Across OECD countries, governments are seeking policies to make education more effective while searching for additional resources to meet the increasing demand for education.

The 2010 edition of *Education at a Glance: OECD Indicators* enables countries to see themselves in the light of other countries’ performance. It provides a rich, comparable and up-to-date array of indicators on systems and represents the consensus of professional thinking on how to measure the current state of education internationally.

The indicators show who participates in education, how much is spent on it and how education systems operate. They also illustrate a wide range of educational outcomes, comparing, for example, student performance in key subject areas and the impact of education on earnings and on adults’ chances of employment.
Education at a Glance 2010: Investing in the future

As governments move to get their finances back into shape in the wake of the global economic crisis, education is the subject of renewed focus. On the one hand, it’s a large item of public expenditure in most countries. On the other, investing in education is essential if countries want to develop their long-run growth potential and to respond to the changes in technology and demographics that are reshaping labour markets.

Education at a Glance 2010 provides data and analysis to illuminate both sides of this equation – investment and returns. More broadly, it provides data on a whole range of issues in education, including levels of attainment, access and the learning environment.

Education: Investments and returns

OECD countries invest heavily on education. Below tertiary level, expenditure by educational institutions per student increased in every country, on average, by 43% between 1995 and 2007, despite relatively stable student numbers. At tertiary level, expenditure by educational institutions per student increased by 14 percentage points on average in OECD countries from 2000 to 2007, after remaining stable in the previous five years. This reflects in part governments’ efforts to deal with the expansion of tertiary education through massive investment (Indicator B1).

Spending levels vary considerably between countries, both in absolute and relative terms. OECD countries spend 6.2% of their collective GDP on educational institutions, ranging from more than 7% in Denmark, Israel, Iceland, the United States and the partner country the Russian Federation to 4.5% or less in Italy and the Slovak Republic (Indicator B2).

In the current economic climate, it’s especially relevant to look at how big a slice of public spending goes on education. Even in OECD countries with little public involvement in other areas, public funding of education is a social priority. On average, OECD countries devote 13.3% of total public expenditure to education, ranging from less than 10% in the Czech Republic, Italy and Japan, to nearly 22% in Mexico (Indicator B4).

Public resources invested in education pay off in a number of ways, including, for example, higher tax revenues. On average across OECD countries, a man with a tertiary level of education will generate an additional USD 119 000 in income taxes and social contributions over his working life compared to someone with just an upper secondary level of education. Even after subtracting the public revenue that has financed the degree, an average of USD 86 000 remains, almost three times the amount of public investment per student in tertiary education. The returns to society are even larger because many other benefits of education (see Chapter A below) are not directly reflected in tax income (Indicator A8).

Education also plays a major role in helping to keep workers in the labour force longer – an advantage that is becoming a necessity as populations age in OECD countries. And it increases employability: On average across OECD countries since 1997, unemployment rates of those with tertiary-level attainment have stayed at or below 4% while for those with less than upper secondary education they have breached 10% several times (Indicator A6).
So, there is compelling evidence of the economic and social benefits of education. But at the same time, simply spending more is not enough. Worryingly, the significant increase in spending per student over the past decade has, in many countries, not been matched with improvements in the quality of learning outcomes. As OECD Secretary-General Angel Gurría notes in his editorial in Education at a Glance, the publication’s findings “underline the scale of the effort that is needed for education to re-invent itself in ways that other professions have already done to provide better value for money.”

Other indicators in Education at a Glance 2010:

Chapter A: The output of educational institutions and the impact of learning.

Levels of educational attainment have risen strongly over the past 30 years, a fact reflected in differing levels among younger and older adults. On average across OECD countries, the proportion of 25-34 year-olds with at least upper secondary education is 22 percentage points higher than that of 55-64 year-olds (Indicator A1).

Among younger people (17-20 year-olds), first-time graduation rates from upper secondary education now exceed 70% in more than two-thirds of OECD countries and are at least 90% in nine countries. In a number of countries, notably Denmark, Finland, Iceland and Norway, graduation rates for students older than 25 account for 10 percentage points or more (Indicator A2).

On average, 38% of young people 2008 are estimated to graduate from tertiary-type A education in the 26 OECD countries with comparable data. The proportion of students who do so outside the typical age is high in Finland, Iceland, Israel, New Zealand and Sweden, where graduation rates for students aged over 30 account for a quarter or more of the total graduation rate (Indicator A3).

