



Educational attainment: A snapshot of 50 years of trends in expanding education

- As a result of the rapid educational expansion in the aftermath of the Second World War the proportion of 25-34 year-olds with upper secondary education or higher has almost doubled across OECD countries, from 43% in 1965 to 84% in 2015.
- In 1965, no OECD country had more than 80% of 25-34 year-olds attaining at least upper secondary education but by the turn of the century about half and by 2015 all but six have met this threshold, signalling a first step towards a higher-educated population.
- In 2015, across OECD countries, half of 25-34 year-olds with upper secondary education had also attained tertiary education, while in 1965 the share was only 30%.

Most adults have attained at least an upper secondary qualification

In the aftermath of the Second World War, and in response to increasing demand and the recognition of the importance of education for economic development, countries started to expand their educational systems massively by providing access to education at upper secondary level or higher to most of their population.

As a result, countries have seen a major increase in the educational attainment level of their populations. In 1965, only 43% of young adults aged 25-34 had attained upper secondary education or higher on average across OECD countries.¹ Fifty years later, upper secondary education had almost doubled with attainment levels reaching 84% in 2015.

In response to societal and economic demands, the completion of upper secondary education now marks the minimum threshold for successful labour market entry and continued employability (OECD, 2015). However, having attained upper secondary education does not always translate equally into high skill proficiency. Among countries and subnational entities that participated in the Survey of Adult Skills, a product of the OECD Programme for International Assessment of Adult Competencies (PIAAC), around 60% of OECD 25-64 year-olds with upper secondary or post-secondary non-tertiary education has literacy or numeracy proficiency at or below level 2 (on a scale from level 0 to level 5). Even among tertiary educated adults the proportion is still around 30% (OECD, 2016).

Box 1. Methodology

The OECD has reviewed historical trend data on educational attainment and labour force status leading to the release of consistent data on educational attainment and labour force status for the period 1991 to 2015. Historical data previously aligned to ISCED-76 and ISCED-97 have been mapped to ISCED-A 2011, the latest International Standard Classification of Education (ISCED), for the aggregated educational attainment levels.

The current analysis covers five decades, 1965 to 2015. It uses the educational attainment data of 25-34 year-olds from 1991 to 2015. For the period 1965-90, it uses the educational attainment level of people aged 45-54 in 2006-10 as a proxy for the educational attainment level of people who were 25-34 years old in 1986-90, and that of people aged 55-64 in 1995-2015 as a proxy for the educational attainment level of people who were 25-34 years old between 1965-85.

This method somewhat overestimates the educational attainment levels for the years before 1991, since older adults may have acquired their highest educational attainment level after having turned 34.

When interpreting the educational attainment levels of different age groups through time it should be remembered that each age group refers to a birth cohort which went through the educational system many years before the reference year. Moreover, the educational attainment of the population is also influenced by the migration dynamics in a country.

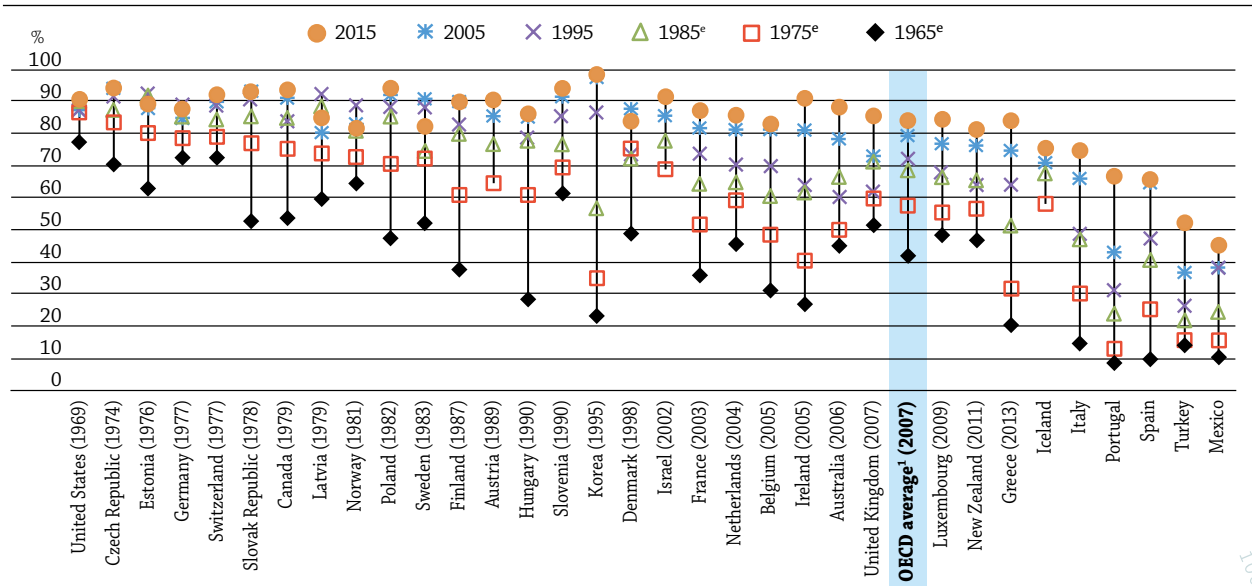
The expansion of upper secondary education has been achieved at different times across OECD countries

