# Asia-Europe Meeting (ASEM) - a statistical portrait - education

# Statistics Explained

Data from April and May 2016. No planned update.

This article is part of a Asia-Europe Meeting (ASEM) — A statistical portrait based on Eurostat's publication Asia-Europe Meeting (ASEM) — A statistical portrait.

It focuses on education data about the European Union (EU), Norway and Switzerland in comparison with 21 Asian ASEM partners and covers key indicators concerning expenditure on education, the number of pupils and students, school life and tertiary education.

The use of the term European ASEM partners in this article refers to the 28 Member States of the EU, Norway and Switzerland. The use of the term Asian ASEM partners in this article refers to the 10 members of the Association of Southeast Asian Nations (ASEAN) and the 11 remaining ASEM partners referred to as Northeast and South Asia (NESA).

# **Educational expenditure**

Comparisons between countries relating to levels of public expenditure on education are influenced by differences in price levels and by the number of students; it is important to note that some countries have sizeable private education sectors too. In relative terms, public expenditure on education was highest among the ASEM partners in 2012 or 2013 in Sweden, New Zealand, Finland, Cyprus and Malta, where it was close to or above 7.0 % of gross domestic product (GDP), as can be seen in Figure 1. The lowest public expenditure relative to GDP was recorded in Bangladesh, Pakistan, Romania, Kazakhstan and Singapore, all below 3.0 %.

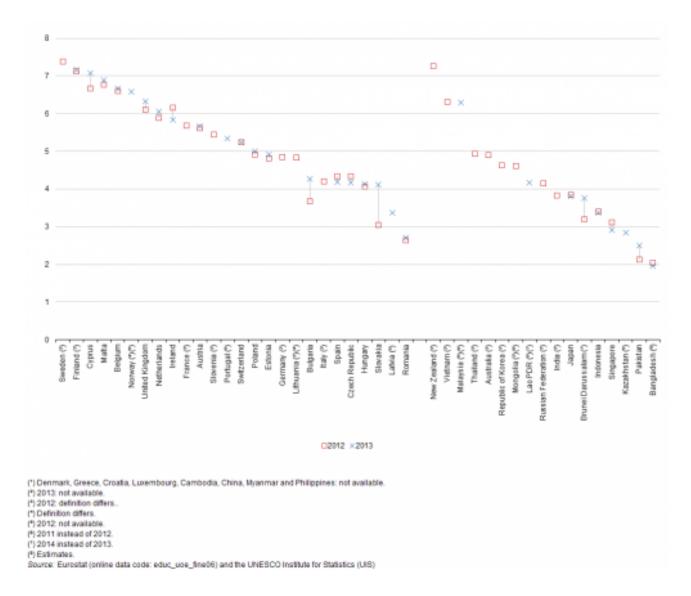


Figure 1: Government/public expenditure on education, 2012 and 2013 (1) (% of gross domestic product) Source: Eurostat (educ\_uoe\_fine06) and the UNESCO Institute for Statistics (UIS)

The division of public expenditure on education by level of education (see Figure 2) depends on a number of factors, such as the age structure of younger people, the enrolment rates for different levels of education and the average expenditure per pupil at each level. Among the ASEM partners, the greatest variability in the share of expenditure on a particular level of education in 2013 was observed for pre-primary education . This education level accounted for 1 % or less of public expenditure on education in Bangladesh and India, but close to one quarter in Mongolia (2011 data) and Bulgaria.

