

EXECUTIVE SUMMARY

Changing economic and social conditions have given education an increasingly central role in the success of individuals and nations. Human capital has long been identified as a key factor in combating unemployment and low pay, but there is now also robust evidence that it is associated with a wide range of non-economic benefits, including improvements in health and a greater sense of well-being.

The benefits of education have driven increased participation in a widening range of learning activities – by people of all ages, from earliest childhood to advanced adulthood. As the demand for learning grows and becomes more diverse, the challenge for governments is to ensure that the learning opportunities provided respond to real, dynamic needs in a cost-effective manner.

Education at a Glance – OECD Indicators 2004 provides a rich, comparable and up-to-date collection of indicators on the performance of education systems that represent the consensus of professional thinking on how to measure the current state of education internationally. The indicators provide information on the human and financial resources invested in education, on how education and learning systems operate and evolve, and on the returns to educational investments. Key findings of the publication are as follows:

The outcomes of learning

- The average **educational attainment of the adult population** in OECD countries corresponds to 11.8 years, based on the duration of current educational programmes. For the 18 countries ranking above the OECD average, average years of schooling range from 11.8 to 13.8 years. For the remaining 12 countries, the spread is greater, covering more than four years, from the lowest duration of 7.4 years to 11.8 years (Table A1.1).
- In 17 out of 20 OECD countries with comparable data, the ratio of **upper secondary graduates** to the population at the typical age of graduation exceeds 70%. In Denmark, Germany, Japan, Norway, Poland and Switzerland, graduation rates equal or exceed 90%. The challenge is now to ensure that the remaining fraction is not left behind, with the risk of social exclusion that this may entail (Table A2.1).
- Comparing the educational attainment of the population aged 25 to 34 years with that of the population aged 45 to 54 shows that the proportion of individuals who have **completed upper secondary education** has been growing in almost all OECD countries, and in some rapidly: in two-thirds of the countries, the proportion ranges from 70 to 95% for the youngest generation. Many countries with traditionally low levels of education are catching up (Table A2.2).
- On average across 17 OECD countries with comparable data, 32% of persons at the typical age of graduation currently **complete the tertiary-type A level of education** that comprises universities and other institutions offering similar qualifications – a figure that ranges from less than 20% in Austria, the Czech Republic, Germany and Switzerland to more than 40% in Australia, Finland, Iceland and Poland (Table A3.1).

Years of schooling in the OECD area

Baseline qualifications for successful labour-market entry

Advanced qualifications at the tertiary level

- As measured by educational attainment, there has been an increase in the stock of tertiary-level skills in the OECD's adult population. However, most of that increase is due to significant increases in tertiary graduation rates in a comparatively small number of countries (Table A3.4).
- On average, one-third of students in OECD countries **“drop out” of tertiary education** before they complete their first degree (Table A3.2).
- On average across OECD countries, close to one-third of **graduates** obtaining a university or equivalent level degree, do so in social sciences, business or law. The second most popular **fields of study** are science-related (engineering, manufacturing and construction, life sciences, physical sciences and agriculture, mathematics and computing, but not including health and welfare), from which one in four students graduates, on average (Table A4.1).
- In humanities, arts, education, health and welfare, more than two-thirds of **graduates** at the university or equivalent level are **females** on average in OECD countries. However, less than one-third of graduates in mathematics and computer science, and less than one-fifth of graduates in engineering, manufacturing and construction are female (Table A4.2).
- University or equivalent level **graduation rates for females** equal or exceed those for males in most OECD countries, but males are still more likely than females to earn advanced research qualifications, such as doctorates (Table A4.2).
- In a comparison involving nine countries, four (Greece, Hungary, Iceland and Slovenia) showed statistically significant increases in the average **reading literacy performance of 4th graders** between 1991 and 2001, ranging from an increase of 16 points in Hungary to an increase of 41 points in Greece. By contrast Sweden decreased in performance over this period, from 513 points in 1991 to 498 points in 2001 (Table A5.1).
- In Hungary improvements among the **top performing quarter of students** pulled up mean performance. By contrast, in Sweden a decline in the performance of the top quarter contributed to a decrease in the average performance of Swedish students (Table A5.1).
- In 1991, **girls outperformed boys** in all nine countries. In 2001, while differences favouring girls remained in most countries, measurable differences disappeared in Italy and Iceland (Table A5.2).
- On average among OECD countries, 10% of **15-year-olds** demonstrated **Level 5 literacy skills**, which involve evaluation of information and building of hypotheses, drawing on specialised knowledge and accommodating concepts contrary to expectations. However, this percentage varies from 19% in Finland and New Zealand to below 1% in Mexico. An average of 12% of 15-year-olds have only acquired the most **basic literacy skills at Level 1** and a further 6% fall below even that (Table A6.1).

