the median in France, Germany and the United Kingdom, and highest in Scandinavia and Switzerland. Per student spending is 4.0 times higher in Denmark than in Ireland at pre-primary level; 2.1 times higher in Switzerland than in Portugal at primary level; 3.3 times higher in Norway than in Israel at secondary level; and 4.4 times higher in Norway than in Israel at tertiary level.
- In North America, Canada and the United States spend amounts that are somewhat higher than the Western European median at primary and upper secondary levels. However, both countries spend much more by tertiary student than any Western European country. In 2011, the United States spent 2.1 times as much as Norway, Canada 1.5 times as much.²¹⁶
- In Central and Eastern Europe,²¹⁷ they are highest in Slovenia, followed with countries of Central Europe such as the Czech Republic and Poland, and lowest in the few countries with data in the South-Eastern Europe, Eastern Europe and the Caucasus. Slovenia spends 5.1 times more than the Armenia at pre-primary level, 6.1 times at primary level, 6.0 at secondary level and 11.5 times more at tertiary level.²¹⁸

The share of resources allocated to each education level depends on population patterns and also reflects policy priorities. Secondary education, which combines almost universal enrolment with higher unit costs than primary education, receives the largest share of public current expenditure on education in 16 of 19 countries with data in Western Europe, and 11 of 13 countries with data in Central and Eastern Europe. The shares devoted to pre-primary and tertiary education are the most variable.

In Western Europe:

- Nine countries including France, Italy and Spain spend around 25% on primary education, around 40% on secondary education and around 20% on tertiary education. Given its higher fertility rate, France spends noticeably little on primary education (21%).
- Eight Nordic and German-speaking countries spend more on tertiary education, from 25% in Switzerland to 33% in Finland, and less on primary education (14% in Germany, where the child population is declining). The share devoted to pre-primary education is highly variable within each of these groups, ranging from less than 2% to more than 14%.
- Israel's quickly growing child population requires higher spending on pre-primary (11%) and especially primary education (42%).
- The United Kingdom devotes only 18% of its public current expenditure to tertiary education. This is the result of a dramatic substitution of private for public funding, which took place over 15 years. In 1995, 80% of total expenditure on tertiary education in the United Kingdom was public. By 2011 the share had dwindled to 30%, lower even than in the United States (35%, stable since 1995), lower indeed than in any other OECD country except Chile. The closest figure in Western Europe was in Italy – 67%. Households now spend more than twice as much as the government on tertiary education in the United Kingdom.²¹⁹

In Central and Eastern Europe, most countries spend 10% to 15% on pre-primary education, 16% to 30% on primary education, 35% to 50% on secondary education and 20% to 30% on tertiary education. Compared with these figures:

- Bulgaria and the Republic of Moldova spend more on pre-primary education (above 20%), at the expense of tertiary education.
- Serbia spends a disproportionate share on primary education (46%), leaving very limited funding for pre-primary education.
- Armenia and Georgia spend least on tertiary education (less than 10%), as the former spends more on secondary education (49%) and the latter on primary education (38%).

In recent years, the financial crisis has led several governments in the European Union to reduce education budgets.²²⁰ Education budgets (at constant prices) were higher in all countries of the European Union in 2010 than in 2000, as most countries had managed to preserve them after the financial crisis started in 2008. However, reductions had already taken place in 2009 and/or 2010 in the worst-affected countries in Western Europe (Greece, Iceland, Portugal and Spain) as well as in Central Europe (Bulgaria, Latvia, Lithuania, Romania). Data for 2011 and 2012 show the following:

- In 2011, education budgets were cut by more than 5% in Greece, Hungary, Lithuania, Portugal and Romania, and by 1% to 5% in eight more countries, including the Czech Republic, Italy, Poland and Spain. The budget for pre-primary, primary and secondary education was cut by 17 % in Greece, Hungary and Romania.
- In 2012, education budgets were cut by more than 5% in eight countries including Croatia, Italy, Latvia and Portugal, and by 1% to 5% in eight more countries including Estonia, France, Slovenia and Spain. The budget for tertiary and adult education was cut by about 30% in Cyprus and Lithuania, and 25% in Greece.

Turkey's education budget on the other hand increased by more than 5% in both years.

The long-term impact on the functioning of schools and on learning outcomes of measures recently taken to reduce education budgets should be monitored. Reducing or freezing teacher salaries has been the most common measure, and was most significant in Greece, Ireland, Portugal and Spain. For instance, in Ireland, salaries for new teachers appointed after January 1st, 2011 were reduced by 10%, a further 3.2% after December 4th, and a further 4.5% after January 31st, 2012; several allowances are not payable to newly appointed teachers. Other measures have included merging or closing schools (Denmark, Italy, Latvia, Poland, Portugal and Slovakia), postponing building renovation or reducing maintenance (Ireland, United Kingdom, Romania, Slovakia, Slovenia), delaying equipment in ICT (Cyprus and Poland), and downsizing support programmes for students with low achievement (Czech Republic and Ireland).

IV. Education in the region over 2015-2030

Countries of Europe and North America have defined their own education agendas for the years to come, with current strategies of the European Union and of countries typically extending to 2020.

IV.1. Priorities expressed in national reports

National reports submitted by countries of Western Europe and North America and of Central and Eastern Europe point to the same priorities: improving the equity and quality of education, enriching learning and training opportunities for youth and adults, and universalizing pre-primary education.

Western Europe and North America

Improving the equity and quality of compulsory education is the first priority of all countries of Western Europe and North America, encompassing policy areas such as:

- Pre-service and in-service teacher training, to improve both learning outcomes and the status and career satisfaction of teachers;
- Equality in learning outcomes, as most countries are concerned with inequalities that appear both between and within schools and are transmitted from one generation to the next, as they are associated with family income, unemployment, immigrant status, mother tongue, or the marginalization of specific communities;
- Assessment of learning outcomes and evaluation of the education system, to be conducted more systematically in several countries than has been the case hitherto, as a basis for policy planning. Other countries however express concerns with the over-reliance on assessments in policy design, and the limited perspective on quality they offer.