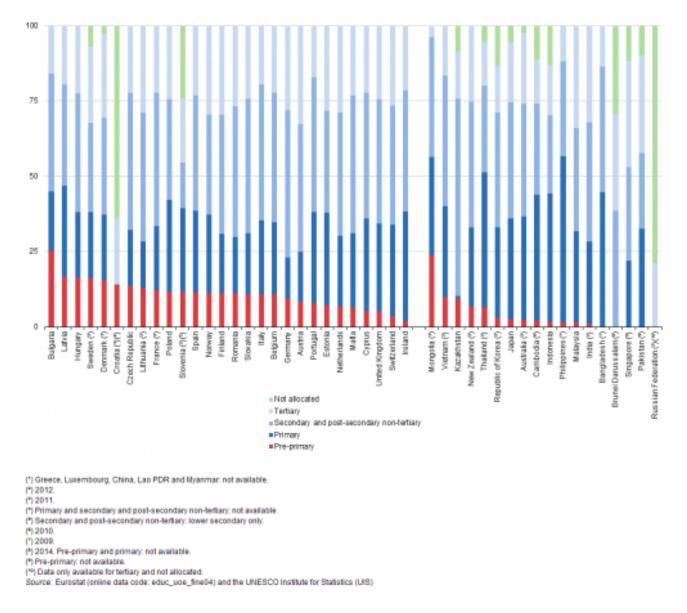


Figure 2: Government/public expenditure on education, analysis by education level, 2013 (1) (% of total government/public education expenditure) Source: Eurostat (educ\_uoe\_fine04) and the UNESCO Institute for Statistics (UIS)

Figure 3 presents data for average public expenditure per pupil/student, by education level, in 2012; the data is presented in a common currency (United States dollars) having converted to this using purchasing power parities to adjust for price level differences. The cost of teaching tends to increase as a child moves through the education system, with expenditure per pupil/student generally highest in tertiary education and lowest in primary education. Notable exceptions among the ASEM partners were Bulgaria and Thailand where expenditure per pupil was highest for primary education.

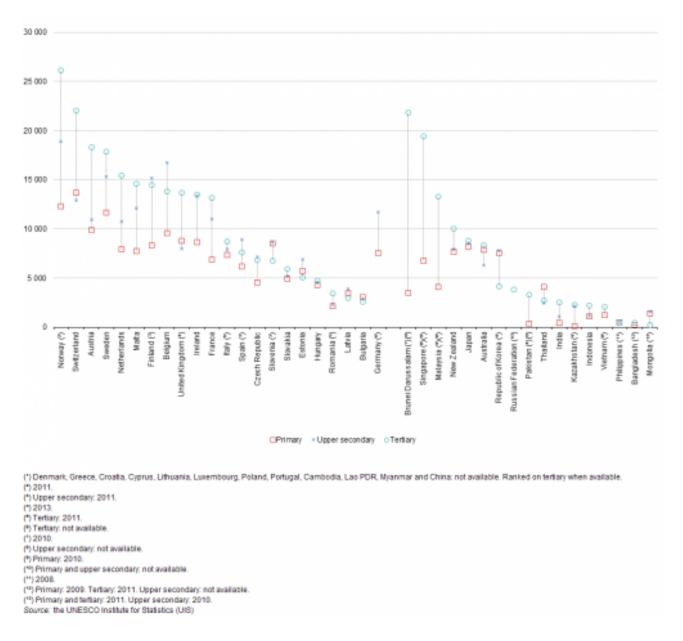


Figure 3: Government/public expenditure per pupil/student, by education level, 2012 (1) (USD based on purchasing power parities) Source: Eurostat (educ\_uoe\_fine04)Source: the UNESCO Institute for Statistics (UIS)

# **Pupils and students**

The level of educational enrolment depends on a wide range of factors, such as the age structure of the population, legal requirements concerning the start and end (or duration) of compulsory education, the availability of educational resources and the demand for secondary and tertiary education.

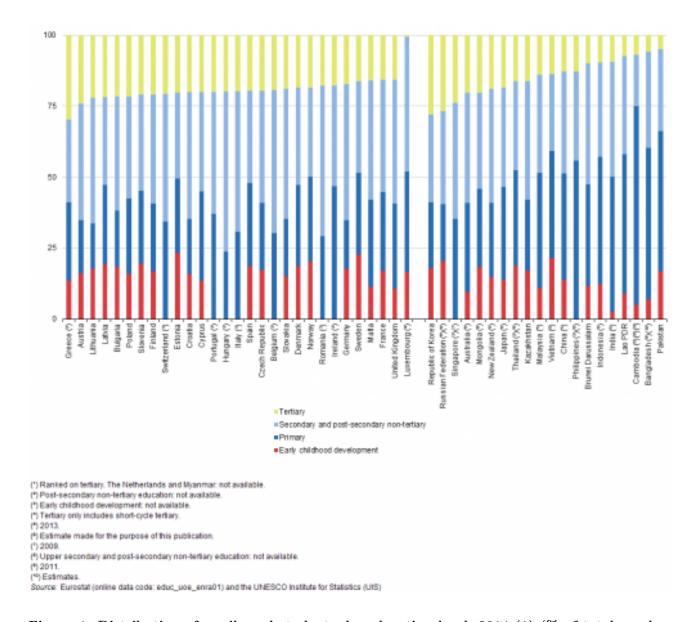


Figure 4: Distribution of pupils and students, by education level, 2014 (1) (% of total number of pupils and students) Source: Eurostat (educ\_uoe\_enra01) and the UNESCO Institute for Statistics (UIS)

