

## Developmental indicator

## STUDENTS WITH SPECIAL EDUCATIONAL NEEDS (disabilities, learning difficulties and disadvantage)

### ■ POLICY CONTEXT

Students with disabilities, learning difficulties and those from disadvantaged groups often receive additional support in school to enable them to make satisfactory progress. Some continue to be educated in special schools, but increasingly they are included in mainstream education.

The orientation of educational policies towards lifelong learning and equity has particular significance for these students since they face the greatest risk of exclusion, not only in schools but also in the labour market and in life generally. Monitoring the educational provision which is made for these students is of great importance especially given the substantial extra resources involved.

Many countries have positive policies towards equitable provision and the inclusion of those with special needs into society. However, legislative frameworks, traditional attitudes, teacher training, segregated systems and categorical descriptions (such as disability categories) among other factors may militate against inclusion and even favour exclusion.

To deliver education for these students, most countries make additional resources available to schools. These usually take the form of extra teaching staff or assistants and para-professional services, such as speech and language therapists and physiotherapists, alongside physical adaptations to buildings and equipment. Countries vary substantially in both the extent of these services and the location where they are delivered (special schools, special classes in regular schools, regular classes in regular schools or other locations).

The data presented in this indicator are still developmental and comparisons between countries need to be interpreted with caution. Although most countries use categories to identify different types of need there is a lack of consistency between countries in the extent to which, and the way in which, they are used. Moreover, some countries include the disadvantaged within special needs education nationally while others do not.

### ■ EVIDENCE AND EXPLANATIONS

#### Proportion of students considered to have special educational needs

The possibility of making international comparisons of the numbers and proportions of students with special educational needs has previously been hindered by a lack of agreement on definitions. Approaches based on counting the

*This developmental indicator compares the proportion of students considered to have special educational needs.*

*It also presents data on the extent of provision, its location, and its resourcing in terms of student/teaching staff ratios.*

*An innovative approach is used that focuses on the additional resources made available to students with special needs.*

*However, the data for this indicator are still developmental.*



*Students with special needs are now defined in terms of the additional public and/or private resources provided to support them.*

*A new tri-partite international taxonomy classifies special programmes in an internationally consistent way.*

*Category A corresponds broadly to needs arising from impairing conditions; Category B for those experiencing difficulties in learning for no clear reason and Category C comprises disadvantage.*

*Countries bring to bear different conceptual frameworks in administering special education.*

numbers of students in special schools, or on models of handicap based on medical categories, do not reflect the reality in many countries of increasing inclusion of students with special educational needs in mainstream education, and of an appreciation that such medical models are of limited value in planning educational provision to meet the needs of students.

This indicator takes a different approach by using data based on the additional resources made available for supporting students with special educational needs during their education. Special needs education is thus defined operationally in terms of the additional public and/or private resources provided to support the education of these students.

To provide a basis for comparisons, countries have now located their own national categories of special needs education within a simple tri-partite international taxonomy. Category A in this taxonomy corresponds broadly to needs arising from impairing conditions; Category B to those experiencing difficulties in learning for no clear reason and Category C comprises disadvantage (see definitions below). Table C6.1 summarises the results of this reclassification of national categories. It reveals that there is substantial overlap between the categories placed in cross-national category A, albeit with some slight differences in the labels used [*e.g.* “trainable mental handicap” (Switzerland); “severe mental handicap” (Italy); “medium grade of mental retardation” (Hungary)].

