Youth in the Education Sustainable Development Goal

Highlights

- The fourth Sustainable Development Goal on Education (SDG 4) adopts a lifelong learning approach to education and introduces vocational and tertiary education into the global agenda. Combined with the eighth Sustainable Development Goal on decent work and economic growth (SDG 8), the two goals include sufficient indicators to track youth throughout their journey from education to employment.
- Out-of-school youth (SDG 4.1.5) still represent more than 10% of the population in the official age range for upper secondary education in over one-quarter of OECD and partner countries. Nonetheless, some countries have succeeded in significantly reducing the proportion of out-of-school youth. For instance, in Mexico and the Russian Federation, this proportion has decreased by at least 18 percentage points since 2005.
- On average across OECD countries, 18% of 15-24 year-olds participate in vocational programmes (ISCED levels 2 to 5; SDG Indicator 4.3.3). Most of them are enrolled at secondary level.

Figure 1. Upper secondary out-of-school rate (2005, 2017)
SDG Indicator 4.1.5

Note: The out-of-school rate is calculated as the number of students of the official age for upper secondary education enrolled in primary, secondary or higher levels of education subtracted from the total population of the same age (numerator), over the total population of the same age (denominator).
1. The source for population data is the UOE data collection for demographic data (Eurostat/DEM) instead of the United Nations Population Division (UNPD).
Countries are ranked in descending order of upper secondary out-of-school rate in 2017.
Source: OECD (2019). The official data sources for this indicator are the UOE data collection for enrolment data and the United Nations Population Division (UNPD) for population data. Results may differ from national statistics. See Source section for more information (https://doi.org/10.1787/f8d7880d-en).
Context

Unlike the previous Millennium Development Goals (MDGs 2000-2015) that were set for low- and middle-income countries, the 2030 Agenda for Sustainable Development is universal. Building on 17 ambitious and far-reaching goals, it commits every single country in the world to eradicate poverty and foster prosperous and sustainable development by 2030.

The fourth Sustainable Development Goal on Education (SDG 4) aims to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” by 2030. SDG 4 is to be achieved through the accomplishment of ten targets, which represent the most comprehensive and ambitious global education agenda ever attempted. Departing from the MDGs’ focus on universal primary education, SDG 4 defines learning as a process that starts at birth and continues throughout all stages of life. In doing so, the SDG 4 agenda considers the various and flexible pathways to education throughout an individual’s journey. Tertiary education, the theme of this year’s *Education at a Glance* publication, also plays a role in this framework, and is presented as one of the paths through which young people can succeed in life (Box 1).

This chapter will focus on youth learning pathways and help inform the debate on youth prospects and employment in OECD and partner countries, in the light of the Sustainable Development Agenda. Building not only on SDG 4 (Quality education) but also on SDG 8 (Decent work and economic growth), this chapter will describe the paths that youth can take throughout their journey: from secondary into higher levels of education (including tertiary), throughout higher levels of education, and from education into the labour market.

Other findings

- Young people are at greater risk of precarious employment than adults in older age groups. On average across OECD countries, the unemployment rate is 2 percentage points higher among 25-34 year-olds (7%) than among 35-44 year-olds (5%) (see Indicator A3, used as a proxy for SDG Indicator 8.5.2).
- On average across OECD countries, 11% of 15-24 year-olds are neither employed, nor in education or training (NEET) (see Indicator A2, used as a proxy for SDG Indicator 8.6.2).

Note

In the SDG 4 monitoring framework, each target has at least one global indicator and a number of related thematic indicators designed to complement the analysis and measurement of the target. In total, there are 11 global indicators and 32 thematic indicators included in the SDG 4 monitoring framework. A list of all the indicators and their methodologies is available at [http://SDG4monitoring.uis.unesco.org](http://SDG4monitoring.uis.unesco.org).

The figures in this chapter present some of the agreed indicators for each target, selected based on their relevance for OECD and partner countries and on data availability. Some of the SDG 4 indicators correspond to indicators already published in other chapters of *Education at a Glance*. In those cases, reference is made to the corresponding indicator.

Data presented in this chapter do not track a single cohort across time. Rather, the chapter describes and analyses youth pathways through education and employment at a single point in time, across different age groups.
Analysis

Box 1. Learning pathways in the SDG Framework

Several of the 17 Sustainable Development Goals and their targets explicitly mention young women and men. SDG 4 on equal access to quality education and SDG 8 on decent work are the ones that are the most related to youth. Other goals that are of particular relevance include SDG 10 (inequality) and SDG 16 (peace and justice).