In 2014, there were more than 80 million pupils in the EU-28 spread across early childhood development, primary, secondary and post-secondary non-tertiary levels of education, while a further 19 million students were enrolled in tertiary education. Worldwide, the total enrolment from pre-primary education through to post-secondary non-tertiary education was 1.48 billion in 2013 with a further 199 million students in tertiary education.

Comparing the division of pupils/students by education level, the main difference between European and Asian ASEM partners was the higher proportion of primary education students in Asian ASEM partners, particularly in ASEAN members, most notably Cambodia in 2011 (see Figure 4). Within NESA there were different situations: the distribution of pupils/students by educational level in the Republic of Korea, the Russian Federation, Australia, Mongolia, New Zealand and Japan was broadly similar to that observed in most of the EU Member States; China and India had similar structures with a relatively high share of primary pupils, which influenced greatly the NESA average; Bangladesh and Pakistan had even higher proportions of pupils in primary education. Among the ASEAN members, Singapore and Brunei Darussalam were the only countries where the combined share of early childhood development and primary education was below 50 %, as it was in nearly all of the EU Member States.

# **Pupil-teacher ratios**

Figure 5 shows the pupil-teacher ratio for primary, lower secondary and upper secondary education: for the European ASEM partners these ratios are calculated by dividing the number of full-time equivalent pupils by the number of full-time equivalent educational personnel; for the Asian ASEM partners they are based on head counts.

In 2014, the average number of pupils per teacher was generally higher for primary education than for secondary education. Globally, the pupil-teacher ratio for primary education was 24.2 in 2013, whereas it was 18.0 for lower secondary and 16.7 for upper secondary education. The main exceptions to this general pattern among ASEM partners were recorded for those partners who displayed similar ratios across all three levels of education (such as Denmark, Luxembourg, Hungary, Sweden, Brunei Darussalam, Indonesia, Malaysia, China or New Zealand). Otherwise, pupil-teacher ratios in upper secondary education were higher than those in primary education in Finland, Estonia and Thailand, while the ratios in lower secondary education were higher than those in primary education in Malaysia and Thailand.

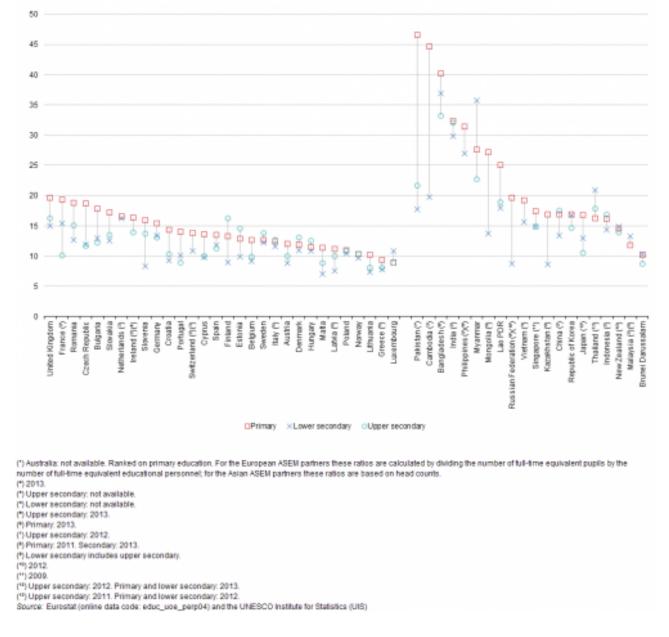


Figure 5: Pupil-teacher ratios by education level, 2014 (1) (number) Source: Eurostat (educ uoe perp04) and the UNESCO Institute for Statistics (UIS)

Pupil-teacher ratios in European ASEM partners were generally below 20, whereas for Asian ASEM partners around one third of the ratios were above this level. For each of the three levels of education shown in Figure 5 there were seven or eight Asian ASEM partners with pupil-teacher ratios that were above the 2013 world averages, while none of the European ASEM partners recorded higher than average ratios.