Addressing early school leaving and improving skills levels among youth and adults is a second priority. Among other measures, countries envisage developing student counselling and career guidance, increasing the share of upper secondary students attending TVET, recruiting more TVET teachers, ensuring the recognition of informal learning and work experience, or completing their national qualifications framework.

Developing early childhood care and education is a third priority, especially in countries where pre-primary education is not yet universal or compulsory. Pre-primary education is considered important both in its own right and as a key instrument for addressing the first two priorities.

Central and Eastern Europe

Making compulsory education more inclusive and raising its quality are the first priorities expressed by countries of Central and Eastern Europe, with such measures as:

- Including the marginalized who still suffer from educational deprivation, for instance children living with disabilities/with special educational needs, belonging to Roma communities or to other ethnic and linguistic minorities;
- Strengthening teacher training and providing additional resources to schools to improve the learning environment;
- Tailoring teaching to the needs of individual students, to achieve equity in learning outcomes;
- Improving school management, reforming education financing, strengthening education data collection (with the aim to converge with European Union standards expressed by member or candidate countries).

Strengthening links between education and the labour market is a second priority. Countries envisage facilitating the completion of upper secondary education, improving TVET and providing second-chance education; expanding higher education; and providing opportunities for adult education in a lifelong learning perspective (recognition of work experience and qualifications received abroad, counselling and training for the unemployed, completion of national qualifications frameworks).

Universalizing pre-primary education is a third priority whether in countries that far from achieving it, or in countries that have made significant progress in that area over 2000-2015. The emphasis is on teacher training and on quality pre-primary education as a foundation for compulsory education.

IV.2. Priorities expressed at the Regional Ministerial Conference

The Regional Ministerial Conference on Education post-2015 for European and North American States held on 19-20 February 2015, pointed to further priorities for 2015-2030:

- Education for citizenship was a common concern, given recent events at the national, regional and international levels. Several Member States mentioned that there was a need for more citizenship and human rights education. UNESCO undertakes several initiatives in the area of Global Citizenship Education linked to these concerns.
- Student disengagement from education was identified by several countries as a challenge for education systems. The need to redefine schooling in a context of rising consumerism and of generalized access to heterogeneous sources of information and knowledge (through information and communication technology) was emphasized.
- Several aspects of the quality and equity of education systems were considered, for instance: early school leaving, especially among boys; the part to be played by education and training in addressing marginalization of disadvantaged social groups and in

integrating immigrants; and low literacy and numeracy skills levels among some youth and adults, calling for an expansion of adult education, including for the elderly.

- The importance of teacher policies was underlined: initial training, recruitment, induction programmes, deployment, etc. Education International recently conducted a survey pointing to the difficulties faced by teachers. UNESCO works with the ILO to address these challenges.
- A data revolution is needed to monitor the post-2015 education agenda and to address policy issues listed above – an important topic for discussion at the World Education Forum.

Conclusion

The 2000-2015 period has witnessed significant progress in education in Europe and North America. Countries of Western Europe and North America and of Central and Eastern Europe have converged towards high rates of participation in pre-primary education and in upper secondary and higher education. Learning outcomes have improved in several countries where they were lower than the regional median in the early 2000s. Education and training policies have been increasingly coordinated at the regional level, with European Union strategies and programmes extending beyond member countries to candidate countries and to other countries of Central and Eastern Europe involved in policy dialogue and cooperation. The fields of vocational training, higher education and adult education – which are among the key priorities of all countries – have been the focus of such cooperation.

Yet education and training systems in the region are facing difficulties which are affecting their functioning and weakening their quality. For instance, international assessments have revealed stagnation or decline in learning outcomes in several countries with initially higher or average scores. Several national reports express concerns about widening inequalities between schools. Early school leavers with low or no qualifications and the large share of adults who have low literacy and numeracy skills risk being excluded from society and from the labour market. Increases in unemployment and poverty caused by the financial, economic and social crisis that started in 2008 have compounded these difficulties. In many countries, education policy making has been further constrained by fiscal austerity. The capacity of public institutions to provide quality education and training to all citizens over the next decade may be at stake.

While Europe and North America came closer than any other region to realizing the six goals of Education for All over 2000-2015, the global education agenda being defined for 2015-2030 may prove highly relevant for the region. The proposed goal and associated targets shift the emphasis from quantitative indicators of participation in basic education towards inclusiveness, quality and equity and towards lifelong learning. This reflects both the priorities expressed by countries of the region and the key weaknesses in their education systems. Whether Europe and North America reaches the new targets by 2030 will thus depend on how successful governments are in implementing their own strategies.