The quality of learning outcomes at the primary level

The quality of learning outcomes towards the end of secondary school

- **15-year-olds** in Japan display the highest mean scores in **mathematical literacy**, although their scores cannot be distinguished statistically from students in two other top-performing countries, Korea and New Zealand. On the **scientific literacy** scale, students in Japan and Korea demonstrate the highest average performance (Tables A7.1 and A7.2).
- While there are large differences in mean performance among countries, the **variation of performance among 15-year-olds within each country** is many times larger. However, wide disparities in performance are not a necessary condition for a country to attain a high level of overall performance. On the contrary, five of the countries with the smallest variation in performance on the mathematical literacy scale, namely Canada, Finland, Iceland, Japan and Korea, all perform significantly above the OECD average, and four of them, Canada, Finland, Japan and Korea, are among the six best-performing countries in mathematical literacy (Table A7.1).
- At the 4th-grade level, females significantly outperform males in **reading literacy**, on average, and at age 15 the **gender gap** in reading tends to be large (Tables A9.2 and A9.3).
- In **mathematics**, 15-year-old males tend to be at a slight advantage in most countries; in science, **gender patterns** are less pronounced and uneven (Table A9.2).
- In **civic knowledge**, few gender differences emerge among 14-year-olds (Table A9.4).
- Females seem to have higher **expectation towards future occupations** than males, but there is considerable variation in expectations for both genders among countries (Table A9.1).
- In about half the countries, females preferred **co-operative learning** more than males did, whereas males in most countries tended to prefer **competitive learning** more than females did (Table A9.5b).
- On average, nearly a quarter of **15-year-olds** express negative views about their **sense of belonging** at school, and an average of one in five reported recently missing school, arriving late or skipping classes (Chart A8.1).
- Students in Austria, Sweden and Switzerland reported a particularly high **sense of belonging**, while students in Belgium, the Czech Republic, Japan, Korea and Poland reported a below-average sense of belonging (Table A8.1).
- In most countries, the prevalence of students with a low **sense of belonging** varied significantly among schools and the between-school variation was even greater for student participation (Indicator A8).
- At the level of individual students, the **relationship between student participation and sense of belonging** is weak, suggesting that there are many students who lack a sense of belonging but still attend school regularly, and vice versa (Chart A8.3).

Gender differences in learning outcomes and student attitudes

Student participation and engagement with school

- By contrast, at the school level students' **sense of belonging and their participation** tend to go hand in hand and are closely **related to school performance**, suggesting that schools with high levels of engagement also tend to have high levels of academic performance (Chart A8.3).
- The analysis reveals, in particular, that a considerable portion of students with comparatively **high academic performance** still report a **low sense of belonging** (Chart A8.4).

Employment benefits of education

- **Employment ratio** rise with educational attainment in most OECD countries. With very few exceptions, the employment ratio for graduates of tertiary education is markedly higher than the ratio for upper secondary graduates. For males, the gap is particularly wide between upper secondary graduates and those without an upper secondary qualification (Table A10.1a).
- The **employment ratio for females** with less than upper secondary attainment is particularly low. Ratios for females with tertiary type-A attainment exceed 75% in all but four countries, but remain below those of males in all countries (Table A10.1a).
- The **gender gap in employment ratios** decreases with increasing educational attainment. The gap is 23 percentage points among persons without upper secondary education and 11 points among those with the highest educational attainment (Table A10.1a).

Earnings benefits for individuals

- **Education and earnings** are positively linked. In many countries, upper secondary education forms a break point beyond which additional education attracts a particularly high premium. In all countries, graduates of tertiary level education earn substantially more than upper secondary graduates. Earnings differentials between tertiary and upper secondary education are generally more pronounced than those between upper secondary and lower secondary or below (Table A11.1a).
- **Earnings of people with below upper secondary education** tend to range from 60 to 90% of those of upper secondary graduates (Table A11.1a).
- **Females still earn less than males** with similar levels of educational attainment (Table A11.1b).