# **Tertiary education graduates**

Universities and other higher education institutions provide tertiary education. Figure 6 provides an analysis of the number of graduates from tertiary education in 2014 relative to the population aged 20–29. This ratio varied more among the Asian ASEM partners than among the European ASEM partners, with the highest ratios — in New Zealand (2012 data) and Australia (2011 data) — ten times as high as the lowest ratios — in Bangladesh (2012 data) and Cambodia (2011 data).

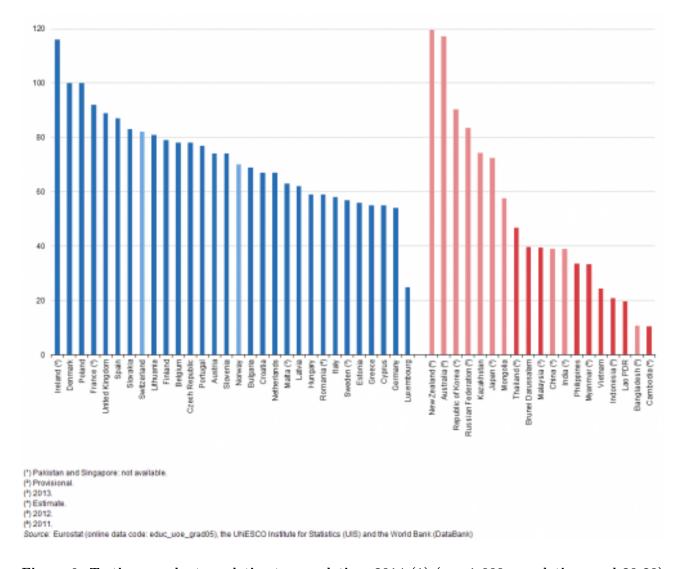


Figure 6: Tertiary graduates relative to population, 2014 (1) (per 1 000 population aged 20-29) Source: Eurostat (educ\_uoe\_grad05), the UNESCO Institute for Statistics (UIS) and the World Bank (DataBank)

An analysis of tertiary graduates by their field of study in 2014 is presented in Figure 7 for the EU-28, Norway and Switzerland, and a selection of nine Asian ASEM partners. Australia reported a higher share of graduates from social sciences, business and law, but otherwise had a similar structure to that for the European ASEM partners, while the reverse was true in Japan. Myanmar, the Republic of Korea, India and the Russian Federation reported relatively large shares of graduates from science, engineering, manufacturing and construction

fields, while Bangladesh and Myanmar reported high shares of graduates from humanities and arts fields. Vietnam and Indonesia reported the largest proportion of graduates from the fields of education and agriculture.

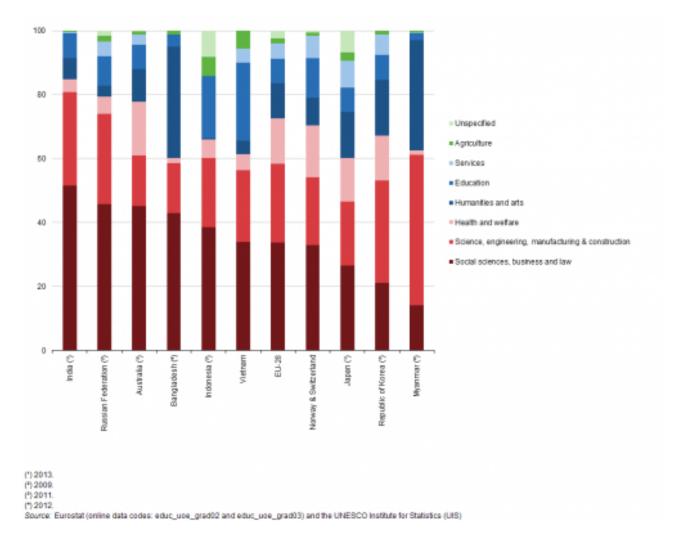


Figure 7: Tertiary graduates by field of study, selected ASEM partners, 2014 (% of all graduates) Source: Eurostat (educ\_uoe\_grad02) and (educ\_uoe\_grad03) and the UNESCO Institute for Statistics (UIS)

# Source data for tables and graphs

• Download Excel file

### **Data sources**

The standards for international statistics on education are set by three international organisations: the Institute for Statistics of the United Nations Educational, Scientific and Cultural Organisation; the OECD; and Eurostat .

