

COUNTRY NOTE



Education at a Glance: OECD Indicators 2012

JAPAN

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KEY FINDINGS

- Although the salaries of experienced teachers in Japan are high relative to other OECD countries, their starting salaries are lower and working hours are longer. Moreover, different from the trend across OECD countries, teachers' salaries have been declining since 2000 in real terms.
- Japan's share in the international student market is relatively high, and Japan receives more foreign students than it sends to study abroad.
- Tuition fees for tertiary education are high in Japan, and students have still limited access to financial aid.
- In 2010, 97.2% of Japan's four-year-olds were enrolled in early childhood education, the seventh largest proportion among OECD countries. However, spending on early childhood education is low and households fund a significant proportion of the costs.
- Compared to other OECD countries, Japan spends significantly less on education, as measured as a proportion of GDP and of total public expenditures; but expenditure per student is high. To a large extent this is because Japan records the third highest level of spending on education from private sources after Chile and Korea: 31.9% of total expenditure on education is from private sources, which does not even include significant household spending outside the formal education system.

Japanese teachers used to be well-paid, and this still holds for experienced teachers, but it is no longer true for new recruits...

Statutory teachers' salaries for experienced teachers are relatively high in Japan. The average statutory salary of primary and secondary school teachers with minimum training and 15 years of experience is USD 44 788, while the OECD average is USD 37 603 for primary teachers, USD 39 401 for lower secondary teachers, and USD 41 182 for upper secondary teachers (Table D3.1). However, starting salaries for primary and

secondary school teachers in Japan, at USD 25 454, are below the OECD average of USD 28 523 (primary teachers), USD 29 801 (lower secondary teachers) and USD 30 899 (upper secondary teachers), thus posing major challenges for Japan to attract talented graduates into the teaching profession (Table D3.1).

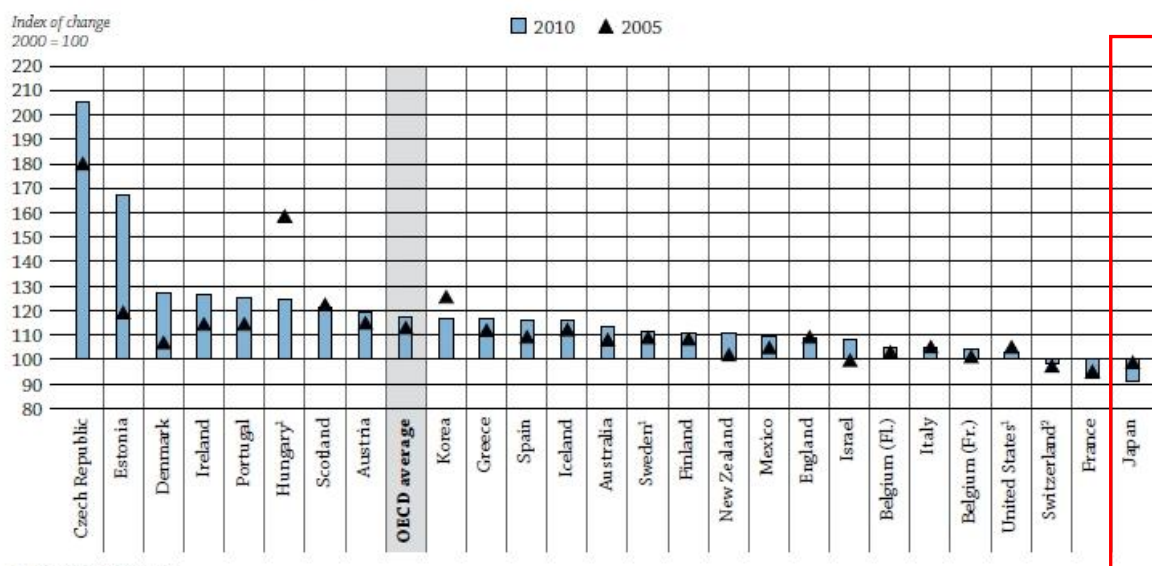
... and teachers' statutory working hours are considerably longer than the OECD average.