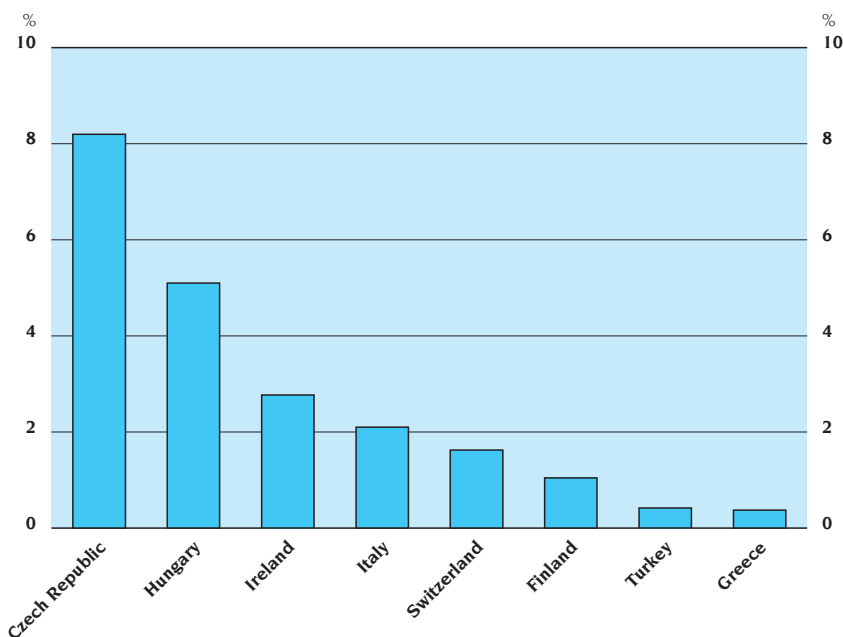
Table C6.1 shows the different conceptual frameworks that countries bring to bear in administering special education. Some countries include only students with medical disabilities in what they refer to nationally as special education (*e.g.* the Czech Republic and Italy) while Turkey includes gifted and talented and yet others include those who are disadvantaged in various ways (*e.g.* Switzerland). Students falling into this last category are those who tend to be included in the broader resources model (*e.g.* Finland and Hungary). Students with emotional problems are also perceived very differently between countries. In some countries these problems are seen to have a transactional basis, in others to have a clear organic basis, and in yet others they do not appear at all. The resources model provides an inclusive framework to bring together all categories of students receiving additional support since it does not rely on national definitions of special education, and hence provides the basis for potential international comparisons.

Chart C6.1 presents the country differences for students in category A (where the data are most complete). The percentage of students in category A is relatively low in Greece and Turkey, intermediate in Finland, Ireland, Italy and Switzerland and high in the Czech Republic and Hungary.

If category B is included, the extent of provision triples in Switzerland and doubles in Finland with the other countries remaining unchanged.

Category C, which covers the provision made for disadvantaged students, shows the considerable extent of additional resources being put into the education of these children. The figures reflect education policies of positive discrimination in favour of disabled and disadvantaged students (Table C6.2).

Chart C6.1. **Number of students in cross-national category A receiving additional resources as a percentage of all primary and lower secondary students (1996)**



Countries are ranked in descending order of the percentage of cross-national category A students.

Source: OECD.

### Location of students with special educational needs

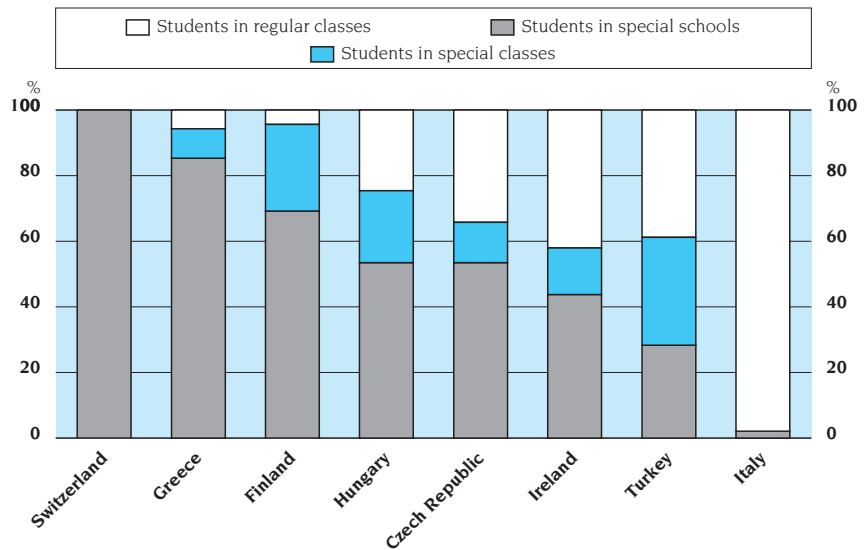
Table C6.4 shows the number of children in special schools, special classes in regular schools and regular classes in regular schools and the ways in which the students in cross-national categories A, B and C are distributed across them. The table shows that in most countries, special schools are providing for category A and B students only, while special classes and regular classes provide for all three categories. Table C6.3 and Chart C6.2 show how category A students are distributed across special schools, special classes and regular classes. The pattern across countries is varied. In Italy there are virtually no students in special schools or classes, whereas for most other countries, although there is some variation, these are the preferred forms of provision for category A students.

