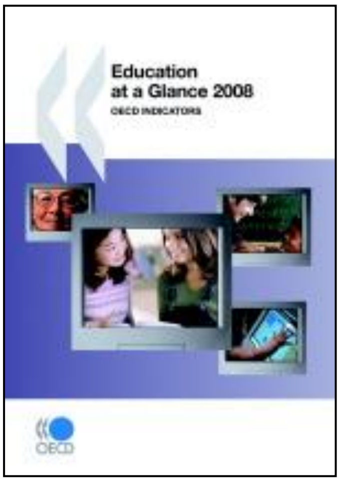
OECD MULTILINGUAL SUMMARIES



Education at a Glance 2008: OECD Indicators

Summary in English

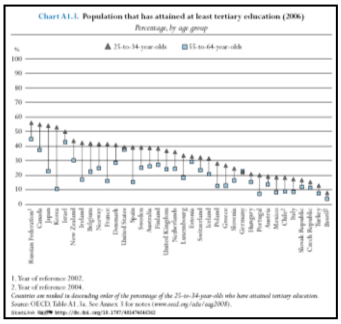
- Education at a Glance is the OECD's annual compendium of internationally comparable statistics on education.
- The 2008 edition tracks the continuing expansion of education, which has resulted in 57% of young people now attending university.
- As education systems cope with the challenges of growth, international comparisons can allow them to see themselves through the lenses of how policies work elsewhere in the world.

Tough choices or tough times - towards sustainable strategies for investing in expanding education systems

OECD governments have high ambitions for their education systems, wanting them to grow both in volume and quality. Yet public budgets face tight constraints, and education remains predominantly a public enterprise. So has education funding been able to meet the extra demands being placed on it, and will it be able to do so in the future?

In volume terms, the decades-old expansion in educational participation and outputs continues – and at a pace that outstrips many past projections. With completion of upper secondary education close to universal in most OECD countries, the greatest recent expansion has come in the tertiary sector (**Indicator A3**). While, in 1995, 37% of a cohort went into university-level programmes it is now 57%, on average across OECD countries (**Indicator A2**). It is always hard to predict the future from past trends. Will the expansion of tertiary education continue at this rapid pace, driven by an ever-rising demand for the highly skilled? Or will it level off and will relative earnings decline? At the beginning of the 20th century, few would have predicted that, among OECD countries, upper secondary education would be largely universal by the end of the century (**Indicator C2**). So it is equally difficult to predict how tertiary qualifications will have evolved by the end of the 21st century.

Chart A1.3 Population that has attained at least tertiary education (2006)



What is clear is that, for now, the incentives for attaining a tertiary qualification remain strong, both in terms of higher salaries and better employment prospects (**Indicators A8, A9 and A10**). In addition, the labour market demand for highly qualified workers has grown significantly (**Indicator A1**).

Meeting the demand while at least maintaining quality is bound to create pressures for current levels of spending to be maintained or increased and to improve the efficiency of spending on education. Recent years have already seen considerable rises in spending levels, both in absolute terms and as a share of public budgets. The total amount of funds allocated to educational institutions across all levels of education rose in all countries over the last decade, and by 19% on average between 2000 and 2005 alone (**Indicator B3**). By 2005, OECD countries were spending 6.1% of their collective GDP on education at all levels, of which 86% came from public sources and all but 7 of the 28 OECD countries spent at least 5% (**Indicator B2**). Another visible indication of the efforts made by governments can be found in the fact that from 1995 to 2005, public expenditure on education grew by more than one percentage point as a proportion of all public spending – from 11.9% to 13.2% in 2005. Education spending rose at least as fast as public spending in other sectors in all countries except Canada, France, Hungary, Portugal and Switzerland (**Indicator B4**).

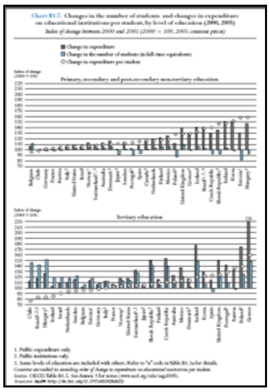
Alongside the increase in public spending on education, there has also been a search for new sources of funding to accommodate the rapid growth in student numbers (particularly at the tertiary level) and to increase the resources available to educational institutions (**Indicator B3**). Although 86% of spending on education still originates from public sources for all levels of education combined, private spending increased more rapidly than public spending between 1995 and 2005 in nearly three-quarters of the countries examined. In some, the proportion of private funding of tertiary educational institutions is high enough to challenge the view that tertiary education is primarily a state responsibility. In fact, this view is gradually being replaced by the perception that, given the shared public and private returns that education brings, costs and responsibilities for its provision should also be shared between those who directly benefit and society at large (*i.e.* private households and businesses as well as governments), at least at the tertiary level of education (**Indicator B3**).