Total statutory working hours for teachers in Japan are considerably longer (1 876 hours) than the OECD average (1 678 hours at primary level, 1 673 hours at lower secondary level, and 1 676 hours at upper secondary level) (Table D4.1). In contrast, the net teaching time is 707 hours for primary education, 602 hours for lower secondary education and 500 hours for upper secondary education, all of which are lower than the OECD average (782 hours, 704 hours, and 658 hours respectively) (Table D4.1). Nevertheless, the number of teaching hours in Japan has increased at all levels of education between 2000 and 2010. While teaching hours in primary schools in most countries remained stable between 2000 and 2010, they increased by 11% in Japan (Table D4.2).

Since 2000, teachers' salaries in Japan declined in real terms, while they rose in most other countries during the same period.

While salaries of teachers with 15 years of experience increased in real terms between 2000 and 2010 in most countries with available data, they decreased only in Japan (by as much as 9%), France and Switzerland (Table D3.2, Chart D3.3).

Chart D3.3. Changes in teachers' salaries after 15 years of experience/minimum training in lower secondary education (2000, 2005, 2010)
Index of change between 2000 and 2010 (2000 = 100, constant prices)



1. Actual base salaries.

2. Salaries after 11 years of experience.

Countries are ranked in descending order of the index of change between 2000 and 2010 in teachers' salaries in lower secondary education after 15 years of experience.

Source: OECD, Table D3.2. See Annex 3 for notes (www.oecd.org/edu/eag2012).

^{1 2} <http://dx.doi.org/10.1787/888932663720>

While experienced teachers in Japan receive above-average pay, they teach large classes.

In 2010, the average primary class in Japan had 28 students, more than the OECD average of 21 students and the second largest class size among OECD countries after Chile (29 students) (Table D2.1). Japan also has

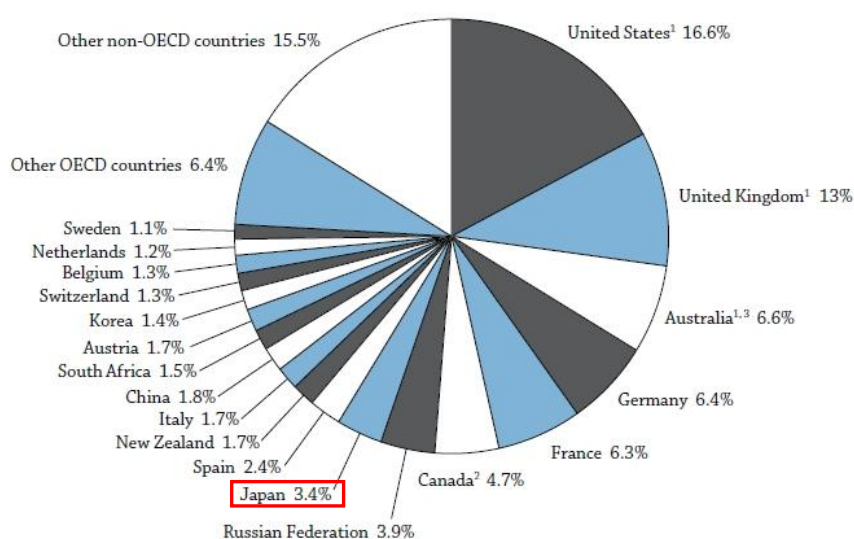
relatively large lower secondary classes (33 students) compared to the OECD average (23 students) and the second largest among OECD countries after Korea (35 students) (Table D2.1).

Japan’s share of the international student market is relatively high.

Japan is an increasingly popular place to study among foreign students, particularly those from Asia. In 2010, 3.4% of all foreign students in tertiary education studied in Japan. This is the eighth highest share after the United States, the United Kingdom, Australia, Germany, France, Canada and the Russian Federation (Chart C4.2). Students from Asia represent 93.2% of international and foreign tertiary students in Japan: 61.1% of international tertiary students in Japan come from China and 18.1% come from Korea (Table C4.3).

