

Education and Equity

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Introduction

For a more equitable society, all individuals, independently of their socio-economic background, origin and gender, should ideally have access to equivalent learning opportunities; those with organic disabilities, learning difficulties or social disadvantages should benefit from specific support; and finally, improving outcomes of all learners, and especially those who are less successful, should be a permanent objective of all educational systems.

Drawing from work developed by the OECD over the past few years, this *Policy Brief* highlights policy lessons from current experiences in OECD countries in dealing with these issues. ■

How to achieve equity in lifelong learning?

Lifelong learning covers all purposeful learning activities, from early childhood education and care to adult training (from cradle to grave), that aim to improve knowledge and competencies for all. For equity purposes, this implies the need to promote access, at all educational levels, from pre-school education to primary, secondary and tertiary education, and finally to adult learning.

Lifelong learning for all is far from being a reality in every OECD country mainly because of the difficulties in providing sufficient access to pre-school education and to adult learning.

Early childhood education and care

Outcome research on early education shows that children who participate over time in high quality, early childhood education and care (ECEC) are likely to develop higher-order reasoning and problem-solving skills; to be more co-operative and considerate of others; to develop greater self-esteem; and to be better equipped to make effective transitions to compulsory schooling. The effects are generally greater and more long-lasting in children

from disadvantaged backgrounds. A recent meta-analysis of the major evaluation studies of centre-based programmes concludes that if certain structural requirements are respected (e.g. sufficient investment, duration and intensity of programming, favourable child-staff ratios...), positive and long-lasting outcomes in both the cognitive and socio-emotional domains are most likely to be delivered by structured programmes with clear developmental and pedagogical aims. For this reason, most OECD countries provide at least two years of public pre-school education for young children before their entry into primary school. In some countries, this service is entirely free; in others, parents will be expected to defray the high costs of early education through a sliding scale of fees.

A number of gaps exist, however, in many national systems:

- *Access can be inadequate:* in particular, for children from low-income families, children living in rural areas and children with special needs, especially in countries where government funded, centre-based instruction programmes are limited.
- *The quality of programming can be a concern:* in particular, the developmental and educational goals of early childhood programmes are sometimes undermined by unfavourable structural features, e.g. high child-staff ratios; inadequate training of staff; curricula that are neither developmental nor educational; programming that is unsuitable for children with special educational needs, such as second-language and ethnic children. Programmes for such children should respond to the needs and rights of diverse populations by providing resources for staff training, culturally appropriate educational materials – e.g. books, music – language support and outreach to parents and communities.
- *While provided as a public service, the programme offered is often too short for working parents.* In many countries, publicly-funded early childhood programmes not only have qualified teachers and appropriate class size, but also provide meals, transportation and an extended day for young children. In other countries, public early childhood education offers only a short morning or afternoon period. Brief programmes place strain on working parents, and encourage the survival – especially among low-income groups – of *ad hoc* arrangements that are unsupervised and generally of low quality.

Without a pro-active stance from the government, there is a large risk of a two-tiered ECEC system developing, with children from the upper income

groups benefiting from high-quality ECEC while children from low-income groups can access only low-quality programmes. Several issues arise:

- What are the necessary structural features of high quality programmes for young children and their costs?
- Can a high quality, universal service at national level be organised that avoids segregation and allows individualised attention to children most in need?
- How should high quality pre-school programmes be organised for disadvantaged and immigrant children that assist the integration of their families and ensure equality of educational opportunity for these children?
- To bring greater equity at the base of education, should adjustments be made across educational budgets?

Adult learning

Adult learning needs also to be further developed in OECD countries. At present, roughly two thirds of the adult population do not participate in organised learning activities. In addition, and even more importantly, adult training rates increase with the level of initial education, so that training tends to reinforce existing inequalities in levels of educational attainment. The policy challenge is therefore to overcome this disparity both through better initial formal education – leading to fewer drop-outs with no commitment to later learning – and through interventions which compensate for the initial problem – by encouraging rather sceptical and perhaps unmotivated adults to re-engage with learning. Otherwise a lot of adult learning is just topping up those with most already provided – further increasing inequities in educational outcomes.