While efforts to increase investments in education are clearly visible in this year's indicators, the question remains whether resources kept up with the demographic and structural changes that have occurred during the past decade? **Indicators B1 and B2** show that educational expenditure in primary and secondary education rose faster than student numbers in all countries between 1995 and 2005, and even faster than GDP per capita in more that two-thirds of them. Although spending per student at the primary and secondary level rose less rapidly on average between 2000 and 2005 than between 1995 and 2000, it rose by 30% or more in eight OECD and partner countries during the later period (**Indicators B1 and B2**). As a result, available resources per primary and secondary student have considerably increased over the past decade. Furthermore, in 23 out of 30 OECD countries, the size of the student population aged 5 to 14 years is set to decline over the next ten years (**Indicator A11 in *Education at a Glance 2006***), which suggests that resources per primary and secondary student could continue to grow if overall budget envelopes remain stable, releasing resources needed for measures to improve programme quality and student performance.

However, the pattern is different at the tertiary level. Between 1995 and 2005, spending per tertiary student shrank in some cases, as expenditure failed to keep up with expanding student numbers. If tertiary student numbers keep rising and with student mobility into the OECD area adding extra pressures in countries where foreign students do not pay for the full cost of their education, it appears that without additional investments, the tendency towards declining unit expenditure could even accelerate (**Indicator C3**). The continuation of current trends could potentially also widen disparities in funding levels among countries. In 2005, expenditure per tertiary student varied by a factor of 7, from USD 3 421 in the Russian Federation to over USD 20 000 in Switzerland and the United States (**Indicator B1**).

The challenges to meet additional financial needs are therefore clear, at least for tertiary education. However, it is equally clear that more money alone will not be enough. Investments in education will need to become much more efficient, too. The OECD Economics Department examined this question and estimates that, on average across OECD countries, there is the potential for increasing learning outcomes by 22% while maintaining current levels of resources (**Indicator B7 in *Education at a Glance 2007***). This indicates the scale of effort that is needed for education to re-invent itself in ways that other professions have already done and to provide better value for money. Results from PISA have also revealed that the cross-national relationship between the resources invested in education and learning outcomes is moderate at best, suggesting that money is a necessary but not a sufficient prerequisite for high quality learning outcomes.

Chart B1.7 Changes in the number of students and changes in expenditure on educational institutions per student, by level of education (2000, 2005)



This year's edition of *Education at a Glance* takes this discussion further (**Indicator B7**) by looking into the policy choices that countries make in investing their resources, including trade-offs between the hours that students spend in the classroom, the number of years they spend at school, the number of hours teachers work, class sizes (proxy measure) and teacher salaries (**Indicators C4, D1, D2, D3 and D4**). The results show that similar levels of expenditure by countries can mask a variety of contrasting policy choices in upper secondary education. This goes some way towards explaining why there is no simple relationship between how much is spent overall on education and the level of student performance. For example, in Korea and Luxembourg, salary costs per student (as a percentage of GDP per capita, in order to level out significant differences in these countries' national income) are well above the OECD average (15.5% and 15.2%, respectively, compared to 10.9% on average). However, while Korea invests the resources in paying teachers relatively high salaries at the price of relatively large class sizes, in Luxembourg higher than average salary costs per student are almost entirely attributable to very small class sizes (**Indicator B7**). Countries will need to consider such choices carefully and they will need to improve the knowledge base as to how such choices relate to value for money if the efficiency of educational services is to increase.

Chart B3.1 Share of private expenditure on educational institutions (2005)

The analysis also reveals several other trends. In countries with the lowest per-student salary cost at the upper secondary level (as a percentage of GDP per capita), the main reason is usually comparatively low salary levels as a proportion of GDP per capita. This is true in Iceland, Ireland, Norway, Poland, the Slovak Republic and Sweden. The main exception is Mexico, whose teacher salary costs relative to GDP per capita are well above the OECD average, which have been compensated by large class sizes (**Indicator B7**).

Again, countries experiencing rises in spending per student need to look carefully at how these are deployed.

At the tertiary level, the financing patterns that have emerged differ from those in primary and secondary education. First of all, the use of private funds is much more common than at the primary and secondary levels. Private funding represents on average 27% of total spending, exceeds the 50% mark in Australia, Japan, the United States and the partner country Israel, and reaches over 75% in Korea and the partner country Chile (**Indicator B3**). The balance between private and public funding on the one hand, and the ability of countries to provide various forms of public subsidies for tertiary institutions on the other hand, have been two factors that help to explain wide differences in the approaches to the financing of tertiary education. Some countries have found new private sources, some have expanded public funding, while those doing neither increasingly find expansion and quality hard to reconcile.