Chart C4.2. Distribution of foreign students in tertiary education, by country of destination (2010)

Percentage of foreign tertiary students reported to the OECD who are enrolled in each country of destination



1. Data relate to international students defined on the basis of their country of residence.

2. Year of reference 2009.

3. Student stocks are derived from different sources; therefore, results should be interpreted with some caution.

Source: OECD and UNESCO Institute for Statistics for most data on non-OECD destinations. Tables C4.4 and C4.7, available on line. See Annex 3 for notes (www.oecd.org/edu/eag2012).

1 2 <http://dx.doi.org/10.1787/888932663188>

Relatively large proportions of international students in Japan (23.7%) are enrolled in tertiary-type B (shorter and vocationally-oriented) programmes, while in many other OECD countries, tertiary-type B programmes are much less internationalised than tertiary-type A (largely theory-based) programmes (Table C4.1). More than 65% of international tertiary students in Japan study either “humanities, arts and education” or “social sciences, business and law” (Table C4.2).

The Japanese government aims to receive 300 000 international students by 2020 by implementing various policy measures, such as scholarship programmes for international students. However, only 3.4% of all students enrolled in tertiary education in Japan are international students, while the OECD average in 2010 was 8.0%. While the increase in the number of international tertiary students in Japan between 2005 and 2010 was a substantial 12%, it was far smaller than the average increase of 92% across OECD countries (Table C4.1).

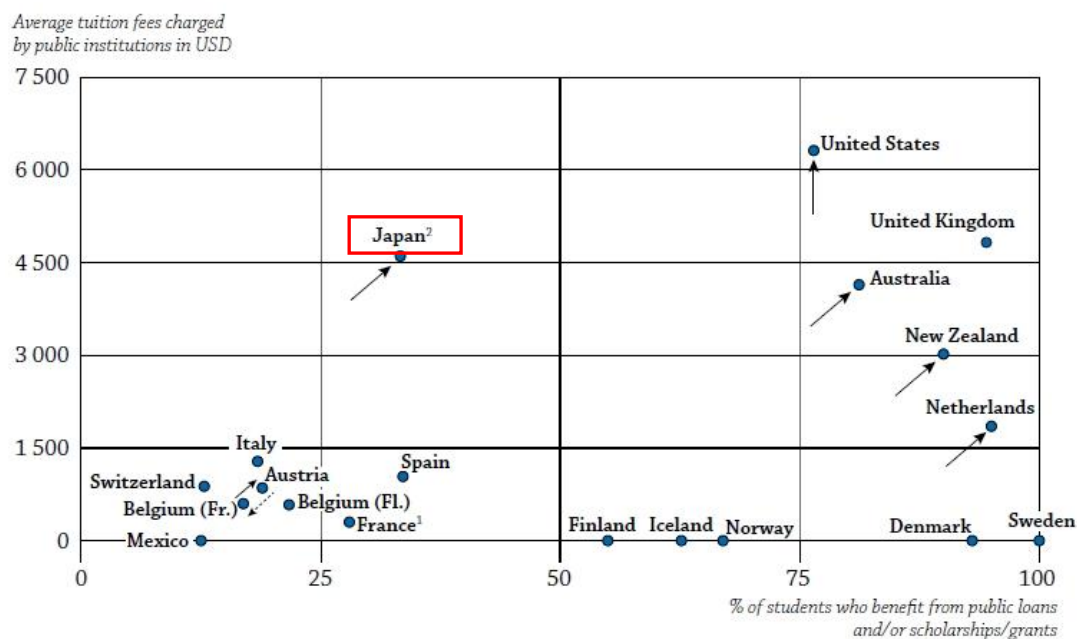
Japan receives more foreign students than it sends to study abroad.

In 2010, Japan hosted 3.3 foreign students for each Japanese student who left to study outside of Japan – higher than the average OECD ratio of 2.9 to 1 (Table C 4.5).

Tuition fees for tertiary education in Japan are high, and financial aid is limited.