*In most countries, special schools are providing for category A and B students only, while special classes and regular classes provide for all three categories.*

OECD countries are in a period of transition from systems which operate largely segregated provision for students with special educational needs (typically categorised in terms of different impairments) to more integrated systems seeking to include all students in the same schools. Some countries (*e.g.* Italy) already have long traditions of such inclusive education. Many others are in the process of change in line with international agreements advocating inclusion on principles of equity and equality of opportunity. Debate continues about the feasibility and desirability of including all students in regular or mainstream provision. This indicator responds to the need to monitor this changing situation, and to provide comparative information about the extent and nature of integration in different national systems.

*OECD countries are in a period of transition from systems in which special needs students are segregated towards more integrated systems seeking to include all students in the same schools.*

Chart C6.2. **Distribution of students with special educational needs receiving additional resources in cross-national category A by location of students (1996)**



Countries are ranked in descending order of the percentage of students in special schools.

Source: OECD.

### Resources and special needs education

*Additional resources for students with special education needs can be of many kinds.*

The resources definition acknowledges that additional resources provided for students with special educational needs can be of many kinds. These include personnel, covering both teachers and others such as para-professionals and assistants; material resources such as aids or supports of various kinds; and financial resources including favourable funding formulas. As the salaries of teachers constitute a major part of educational expenditure and resourcing, student/teaching staff ratios for students with special educational needs are an important indicator. Table C6.5 shows the student/teaching staff ratios for cross-national categories A, B and C, broken down for primary and lower secondary education. For purposes of comparison the student/teaching staff ratios for regular education are also shown (see also Indicator B7).

*In all countries, student/teaching education needs are comparatively low.*

Student/teacher ratios for students with special education needs are comparatively low, ranging for category A students in special schools from 2.3 to 8.6 and in special classes in regular schools from 1.7 to 10.7 (primary and lower secondary education). These ratios indicate a substantially more favourable resourcing than for all students in regular schools, which range in primary schooling from 11.2 to 27.9 and lower secondary from 9.5 to 16. This is, at least in part, a recognition of the complexity of the teaching task and of the likely need for individualised attention. It is also clear that substantial resources in terms of support teachers are often made available. Data on this point are difficult to obtain, however.

### The special needs education indicator

Based on the additional resources countries make available for supporting special needs education, this indicator reveals:

First, that different countries identify very different proportions of children as being in need of additional support.

Second, the use of three broad categories for identifying the perceived “causes” of educational difficulty uncovers apparent differences between countries in the identification of “causes” and seems a promising way forward. The combined use of the resources definition and the tri-partite classification helps to remove differences simply arising from differences in definition as applied to the concept of special needs education and should assist in improving the quality of international comparisons in this area.

Third, the data reveal the great differences between countries in the type of school in which special needs students are educated and thus their socialising and educational experiences, which may be linked to later experiences of social exclusion. It is clear that some countries regard it as feasible to educate in regular classes students who would, in other national systems, be educated in special schools. The combined effect of the increasing use of the concept of special needs education and the moves towards inclusion present formidable challenges to the collection of statistical data in this area.

Fourth, the additional resources made available, proxied by favourable student/teaching staff ratios, reveal the extent of the additional support provided to special needs students and their schools. This may be viewed as an effort by countries to improve opportunities for students with disabilities, learning difficulties and disadvantages by means of positive discrimination.

Several countries do not collect data on students with special needs educated in regular classrooms. With moves toward integration and inclusive education increasing the numbers of students in these settings, data on such students should be a priority in the further development of data collection systems.

Developments in methodology which permit the widespread collection of such data, including quantification of the resources made available in these settings, encourage an objective comparison of different systems. If coupled with development work on the outcomes of education for those with special needs, wherever educated, an economic rationale could be added to the philosophical and educational case for integration.

## ■ DEFINITIONS

The percentage of students with special educational needs in Table C6.2 is calculated by dividing the number of students with special educational needs by the total number of students in primary and lower secondary education (times 100). This is taken to be the students involved in programmes at ISCED levels 1 and 2, unless otherwise indicated. The figures for students with special educational needs are based on full-time study.

*Data refer to the school year 1995/96 unless indicated and are based on a UOE special study on special needs education carried out in 1996/97 (for details see Annex 3).*

Students with special educational needs are defined by the additional public and/or private resources provided to support their education. “Additional resources” are those made available over and above the resources generally available for students who have no difficulties in accessing the regular curriculum. Figures in the tables are based on both public and private institutions, unless otherwise indicated.