Table 1: Public expenditure in Europe and North America

	Total public expenditure on education as % of GNP		Total public expenditure on education as % of total government expenditure		Public current expenditure by level as % of public current expenditure on education								Public current expenditure by level per pupil at PPP in constant 2011 US\$							
	1999	2012	1999	2012	pre-primary education	primary education	secondary education	tertiary education	pre-primary education	primary education	secondary education	tertiary education	pre-primary education	primary education	secondary education	tertiary education	pre-primary education	primary education	secondary education	tertiary education
	1999	2012	1999	2012	1999	2012	1999	2012	1999	2012	1999	2012	1999	2012	1999	2012	1999	2012	1999	2012
North America and Western Europe																				
Andorra	...	3,1	...	...	...	14,4	...	28,7	...	21,3	...	3,7	...	...	...	...	...	...	...	...
Austria	6,4	5,8	11,7	11,4	6,9	9,8	19,0	17,4	45,1	46,2	26,7	26,1	5 147	8 088	8 223	10 532	10 138	12 624	17 736	14 272
Belgium	5,9	6,5	12,2	12,3	...	9,4	...	23,1	...	43,0	...	22,2	...	5 756	...	8 514	...	14 520	...	13 051
Canada	5,9	5,5	12,4	12,2	...	...	...	...	...	26,4	...	35,6	...	...	...	...	...	6 747	...	...
Cyprus	5,3	7,5	13,8	15,8	4,0	5,2	33,9	30,3	52,5	44,3	9,6	20,2	1 811	4 255	4 431	9 555	6 995	12 026	7 408	10 842
Denmark	8,2	8,6	14,5	15,1	8,9	11,5	21,4	23,4	34,6	33,8	32,6	28,2	5 983	8 392	8 973	10 555	14 143	12 578	23 242	22 094
Finland	6,2	6,7	11,8	12,2	5,5	6,1	21,1	19,7	39,3	41,2	34,1	33,0	3 910	4 813	4 927	7 220	7 321	12 348	11 578	13 595
France	5,7	5,6	11,1	10,2	11,6	11,7	20,2	20,6	49,8	44,0	17,0	23,3	5 054	5 521	5 313	5 951	8 685	9 002	8 803	12 408
Germany	...	5,0	...	10,6	...	8,8	...	13,9	...	46,9	...	25,7	...	5 763	...	7 022	...	9 484	...	...
Greece	3,2	...	7,2	...	...	...	...	...	38,1	...	23,6	...	...	...	...	3 020	...	3 636	...	...
Iceland	6,7	9,2	15,1	15,9	6,6	9,2	34,2	31,6	34,1	31,4	19,2	22,0	2 763	5 886	5 577	8 649	5 190	7 128	11 249	9 839
Ireland	4,9	7,6	12,4	13,1	0,1	1,7	32,2	35,1	36,8	34,5	26,0	21,7	...	2 110	3 938	7 678	5 690	11 661	9 881	12 349
Israel	7,5	6,2	12,7	13,5	9,3	10,9	33,9	41,5	30,0	25,5	19,0	17,1	3 089	3 131	4 986	6 370	4 639	4 461	7 492	5 888
Italy	4,7	4,5	9,8	8,6	8,4	10,4	26,1	25,2	46,5	43,3	18,1	18,7	4 276	4 986	7 332	7 169	8 441	7 536	8 128	7 655
Luxembourg	4,2	...	9,8	...	...	...	...	...	...	...	...	...	...	18 548	...	18 548	...	15 734	...	...
Malta	...	7,5	...	16,1	...	7,6	...	22,2	...	46,8	...	20,8	...	6 567	...	6 588	...	9 319	...	14 189
Monaco	1,2	...	...	...	4,4	3,3	17,7	14,5	50,9	38,5	.	.	...	...	...	...	...	...	.	.
Netherlands	4,8	5,9	10,6	11,8	...	7,0	...	23,7	...	40,2	...	29,1	...	5 542	...	7 718	...	10 799	...	15 230
Norway	7,2	6,8	15,2	15,3	...	5,0	...	25,7	...	34,6	27,7	31,2	...	5 366	...	11 340	...	14 891	23 526	26 000
Portugal	5,1	5,8	12,3	10,9	5,5	7,4	31,0	27,3	44,0	43,9	16,2	19,8	2 880	4 058	4 411	5 581	6 017	9 118	5 246	7 718
San Marino	...	...	...	9,9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Spain	4,4	5,0	11,0	10,7	7,8	14,5	28,1	26,5	47,5	38,0	16,7	21,0	3 099	5 203	4 915	6 384	6 496	7 819	4 215	7 328
Sweden	7,3	6,8	12,5	13,3	...	10,2	...	24,0	...	35,1	...	29,8	4 213	6 388	7 878	10 417	8 856	12 041	17 168	16 397
Switzerland	4,9	4,9	14,5	15,9	4,0	3,7	31,6	28,7	40,5	40,3	21,0	25,4	3 823	4 937	9 016	11 556	11 216	13 053	20 281	19 302
Turkey	3,0	...	...	...	-	...	...	...	...	...	28,2	...	-	...	...	...	...	...	2 928	...
United Kingdom	4,4	6,2	12,1	13,3	...	5,6	...	28,6	...	48,0	...	17,7	...	6 008	...	8 167	...	10 934	...	9 015
United States	4,8	5,4	14,7	12,7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9 016

	Total public expenditure on education as % of GNP		Total public expenditure on education as % of total government expenditure		Public current expenditure by level as % of public current expenditure on education								Public current expenditure by level per pupil at PPP in constant 2011 US\$							
					pre-primary education		primary education		secondary education		tertiary education		pre-primary education		primary education		secondary education		tertiary education	
	1999	2012	1999	2012	1999	2012	1999	2012	1999	2012	1999	2012	1999	2012	1999	2012	1999	2012	1999	2012
Central and Eastern Europe																				
Albania	3,3	...	9,6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	2,2	3,1	...	13,7	...	9,7	...	23,1	...	49,0	...	9,4	...	1 159	...	1 265	...	1 381	...	587
Azerbaijan	4,3	2,6	18,5	7,2	7,6	7,0	...	...	...	...	6,0	15,0	685	1 543	...	...	...	...	...	1 771
Belarus	6,0	5,3	...	12,8	...	21,1	...	...	...	...	...	17,4	...	4 661	...	...	...	...	...	1 977
Bosnia and Herzegovina	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bulgaria	3,5	4,2	9,3	11,2	16,5	22,0	20,8	19,8	46,6	43,5	15,9	14,5	2 202	4 454	1 490	3 349	1 795	3 603	1 722	2 228
Croatia	...	4,5	...	9,9	...	14,5	...	...	...	...	...	16,6	...	5 122	...	...	...	...	4 980	3 889
Czech Republic	3,9	4,8	9,1	10,4	11,5	11,0	17,8	16,6	49,8	45,2	18,2	22,6	2 388	3 559	1 766	3 816	3 480	6 036	5 104	5 454
Estonia	6,8	6,0	17,1	12,3	...	8,5	...	25,9	...	35,7	...	25,1	...	2 323	...	4 857	...	5 387	...	4 760
Georgia	2,0	2,0	12,5	6,7	...	14,9	...	38,3	...	38,2	...	0,6	...	...	...	558	...	...	...	22
Hungary	4,9	4,9	9,9	9,4	15,9	13,8	19,5	16,7	40,6	40,7	18,8	22,0	2 959	3 734	2 711	3 938	2 822	4 223	4 697	5 265
Latvia	5,8	4,9	14,1	12,7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lithuania	6,0	5,4	16,7	13,6	14,3	14,6	...	16,2	...	42,4	22,0	24,7	4 151	5 356	...	4 488	...	4 182	4 131	4 241
Montenegro	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Poland	4,7	5,4	10,9	11,4	9,3	10,0	...	30,3	...	35,6	16,5	23,5	2 146	3 829	...	5 153	...	4 766	2 593	4 162
Republic of Moldova	4,6	7,8	12,7	20,8	...	21,4	...	18,6	...	35,4	...	17,6	...	1 645	...	1 244	...	1 191	...	1 303
Romania	2,9	3,0	...	...	9,0	9,7	...	16,4	...	34,6	21,8	26,5	1 090	1 399	...	1 933	...	1 891	3 040	2 952
Russian Federation	3,0	...	9,0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Serbia	...	4,9	...	10,6	...	1,1	...	45,6	...	23,2	...	28,9	...	285	...	6 316	...	1 610	...	5 057
Slovakia	4,2	4,3	12,7	10,6	11,5	10,7	14,5	19,4	55,7	46,7	16,8	20,9	2 253	3 587	1 430	4 478	2 580	4 242	4 285	4 455
Slovenia	5,9	5,8	13,8	12,1	...	10,3	...	27,9	...	37,4	...	24,3	...	5 854	...	7 765	...	8 253	...	6 752
Tajikistan	2,1	4,0	11,8	16,3	...	4,9	...	...	...	...	...	9,0	...	461	...	...	...	...	...	275
The former Yugoslav Rep. of Macedonia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ukraine	3,7	6,3	13,5	13,5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Source: UNESCO Institute for Statistics data drawn from Statistical appendix (long version) to *EFA Global Monitoring Report 2015: What Did We Achieve?*. Data pertain to either 1999 and 2012 or to the nearest available year. ...: data not available.