Increasing the number of courses is however insufficient. For instance, creating a learning-rich environment at work can be as important to learning as the number of available training courses; and unless the diversity of learning options is increased, tertiary education may serve, primarily, already privileged groups.

In the OECD area, the Nordic countries stand out with good performances in terms of lifelong learning. However each has weaknesses, particularly with regard to participation in early childhood education and care, completion of upper secondary education and/or adult learning. All other countries have even greater weaknesses. ■

Education and gender equity: is there an issue?

When comparing the data on education attainment for those aged 55-64 and those aged 25-34, there is clear evidence that women have substantially improved their relative position.

Table 1. **Percentage of the population having attained at least (2001)**

		Upper secondary education	University level
Age group			
55-64	Men	50	12
	Women	38	6
25-34	Men	72	16
	Women	72	16

Source: Education at a Glance: OECD Indicators – 2003 Edition.

The results are even more striking for graduation rates.

- In 15 of the 16 OECD countries for which total upper secondary graduation rates can be compared between the genders, in 2001 the rate for women exceeded that for men, by up to 13 percentage points.
- While in 1991, the levels of tertiary attainment were about the same for men and women, in 2001, the advantage is clearly in favour of women: on average in the OECD area, 29% of women have tertiary qualifications, compared with only 26% of men.

But significant gender differences continue to exist in specific areas where more public intervention may be necessary:

- More young males are identified as being disadvantaged students: on average in countries where the information is available, 50-60% of those identified as suffering social disadvantages, 60% of those identified as suffering organic disabilities and 60-70% of those identified with learning difficulties are male. These figures can be explained by natural causes (e.g. male children are more prone to illness and trauma); psychological (males externalise their feelings in school more openly than females) or sociological factors (the education of males is given greater priority than that of females).

- Among 15-year olds, PISA 2000 shows large gender differences in reading literacy: in every OECD country girls reach higher levels of performance on average than do boys. In mathematical literacy however, in about half the countries, boys perform better, but the difference is equal to only a third of the level recorded in reading literacy. In scientific literacy, 25 countries show no significant gender differences.
- Major gender differences remain between fields of study in tertiary education. In 2001, in the humanities, arts, education, health and welfare, on average women made up more than two thirds of the graduates in OECD countries, but less than one third of mathematics and computer science graduates and less than one fifth of engineering, manufacturing and construction graduates. In addition, on average in OECD countries, nearly two thirds of all Ph.D. graduates are men.

There are clearly underlying features of educational systems or societies and cultures that induce gender differences that need to be addressed. ■

How to meet the needs of the disadvantaged?

All students with organic disabilities, learning difficulties (dyslexia, dyscalculia...) or social disadvantages (children from disadvantaged socio-economic backgrounds, potentially some migrants and minorities) should benefit from a learning environment equivalent to that of other students, which means that they need extra resources to equal the performance of other students with similar abilities.

Not all OECD countries have the same conceptualisation of disabilities, learning difficulties or social disadvantages. Nor do they use the same identification procedures and the same educational practices, or have the same comprehensiveness of provision and finally the same policy priorities. Accordingly, international comparisons are difficult.

In addition, independently of the number of supported students, it is the additional resources and the quality of the teaching from which these students can benefit that really counts in order to assess the equity level of an educational system.

There is no internationally comparable information on these issues which makes it difficult to assess whether disadvantaged students in some countries benefit from more equitable learning opportunities than in others. Furthermore, while the higher percentage of

Table 2. **Percentage of students in compulsory education receiving additional resources for defined (1999)**

	Disabilities	Difficulties	Disadvantages
Belgium	3.6	9.3	6.3
Canada	3.2	8.3	0
Czech Republic	3.8	5.3	0
Finland	1.5	19.7	11.1
France	2.9	1.7	1
Germany	1.5	2.6	0.3
Italy	2.1	0	na
Japan	1.1	0	0.2
Luxembourg	2.1	0.5	na
Mexico	0.6	1.3	na
Netherlands	1.9	6.5	16.5
Spain	2.3	2	2.6
Sweden	1.8	n.a.	n.a.
Switzerland	1.7	n.a.	n.a.
United Kingdom	2.7	14.4	n.a.
United States	4.6	6.6	n.a.

n.a. = not available.