Although Japan has been making efforts to improve the student support system for tertiary education, most students still face high tuition fees that are largely paid by individual households. During the academic year 2008-2009, Japanese tertiary students paid an average of USD 4 602 in tuition fees charged by tertiary-type A public institutions – the fourth highest fees after the United States (USD 6 312), Korea (USD 5 193), and the United Kingdom (USD 4 731), among OECD countries with available data. In contrast, only 33% of students received public loans and/or scholarships/grants in Japan, whereas 76% of students in the United States and 94% of students in the United Kingdom benefited from such support (Table B5.1, Table B5.2, Chart B5.1). Japan is among the countries with the lowest levels of public expenditure on tertiary education as a percentage of GDP: 0.5% compared to the OECD average of 1.1% (Table B2.3).

Chart B5.1. Relationship between average tuition fees charged by public institutions and proportion of students who benefit from public loans and/or scholarships/grants in tertiary-type A education (academic year 2008-09)
For full-time national students, in USD converted using PPPs



1. Average tuition fees from USD 190 to 1 309 for university programmes dependent on the Ministry of Education.

2. Tuition fees refer to public institutions but more than two-thirds of students are enrolled in private institutions.

Source: OECD, Tables B5.1 and B5.2. See Annex 3 for notes (www.oecd.org/edu/eag2012).

^{1 2} <http://dx.doi.org/10.1787/888932662770>

Proportion of public expenditure on education to GDP and total public budget in select OECD countries

(%)	as a share of GDP			as a share of total public budget		
	all education	primary, secondary and post-secondary non-tertiary	Tertiary	all education	primary, secondary and post-secondary non-tertiary	Tertiary
Japan	3.6	2.7	0.5	8.9	6.4	1.8
OECD average	5.4	3.7	1.1	13.0	8.7	3.1
United States	5.3	3.9	1.0	13.1	9.3	3.0
United Kingdom	5.3	4.5	0.6	11.3	9.0	1.6
France	5.8	3.8	1.3	10.4	6.8	2.4
Germany	4.5	2.9	1.1	10.5	6.6	2.8
Canada	4.8	3.2	1.5	12.3	8.3	4.7
Italy	4.5	3.3	0.8	9.0	6.5	1.7
Korea	4.9	3.6	0.7	15.3	10.8	2.6
Russia	4.7	2.3	1.2	M	M	m

Note: Above OECD average numbers are indicated by boldface.

Most four-year-olds in Japan are enrolled in education...

Early investment in education raises student achievement and likely improves economic and social outcomes. For example, recent analysis from the OECD's Programme for International Student Assessment (PISA) suggests that students who attended pre-primary school for one year or less scored an average of 30 points higher in reading – the equivalent of nearly nine months of formal schooling – than students who did not attend pre-primary education. Moreover, students who attended more than one year of pre-primary education scored an average of 54 points higher – well over a year of formal schooling – than those who had no pre-primary education (OECD, 2009: PISA 2009 Results: Overcoming Social Background, Table II.5.5).