Notes

All online references were accessed on 3 March 2014.

All documents with a country as the author's name are national reports submitted to UNESCO as part of the 2015 Education for All review process, available at <http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-all/resources/formulaires-unesdoc/>

¹ UNESCO, *EFA Global Monitoring Report 2013/4: Teaching and Learning: Achieving Quality for All*, Paris: UNESCO, 2014, pp. 45-93

² Population figures in this section are drawn from *EFA Global Monitoring Report 2015: What Did We Achieve?*, Statistical appendix (long version), to be available at <http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/efareport/statistics/statistical-tables/>

³ In this section as in the rest of the report, Andorra, Monaco and San Marino are not included in statistics at the group level, and Turkey is analyzed separately from Western Europe and North America per se.

⁴ Demographically, Turkey is becoming similar to Western Europe. Its total fertility rate is down to 2.0 children per woman and its population aged 0-4 is decreasing by 0.2% a year, though total population is still increasing fairly rapidly owing to its younger age structure.

⁵ Belgium (Flemish community), *Education for All Evaluation Report*, p. 5.

⁶ Eurostat, 'Migration and migrant population statistics', May 2014, http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Migration_and_migrant_population_statistics

⁷ Income and unemployment figures in this section were calculated from IMF, *World Economic Outlook*, October 2014, <http://www.imf.org/external/pubs/ft/weo/2014/02/weodata/index.aspx>

⁸ Youth unemployment figures are from ILO, *Key indicators of the labour market*, December 2013, http://www.ilo.org/empelm/what/WCMS_114240/lang-en/index.htm

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¹⁰ World Top Incomes database, <http://topincomes.parisschoolofeconomics.eu/#Database>:

¹¹ Thomas Piketty, *Le Capital au XXI^e siècle*, Paris: Seuil, 2013.

¹² István György Tóth, 'Time series and cross country variation of income inequalities in Europe on the medium run: Are inequality structures converging in the past three decades?', Gini Policy Paper No. 3, GINI Project, Társi Budapest, September 2013.

¹³ Irena Grosfeld and Claudia Senik, 'The emerging aversion to inequality: Evidence from subjective data', *Economics of Transition*, 18 (1), 2010, pp. 1-26.

¹⁴ Eurostat, 'Children at risk of poverty or social exclusion: Children were the age group at the highest risk of poverty or social exclusion in 2011', April 2013, http://ec.europa.eu/eurostat/statistics-explained/index.php/Children_at_risk_of_poverty_or_social_exclusion

¹⁵ European Environment Agency, *The European Environment. State and Outlook 2015. Synthesis Report*, Copenhagen, 2015.

¹⁶ Marie-Claude Blais, Marcel Gauchet and Dominique Ottavi, *Conditions de l'éducation*, Paris: Stock, 2008, and *Transmettre, apprendre*, Paris: Stock, 2014.

¹⁷ Finland, *National EFA 2015 Review*, p. 11.

¹⁸ Lithuania, *Overview of National Education*, p. 12.

¹⁹ Cyprus, *National EFA 2015 Review report*, pp. 24-26.