The Sustainable Development Goal on Education (SDG 4) insists on the importance of equal access to quality education and lifelong learning opportunities for all. To track the continuous education process, the SDG 4 agenda provides a range of indicators to measure the participation and skills of individuals throughout their lives, encompassing levels in and outside compulsory education and considering a wide range of programmes (including formal and non-formal education).

Among SDG 4 targets, SDG 4.1 and SDG 4.2 emphasise the importance of both education participation and education quality at pre-primary (SDG 4.2), and primary and secondary levels (SDG 4.1), while SDG 4.3 focuses on participation at higher levels. SDG 4.3 aims to “by 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university”. This target is closely linked to SDG 4.4 and 4.6, which both measure essential skills that youth and adults can acquire through vocational, tertiary or adult education, including literacy and numeracy, digital literacy, and information and communication technologies (ICT) skills. It is also closely linked to SDG 4.7, which aims to ensure that learners acquire the knowledge and skills needed to promote sustainable development.

SDG 4.3 contains one global indicator on the participation rate of youth and adults in formal and non-formal education and training, and two thematic indicators on the gross enrolment ratio for tertiary education and the participation rate in vocational education. The phrasing of the target, as well as the indicators it contains, recognises the many alternative paths through which young people and adults can acquire the necessary skills to ease their transition to the labour market and live better lives.

Figure 2 describes how the SDG 4 and SDG 8 indicators track the progression of youth from secondary education to employment, by evaluating their participation (blue arrows) and assessing the proportion of those who leave education and/or the labour market (red rectangles).
SDG 4 and its associated targets set an ambitious agenda that encompasses quality learning and equity in education alongside the more traditional indicators of access and participation, at all levels of education. In doing so, it challenges every country in the world to improve its education system and marks a significant departure from previous global education goals and targets, such as the Millennium Development Goals, which were not as far-reaching and focused more on access and participation at primary level. The analysis below takes into account this lifelong learning approach and reports on youth pathways throughout their journey from education to the labour market.

**Completing upper secondary education**

Completing upper secondary education is an important step for youth to ensure a better entry into the labour market. Individuals without upper secondary education are more likely to be unemployed (see Indicator A3) and to have lower earnings (see Indicator A4) than those who complete this or a higher level of education.

As the SDG agenda confirms, education is also key in ensuring that youth become engaged citizens and participate in society. In this context, SDG Target 4.7 aims at “ensuring that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture’s contribution to sustainable development”. While the data needed to properly monitor this target are still limited, SDG Target 4.7 acknowledges the many functions of education, including training better citizens.

Graduation from secondary education does not necessarily lead to further training as the pathways into education after secondary level vary substantially across countries. For example, in some countries, young people who want to pursue a tertiary degree may first need to pass a central entrance exam (see Indicator D6). In other countries, young people with a secondary qualification might have fair chances if they join the labour market directly. Therefore, the proportion of youth graduating from secondary education does not always reflect the proportion going on to pursue further education after secondary school. However, across countries, the youth who do not complete upper secondary education are less likely to pursue further education and more likely to be unemployed or inactive.

SDG Indicator 4.1.5 measures the upper secondary out-of-school rate, which corresponds to the proportion of young people in the official age range for upper secondary education who are not enrolled in primary, secondary or higher levels of education. On average across OECD countries, almost 7% of youth of upper secondary school age were out of school in 2017, but they represent 5% or less of that age group in over half of countries with available data (Figure 1). In other words, while the majority of countries have managed to limit the proportion of out-of-school youth (less than 5%), about one-quarter of OECD and partner countries still have a large proportion of out-of-school youth (over 10%). Colombia and Mexico have the highest rate of out-of-school youth among all OECD and partner countries, with over 25% of upper secondary school-aged youth not enrolled. They are followed by Luxembourg (19%), Brazil (19%) and Switzerland (17%). In Luxembourg, the high rate of repeaters in primary and secondary levels may contribute to a higher dropout rate (OECD, 2016[1]).

Some countries have made significant progress in reducing the numbers of out-of-school youth in the past decade. Figure 1 highlights a decrease of 20 percentage points in the out-of-school rate in the Russian Federation, 18 percentage points in Mexico, 16 percentage points in Portugal and 10 percentage points in Australia and New Zealand between 2005 and 2017. Such large reductions reflect continuous policy efforts to retain students of upper secondary education age in school.