Education, labour productivity and economic growth

- Recent analyses of **human capital** across 14 OECD economies – based on literacy scores – suggest significant positive **effects on growth** (Indicator A12).
- Increases in the **stock of human capital** raise labour productivity, and also serve as a driver of technological progress (Indicator A12).
- Rising **labour productivity** accounted for at least half of **GDP per capita growth** in most OECD countries over the period 1990-2000 (Chart A12.1).
- In the OECD area generally, it is estimated that increasing the average level of attainment by one year raises the level of output per capita by between 3 and 6% (Indicator A12).

The financial resources invested in education

- OECD countries **spend US\$ 4 819 per primary student, US\$ 6 688 per secondary student and US\$ 12 319 per tertiary student**, but these averages mask a broad range of expenditure across countries. On average, as represented by the simple mean across all OECD countries, countries spend 2.2 times as much per student at the tertiary level than at the primary level (Table B1.1).
- Excluding research and development (R&D) activities, **expenditure in tertiary educational institutions** represents on average US\$ 7 203 and ranges from US\$ 4 000 or below in Greece, Mexico, Poland and Turkey to more than US\$ 8 000 in Australia, Belgium, Denmark, Ireland, the Netherlands, Sweden, the United Kingdom and the United States (Table B1.1).
- In some OECD countries, low annual expenditure per tertiary student still translates into high **overall costs per tertiary student** because students participate in tertiary studies over a long period of time (Table B1.3).
- Lower expenditure cannot automatically be equated with a lower **quality of educational services**. Australia, Finland, Ireland, Korea and the United Kingdom, which have moderate expenditure on education per student at the primary and lower secondary levels, are among the OECD countries with the highest levels of performance by 15-year-old students in key subject areas (Indicators A6 and B1).
- There are significant differences between the **proportion of money** invested in and the **proportion of students** enrolled in **tertiary education**. On average among the 24 OECD countries for which data are available, 24% of all expenditure on educational institutions is allocated to tertiary education whereas only 14% of students are enrolled at this level of education (Table B1.4).
- **Expenditure** per primary, secondary and post-secondary non-tertiary student increased by 29% or more **between 1995 and 2001** in Australia, Greece, Ireland, Poland, Portugal, Spain and Turkey. At the tertiary level, spending on education has not always kept pace with the rapid expansion of enrolments (Table B1.5).
- In seven out of 22 OECD countries for which data are available **expenditure on educational institutions per tertiary student** expressed in US\$ decreased between **1995 and 2001**, while GDP per capita increased over the same time period (Table B1.6).
- OECD countries spend 6.2% of their collective GDP on their educational institutions (Table B2.1a).
- In 17 out of 18 OECD countries for which data are available, **public and private spending on educational institutions** increased in real terms by more than 5% between **1995 and 2001**. However, in contrast to trends in

Expenditure per student

The share of national income invested in education

the early 1990s, increases in spending on educational institutions tended to fall behind the growth in national income (Tables B2.1a and B2.2).

- Canada, Korea and the United States spend more than 2% of their GDP on **tertiary education** (Table B2.1b).
- **Educational institutions are still mainly funded from public sources:** 88% of all funds for educational institutions come directly from public sources. **Private funding** is, however, significant in Korea (where it represents 43% of total spending), the United States (approaching one-third of total spending), Australia and Japan (almost one-quarter of total spending) (Table B3.1).
- In a number of OECD countries, **governments pay** most of the **costs of primary and secondary education** but leave the management of educational institutions at these levels to the private sector. This provides a wider range of learning opportunities without creating barriers to the participation of students from low-income families (Tables B3.2a and B3.3).
- **Tertiary institutions** tend to obtain a much higher proportion of their funds from **private sources** than primary and secondary institutions. The private share ranges from less than 4% in Denmark, Finland, Greece and Norway, to over three-quarters in Korea but includes private payments that are subsidised from public sources (Table B3.2b).
- In one-third of the countries – Australia, Belgium, Canada, Hungary, Korea, the Netherlands, Sweden, the United Kingdom and the United States – the proportion of **expenditure on tertiary institutions covered by private entities other than households** represents 10% or more (Table B3.2b).
- Across all levels of education, the **trend in the public/private share of education expenditure** is mixed, with some countries shifting towards public spending while others move towards private expenditure. In most cases, shifts towards private expenditure did not lead to a decrease in the real level of public sector spending (Tables B2.2, B3.2a and B3.2b).
- On average, **OECD countries devote 12.7% of total public expenditure on education.** However, the values for individual countries range from below 10% in the Czech Republic, Germany, Luxembourg and the Slovak Republic, to 24% in Mexico (Table B4.1).
- **Public funding of education** is a social priority, even in OECD countries with little public involvement in other areas (Table B4.1).
- **Public expenditure on education** tended to grow faster than **total public spending**, but not as fast as GDP. Public expenditure on education as a percentage of total public expenditure grew fastest between 1995 and 2001 in Denmark, Mexico and Sweden (Table B4.1).
- **Public subsidies for students and households** are evident mainly at the tertiary level (Tables B5.1 and B5.2).