Figures based on national categories of special needs education, where these are used by countries, have been aggregated into cross-national categories A, B and C.

- Category A refers to educational needs of students where there is substantial normative agreement – such as blind and partially sighted, deaf and partially hearing, severe and profound mental handicap, multiple handicaps.
- Category B refers to educational needs of students who have difficulties in learning which do not appear to be directly or primarily attributable to factors which would lead to categorisation as A or C.
- Category C refers to educational needs of students which are considered to arise primarily from socio-economic, cultural and/or linguistic factors.

Special schools are defined as segregated settings, separately administered from regular or mainstream schools. Special classes are classes or units attached to regular schools. Teaching staff, as used in the calculation of student/staff ratios in Table C6.5, refers to the total of full and part-time staff (calculated on a full-time equivalent basis), unless otherwise indicated.

Table C6.1. Allocation of national categories of special needs education to cross-national categories A, B and C (1996)

	Cross-national category A	Cross-national category B	Cross-national category C
Czech Republic	<ul style="list-style-type: none"> <li><i>i</i> Mentally retarded</li> <li><i>ii</i> Hearing handicaps</li> <li><i>iii</i> Sight handicaps</li> <li><i>iv</i> Speech handicaps</li> <li><i>v</i> Physical handicaps</li> <li><i>vi</i> Multiple handicaps</li> <li><i>vii</i> Sick lying in hospitals</li> <li><i>viii</i> Developmental, behavioural and learning problems</li> <li><i>ix</i> Other handicaps</li> <li><i>x</i> Children with weakened health</li> </ul>		
Finland	<ul style="list-style-type: none"> <li><i>i</i> Moderate mental impairment</li> <li><i>ii</i> Hearing impairment</li> <li><i>iii</i> Visual impairment</li> <li><i>iv</i> Physical and other impairment</li> <li><i>v</i> Others</li> </ul>	<ul style="list-style-type: none"> <li><i>i</i> Mild mental impairment</li> <li><i>ii</i> Emotional and social impairment</li> <li><i>iii</i> Specific learning disabilities</li> <li><i>iv</i> Support teaching</li> </ul>	<ul style="list-style-type: none"> <li><i>i</i> Immigrants/emigrants</li> </ul>
Greece	<ul style="list-style-type: none"> <li><i>i</i> Blind – partially sighted</li> <li><i>ii</i> Deaf – hearing impaired</li> <li><i>iii</i> Physically handicapped</li> <li><i>iv</i> Mentally retarded</li> </ul>	<ul style="list-style-type: none"> <li><i>i</i> Autistic</li> </ul>	<ul style="list-style-type: none"> <li><i>i</i> Learning difficulties</li> </ul>
Hungary	<ul style="list-style-type: none"> <li><i>i</i> Slight grade of mental retardation</li> <li><i>ii</i> Medium grade of mental retardation</li> <li><i>iii</i> Visual disabilities</li> <li><i>iv</i> Hearing disabilities</li> <li><i>v</i> Motoric disabilities</li> <li><i>vi</i> Speech disabilities</li> <li><i>vii</i> Other disabilities</li> </ul>		<ul style="list-style-type: none"> <li><i>i</i> Children of minorities</li> <li><i>ii</i> Disadvantaged pupils/pupils at risk</li> </ul>
Ireland	<ul style="list-style-type: none"> <li><i>i</i> Visually impaired</li> <li><i>ii</i> Hearing impaired</li> <li><i>iii</i> Mild mental handicap</li> <li><i>iv</i> Moderate mental handicap</li> <li><i>v</i> Physically handicapped</li> <li><i>vi</i> Specific speech and language disorder</li> <li><i>vii</i> Specific learning disability</li> <li><i>viii</i> Severely and profoundly mentally handicapped</li> <li><i>ix</i> Multiply handicapped</li> </ul>	<ul style="list-style-type: none"> <li><i>i</i> Children in need of remedial help</li> <li><i>ii</i> Emotionally disturbed</li> <li><i>iii</i> Severely emotionally disturbed</li> </ul>	<ul style="list-style-type: none"> <li><i>i</i> Children of travelling families</li> <li><i>ii</i> Young offenders</li> <li><i>iii</i> Children of refugees</li> <li><i>iv</i> Children in regular schools who are disadvantaged</li> </ul>
Italy	<ul style="list-style-type: none"> <li><i>i</i> Visual impairment</li> <li><i>ii</i> Hearing impairment</li> <li><i>iii</i> Mild mental handicap (psychiatric)</li> <li><i>iv</i> Severe mental handicap (psychiatric)</li> <li><i>v</i> Mild physical handicap</li> <li><i>vi</i> Severe physical handicap</li> <li><i>vii</i> Multiply handicapped</li> </ul>		
Switzerland	<ul style="list-style-type: none"> <li><i>i</i> Educable mental handicap</li> <li><i>ii</i> Trainable mental handicap</li> <li><i>iii</i> Multiply handicapped</li> <li><i>iv</i> Physical disabilities</li> <li><i>v</i> Behaviour disorders</li> <li><i>vi</i> Deaf or hard of hearing</li> <li><i>vii</i> Language disability</li> <li><i>viii</i> Visual handicap</li> <li><i>ix</i> Chronic conditions/need for prolonged hospitalisation</li> <li><i>x</i> Multiple disabilities</li> </ul>	<ul style="list-style-type: none"> <li><i>i</i> Learning disabilities/introductory classes</li> <li><i>ii</i> Learning disabilities/special classes</li> <li><i>iii</i> Learning disabilities/vocationally oriented classes</li> <li><i>iv</i> Behavioural difficulties</li> <li><i>v</i> Physical disabilities</li> <li><i>vi</i> Sensory and language impairments</li> <li><i>vii</i> Students who are ill/hospital classes</li> <li><i>viii</i> Others of the group 'special curriculum'</li> </ul>	<ul style="list-style-type: none"> <li><i>i</i> Foreign first language</li> </ul>
Turkey	<ul style="list-style-type: none"> <li><i>i</i> Visually impaired</li> <li><i>ii</i> Hearing impaired</li> <li><i>iii</i> Orthopaedically handicapped</li> <li><i>iv</i> Educable mentally handicapped</li> <li><i>v</i> Trainable mentally handicapped</li> <li><i>vi</i> Speech impairment</li> <li><i>vii</i> Chronically ill</li> </ul>	<ul style="list-style-type: none"> <li><i>i</i> Gifted and talented</li> </ul>	