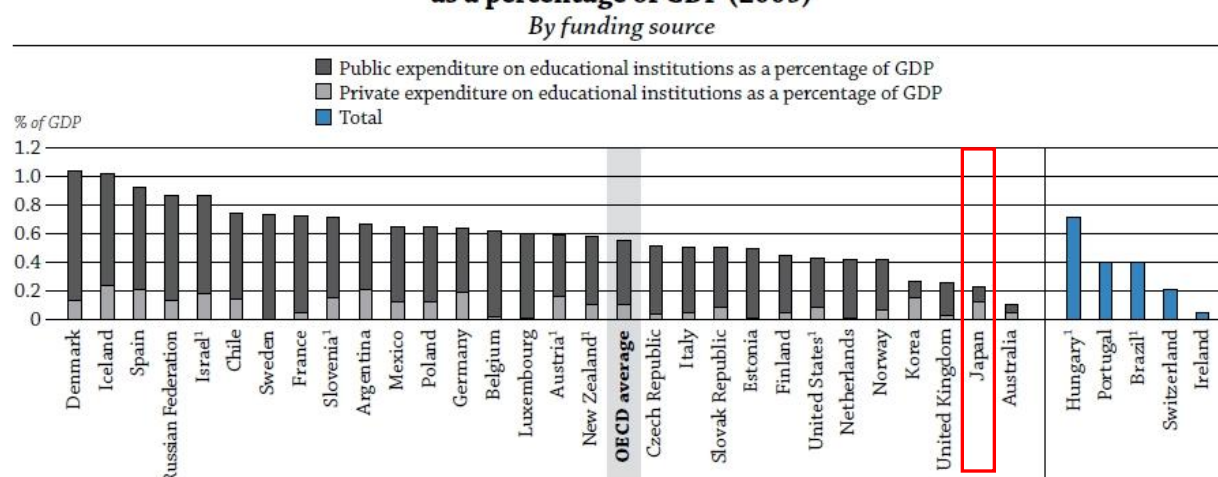
In 2010, 97% of Japan's four-year-olds were enrolled in early childhood education – the seventh largest proportion among OECD countries and much larger than the OECD average of 81%. In 16 of 39 countries with available data, pre-primary enrolment rates are above 90%. In France and the Netherlands, pre-primary education for four-year-olds is universal. In Mexico, enrolment rates for this age group surged from 70% to 100% between 2005 and 2010, reflecting reforms that made pre-primary education compulsory (Table C2.1).

...however, public spending on pre-primary education is relatively low, and households fund a significant proportion of the costs.

Annual expenditure per pre-primary student in Japan is USD 5 103, significantly lower than the OECD average of USD 6 670 (Table B1.1a). This stands in sharp contrast with expenditure on tertiary education. In addition, Japan spent 0.2% of its GDP on pre-primary education in 2009 – the 4th lowest proportion among OECD countries with available data after Ireland, Australia and Switzerland, and well below the OECD average of 0.5% (Table B2.2).

Some 55% of expenditure on pre-primary education in Japan comes from private sources, largely household expenditures. Households contribute 38.3% of total expenditure on pre-primary education, the third highest share after Korea and Australia, among countries with available data. In contrast, the French government covered 94% of total expenditures on early childhood educational institutions in 2009, amounting to 0.7% of its GDP (Table B2.2, Table B3.2a).

Chart C2.2. Expenditure on early childhood educational institutions as a percentage of GDP (2009)



1. Includes some expenditure on child care.

Countries are ranked in descending order of public and private expenditure on educational institutions.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators programme). Table C2.2. See Annex 3 for notes (www.oecd.org/edu/eag2012).

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Education continues to offer significant economic benefits in Japan as in many other OECD countries...

Employment rates tend to increase and unemployment rates tend to decrease as one achieves higher educational attainment. In Japan, the employment rate for men with an upper secondary education is 85.7% and the unemployment rate is 6.4%, whereas for men who completed a tertiary-type A or advanced research programme, the employment rate rises to 92% and the unemployment rate falls to 3.4%. For women, the employment rate rises from 61.2% to 68.4% and the unemployment rate falls from 5% to 3.2% as their level of education rises from upper secondary to tertiary-type A. The gap between men's and women's employment rates is constant across all educational levels in Japan, whereas across other OECD countries, that gap narrows considerably, on average, as the level of education rises (Table A7.1a, Table A7.2a, Chart A7.3).

... which may partly explain the growing proportion of young adults who attain tertiary education.

