



### EDUCATION AT A GLANCE 2017

Education at a Glance: OECD Indicators is the authoritative source for information on the state of education around the world. It provides data on the structure, finances and performance of education systems in the 35 OECD countries and a number of partner countries.

The topics covered in this country note were selected according to data availability.

## People's Republic of China (China)

- Access to tertiary education in China has reached OECD levels, although participation in upper secondary remains a challenge: at 19% and 32% respectively, the enrolment of 18- and 19-year-olds in tertiary education is similar to the OECD average, while the share of 15-, 16- and 17- year-olds enrolled in upper secondary is about 20 percentage points behind.
- The expansion of short-cycle tertiary programmes has been a significant factor in the growth of higher education in China. If current patterns continue, 37% of young adults in China are expected to enter a short-cycle tertiary programme at least once during their lifetime, more than twice the OECD average (16%).
- Chinese students account for 20% of all internationally mobile tertiary students in OECD countries, a larger share than any other country.
- China combines relatively large class size with student-teacher ratios similar to OECD countries: with 47 students, the average Chinese class in lower secondary education is twice the OECD average size. However, student-teacher ratios are generally on a par with OECD countries, reflecting the increased time teachers in China have for tasks outside the classroom, such as lesson planning, research and collaborative learning.
- China has greater gender parity among teachers at all educational levels than other countries with more male teachers in primary and secondary schools than the average across OECD countries.
- **Pre-primary education is largely provided by private institutions in China:** in 2015, 52% of children enrolled in pre-primary education attended private institutions compared to 34% across OECD countries.

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Figure 1. Enrolment rates of 15-19 year-olds, by programme level and orientation (2015)

1. Year of reference 2014.

2. Excludes post-secondary non-tertiary education.

Countries are ranked in descending order of total enrolment.

Source: OECD (2017), Education at a Glance Database, <a href="http://stats.oecd.org/">http://stats.oecd.org/</a>. See Source section for more information and Annex 3 for notes (<a href="https://www.oecd.org/education/education-at-a-glance-19991487.htm">https://www.oecd.org/education/education-at-a-glance-19991487.htm</a>).

StatLink Tip http://dx.doi.org/10.1787/888933558192

#### Expanding participation in upper secondary education is a key challenge ahead

- Although China mandates 9 years of compulsory education (OECD, 2016), attainment of lower secondary level remains relatively low. In 2010, 76% of 25-64 year-olds had attained at least this level, and only 24% reached upper secondary or higher education.
- However, the participation of 15-19 year-olds in education has been increasing. In 2015, 64% of 15-19 year-olds were enrolled in education (Figure 1). Although still below the OECD average of 85%, this is comparable to partner countries such as Brazil (68%), Colombia (55%) and Costa Rica (57%). In many OECD countries e.g. Australia, Belgium, the Czech Republic, Ireland, Latvia, the Netherlands, Poland and Slovenia participation among 15-19 year-olds is close to universal (above 90%).
- The lower enrolment of 15-19 year-olds is mainly related to challenges in accessing upper secondary education. China is still struggling to ensure broad participation across the country at this level, particularly in rural areas. In 2015, only 77% of 15-year-olds were enrolled in secondary education, the second lowest level across OECD and partner countries after India (62%), and 20 percentage points lower than the OECD average of 97%.
- In recent years, many countries have increased the diversity of their secondary programmes, promoting vocational programmes as a response to the growing demand for upper secondary education and to meet labour market needs. These programmes are well developed in China although, as in most countries, they are less attractive than general academic ones. In 2015, 42% of Chinese upper secondary students enrolled in vocational education in 2015, compared to 58% for general education. This is comparable to the OECD average, where 46% of upper secondary students were enrolled in vocational programmes but much less than in countries with a strong emphasis on vocational programmes such as Austria (70%) or Czech Republic (73%).

## Participation in higher education has reached OECD levels, driven by high rates of enrolment in short-cycle tertiary programmes