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- ²⁰ Estonia, *Education for All National EFA 2015 Review*, pp. 3-4; Latvia, *Education for all National Review of the Republic of Latvia*, pp. 26-27.
- ²¹ Belgium (Flemish community), *Education for All Evaluation Report*, pp. 7-9.
- ²² François Dubet, Marie Duru-Bellat et Antoine Véréttout, *Les Sociétés et leur École : emprise du diplôme et cohésion sociale*, Paris: Seuil, 2010.
- ²³ OECD, *OECD Skills Outlook 2013, First Results from the Survey of Adult Skills*, Paris: OECD, 2013.
- ²⁴ EU High Level Group of Experts on Literacy, *Final Report*, Luxembourg: Publications Office of the European Union, September 2012, p. 26.
- ²⁵ *Ibid.*
- ²⁶ Mortality rates in this section are projections for 2015.
- ²⁷ Norway, *Education for All National 2015 Review*, p. 7.
- ²⁸ Sweden, *National Education for All Review 2015*, p. 4.
- ²⁹ Figures below are gross and net enrolment ratios in pre-primary education drawn from the UIS database, which are available for most countries of Europe and North America. Enrolments rates at ages 3, 4, 5 and 6 are available from OECD's *Education at a Glance 2014* (Paris: OECD, 2014) but not used here, as they are available for a smaller number of countries and no overall enrolment ratio in pre-primary education is given. OECD enrolment rates are broadly consistent with UIS enrolment ratios.
- ³⁰ Belgium (Flemish community), *Education for All Evaluation Report*, p. 10 and 13, and Belgium (Flemish community and French community), comments on the first draft of this report.
- ³¹ France, *Rapport d'évaluation nationale de « l'éducation pour tous 2015 »*, pp. 2-4.
- ³² Germany, comments on the first draft of this report.
- ³³ Norway, *Education for All National 2015 Review*, pp. 6-8.
- ³⁴ Sweden, *National Education for All Review 2015*, p. 3.
- ³⁵ Cyprus, *National EFA 2015 Review Report*, pp. 10-11.
- ³⁶ Finland, *National EFA 2015 Review*, p. 2.
- ³⁷ Greece, *National EFA 2015 Review*, p. 9.
- ³⁸ Portugal, *Relatório nacional sobre os progressos relativos à iniciativa Educação para todos (EPT) 2015*, p. 9.
- ³⁹ United Kingdom (England), *National EFA 2015 Review: England: Top level evidence*, pp. 3-4.
- ⁴⁰ Turkey, *National EFA 2015 Review*, pp. 4-8.
- ⁴¹ Exceptions include Azerbaijan and Tajikistan, where more than 10% of birth are not attended by skilled personnel, and Azerbaijan and Ukraine, with immunization rates around 75% for both vaccines.
- ⁴² Armenia, *National Report*, p. 5.
- ⁴³ Bosnia and Herzegovina, *Education for All 2015 Country Report*, pp. 8-10.
- ⁴⁴ Georgia, *National EFA 2015 Review*, pp. 1-2.
- ⁴⁵ The former Yugoslav Republic of Macedonia, *National Report – Education for All*, pp. 1-2.
- ⁴⁶ Uzbekistan, *Education for All 2015 National Review*, pp. 16-18.
- ⁴⁷ Bulgaria, *Report from the National Review of Education for All 2015*, pp. 1-8.
- ⁴⁸ Czech Republic, *Education for All*, pp. 3-6.
- ⁴⁹ Hungary, *Education for All*, p. 2.
- ⁵⁰ *Ibid.*, pp. 2-4.
- ⁵¹ Hungary, comments on the first draft of this report.

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- ⁵² Romania, *Romanian Education for All Review Report*, p. 47.
- ⁵³ Lithuania, *Overview of National Education*, p. 16 and 23.
- ⁵⁴ Russian Federation, *2014 National Report of the Russian Federation on the 'Education for All' Programme*, pp. 8-9.
- ⁵⁵ Estonia, *Education for All National EFA 2015 Review*, pp. 11-12.
- ⁵⁶ Latvia, *Education for all National Review of the Republic of Latvia*, pp. 35-36.
- ⁵⁷ Slovenia, *Education for All (EFA) National Report*, pp. 10-11.
- ⁵⁸ *EFA Global Monitoring Report 2007: Strong Foundations: Early Childhood Care and Education*, pp. 106-114.
- ⁵⁹ OECD, *PISA 2012 Results: Excellence through Equity: Giving Every Student the Chance to Succeed* (Volume II) and *What Makes a School Successful? Resources, Policies and Practices* (Volume IV), Paris: OECD, 2013.
- ⁶⁰ Ina V.S. Mullis, Michael O. Martin, Pierre Foy and Kathleen T. Drucker, *PIRLS 2011 International Results in Reading*, and Ina V.S. Mullis, Michael O. Martin, Pierre Foy and Alka Arora, *TIMSS 2011 International Results in Mathematics*, Chestnut Hill, MA and Amsterdam: TIMSS & PIRLS International Study Center and IEA, 2012.
- ⁶¹ *EFA Global Monitoring Report 2012: Youth and Skills: Putting Education to Work*, p. 49.
- ⁶² Henry M. Levin and Clive Belfield (eds.), *The Price We Pay: Economic and Social Consequences of Inadequate Education*, Washington, DC: The Brookings Institution Press, 2007.
- ⁶³ Cyprus, *National EFA 2015 Review Report*, p. 19.
- ⁶⁴ There are a few exceptions. In Spain, private schools account for 33% of primary enrolment. In Belgium, 54% of primary pupils attend private schools, but those are non-profit foundations that are recognized and funded by the state, and follow the same curriculum as public schools. Whether in the Flemish or in the French community, private schools raise no tuition fees, provide most learning materials and have to respect a maximum charge for other materials and extra-curricular activities.
- ⁶⁵ 14.4 years in Turkey.
- ⁶⁶ Turkey, *National EFA 2015 Review*, pp. 9-10.
- ⁶⁷ Turkey, *National EFA 2015 Review*, pp. 6-7.
- ⁶⁸ Cyprus, *National EFA 2015 Review Report*, pp. 23-24.
- ⁶⁹ France, *Rapport d'évaluation nationale de « l'éducation pour tous 2015 »*, pp. 5-7.
- ⁷⁰ Portugal, *Relatório nacional sobre os progressos relativos à iniciativa Educação para todos (EPT) 2015*, p. 18.
- ⁷¹ Belgium (Flemish community), *Education for All Evaluation Report*, pp. 11-13.
- ⁷² France, *Rapport d'évaluation nationale de « l'éducation pour tous 2015 »*, pp. 5-7.
- ⁷³ Norway, *Education for All National 2015 Review*, p. 9.
- ⁷⁴ Sweden, *National Education for All Review 2015*, p. 5.
- ⁷⁵ Andorra, *Évaluation Nationale de l'EPT 2015*, pp. 21-22.
- ⁷⁶ Finland, *National EFA 2015 Review*, p. 4.
- ⁷⁷ A qualification is that a few countries have sizeable numbers of out-of-school children belonging to disadvantaged social groups, including Azerbaijan (54,000), Romania (84,000), the Russian Federation (151,000) and Uzbekistan (178,000).
- ⁷⁸ Latvia, *Education for all National Review of the Republic of Latvia*, pp. 37-38.
- ⁷⁹ Slovenia, *Education for All (EFA) National Report*, p. 20.
- ⁸⁰ <http://www.worldbank.org/content/dam/Worldbank/document/FY15%20Fragile%20states%20list.pdf>
- ⁸¹ Bosnia and Herzegovina, *Education for All 2015 Country Report*, p. 11.