Source: OECD Education Database. See Annex 3 for notes.

**Table C6.2. Number of students in cross-national categories A, B and C receiving additional resources as a percentage of all students in primary and lower secondary education and of all students with special educational needs receiving additional resources (based on head counts) (1996)**

	As a percentage of all students in primary and lower secondary education			As a percentage of all students receiving additional resources		
	Cross-national category A	Cross-national category B	Cross-national category C	Cross-national category A	Cross-national category B	Cross-national category C
Czech Republic	8.2	a	a	m	m	m
Finland	1.0	13.2	1.7	6.5	82.8	10.7
Greece	0.4	(n)	0.9	30.0	n	70.0
Hungary	5.1	a	11.1	31.5	a	68.5
Ireland	2.8	6.6	(14.2)	(11.8)	(27.9)	(60.3)
Italy	2.1	a	a	100.0	a	a
Switzerland	1.6	4.2	0.4	28.0	64.8	7.2
Turkey	0.4	n	a	99.3	0.8	a
United Kingdom	m	m	m	m	m	m

**Table C6.3. Numbers of students with special educational needs receiving additional resources as a percentage of all students in primary and lower secondary education and percentage of students in cross-national category A by location (special schools, special classes in regular schools, regular classes in regular schools) (based on head counts) (1996)**

	Students with special educational needs as a percentage of all students in primary and lower secondary education			Distribution of students in cross-national category A by location		
	Percentage of students in special schools	Percentage of students in special classes	Percentage of students in regular classes	Percentage of students in special schools	Percentage of students in special classes	Percentage of students in regular classes
Czech Republic	4.4	1.0	2.8	53.5	12.3	34.3
Finland	1.9*	1.1	11.3	69.2	26.4	4.3
Greece	2.1*	0.9	n	85.4	8.9	5.7
Hungary	2.7	1.1	12.3	53.5	21.9	24.7
Ireland	1.4	0.4	(21.7)	43.8	14.2	(42.0)
Italy	0.04	n	2.1*	1.9	0.2	97.9
Switzerland	1.6	4.6	m	100.0	n	n
Turkey	0.1	0.1	0.2	28.1	32.6	39.3
United Kingdom	1.2	x	1.6	m	m	m

**Table C6.4. Number of students with special educational needs receiving additional resources and percentages of cross-national categories A, B and C by location (special schools, special classes in regular schools, regular classes in regular schools) (1996)**