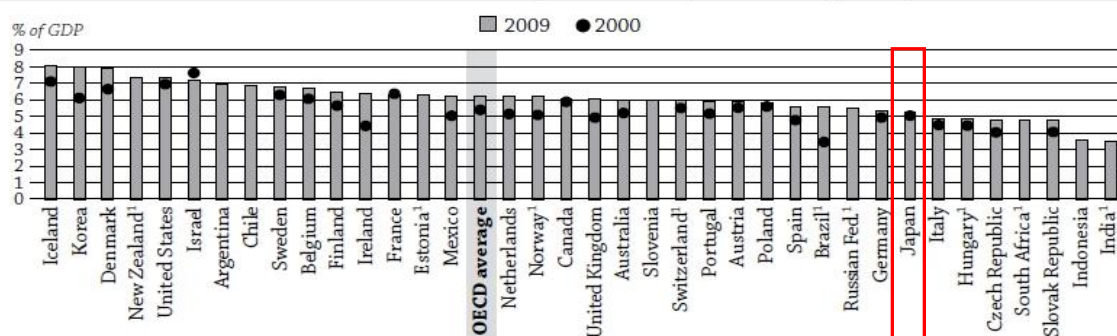
Some 45% of adults in Japan attained tertiary education in 2010 – one of the highest proportions among OECD countries (31% on average). The tertiary attainment rate among 25-34 year-olds in Japan is 57%, considerably larger than the proportion of 55-64 year-olds (29%) with that level of education. This indicates an expansion of tertiary attainment over a generation, a trend evident across OECD countries, where the average tertiary attainment rate among 25-34 year-olds is 38% and 23% among 55-64 year-olds (Table A1.3a). Moreover, if current tertiary attainment rates among 25-34 year-olds are maintained, the proportion of adults with tertiary education will grow even larger in the future (Chart A1.3).

Japan invests less in education than other OECD countries...

Despite the global economic crisis, spending on education increased in most OECD countries between 2008 and 2009 (Box B2.1). This was not the case for Japan, where expenditures on educational institutions shrunk during this period. In spite of this, Japan's total expenditure on education as a percentage of GDP rose from 5.0% in 2000 to 5.2% in 2009, while it is still below the OECD average of 6.3% (Table B2.1, Chart B2.1).

Japan's share of public spending on education relative to both GDP and the total public budget were 3.6% and 8.9%, respectively, as compared to the OECD average of 5.4% and 13.0%, respectively (Table B2.3, Table B4.1).

Chart B2.1. Expenditure on educational institutions as a percentage of GDP for all levels of education (2000 and 2009) and index of change between 2000 and 2009 (2000=100, constant prices)



1. Public expenditure only (for Switzerland, in tertiary education only; for Norway, in primary, secondary and post-secondary non-tertiary education only; for Estonia, New Zealand and the Russian Federation, for 2000 only).

Countries are ranked in descending order of expenditure from both public and private sources on educational institutions in 2009.

Source: OECD. Argentina, India, Indonesia: UNESCO Institute for Statistics (World Education Indicators programme). South Africa: UNESCO Institute for Statistics. Table B2.1 and Table B2.5, available on line. See Annex 3 for notes (www.oecd.org/edu/eag2012).

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...but expenditure per student is growing, especially at the tertiary level.

In 2009, Japan's annual expenditure per student from primary through tertiary education was USD 10 035, above the OECD average of USD 9 252 (Table B1.1a). This was primarily driven by high expenditures at the tertiary level (USD 15 957) relative to the OECD average (USD 13 728). Expenditures at the primary, secondary and post-secondary non-tertiary levels (USD 8 502) remain comparable to the OECD average (USD 8 617) (Table B1.2). Between 2005 and 2009, expenditure per student at the tertiary level increased by 13%, while it increased only 5% at the primary, secondary and post-secondary non-tertiary levels. These trends are nearly the reverse of those found across other OECD countries as a whole, where tertiary spending per student grew by only 9% while spending on primary, secondary and post-secondary non-tertiary education increased as much as 15% (Table B1.5a, Table B1.5b).

Japan's investment in education is heavily dependent on private sources.

Some 31.9% of Japan's total expenditure on education in 2009 came from private sources, the third highest share after Chile and Korea, and almost twice as much as the OECD average of 16% (Table B3.1). It is noteworthy that this amount does not even include significant household spending outside the formal education system, which is likely to be substantial in Japan. The relatively high proportion of private funding is notable at the pre-primary (55%, compared to the OECD average of 18.3%) and tertiary (64.7%, compared to the OECD average of 30%) levels. Moreover, of the total spending on these levels of education, 38.3% (pre-primary level) and 50.7% (tertiary level) come from household expenditures (Table B3.2a, Table B3.2b).