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- ⁸² Slovenia, *Education for All (EFA) National Report*, pp. 20-21.
- ⁸³ Armenia, *National Report*, p. 8.
- ⁸⁴ Russian Federation, *2014 National Report of the Russian Federation on the 'Education for All' Programme*, p. 12.
- ⁸⁵ Czech Republic, *Education for All*, p. 12.
- ⁸⁶ European Commission/EACEA/Eurydice/Cedefop, *Tackling Early Leaving from Education and Training in Europe: Strategies, Policies and Measures*. Eurydice and Cedefop Report, Luxembourg: Publications Office of the European Union, 2014, pp. 24, 35-42.
- ⁸⁷ *Ibid.*
- ⁸⁸ Bulgaria, *Report from the National Review of Education for All 2015*, pp. 19-20.
- ⁸⁹ *EFA Global Monitoring Report 2012: Youth and Skills: Putting Education to Work*, p. 232.
- ⁹⁰ Latvia, *Education for all National Review of the Republic of Latvia*, p. 39.
- ⁹¹ Romania, *Education for All Review Report*, p. 3.
- ⁹² France, *Rapport d'évaluation nationale de « l'éducation pour tous 2015 »*, p. 10.
- ⁹³ United Kingdom (England), *National EFA 2015 Review: England: Top level evidence*, p. 5.
- ⁹⁴ Norway, *Education for All National 2015 Review*, p. 11.
- ⁹⁵ Finland, *National EFA 2015 Review*, pp. 5-7
- ⁹⁶ Georgia, *National EFA 2015 Review*, pp. 3-4.
- ⁹⁷ Romania, *Education for All Report*, p. 20.
- ⁹⁸ OECD, *Education at a Glance 2014*, Paris: OECD, 2014, p. 314.
- ⁹⁹ Turkey, *National EFA 2015 Review*, p. 20, and comments on the first draft of this report.
- ¹⁰⁰ Figures in this paragraph as UIS figures pertaining specifically to 'technical and vocational education'. They exclude Georgia and Uzbekistan, for which the number of students in TVE is not available.
- ¹⁰¹ Estonia, *Education for All National EFA 2015 Review*, p. 18.
- ¹⁰² Latvia, *Education for all National Review of the Republic of Latvia*, p. 40.
- ¹⁰³ *EFA Global Monitoring Report 2012: Youth and Skills: Putting Education to Work*, pp. 236-42.
- ¹⁰⁴ Czech Republic, *Education for All*, p. 21.
- ¹⁰⁵ *EFA Global Monitoring Report 2012: Youth and Skills: Putting Education to Work*, p. 240.
- ¹⁰⁶ *Ibid*, p. 245.
- ¹⁰⁷ France, *Rapport d'évaluation nationale de « l'éducation pour tous 2015 »*, p. 9.
- ¹⁰⁸ Cyprus, *National EFA 2015 Review Report*, pp. 29-34.
- ¹⁰⁹ Czech Republic, *Education for All*, pp. 22-23.
- ¹¹⁰ *EFA Global Monitoring Report 2011: The hidden crisis: Armed conflict and education*, pp. 57-64.
- ¹¹¹ Cyprus, *National EFA 2015 Review Report*, pp. 26-29.
- ¹¹² Greece, *National EFA 2015 Review*, pp. 28-30.
- ¹¹³ Norway, *Education for All National 2015 Review*, p. 11.
- ¹¹⁴ Turkey, comments on the first draft of this report.
- ¹¹⁵ Bosnia and Herzegovina, *Education for All 2015 Country Report*, pp. 12-13.
- ¹¹⁶ Estonia, *Education for All National EFA 2015 Review*, pp. 19-20.

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- ¹¹⁷ Lithuania, *Overview of National Education*, pp. 36-37.
- ¹¹⁸ Romania, *Education for All Report*, p. 19.
- ¹¹⁹ Slovakia, *EFA National Report*, pp. 21-13, and comments on the first draft of this report.
- ¹²⁰ Slovenia, *Education for All (EFA) National Report*, p. 32.
- ¹²¹ Uzbekistan, *Education for All 2015 National Review*, p. 23
- ¹²² Russian Federation, *2014 National Report of the Russian Federation on the 'Education for All' Programme*, p. 16.
- ¹²³ Bulgaria, *Report from the National Review of Education for All 2015*, p. 29.
- ¹²⁴ Bosnia and Herzegovina, *Education for All 2015 Country Report*, p. 13.
- ¹²⁵ *EFA Global Monitoring Report 2012: Youth and Skills: Putting Education to Work*, p. 99.
- ¹²⁶ France, *Rapport d'évaluation nationale de « l'éducation pour tous 2015 »*, p. 13.
- ¹²⁷ Belgium (French community), *Éducation pour tous : Évaluation nationale 2015*, pp. 11-16.
- ¹²⁸ France, *Rapport d'évaluation nationale de « l'éducation pour tous 2015 »*, p. 13.
- ¹²⁹ Germany, comments on the first draft of this report.
- ¹³⁰ Austria, Belgium (Flanders), Canada, Cyprus, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Spain, Sweden, United Kingdom (England and Northern Ireland), United States.
- ¹³¹ Czech Republic, Estonia, Poland, Russian Federation, Slovakia.
- ¹³² OECD, *OECD Skills Outlook 2013, First Results from the Survey of Adult Skills*, *op. cit.*
- ¹³³ Figures for the Russian Federation are preliminary and do not include the Moscow municipal area.
- ¹³⁴ Norway, *Education for All National 2015 Review*, p. 12.
- ¹³⁵ European Commission/EACEA/Eurydice/Cedefop, *Tackling Early Leaving from Education and Training in Europe: Strategies, Policies and Measures*. Eurydice and Cedefop Report, Luxembourg: Publications Office of the European Union, 2014, p. 42.
- ¹³⁶ Czech Republic, *Education for All*, p. 33.
- ¹³⁷ Bosnia and Herzegovina, *Education for All 2015 Country Report*, p. 14.
- ¹³⁸ Belgium (French community), *Éducation pour tous : Évaluation nationale 2015*, p. 17.
- ¹³⁹ Latvia, *Education for All National Review of the Republic of Latvia*, p. 43.
- ¹⁴⁰ United Kingdom (England), *National EFA 2015 Review: England: Top level evidence*, pp. 5, 8.
- ¹⁴¹ Turkey, *National EFA 2015 Review*, pp.15-16, and comments on the first draft of this report.
- ¹⁴² Data on the reading and mathematical achievement of grade 4 pupils in PIRLS and TIMSS 2011 paint a similar picture.
- ¹⁴³ Figures for Cyprus are not available, hence 22 countries (including Turkey) are covered in this section.
- ¹⁴⁴ OECD, *PISA 2012 Results: What Students Know and Can Do: Student Performance in Reading, Mathematics and Science* (Volume I), Paris: OECD, 2013.
- ¹⁴⁵ National assessment data confirm these patterns. In Norway, girls had higher marks than boys in reading at tests taken by pupils at the end of grade 5 in 2013, but the difference was less pronounced in English, and boys had better scores in mathematics. However, by the time pupils completed lower secondary education at the end of grade 10, girls had higher marks in all subjects except physical education (*Education for All National 2015 Review*, pp. 12-13). In Sweden, in 2012/13, 'young women on average scored higher grades in all national programmes in upper secondary school (with the exception of the Vehicle and Transport programme)' (*National Education for All Review 2015*, p. 13).
- ¹⁴⁶ Belgium (French community), *Éducation pour tous : Évaluation nationale 2015*, p. 18.