Chart B7.1 Contribution of various factors to salary cost per student as a percentage of GDP per capita, at the upper secondary level of education (2004)

So far, the Nordic countries have achieved expansion by providing massive public spending on tertiary education, including both support of institutions and support of students and households, as an investment that pays high dividends to individuals and society. Other countries such as Australia, Canada, Japan, Korea, New Zealand, the United Kingdom and the United States have expanded participation in tertiary education by shifting some of the financial burden to students and their families. In many of these countries, tuition fees are set by the institutions (often with a ceiling) and can vary according to students' labour market prospects and expected salary levels upon graduation (**Indicator B5**). These measures often go hand in hand with financial support to students from less advantaged backgrounds, in the form of loans and/or scholarships, as well as with loans on advantageous terms available to all students. For example, in Australia and New Zealand income contingent loan schemes, which are available to all students to cover the cost of tuition fees, are supplemented with means tested income support for living expenses and scholarships, which assist with general education and accommodation costs and are targeted at lower socio-economic background students.

In contrast, many European countries have not increased public investments in their universities to the extent needed to maintain past expenditure per student levels, yet do not allow universities to charge tuition fees. As a result, their institutions' budgetary difficulties are increasing, which may ultimately endanger the quality of the programmes offered. A striking comparison is that average spending per tertiary student in most European countries is now well below half the level in the United States. While choices between greater public investments and a larger share of private money are difficult to make, doing neither in the face of the rising demand for more and better tertiary education seems no longer an option.

In moving their education systems forward, countries need to employ a multipronged approach to ensuring that education is adequately funded. As well as looking at the case for prioritising education in the allocation of public spending, they may need to look at how more private funding can be brought in at the tertiary level, at areas to prioritise for quality improvement within the education system and at ways of deploying resources more efficiently. A challenge here is to achieve this in ways that do not compromise equity. The indicators show that in many countries, students are much more likely to be in tertiary education if their fathers completed tertiary education. This suggests a need for measures encouraging intergenerational progression in terms of educational qualifications. Strengthening public subsidies and achieving a good balance between financial aid in the form of student loans and scholarships can be a way to improve equity in the access to tertiary education. Some analysis suggests that scholarships may be more efficient than loans in encouraging students from disadvantaged socio-economic backgrounds to continue to study, whereas loans may work better for the other socio-economic categories (**Indicators A7 and B5**).

Beyond the question of resource allocations, improving guidance mechanisms for students to make informed choices between secondary- and tertiary-level programmes could also impact on graduation rates and ease pressures on spending because, on average, some 31% of students do not complete the tertiary studies for which they enrol across the 19 OECD countries for which data are available (**Indicators A3 and A4**).

Indicator A1 also suggests that adapting programmes that yield poor labour market outcomes to the growing needs of human resources in specific sectors is an issue. In OECD countries, the proportion of skilled jobs in the economy is generally larger than the potential supply of individuals holding high-level education and training qualifications matched with those jobs.

Managing the growth and development of educational systems in ways that improve access, enhance quality and boost value for money poses difficult challenges, and countries will need to find ways to address these. The knowledge society is here to stay, requiring capable, highly qualified and innovative citizenry, and rising educational participation suggests that young persons and their families have got that message. While nobody can predict how far the expansion in tertiary education will continue, countries need sustainable financing systems capable of responding to growing student numbers. Not doing so could mean that the knowledge society could be a polarised world, peopled by those who can afford education and those who cannot.

This requires tough choices. An important aim of this year’s edition of *Education at a Glance* is to lay out how some of these policy choices are made in different countries. Much more will need to be done to understand how the choices and mixes of policies combine most effectively to promote student learning in the different contexts in which countries operate. International comparisons can be a powerful instrument to facilitate this. They allow education systems to look at themselves through the lenses of policies planned, implemented, and achieved elsewhere in the world. They also show what is possible in education in terms of the quality, equity, and efficiency of educational services, and they can foster better understanding of how different education systems address similar problems.

Furthermore, this year's edition of *Education at a Glance* answers the following questions: what can 15-year-olds do in science (**Indicator A5**), what are the parents' perceptions related to school and science learning (**Indicator A6**), does their parents' socio-economic status affect students' participation in higher education (**Indicator A7**), on what resources and services is education funding spent (**Indicator B6**), how prevalent are vocational programmes (**Indicator C1**), do adults participate in training and education at work (**Indicator C5**), how are evaluations and assessments used in education systems (**Indicator D5**) and, finally, what is the level of decision making in education systems (**Indicator D6**).

The OECD will pursue the further development of policy-relevant international comparisons vigorously, not just in areas where it is currently feasible, but also in those where a considerable investment still needs to be made in conceptual work. The launch of the OECD Teaching and Learning International Survey (TALIS), which represents a major breakthrough in both conceptual and methodological terms, the further development of the OECD Programme for International Student Assessment (PISA) and its extension through the OECD Programme for the International Assessment of Adult Competencies (PIAAC), as well as initial work on exploring the assessment of higher education outcomes (AHELO) will be important steps towards this end.

The full report can be accessed on www.oecd.org/edu/eag2008

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