- Enrolment in tertiary education among young students has been following global trends and is today on a par with OECD countries: the share of 18- and 19-year-olds enrolled in tertiary education in China is 19% and 32% respectively, very similar to the OECD average of 17% and 33%.
- The high rate of enrolment in higher education in China is mainly driven by the prevalence of short-cycle tertiary programmes. If current patterns continue, 37% of young adults in China are expected to enter a short-cycle tertiary programme at least once in their lifetime, more than twice the OECD average of 16%. However, entry rates to higher tertiary programmes are lower than the OECD average: 33% of young adults are expected to enter a bachelor's programme or equivalent, 4% a master's or equivalent programmes and 0.3% a doctorate or equivalent, lower than the respective OECD averages of 57%, 23% and 2.4% respectively.
- Chinese tertiary students are very internationally mobile. In 2015, they accounted for 20% of all internationally mobile tertiary students in OECD. However, the share of students choosing to study abroad is still small relative to the number of national tertiary students overall, though the share is higher than in other OECD partner countries. In 2015, 1.8% of China's national students were enrolled abroad, more than Brazil (0.5%), Colombia (1.2%), Costa Rica (1.1%) and the Russian Federation (0.8%), but lower than the OECD average of 5.9%.
- China is not a major destination for international tertiary students, resulting in a net outflow of tertiary students from the country. In 2015, there were just 0.2 international students in China for every national student abroad, one of the lowest ratios among OECD and partner countries.

# A similar student-teacher ratio to OECD countries combined with larger class sizes allows teachers more time for preparation and professional development

As a result of strong demographic trends, average class sizes in China are among the largest across OECD and
partner countries and increase with higher levels of education. In 2014, the average class size at the primary level
was 37, 16 students more per class than the OECD average. The difference is even more marked at the lower
secondary level, where the class size in China (49 students) is double the average across OECD countries

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(23 students). This increases further still in private institutions, with an average of 51 students per class in China (OECD average, 22).

- Despite large class sizes, Chinese educational institutions have similar teaching resources to the OECD average. In 2015, China had 16 students per teacher at the primary level and 14 at the secondary level, similar to the OECD average of 15 and 13 respectively, and lower than other OECD partner countries such as Brazil (25 and 24 respectively), Colombia (24 and 26 respectively) or India (29 and 32 respectively). The combination of large class sizes and a relatively high number of teachers reflects the way teachers' time is used, and the strong importance attached to lesson preparation, research and teacher collaboration.
- The ratio of students to teaching staff is higher in private than in public institutions in China, in contrast to the usual situation across OECD countries. In 2015, there were 18 students per teacher in secondary private institutions and 13 per teacher in public ones, while the OECD average was 13 for both public and private.
- There is greater gender parity among teachers at all educational levels in China than in other countries: 42% of teachers from primary to secondary level were men, compared to 30% across OECD countries in 2015. At primary level, the share of male teachers was particularly high compared to other countries, reaching 37% or 21 percentage points higher than the OECD average, just after India (51%), Indonesia (39%) and Saudi Arabia (48%). The genders are even more balanced at secondary level, where 47% of teachers in lower secondary and 49% in upper secondary are men (OECD average, 31% and 41% respectively).

#### Pre-primary education is largely supported by private institutions

- Pre-school is not compulsory in China, and pre-primary education is largely provided by private institutions. In 2015, 52% of children enrolled in pre-primary education attended private institutions compared to 33% across OECD (Figure 2), although this average conceals wide variations across OECD countries 99% of children enrolled in pre-primary education in New Zealand attended privately-funded institutions compared to only 1% of Russian children. However, public investment in pre-primary education in China has been increasing following the Three-Year Pre-school Education Action Plan which aims to achieve universal access to pre-primary schooling by 2020 (OECD, 2016).
- At the pre-primary level, China had one of the highest ratios of children to full-time teaching staff in 2015 with 20 children to every teacher. This was almost 50% higher than the OECD average of 14 children for every teacher, although it was close to half the ratio in Colombia.

■ Private institutions Public institutions 100 90-80 60-50. 40-30 Latvia Slovenia Estonia<sup>1</sup> Greece Brazil Portugal Czech Republic celand Italy Spain Switzerland Slovak Republic South Africa2 Netherlands Argentina<sup>2</sup> United States Saudi Arabia Australia Russian Federation United Kingdom ndonesia EU22

Figure 2. Percentage of children enrolled in public and private institutions in pre-primary education (2015)

Countries are ranked in descending order of the percentage of children enrolled in public institutions in pre-primary education.

Source: OECD (2017), Table C2.2. See Annex 3 for notes (<a href="www.oecd.org/education/education-at-a-glance-19991487.htm">www.oecd.org/education/education-at-a-glance-19991487.htm</a>).

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<sup>1.</sup> Pre-primary includes early childhood development programmes.

<sup>2.</sup> Year of reference 2014.

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#### Note regarding data from Israel

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

#### References

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OECD (2016), *Education in China, a Snapshot*, OECD Publishing, Paris, <a href="https://www.oecd.org/china/Education-in-China-a-snapshot.pdf">https://www.oecd.org/china/Education-in-China-a-snapshot.pdf</a>.