Public and private sources of funds

The share of government budgets that education commands

The extent and nature of government subsidies to households

- An average of 17% of **public spending on tertiary education** is devoted to **supporting students, households and other private entities**. In Australia, Denmark, New Zealand, Norway, Sweden and the United States, public subsidies account for about 30% or more of public tertiary education budgets (Table B5.2).
- **Subsidies** are generally more evident in systems where students are expected to pay for at least part of the cost of their education (Indicator B5).
- **Subsidised student loan systems** tend to operate in countries with high levels of participation at the tertiary level. In most OECD countries, the beneficiaries of public subsidies have considerable discretion regarding the spending of subsidies. In all reporting OECD countries, subsidies are spent mainly outside educational institutions, and in one out of three of these countries, exclusively outside (Table B5.2).
- On average, one-quarter of expenditure on tertiary education is attributable to **R&D in tertiary educational institutions**. Significant differences among OECD countries in the emphasis on R&D in tertiary institutions explain part of the large differences in expenditure per tertiary student (Table B6.1).
- For levels below the tertiary level, **current expenditure** accounts for an average of 92% of total spending across OECD countries. In all but four OECD countries, 70% or more of current expenditure at those levels is spent on **staff salaries** (Table B6.3).

The distribution of funding between resource categories

Access to education, participation and progression

- In 24 out of 27 OECD countries, **individuals participate in formal education** for between 16 and 20 years, on average. Most of the variation among countries on this measure derives from differences in enrolments in upper secondary education (Table C1.1).
- **School expectancy** increased between 1995 and 2002 in all OECD countries reporting comparable data (Table C1.1).
- In half of the OECD countries, more than 70% of **children aged 3 to 4** are enrolled in either pre-primary or primary programmes. At the other end of the spectrum, a 17-year-old can expect to spend an average of 2.7 years in tertiary education (Table C1.2).
- In the majority of OECD countries, **females** can expect to receive 0.7 more years of education, on average, than **males** (Table C1.1).
- Today, every second young person in the OECD area will **enter a university or equivalent level programme** during his/her lifetime (Table C2.1).
- On average in OECD countries, a **17-year-old can now expect to enrol in 2.7 years of tertiary programmes**, of which 2 years will be full-time. In Finland, Korea and the United States, students can expect to receive about four years of full-time and part-time tertiary education (Table C2.2).

Expected years in schooling

Entry to tertiary education

*The internationalisation
of tertiary education*

- With the exception of Austria and France, **participation in tertiary education** grew in all OECD countries **between 1995 and 2002** (Table C2.2).
- **The majority of tertiary students are enrolled in public institutions**, but in Belgium, Japan, Korea, the Netherlands and the United Kingdom, most students are enrolled in privately managed institutions (Table C2.3).
- In 2002, **1.90 million students were enrolled outside their country of origin** within OECD and partner countries reported in this volume. This represented a 15% increase in total student mobility since the previous year (Table C3.6).
- Five countries (Australia, France, Germany, the United Kingdom and the United States) receive nearly 73% of all **foreign students studying in the OECD area** (Chart C3.2).
- In absolute numbers, students from France, Germany, Greece, Japan, Korea and Turkey represent the **largest sources of intakes from OECD countries** into OECD and partner countries. Students from China, India and South-east Asia comprise the largest numbers of **foreign students from partner countries** into OECD and partner countries (Table C3.2).
- Relative to a country's total tertiary enrolment, the **percentage of foreign students enrolled in OECD countries** ranges from below 1 to almost 18% in Australia and Switzerland. Australia, Austria, Belgium, France, Germany, Switzerland and the United Kingdom take in the most foreign students, when measured as a percentage of their tertiary enrolments (Table C3.1).
- In Finland, Spain and Switzerland, more than one in six **foreign students** is enrolled in **highly theoretical advanced research programmes** (Table C3.4).
- As far as **fields of study** are concerned, 30% or more of **foreign students** are enrolled in sciences or engineering in Australia, Finland, Germany, Sweden, Switzerland and the United Kingdom (Table C3.5).