OECD countries have followed different paths and dynamics in their educational expansion. In all OECD countries, the educational attainment level of young adults has been more or less increasing over the last five decades (Figure 1). Whereas in 1965 none of the OECD countries had more than 80% of young adults attaining at least upper secondary education, by 2015 all but six had met this threshold, signalling a first step towards a higher-educated population. Countries can be grouped according to the point when they first achieved this 80% threshold: in the first group of countries, which includes Canada, Germany, Latvia or the United States, this first step in educational expansion was achieved before 1980. A second group of countries, which includes Denmark, Korea, Norway

1. "OECD countries" refers to the 35 OECD countries in 2016 even though some of them were not member in earlier years.



Figure 1. Percentage of 25-34 year-old adults with upper secondary education or higher (1965-2015)



Note: The year in brackets after the country name indicates the first year when more than 80% of young adults had attained upper secondary education or higher. Countries without any date have not yet attained this level. Chile and Japan are not shown due to missing trend data. Data for 1965 refer to 1967 and for 1995 to 1997 in Estonia, Hungary, Latvia, Mexico and the Slovak Republic. Data for 1965 refer to 1970 and for 1995 to 2000 in Luxembourg and Slovenia. Data for 1985 refer to 1984 and for 2015 to 2014 in France.
^e estimate. See Box 1 for more details.

1. The OECD average excludes Chile and Japan for all years and Austria, Iceland and Israel for 1965 and 1995.

Countries have been ranked in ascending order of the first year when more than 80% of young adults had attained upper secondary education or higher.

Source: OECD, Education at a Glance (database), <http://stats.oecd.org/>.

or Poland surpassed the 80% mark between 1980 and 1999. In Australia, France, Israel, New Zealand or the United Kingdom this point was reached between 1990 and 2015. Iceland, Italy, Mexico, Portugal, Spain and Turkey have yet to meet this threshold.

Some OECD countries have been able to increase overall educational attainment levels drastically in the last five decades. For instance, in Greece, Ireland, Italy, Korea, Portugal and Spain, the share with upper secondary education was less than 30% in 1965 but increased by more than 50 percentage points between 1965 and 2015. In contrast, although Mexico and Turkey have made a considerable progress in their educational expansion since 1965, they are still lagging behind countries such as Portugal or Spain.

Different policies have shaped countries' educational expansion

Countries have pursued different policies throughout this time which have shaped their educational attainment patterns. Some have responded to increased demand and participation by extending the period of compulsory education and increasing post-compulsory study, some have expanded their systems upwards by providing wider access to tertiary education, while others have applied both approaches at different stages of their educational development.

Korea provides us with a prototypical example of deliberate policies to shape educational expansion, using a "sequential bottom-up approach" between the 1950s and the 2010s (see Lee et al., 2012). In the 1950s, the policy focus of Korea's first stage of educational expansion was the achievement of universal primary education. During the 1960s and 1970s, the focus of the second stage was on the expansion of secondary education. In the next stage, from 1980 onwards, Korea expanded opportunities for higher education.