The indicators presented are often compiled according to international — sometimes global — standards. Although most data are based on international concepts and definitions there may be certain discrepancies in the methods used to compile the data.

Almost all of the indicators presented for the EU (and its Member States), Norway and Switzerland have been drawn from Eurobase , Eurostat's online database. In exceptional cases some indicators for the EU have been extracted from international sources.

For the Asian ASEM partners and their aggregates (ASEAN and NESA), the data presented have been extracted from the World Bank and the UNESCO Institute for Statistics (UIS).

For many of the indicators, multiple international statistical sources are available, each with their own policies and practices concerning data management (for example, concerning data validation, the correction of errors, the estimation of missing data, and the frequency of updating). In general, attempts have been made to use only one source for each indicator in order to provide a comparable analysis between the partners.

Aggregates for ASEM, the European ASEM partners and the Asian ASEM partners have been compiled from the data for individual partners as indicated above. As such, they may combine data from Eurostat and international sources.

### **Context**

The importance of private expenditure on education varies greatly between countries and as such public expenditure does not represent the total expenditure on education. Expenditure includes spending on schools, universities and other public and private institutions involved in delivering educational services as well as providing financial support to students.

Education is regarded as providing a wealth of benefits, such as supporting economic growth, contributing to the personal and social development of pupils and students and helping to reduce inequalities.

### Other articles

- Asia-Europe Meeting (ASEM) a statistical portrait online publication
- EU-ASEAN cooperation
- South Korea-EU international trade in goods statistics
- The EU in the world

### **Database**

• Education and training, see:

Participation in education and training (educ part)

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Pupils and students - enrolments (educ uoe enr)
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All education levels (educ_uoe_enra)
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Pupils and students enrolled by education level, sex, type of institution and intensity of participation (educ\_uoe\_enra01)

Education personnel (educ uoe per)

Teachers and academic staff (educ uoe perp)

Ratio of pupils and students to teachers and academic staff by education level and programme orientation (educ\_uoe\_perp04)

Education finance (educ uoe fin)

Expenditure on education (educ uoe fine)

Total public expenditure on education in current prices, by education level and programme orientation (educ uoe fine04)

Total public expenditure on education by education level and programme orientation - as % of GDP (educ uoe fine06)

Education and training outcomes (educ outc)

Graduates (educ uoe grad)

Graduates by education level, programme orientation, sex and field of education (educ\_uoe\_grad02)

Distribution of graduates at education level and programme orientation by sex and field of education
(educ\_uoe\_grad03)

Graduates in tertiary education by age groups - per 1000 of population aged 20-29 (educ uoe grad05)

## **Dedicated section**

- Education and training
- International Statistical Cooperation

### **Publications**

- $\bullet$  ASEM partners accounted for 44% of EU28 imports and 30% of exports in 2013 News release October 2014
- EU-South Korea trade relations boosted by the recent free trade agreement Statistics in focus 1/2015
- EU trade in goods with India in slight deficit in 2015 for a third consecutive year News release March 2016
- From birth to death: a closer look at business demography in selected EU countries and the Republic of Korea — Statistics in focus 1/2014
- Goods trade with ASEAN countries rebounds from 2009 to 2010 Statistics in focus 47/2011
- The EU in the world 2013 A statistical portrait Statistical book (2013)
- The European Union and the BRIC countries Pocketbook (2012)
- The European Union and the Republic of Korea A statistical portrait Statistical book (2012)

### **External links**

- ASEM Infoboard The official information platform of the Asia-Europe Meeting (ASEM)
- European Commission DG International Development and Cooperation EuropeAid: Building strong and lasting links with Asia
- European External Action Service (EEAS): European Union involvement in the Asia-Europe Meeting