*The transition from
education to working life*

- On average among countries, **a young person aged 15 can expect to be in formal education** for a little less than six and a half years. In 17 of the 28 countries studied, this period ranges from near six to seven and a half years (Table C4.1a).
- In addition to the expected number of years spent in education, a young person aged 15 can expect to **hold a job** for 6.4 of the 15 years to come, to be **unemployed** for a total of 0.8 years and to be **out of the labour market** for 1.3 years. Countries vary the most in the average duration of spells of unemployment (Table C4.1a).
- In 23 out of 27 OECD countries, **more female than male 20 to 24-year-olds are in education**. Males in the 20 to 24-year-old age group are more

likely to be employed. The percentage of 20 to 24-year-olds not in education ranges from 50 to 70% in most OECD countries (Table C4.2a).

- In some countries, education and work largely occur consecutively, while in other countries they are concurrent. **Work-study programmes**, relatively common in European countries, offer structured vocational education routes to recognised occupational qualifications. In other countries, initial education and work are rarely associated (Chart C4.4).
- The **proportion of 20 to 24-year olds not in education and without upper secondary education** is under 10% in only eight out of 27 OECD countries. In 11 countries, this group potentially at risk represents between 10 and 18% of the age group and for the remaining eight OECD countries, more than 20% of the age group falls under this category (Table C5.1).
- The percentage of male 20 to 24-year olds that fall into this “**at risk**” group is greater than the percentage of females who do so in 19 out of 27 countries, most notably in Greece, Iceland, Ireland, Italy, Portugal and Spain. The countries where the reverse trend is most evident are Denmark, Luxembourg and Turkey (Table C5.1).

The learning environment and organisation of schools

- Students accumulate, on average, 6 868 **hours of instruction** between the ages of 7 and 14, of which 1 576 hours are between ages 7 and 8, 2 510 hours between ages 9 and 11 and 2 782 hours between ages 12 and 14 years (Table D1.1).
- Students between the ages of 7 and 8 in OECD countries receive an average of 752 hours per year of **compulsory instruction time** and 788 hours per year of **intended instruction time** in the classroom. Compared with 7 and 8-year-olds, students between the ages of 9 and 11 are intended to receive nearly 50 hours more instruction time per year, and those aged between 12 and 14 are intended to receive nearly 100 hours more instruction time per year than those aged between 9 and 11. However, these figures vary significantly among countries (Table D1.1).
- **The teaching of reading and writing, mathematics and science** comprises almost half of the compulsory instruction time for students aged 9 to 11 years and 41% for students aged 12 to 14 years. Among countries, there is great variation in the percentage of the curriculum for 9 to 11-year-olds that is devoted to reading and writing as a compulsory subject; this ranges from 12% of the curriculum in Portugal to 31% in the Slovak Republic (Table D1.2).
- Based on survey reports from school principals in 2002, students’ academic performance is the most commonly used **criterion for admitting students to upper secondary schools**, though there is wide variation among countries. More than 80% of students in Finland, Hungary and Norway attend schools where students’ **academic performance** is always used as a criterion for admission, whereas in Spain the percentage is less than 10% (Table D5.1).

The amount of instruction students receive

Admittance policies in upper secondary schools

- The other most commonly used factors in **admission policies** are students' need for and interest in the programme and their residence in a particular area (Table D5.1).
- For **grouping students**, the most commonly used criterion is the **student's choice** of specific subject or programme; on average some 73% of students attend schools where this criterion is always used. By contrast, in Mexico, almost half the students attend schools where this is never the practice. Grouping students to ensure that classes contain a **mixture of abilities** is the next most common policy, followed by grouping students by **similar age** (Table D5.3).
- Schools in the Flemish Community of Belgium, Hungary, Ireland and Italy are, on average, more **selective both in admitting and in grouping students** than the international average. By contrast, in Spain and Sweden, schools appear to be less selective in their admission policies than the international average and they also tend to use selective grouping policies less frequently (Chart D5.3).