Source: OECD, Education Policy Analysis, 2003.

students receiving additional resources in some countries (see Table 2) is one indicator of policy priorities, other countries may devote more resources to all students, making it easier to cope with individual difficulties.

An inclusive education

To address the needs of disadvantaged students, countries can choose between special or regular schools, and so include students in special or in regular classes.

While the solutions adopted by countries vary substantially, evidence shows that in order to equip disadvantaged students, as far as possible, with equivalent learning means, such students, even those with severe disabilities, should be educated in regular, mainstream schools rather than in separate institutions, on the condition that the extra resources provided in special schools are maintained elsewhere. There is even evidence that non-disabled students benefit from the extra support provided in the regular classes as a result of the inclusion of disabled students.

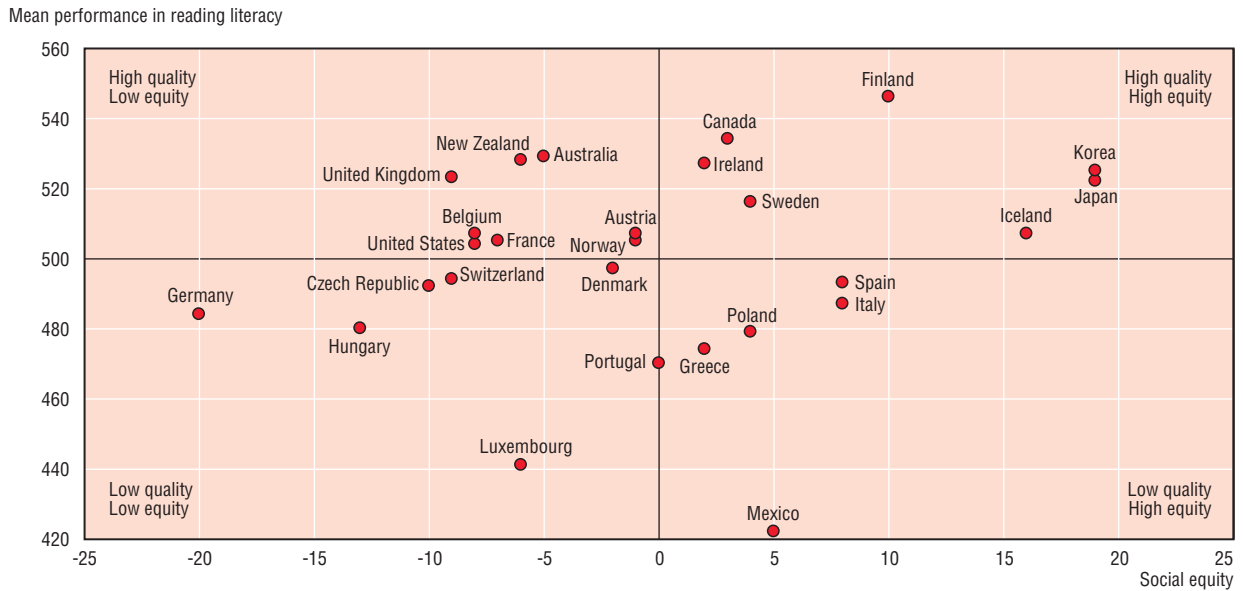
Despite these encouraging results, much remains to be done. The OECD is working with member countries to help strengthen the information and research base. ■

Can educational systems reduce the influence of low socio-economic backgrounds?

PISA 2000 provided an answer which is encouraging. It showed that:

- High average quality and equality of outcomes among students from different socio-economic backgrounds are compatible as shown by Figure 1 where average performance in PISA 2000 in reading literacy is on the vertical axis and the impact of family background on the horizontal axis. Canada, Finland, Iceland, Ireland, Japan, Korea and Sweden all display above-average levels of student performance and, at the same time, a below-average impact of economic, social and cultural status on student performance. Conversely, average performance in reading literacy in the Czech Republic, Germany, Hungary and Luxembourg is below the OECD average while, at the same time, there are above-average disparities between students from advantaged and disadvantaged family backgrounds. An important finding of PISA is thus that countries differ not just in their overall performance, but also in the extent to which they are able to close the gap between the students with the lowest and the highest levels of performance.