	Special schools				Special classes in regular schools				Regular classes in regular schools			
	Number of students	Percentage in cross-national category A	Percentage in cross-national category B	Percentage in cross-national category C	Number of students	Percentage in cross-national category A	Percentage in cross-national category B	Percentage in cross-national category C	Number of students	Percentage in cross-national category A	Percentage in cross-national category B	Percentage in cross-national category C
Czech Republic	47 543	100.0	a	a	10 896	100.0	a	a	30 445	100.0	a	a
Finland	11 353	53.8	46.2	n	6 159	26.3	73.7	n	66 478	0.4	0.7	98.9
Greece	3 276*	99.8	0.2	n	9 282	3.7	n	96.3	218	100.0	n	n
Hungary	29 219	100.0	n	n	11 948	100.0	n	n	132 145	10.2	n	89.8
Ireland	7 530*	87.5	6.4	6.1	2 289*	100.0	n	n	(121 160)*	4.7	30.9	64.4
Italy	1 737	100.0	a	a	180	a	a	a	91 594*	100.0	a	a
Switzerland	12 557	100.0	n	n	32 329	n	90.0	10.0	m	n	m	m
Turkey	7 504	100.0	n	a	8 733	100.0	n	a	10 498	98.1	1.9	a
United Kingdom	114 420	m	m	m	x	m	m	m	1 362 180	m	m	m

\* Public institutions only.

() Figures in parentheses are estimates.

Hungary: some students in upper secondary education are also included.

United Kingdom: Students in pre-primary and upper secondary education are also included.

Source: OECD Education Database. See Annex 3 for notes.

Table C6.5. **Ratio of all students with special educational needs receiving additional resources to teaching staff and regular student/teaching staff ratios in full-time equivalents, by level of education and cross-national category (1996)**

	All categories			Cross-national category A			Cross-national category B			Cross-national category C		
	Primary and lower secondary education	Primary education	Lower secondary education	Primary and lower secondary education	Primary education	Lower secondary education	Primary and lower secondary education	Primary education	Lower secondary education	Primary and lower secondary education	Primary education	Lower secondary education
<b>Special schools</b>												
Czech Republic	7.0	7.0	a	7.0	7.0	a	a	a	a	a	a	a
Finland	4.5	m	m	4.5	m	m	5.7	m	m	m	m	m
Greece	5.0*	5.4	3.0	5.0*	5.4	3.0	3.5	3.5	m	m	m	m
Hungary	4.2	3.7	12.2	4.2	3.7	12.2	a	a	a	m	m	m
Ireland	6.9* **	m	m	8.6* **	m	m	8.0* **	m	m	(8.8)* **	m	m
Italy	2.3**	2.4**	1.5**	2.3**	2.4**	1.5**	a	a	a	a	a	a
Switzerland	m	m	m	m	m	m	m	m	m	m	m	m
Turkey	5.8	5.8	a	5.8	5.8	a	m	m	m	a	a	a
United Kingdom	6.6**	m	m	m	m	m	m	m	m	m	m	m
<b>Special classes in regular schools</b>												
Czech Republic	10.2	10.2	a	10.2	10.2	a	a	a	a	a	a	a
Finland	7.4	m	m	6.3	m	m	10.5	m	m	m	m	m
Greece	12.1	13.6	2.7	3.0	5.3	2.7	a	a	a	13.7	13.7	m
Hungary	m	m	m	m	m	m	a	a	a	m	m	m
Ireland	9.8* **	m	m	9.8* **	m	m	m	m	m	(15.2)* **	(15.2)* **	m
Italy	1.7*	1.6*	2.3*	1.7*	1.6*	2.3*	a	a	a	a	a	a
Switzerland	m	m	m	m	m	m	m	m	m	m	m	m
Turkey	10.7	10.7	a	10.7	10.7	a	m	m	m	a	a	a
United Kingdom	m	m	m	m	m	m	m	m	m	m	m	m
<b>Regular schools</b>												
Czech Republic		20.4	13.0									
Finland		16.8	12.4									
Greece		15.0	11.4									
Hungary		12.2	9.5									
Ireland		22.6	15.8									
Italy		11.2	10.8									
Switzerland*		15.9	13.0									
Turkey		27.9	a									
United Kingdom		21.3	16.0									

Turkey: Data refer to 1995.

Ireland, the Netherlands: Data include upper secondary education.

\* Public institutions only.

\*\* Full-time teachers only.

() Figures in parentheses are estimates.

Source: OECD Education Database. See Annex 3 for notes.