**For more information on Education at a Glance 2017** and to access the full set of Indicators, visit <a href="https://www.oecd.org/education/education-at-a-glance-19991487.htm">www.oecd.org/education/education-at-a-glance-19991487.htm</a>.

**Updated data can be found on line at** OECD. Stat as well as by following the **StatLinks** under the tables and charts in the publication <a href="http://dx.doi.org/10.1787/eag-data-en">http://dx.doi.org/10.1787/eag-data-en</a>.

Explore, compare and visualise more data and analysis using: Education GPS <a href="http://gpseducation.oecd.org/CountryProfile?primaryCountry=CHN&treshold=10&topic=EO.">http://gpseducation.oecd.org/CountryProfile?primaryCountry=CHN&treshold=10&topic=EO.</a>

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#### **Key Facts for China in Education at a Glance 2017**

Source	Main topics in Education at a Glance	China		OECD average		G20 average		
	Fields of study							
	New outputs to toutions advantion	2015						
	New entrants to tertiary education	%	% Women	%	% Women	%	% Women	
	Education	**	**	9%	78%	9%	72%	
Table C3.1	Business, administration and law	**	**	23%	54%	23%	48%	
	Engineering, manufacturing and construction	**	**	16%	24%	18%	23%	
	Early childhood education							
	Expenditure on all early childhood educational institutions	2014						
Table C2.3	As a percentage of GDP	**		0.8%		**		
	Proportions of total expenditure from public sources	**		82%		**		
	Vocational education and training (VET)							
	Enrolment in upper secondary education, by programme orientation				015			
	2m omenem upper secondary education, by programme orientation	General	Vocational	General	Vocational	General	Vocational	
Table C1.3	Enrolment rate among population aged 15-19 year-olds	30%	15%	37%	25%	38%	18%	
	Tertiary education							
	Educational attainment of 25-64 year-olds	2016						
	Short-cycle tertiary	6%		8%		10%		
	Bachelor's or equivalent	3%		16%		16%		
Table A1.1	Master's or equivalent	0%		12%		9%		
	Doctoral or equivalent	**		1%		**		
	Employment rate of 25-64 year-olds, by educational attainment			20	016			
	Short-cycle tertiary	**		81%		**		
	Bachelor's or equivalent	**		83%		**		
Table A5.1	Master's or equivalent	**		87%		**		
	Doctoral or equivalent	**		91%		**		
	All tertiary levels of education	**		84%		**		
	Financial investment in education	•						
	Annual expenditure per student, by level of education (in equivalent USD, using PPPs)	2014						
	Primary education	**		USD 8 733		**		
Table B1.1	Secondary education	**		USD 10 106		**		
	Tertiary (including R&D activities)	**		USD 16 143		**		
	Total expenditure on primary to tertiary educational institutions			2014				
Table B2.1	As a percentage of GDP		**	5.2%		**		
	Total public expenditure on primary to tertiary education			2014				
Table B4.1	As a percentage of total public expenditure	**		11.3%		12.3%		
	Teachers							
	Share of female teachers in public and private institutions			20	015			
Table D5.2	Primary education	$\epsilon$	63%		83%		76%	
	Upper secondary education	5	51%		59%		54%	
	Tertiary education	2	25%		43%		42%	
	Ratio of students to teaching staff			20	015			
Table D2.2	Primary education	16		15		19		
	Secondary education	14		13		16		
	Tertiary education	19		16		18		

The reference year is the year cited or the latest year for which data are available.

Refer to Annex~3~for~country-specific notes~and~for~more~information~on~data~presented~in~this~key~facts~table~(www.oecd.org/education-at-a-glance-19991487.htm).

 $Cut-off\ date\ for\ the\ data:\ 19\ July\ 2017.\ Any\ updates\ on\ data\ can\ be\ found\ on\ line\ at\ http://dx.doi.org/10.1787/eag-data-en$ 

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 $<sup>\</sup>ensuremath{^{**}}$  Please refer to the source table for details on this data.

 $<sup>^{\</sup>rm i}$  The data in EAG 2017 refers to mainland China, therefore excluding Hong Kong and Macau.



# From: Education at a Glance 2017 OECD Indicators

#### Access the complete publication at:

https://doi.org/10.1787/eag-2017-en

#### Please cite this chapter as:

OECD (2017), "China", in Education at a Glance 2017: OECD Indicators, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/eag-2017-75-en

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