Class size and student/teacher ratios

- The **average class size** in primary education is 22, but varies between countries from 36 students per class in Korea to less than half of that number in Greece, Iceland and Luxembourg (Table D2.1).
- The **number of students per class** increases by an average of two students between primary and lower secondary education, but **ratios of students to teaching staff** tend to decrease with increasing levels of education due to more annual instruction time (Table D2.1).
- **Teaching and non-teaching staff employed** in primary and secondary schools ranges from less than 81 persons per 1 000 students enrolled in Japan, Korea and Mexico to 119 persons or more per 1 000 students in France, Hungary, Iceland, Italy and the United States (Table D2.3).

Teacher salaries

- The **mid-career salaries** of lower secondary teachers range from less than US\$ 10 000 in the Slovak Republic to US\$ 40 000 and more in Australia, Germany, Japan, Korea, Scotland, Switzerland and the United States (Table D3.1).
- On average, upper secondary **teachers' salary per teaching hour** exceeds that of primary teachers by around 40%, though the difference is lower than 5% in New Zealand, Turkey and the United States and as high as 82% in Spain, where the difference between teaching time at primary and upper secondary level is greatest (Table D3.1).
- **Salaries at the top of the scale** are on average around 70% higher than starting salaries for both primary and secondary education, though this varies between countries largely in line with the number of years it takes for a teacher to progress through the scale. For instance, top-of-the-scale salaries in Korea are almost three times that of starting salaries, but it takes 37 years to reach the top of the scale (Table D3.1).

- **Teachers' salaries** have risen in real terms **between 1996 and 2002** in virtually all countries, the largest increases evident in Hungary and Mexico. Salaries at the primary and upper secondary levels in Spain fell in real terms over the same period (Table D3.3).
- The number of **teaching hours per year in public primary schools** averages 803 hours, but ranges from 617 in Japan to 1 139 hours in the United States (Table D4.2).
- The average number of **teaching hours in lower secondary education** is 717 hours, but ranges from 513 in Japan to 1 167 hours in Mexico (Table D4.2).
- The average number of **teaching hours in upper secondary education** is 674 hours, but ranges from 449 in Japan to 1 121 hours in the United States (Table D4.2).
- The **percentage of working time that is spent teaching** is higher at the primary level than it is at the secondary level. At either level the percentage of working time spent teaching is greater than 50% in only a minority of countries (Table D4.1 and Chart D4.2).
- **Regulations of teachers' working time** vary among countries. In most countries, teachers are formally required to work a specific number of hours; in others, only teaching time in lessons per week is specified (Indicator D4).
- Overall, based on data for 2003, **decision making** is most highly centralised (taken at the central and/or state level of government) in Australia, Austria, Greece, Luxembourg, Mexico, Portugal, Spain and Turkey, with central government particularly dominant in Greece (88% of decisions taken by the central administration) and Luxembourg (66%) (Table D6.1).
- **Decisions** are more often taken **at the school level** in the Czech Republic, England, Hungary, New Zealand and the Slovak Republic and in particular in the Netherlands where all decisions are taken at the school level (Table D6.1).
- **Decisions** on the **organisation of instruction** are predominantly taken by schools in all OECD countries, while decisions on **planning and structures** are mostly the domain of more centralised tiers of government. The picture is more mixed for decisions on **personnel management and allocation and use of resources** (Table D6.2).
- Just less than half of **decisions taken by schools** are taken **in full autonomy**, about the same proportion as those taken within a framework set by a higher authority. Decisions taken by schools in consultation with others are relatively rare. Schools are less likely to make autonomous decisions related to planning and structures than related to other domains (Table D6.3).
- **Between 1998 and 2003**, decision making in most countries became **more decentralised**, most notably in the Czech Republic, Korea and

Teacher working time

The distribution of decision-making responsibilities at the lower secondary level of education

Turkey. The opposite trend was evident in the French Community of Belgium and Greece (Chart D6.3).