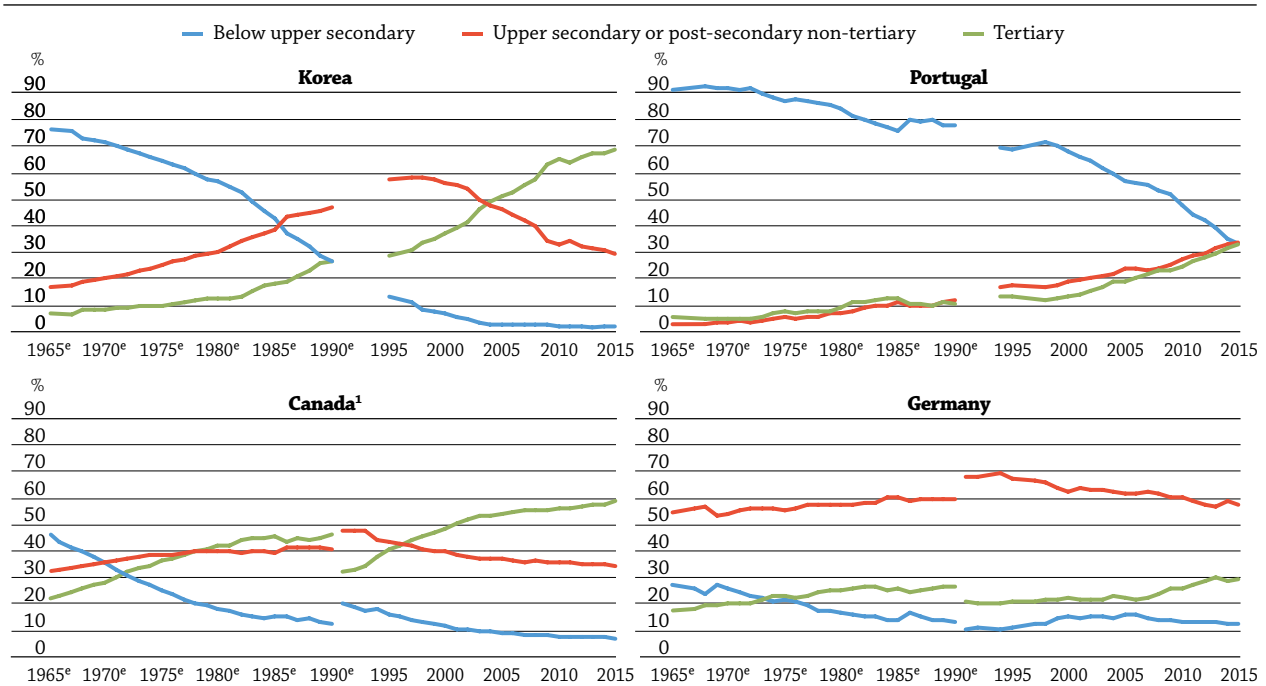
The impact of the educational reforms in Korea is clearly reflected in the educational attainment levels attained by subsequent generations of 25-34 year-olds (Figure 2). Between 1965 and 1995, the percentage of young adults without upper secondary education fell continuously, with the trend accelerating in the 1980s. At the same time, the percentage of young adults with upper secondary or post-secondary non-tertiary education increased, before this trend reversed in the mid-1990s. From the 1980s, the expansion of tertiary education becomes visible in the tertiary attainment level of young adults, accelerating in the 2000s and is now the commonest attainment level of the population in 2015.

In contrast, many other OECD countries have followed a "concurrent bottom-up approach", expanding both upper secondary education and tertiary education simultaneously. This is especially the case, in countries where educational expansion started relatively late, mainly in Mexico, Portugal (Figure 2), Spain and Turkey.

100% 2014
95% 2013
90% 2012
85% 2011
80% 2010
75% 2009
70% 2008
65% 2007
60% 2006
55% 2005
50% 2004
45% 2003
40% 2002
35% 2001
30% 2000
25% 1999
20% 1998
15% 1997
10% 1996
5% 1995



Figure 2. Patterns of educational attainment levels of 25-34 year-old adults (1965-2015)



Note: ^e estimate. Due to the estimation methodology for the educational attainment levels of 25-34 year-olds before 1991, in some countries a gap in the time series between 1990 and 1991 (or later) can be observed. See Box 1 for more details.

1. The population with tertiary education includes a small share of adults with educational attainment of ISCED level 4.

Source: OECD, Education at a Glance (database), <http://stats.oecd.org/>.

In Germany, educational expansion can be characterised by a high overall stability over time (Figure 2) which reflects its long tradition of vocational education and training.² Over the generations more than half of young adults have entered into an apprenticeship programme and obtained an upper secondary or post-secondary non-tertiary qualification widely recognised by employers. At the same time, this stability in educational attainment levels has hidden a rise in the educational level of apprenticeship entrants from a lower secondary to an upper secondary qualification.

In some countries the change in the educational attainment levels of the population is largely affected by immigration patterns and policy, such as in Canada (Figure 2), where overall progress in educational attainment can be attributed in part to a significant and increasing flow of highly educated immigrants, since the 1950s.

Educational expansion has shifted to expanding tertiary education

During recent decades, educational expansion in all countries has also been characterised by the considerable growth of tertiary education, often regarded as a response to the skills requirements of the “knowledge economy” for the 21st century and the educational aspirations of recent generations.