KEY FACTS

Indicator	Japan	OECD average	Japan rank*
Educational Access and Output			
Enrolment rates			
3-year-olds (in early childhood education)	75%	66%	16 of 36 countries
4-year-olds (in early childhood and primary education)	97%	81%	7 of 38 countries
5-14 year-olds (all levels)	100%	96%	1 of 39 countries
Percentage of population that has attained pre-primary or primary levels of education only			
25-64 year-olds	m	m	m
Percentage of population that has attained at least upper secondary education			
25-64 year-olds	m	75%	m
25-34 year-olds	m	83%	m
55-64 year-olds	m	65%	m
Percentage of population that has attained tertiary education			
25-64 year-olds	45%	31%	4 of 41 countries
25-34 year-olds	57%	38%	2 of 37 countries
55-64 year-olds	29%	23%	10 of 37 countries
Entry rates into tertiary education			
Vocational programmes (Tertiary-type B)	27%	17%	11 of 33 countries
University programmes (Tertiary-type A)	51%	62%	24 of 36 countries
Graduation rates			
Percentage of today's young people expected to complete upper secondary education in their lifetime	96%	84%	2 of 27 countries
Percentage of today's young people expected to complete university education (tertiary-type A) in their lifetime	40%	39%	12 of 28 countries
Economic and Labour Market Outcomes			
Unemployment rate of 25-64 year-olds			
Below upper secondary	m	12.5%	m
Upper secondary and post-secondary non-tertiary	5.8%	7.6%	25 of 34 countries
Tertiary	3.8%	4.7%	22 of 34 countries
Average earnings premium for 25-64 year-olds with tertiary education (compared to people with upper secondary education; upper secondary = 100)			
Men and women	148	155	22 of 32 countries
Men	139	160	26 of 32 countries
Women	161	157	15 of 32 countries
Average earnings penalty for 25-64 year-olds who have not attained upper secondary education (compared to people with upper secondary education; upper secondary = 100)			
Men and women	80	77	12 of 32 countries
Men	74	78	22 of 32 countries
Women	78	74	9 of 32 countries

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Indicator	Japan	OECD average	Japan rank*
Percentage of people not in employment, education or training			
15-29 year-olds (2005 data)	8.8%	15.0%	27 of 32 countries
15-29 year-olds (2010 data)	m	15.8%	m
Financial Investment in Education			
Annual expenditure per student (in equivalent USD, using PPPs)			
Pre-primary education	5 103	6 670	23 of 34 countries
Primary education	7 729	7 719	16 of 35 countries
Secondary education	9 256	9 312	17 of 37 countries
Tertiary education	15 957	13 728	13 of 37 countries
Total public and private expenditure on education			
As a percentage of GDP	5.2%	6.2%	30 of 37 countries
Total public expenditure on education			
As a percentage of total public expenditure	8.9%	13.0%	32 of 32 countries
Share of private expenditure on educational institutions			
Primary, secondary and post-secondary non-tertiary education	9.6%	8.8%	13 of 32 countries
Tertiary education	64.7%	30%	4 of 31 countries
All levels of education	31.9%	16%	3 of 30 countries
Schools and Teachers			
Ratio of students to teaching staff			
Pre-primary education	15.9	14.4	12 of 32 countries
Primary education	18.4	15.8	12 of 36 countries
Secondary education	13.2	13.8	19 of 38 countries
Number of hours of compulsory instruction time per year			
7-8 year-olds	735	774	16 of 33 countries
9-11 year-olds	800	821	16 of 34 countries
12-14 year-olds	877	899	20 of 34 countries
Number of hours of teaching time per year (for teachers in public institutions)			
Primary education	707	782	22 of 35 countries
Lower secondary education	602	704	28 of 34 countries
Upper secondary education	500	658	32 of 35 countries
Ratio of teachers' salaries to earnings for full-time, full-year adult workers with tertiary education			
Primary school teachers	m	0.82	m
Lower secondary school teachers	m	0.85	m
Upper secondary school teachers	m	0.90	m

* Countries are ranked in descending order of values.

See: *Education at a Glance 2012: OECD Indicators*

Visit: www.oecd.org/edu/eag2012

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