New indicators in this edition

In addition to an update of the regular indicators, this edition includes the following new indicators:

- **A5: Trends in reading literacy skills** – assesses reading literacy skills of students around the age of 9 years both overall and by gender.
- **A8: Student engagement** – examines two dimensions of student engagement: students' sense of belonging and their participation in school and shows the extent to which these vary across countries.
- **D5: Student admission, placement and grouping policies** – examines these policies as they apply at the upper secondary level where education provision begins to show greater diversity.
- **D6: Decision making in education systems** – examines the pattern for decision making and outlines which authority takes decisions on which areas of the system and the degree of autonomy with which they take these decisions.

In addition, several *new analyses* are featured throughout the regular indicators showing:

- Demographic factors affecting the future supply of qualified people (Indicator A1).
- Trends in the relationship between educational attainment and labour force activity (A10).
- A comparison of relative earnings over time both overall and for males and females separately (A11).
- A comparison of the distributions of expenditure and students by level of education (B1).
- A disaggregation of private expenditure on education between household expenditure and other private expenditure (B3).
- The pattern of enrolment by single years of age for young adults (C1).
- Trends in student mobility and analysis of subjects studied by foreign students (C3).
- Comparisons over time of how the transition between education and work is managed (C4).
- A profile in terms of country of birth of young persons with low levels of qualifications (C5).
- A comparison between public and private institutions of ratios of students to teaching staff (D2).
- The proportion of teachers' working time that is spent teaching (D4).

Note to editors

Figures generally refer to the 2002 school year or the 2001 financial year, unless otherwise stated. Figures on the reading, mathematical and scientific literacy of 15-year-olds and on student engagement are from the Programme for International Student Assessment (PISA) in 2000.

The indicators presented in the book are based on the data held by OECD as of 30 June 2004. Any subsequent revisions made by countries to their data that impact on the indicator values are reported on the OECD website at: www.oecd.org/edu/eqg2004.

Glossary of terms used in the Executive Summary

Advanced research programmes – refer to tertiary programmes that lead directly to the award of an advanced research qualification, *e.g.*, Ph.D.

Educational attainment – educational attainment is expressed by the highest completed level of education held by an individual, defined according to the ISCED.

Employment ratio – is the number of employed persons as a percentage of the total number of persons in the population.

Expenditure on educational institutions – covers expenditure on those educational institutions that are engaged in instruction as well as expenditure on non-instructional educational institutions, for example those involved in administration of the education system.

Human capital – productive wealth embodied in labour, skills and knowledge.

ISCED – International Standard Classification of Education which classifies educational programmes by level.

Partner countries – the countries taking part in the OECD/UNESCO World Education Indicators (WEI) programme: Argentina, Brazil, Chile, China, Egypt, India, Indonesia, Jamaica, Jordan, Malaysia, Paraguay, Peru, Philippines, Russian Federation, Sri Lanka, Thailand, Tunisia, Uruguay and Zimbabwe. In addition, Israel, who has observer status in OECD's activities on education, is included.

School expectancy – the average duration of formal education in which a 5-year-old child can expect to enrol over his or her lifetime.

Tertiary-type A level of education – corresponds to programmes at level 5A of ISCED. These are largely theory-based and are designed to provide sufficient qualifications for entry to advanced research programmes and professions with high skill requirements, such as medicine, dentistry or architecture. Usually includes both Bachelor and Masters degrees and their equivalent.

Tertiary-type B level of education – corresponds to programmes at level 5B of ISCED. These are usually shorter than those of tertiary-type A and focus on practical, technical or occupational skills for direct entry into the labour

market, although some theoretical foundations may be covered in the respective programmes.

Tertiary level of education – tertiary-type A and type B programmes plus advanced research programmes.

Total public expenditure on education – covers public (government) expenditure on institutions as well as public subsidies to households (*e.g.* for living costs) and other private entities.

University or equivalent level – refers to tertiary-type A programmes and above.

CONTRIBUTORS TO THIS PUBLICATION

Many people have contributed to the development of this publication. The following lists the names of the country representatives, researchers and experts who have actively taken part in the preparatory work leading to the publication of this edition of *Education at a Glance – OECD Indicators*. The OECD wishes to thank them all for their valuable efforts.

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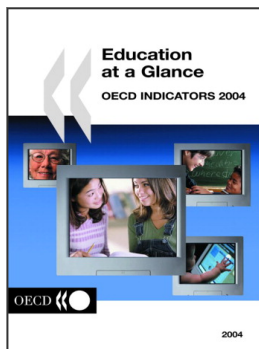
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