In many countries, a substantial number of students begin tertiary education but don’t manage to graduate. On average, in the 18 OECD countries for which data are available, some 31% of tertiary students fail to graduate from a programme equivalent to this level of education (Indicator A4).

Learning, of course, does not end at tertiary level, and many adults continue to train and study throughout their working life. Across the OECD, more than 40% of adults participate in formal or non-formal education in a given year, but the level varies considerably – from more than 60% in New Zealand and Sweden, to below 15% in Hungary and Greece (Indicator A5).

Some other economic benefits of education, as well as those discussed above, are also looked at in Education at a Glance 2010, including earnings differences between people with various levels of education: These can be substantial, with graduates of tertiary education enjoying an earnings premium of more than 50% in more than two-thirds of countries for which data is available (Indicator A7). Higher levels of education are also associated with social benefits, including better health (Indicator A9). The cost to employers of workers with different levels of education are also explored: On average across the OECD area, the annual labour costs for those with below upper secondary education is USD 40 000 for men and USD 29 000 for women; for workers with tertiary education, this rises to USD 74 000 for men and USD 53 000 for women (Indicator A10).
Chapter B: Financial and human resources invested in education.

As noted above, societies generally invest heavily in education. Most of this comes from public sources: On average in OECD countries over 90% of primary, secondary and post-secondary non-tertiary education is paid for publicly. Private funding is more apparent in tertiary education, ranging from less than 5% in Denmark, Finland and Norway to over 75% in Chile and Korea (Indicator B3).

Tuition fees are another closely watched issue in education: In eight OECD countries public institutions charge no tuition fees, but in one-third of countries with available data, public institutions charge annual tuition fees for national students in excess of USD 1 500 (Indicator B5).

What does spending on education go on? In OECD countries, 92% of total spending goes to current expenditure in primary, secondary and post-secondary non-tertiary education, of which more than 70% goes on staff salaries in all but four OECD countries (Indicator B6). Salary cost per student varies significantly between countries. For example, it is more than ten times greater in Luxembourg, Spain and Switzerland than in Chile (Indicator B7).

Chapter C: Access to education, participation and progress.

In most OECD countries over the last decade, virtually everyone had access to at least 12 years of formal education. In around one-third of countries with available data, the enrolment rate for 15-19 year-olds and for 20-29 year olds levelled off in the last five years, possibly indicating a saturation point (Indicator C1).

Student mobility – i.e. students who travel to another country to study at tertiary level – continues to expand. In 2008, over 3.3 million tertiary students were enrolled outside their country of citizenship, a 10.7% increase on the previous year (Indicator C2).

The transition from education to the labour force is not always smooth for young people, and in many countries some older teens (15-19 year-olds) are not in education and not in the labour force or unemployed. The proportion ranges over 32.6% in Turkey to 2.1% in the Netherlands (Indicator C3).

Chapter D: The learning environment and organisation of schools.

On average across OECD countries, the teaching of reading, writing and literature, mathematics and science represents 48% of the compulsory instruction time for 9-11 year-olds and 40% for 12-14 year-olds. For 9-11 year-olds, the proportion of compulsory curriculum devoted to reading, writing and literature varies widely, from 16% in Iceland to 30% or more in France, Mexico and the Netherlands (Indicator D1). On average, there are about 22 students per class in primary education, but this varies from 30 or more in Chile and Korea to nearly half that number in Luxembourg and in the partner country the Russian Federation (Indicator D2).

Teachers’ salaries increased in real terms between 1996 and 2008 in virtually all countries but teachers are still paid less than other individuals with similar educational qualifications in most countries. Salaries of teachers with at least 15 years of experience at the lower secondary level range from less than USD 16 000 in Hungary and in the partner country Estonia to more than USD 98 000 in Luxembourg (Indicator D3). The number of teaching hours in public lower secondary schools averages 703 hours per year but ranges from less than 520 hours in Greece and Poland to over 1 000 in Mexico and the United States (Indicator D4).
Finally, *Education at a Glance* this year examines two new issues – the extent to which parents can choose their children’s schools and the role they play in overseeing schools. In addition to public schools, countries typically have a variety of educational institutions. For example, four out of five OECD countries for which data is available allow government-dependent private schools and independent private schools to provide compulsory education. In practice, however, enrolments in government-dependent private schools exceed 10% in only seven countries (Indicator D5). Most OECD countries report that parents have a range of opportunities for participating in the governance of public schools or in associations that advise public schools. Most also report that regulations provide for a formal process by which parents can file complaints (Indicator D6).