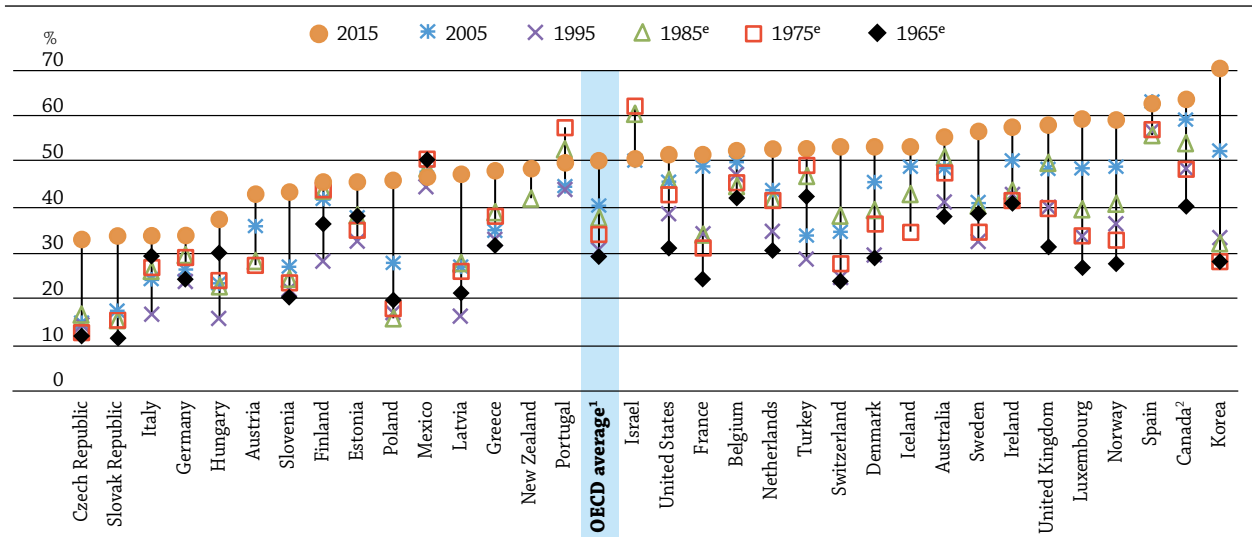
The share of adults with tertiary education among those with upper secondary education or higher has considerably increased (Figure 3). In 2015, on average across OECD countries, half of all 25-34 year-olds with an upper secondary education or higher have attained tertiary education. Five decades earlier, in 1965, only 30% of young adults had done so. By 2015, the share of young adults with tertiary attainment was larger than that with upper secondary or post-secondary attainment in more than half of OECD countries and exceeded 60% in Canada, Korea, Luxembourg, Norway and Spain. In contrast only one-third of young adults with at least upper secondary education have attained a tertiary degree in the Czech Republic, Italy, Germany and the Slovak Republic.

In contrast to most OECD countries, where the share of young adults with tertiary education has steadily increased, the development of tertiary education in the Czech Republic, Estonia, Latvia, Poland and the Slovak Republic can be characterised by a highly stable share of tertiary attainment over four decades followed by a huge increase of about 10 percentage points or more between 2005 and 2015. This can be explained by changes in educational policy during this period: after the collapse of the communism in 1989, access to higher education was no longer controlled by the state but driven by demand, leading to a huge expansion of the attainment levels of the population (Kwiek, 2013).

2. Before the reunification of Germany in 1990, the educational system and the educational policy in East Germany, which represents one-fifth of the total population, were different.



Figure 3. Percentage of 25-34 year-old adults with tertiary education among those with upper secondary education or higher (1965-2015)



Note: In some countries the indicated reference year is different, please refer to the note in Figure 1 for more details.

^e estimate. See Box 1 for more details.

1. The OECD average excludes Chile and Japan for all years, Portugal and Spain for 1965, Austria, Iceland, Israel for 1965 and 1995, and New Zealand for 1965, 1975, 1995 and 2005.

2. The population with tertiary education includes a small share of adults with educational attainment of ISCED level 4.

Countries have been ranked in ascending order of the percentage of 25-34 year-olds with tertiary education among those with secondary education or higher in 2015

Source: OECD, Education at a Glance (database), <http://stats.oecd.org/>.

The bottom line: As a result of the rapid expansion in education over the last five decades, the large majority of adults in OECD countries have now attained at least upper secondary education. This educational expansion started in different periods and countries have followed different trajectories: some have chosen to expand secondary education first and then tertiary education, while others have chosen to expand all levels simultaneously. In other countries educational expansion has slowed or remained stable in recent decades. Tertiary education has also experienced considerable expansion with many countries now witnessing the majority of their young adults reaching this level of qualification.

For more information

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Contact

Markus Schwabe (Markus.Schwabe@oecd.org)

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