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- ¹⁴⁷ France, *Rapport d'évaluation nationale de « l'éducation pour tous 2015 »*, pp. 14-15.
- ¹⁴⁸ Estonia, *Education for All National EFA 2015 Review*, p. 27.
- ¹⁴⁹ The former Yugoslav Republic of Macedonia, *National Report – Education for All*, pp. 13-14.
- ¹⁵⁰ OECD, *PISA 2012 Results* (Volumes I-VI), Paris: OECD, 2013.
- ¹⁵¹ Albania, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Montenegro, Poland, Romania, Russian Federation, Serbia, Slovakia Slovenia.
- ¹⁵² Azerbaijan, Georgia, the former Yugoslav Republic of Macedonia and the Republic of Moldova.
- ¹⁵³ Ina V.S. Mullis, Michael O. Martin, Pierre Foy and Kathleen T. Drucker, *PIRLS 2011 International Results in Reading*, *op. cit.*, and Ina V.S. Mullis, Michael O. Martin, Pierre Foy and Alka Arora, *TIMSS 2011 International Results in Mathematics*, *op. cit.*
- ¹⁵⁴ Finland, *National EFA 2015 Review*, p. 12.
- ¹⁵⁵ Belgium (Flemish community), comments on the first draft of this report.
- ¹⁵⁶ Norway, *Education for All National 2015 Review*, p. 10.
- ¹⁵⁷ Sweden, *National Education for All Review 2015*, p. 16.
- ¹⁵⁸ Armenia, *National Report*, pp. 12-13.
- ¹⁵⁹ Bulgaria, *Report from the National Review of Education for All 2015*, pp. 34-35.
- ¹⁶⁰ Cyprus, *National EFA 2015 Review Report*, pp. 47-49.
- ¹⁶¹ Germany, comments on the first draft of this report.
- ¹⁶² Slovakia, *EFA National Report*, pp. 51-56.
- ¹⁶³ The former Yugoslav Republic of Macedonia, *National Report – Education for All*, p. 15.
- ¹⁶⁴ Turkey, *National EFA 2015 Review*, pp. 19-20.
- ¹⁶⁵ Bosnia and Herzegovina, *Education for All 2015 Country Report*, p. 15.
- ¹⁶⁶ France, *Rapport d'évaluation nationale de « l'éducation pour tous 2015 »*, p. 17.
- ¹⁶⁷ Ina V.S. Mullis, Michael O. Martin, Pierre Foy and Alka Arora, *TIMSS 2011 International Results in Mathematics*, *op. cit.*
- ¹⁶⁸ Finland, *National EFA 2015 Review*, p. 1.
- ¹⁶⁹ Canada (Quebec), comment on the second draft of this report.
- ¹⁷⁰ Ina V.S. Mullis, Michael O. Martin, Pierre Foy and Alka Arora, *TIMSS 2011 International Results in Mathematics*, *op. cit.*
- ¹⁷¹ OECD, *Strong Performers and Successful Reformers in Education: Lessons from PISA for the United States*, Paris: OECD, 2011.
- ¹⁷² OECD, *PISA 2012 Results: Excellence through Equity: Giving Every Student the Chance to Succeed* (Volume II), *op. cit.* and Germany, comments on a first draft of this report.
- ¹⁷³ Norway, *Education for All National 2015 Review*, p. 14.
- ¹⁷⁴ Belgium (French community), *Éducation pour tous : Évaluation nationale 2015*, pp. 31-32.
- ¹⁷⁵ France, *Rapport d'évaluation nationale de « l'éducation pour tous 2015 »*, p. 18.
- ¹⁷⁶ Georgia, *Education for All*, pp. 12-13.
- ¹⁷⁷ United Kingdom (England), *National EFA 2015 Review: England: Top level evidence*, p. 9.
- ¹⁷⁸ OECD, *Education at a Glance 2014*, Paris: OECD, 2014.
- ¹⁷⁹ Hungary, comments on the first draft of this report.