Figure 1. Relationship between the average performance of students and social equity



Source: OECD (2001) Knowledge and skills for life, Appendix B1, Table 2.3a, p.253.

- Public policy can have an impact as some countries indeed succeed in bringing children with a migrant background to performance levels comparable to those of native students; others, however, show large gaps.

PISA also showed that the variation in the reading literacy skills of 15-year-olds can be accounted for by the different results of each school and between schools. Substantial variation among schools suggests differences in equity of learning opportunities. Countries with the highest mean scores in reading are also those with high average performance levels across schools. Conversely, there is a clear tendency for larger disparities among schools to be associated with lower overall performance.

PISA showed that, in many countries, a substantial portion of the variation in performance among schools is associated with differences in students' socio-economic background. This is particularly true when the allocation of students to programmes is linked to students' socio-economic background. PISA also showed that, in almost all countries, there is a clear advantage in

attending a school whose students are, on average, from more advantaged family backgrounds.

The overall conclusion is that socio-economic background can explain only part of the disparities in education. The quality of schools and the average level of students are of greater significance. In countries where there is a high degree of differentiation between schools from a socio-economic viewpoint, students from disadvantaged socio-economic backgrounds do worse. In such circumstances, talents remain underutilised and students with disadvantaged home backgrounds may not achieve their full potential, i.e. inequality of outcomes can be associated with inequity of opportunity. ■

Would ICTs help to achieve higher equity?

Schools and education authorities are well aware of the importance of integrating information and communications technologies (ICTs) into teaching and learning. The objectives are to make the best use of new pedagogical methods and the Internet, to prepare

students for the information society and to help bridge the gap between home and school occupations. The use of ICTs at school is simply not enough. It needs to be complemented by the use of such technologies at home, in libraries, learning centres and the workplace.

People without access to ICTs or without ICT skills become less and less capable of participating in the knowledge society. The resulting digital divide, which can only reinforce existing disparities in education opportunity, as well as income and wealth inequalities, has three dimensions:

- Differences in access to computers and the Internet according to socio-economic background, ethnic group, age and educational background.
- Geographic differences (between urban and rural regions, between large and small cities, between countries).
- Variation in ICT use by type of company (small *vs.* large) and sectors (agriculture *vs.* finance).

Consequently, to bridge the digital divide, it is necessary to address a wide range of policy initiatives. Many OECD countries have developed programmes, among others, for:

- Improving access to ICTs in schools, libraries and learning centres with an emphasis on children and schools in poor neighbourhoods.
- Improving the ICT skills of teachers.
- Providing extra financial help for ICT investment.
- ICT training of low-skilled workers.
- Tax initiatives for encouraging companies' to invest in ICT training.

However, much remains to be done as low ICT literacy is increasingly becoming in itself a form of exclusion from society. ICTs can be considered as providing

major opportunities to improve the quality of teaching and learning and to broaden learning opportunities, but they can also be considered as presenting major risks because their lack of accessibility to, and use by, both students from low income families and adults with low education can lead to further social disparities. ■

For further information

Additional information can be obtained as follows:

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- On PISA, from Andreas Schleicher
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For further reading

- **Starting Strong: Early Childhood Education and Care**, 2001
ISBN: 9264186751, €45, 216p
- **Education Policy Analysis**, 2001, Chapter 1, Lifelong Learning for All: Policy Directions
ISBN: 9264186360, €20, 152 p.
- **Education Policy Analysis**, 2001, Chapter 3, Closing the Gap: Securing Benefits for All from Education and Training
ISBN: 9264186360, €20, 152 p.
- **Knowledge and Skills for Life: First Results from PISA 2000**, 2001
ISBN: 9264196714, €21, 322 p.
- **Education Policy Analysis**, 2002, Chapter 2, Improving Both Quality and Equity: Insights from PISA, 2000
ISBN: 9264199306, €20, 136 p.
- **Education Policy Analysis**, 2003, Chapter 1, Diversity, Inclusion and Equity: Insights from Special Needs Provision
ISBN: 9264104577, €16, 116 p.
- **Education at a Glance: OECD Indicators**, 2003 Edition
ISBN: 9264102337, €49, 456 p.

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