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- ¹⁸⁰ Eurydice, *Teachers' and School Heads' Salaries and Allowances in Europe, 2013/14*, Brussels: European Commission, 2014, p. 21.
- ¹⁸¹ *Ibid.*
- ¹⁸² Gregory A. Gilpin, 'Reevaluating the effect of non-teaching wages on teacher attrition', *Economics of Education Review*, 30 (4), pp. 598-616, 2011.
- ¹⁸³ Currently including Albania, Iceland, the former Yugoslav Republic of Macedonia, Montenegro, Serbia and Turkey. European Union, 'Countries', http://europa.eu/about-eu/countries/index_en.htm
- ¹⁸⁴ European Commission, *Europe 2020: A strategy for smart, sustainable and inclusive growth*, Brussels, European Commission, 3 March 2010, p. 30.
- ¹⁸⁵ European Commission, 'Rethinking Education: Investing in skills for better socio-economic outcomes', Strasbourg, 20 November 2012, pp. 14-17, and Council, 'Council Conclusions on investing in education and training — a response to 'Rethinking Education: Investing in skills for better socio-economic outcomes' and the '2013 Annual Growth Survey'', *Official Journal of the European Union*, 5 March 2013, pp. C64/6-C64/7.
- ¹⁸⁶ EUR-Lex, 'Education and Training 2020 (ET 2020)', <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1416334503873&uri=URISERV:ef0016>
- ¹⁸⁷ European Commission, 'Erasmus+, The EU programme for Education, Training, Youth and Sport, 2014-2020', Brussels, 2013, and 'Erasmus +, Key figures', http://ec.europa.eu/programmes/erasmus-plus/discover/key-figures/index_en.htm
- ¹⁸⁸ EUR-Lex, 'The Bologna process: setting up the European Higher Education Area', <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV:c11088&qid=1416334503873>; EACEA P9 Eurydice, *The European Higher Education Area in 2012: Bologna Process Implementation Report*, Brussels, 2012.
- ¹⁸⁹ Israel, Tajikistan and Uzbekistan are not eligible to the Bologna process and European Higher Education Area as they are not party to the European Cultural Convention of the Council of Europe.
- ¹⁹⁰ Norway, *Education for All National 2015 Review*, p. 4.
- ¹⁹¹ Sweden, *National Education for All Review 2015*, p. 1.
- ¹⁹² Finland, *National EFA 2015 Review*, pp. 1-2.
- ¹⁹³ *Loi d'orientation et de programmation pour la refondation de l'École de la République du 8 juillet 2013*. France, pp. 1-19.
- ¹⁹⁴ Greece, *National EFA 2015 Review*, pp. 6-7.
- ¹⁹⁵ Turkey, *National EFA 2015 Review*, pp. 22-24.
- ¹⁹⁶ United Kingdom (England), *National EFA 2015 Review: England: Top level evidence*, p. 2.
- ¹⁹⁷ Finland, *National EFA 2015 Review*, pp. 1-2.
- ¹⁹⁸ Cyprus, *National EFA 2015 Review Report*, pp. 5-8.
- ¹⁹⁹ Sweden, *National Education for All Review 2015*, p. 15
- ²⁰⁰ Spain, *Educación para todos. Revisión nacional de la EPT para 2015*, pp. 3-5.
- ²⁰¹ U.S. Department of Education, *Strategic Plan for Fiscal Years 2014-2018*, Washington, DC: U.S. Department of Education, 2013.
- ²⁰² *Ibid.*, p. 1.
- ²⁰³ U.S. Department of Education, *Succeeding Globally Through International Education and Engagement: U.S. Department of Education International Strategy 2012-16*, Washington, DC: U.S. Department of Education, 2012.
- ²⁰⁴ Office of Head Start, <http://www.acf.hhs.gov/programs/ohs>

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- ²⁰⁵ U.S. Department of Education, 'ESEA Flexibility', <http://www2.ed.gov/policy/elsec/guid/esea-flexibility/index.html>
- ²⁰⁶ U.S. Department of Education, 'Race to the Top Fund', <http://www2.ed.gov/programs/racetothetop/index.html>
- ²⁰⁷ Lithuania, *Overview of National Education*, pp. 3-4 and 14-15.
- ²⁰⁸ Bosnia and Herzegovina, *Education for All 2015 Country Report*, p. 4.
- ²⁰⁹ Bosnia and Herzegovina, *Education for All 2015 Country Report*, p. 17.
- ²¹⁰ Czech Republic, *Education for All*, p. 1.
- ²¹¹ Russian Federation, *2014 National Report of the Russian Federation on the 'Education for All' Programme*, pp. 1-2.
- ²¹² Slovenia, *Education for All (EFA) National Report*, pp. 7-8.
- ²¹³ Unless stated otherwise, indicators in this section are UNESCO Institute for Statistics data drawn from Statistical appendix (long version) to *EFA Global Monitoring Report 2015: What Did We Achieve?*, and they are for 2009 or 2010, as 2012 data are not yet available. Data for the beginning of the decade are for 1999, 2000 or 2001. Data are not available or very incomplete for several countries including Canada, Greece, Luxembourg, Turkey and the United States in Western Europe and North America, and Albania, Belarus, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, Montenegro, the Russian Federation, Ukraine and Uzbekistan in Central and Eastern Europe.
- ²¹⁴ Canada devoted 6.8% of its gross domestic product to education in 2011, and the United States 6.9%. OECD, *Education at a Glance 2014*, *op. cit.*, p. 222.
- ²¹⁵ According to its national report (*Education for All 2015 National Review*, p. 33), Uzbekistan spent 35% of its budget on education in 2011. This share is higher than for any country in the world in 2012 in the UIS database (which has no figure for Uzbekistan), and is probably not comparable.
- ²¹⁶ Annual expenditure per student for all tertiary education (excluding R&D activities), drawn from OECD, *Education at a Glance 2014*, *op. cit.*, p. 215. For Canada, the reference is 2010, and only expenditure on public institutions is taken into account at tertiary level.
- ²¹⁷ Data are available for about half the countries, depending on the education level.
- ²¹⁸ Calculated from public current expenditure per pupil by level of education, expressed in 2011 constant purchasing power parity US dollars.
- ²¹⁹ OECD, *Education at a Glance 2014*, *op. cit.*
- ²²⁰ European Commission/EACEA/Eurydice, *Funding of Education in Europe 2000-2012: The Impact of the Economic Crisis. Eurydice Report*, Luxembourg: Publications Office of the European Union, 2013.