Upper secondary out-of-school rates remain roughly similar between genders in most countries. The difference between young women and men in out-of-school rates remain at or below 4 percentage points in almost all countries, except in Luxembourg, where the out-of-school rate is 5 percentage points higher among young men, and Sweden, where it is 11 percentage points higher among young women.
Advancing from secondary to higher levels of education

Education following upper secondary can take a variety of forms. Upon graduation from secondary level, depending on the country, youth could opt for post-secondary non-tertiary education, short-cycle tertiary, or a bachelor’s or long first degree.

SDG Target 4.3 is to “by 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university”. It recognises the many alternative paths through which young people and adults can acquire the necessary skills to ease their transition to the labour market, become engaged citizens and live better lives. Although Target 4.3 focuses only on participation, it is closely linked to Targets 4.4 and 4.6, which measure some of the skills that can be acquired through participation in vocational and tertiary levels of education and training.

Target 4.3 also reveals a strong equity focus, by referring to “equal access for all women and men”. There may be different paths available to young people, but what is most important is that everyone has equal opportunities to access them. Moreover, tracking the different pathways sheds light on the education system’s permeability, which is also related to equity: learners should be able to move easily between levels and types of programmes (e.g. from vocational to general education). Finally, Target 4.3 highlights the importance of both the quality and affordability of vocational and tertiary education, yet no indicator has been proposed to capture any of these two concepts (UNESCO, 2016[2]).

Vocational education and training

Vocational education and training can play a crucial role in tackling youth unemployment. During economic downturns, such as the 2008 recession, they have proved to be a powerful tool in addressing youth unemployment in countries such as Austria, Germany and Switzerland. All three have efficiently used vocational training programmes, particularly targeted at potential school dropouts (Dolado, 2015[3]).

The SDG Thematic Indicator 4.3.3 measures the participation rate in technical and vocational programmes among 15-24 year-olds, either in formal education, work-based or other settings. The indicator focuses on this broad age group and a wide range of education levels (secondary, post-secondary non-tertiary and short-cycle tertiary), and seeks to measure participation in work-related training designed to lead to a job (UNESCO, 2017[4]). On average across OECD countries, in 2017, 18% of 15-24 year-olds were enrolled in vocational education (at the secondary, post-secondary non-tertiary and short-cycle tertiary levels combined), ranging from 3% in Brazil to 35% in Slovenia (Figure 4). Levels of enrolment remain higher for young men than for young women in almost all countries with available data (Figure 3). On average across OECD countries, while 16% of young women (aged 15-24) are enrolled in vocational education and training, this proportion goes up to 19% for men.

Breaking down SDG 4.3.3 by level of education reveals that in almost all countries, most 15-24 year-olds in vocational programmes are enrolled at secondary level (Figure 4). In other words, the large majority of students who participate in vocational programmes will do so at the ages corresponding to upper secondary education, i.e. 15-19 year-olds (see Indicator B1). Thus, the extended 15-24 age range in SDG 4.3.3 may underestimate participation rates in these programmes in OECD countries.

Work experience remains a key feature of successful vocational education and training (OECD, 2014[5]). Yet available data do not allow to report on the variety of vocational programmes that exist across countries. In particular, monitoring existing “dual systems” (formal vocational schooling combined with on-the-job training) would help to more thoroughly inform the role of vocational education and training in limiting school dropout rates and offering alternative options to disengaged youth (see Box A5.1 in (OECD, 2017[6])).

Vocational education and training can also be a pathway to tertiary education. For example, countries such as Finland and the Netherlands have developed education permeability and established “bridges” from vocational training to tertiary education.
Figure 3. Enrolment rate of 15-24 year-olds in vocational education and training, by gender (2017)

SDG Indicator 4.3.3

1. The source for population data is the UOE data collection for demographic data (Eurostat/DEM) instead of the United Nations Population Division (UNPD).

Countries are ranked in descending order of enrolment rate of 15-24 year-olds women in vocational education and training in 2017.

Source: OECD (2019). The official data sources for this indicator are the UOE data collection for enrolment data and the United Nations Population Division (UNPD) for population data. See Source section for more information https://doi.org/10.1787/f8d7880d-en).

StatLink https://doi.org/888933976308

Tertiary education

The number of students pursuing tertiary education globally has grown continuously over the past two decades and is expected to continue growing through to 2030 (OECD, 2018[7]). The share of tertiary-educated young adults (aged 25-34) in OECD increased from 35% in 2008 to 44% in 2018 (see Indicator A1). This increase could reflect a rise in demand for skilled labour, a greater demand for tertiary education, increasing wealth and the growing number of financial support policies to promote access to tertiary education (OECD, 2018[7]; Owens, 2017[8]).

The SDG agenda acknowledges the increased importance of tertiary education globally and includes an indicator dedicated to this level. SDG Indicator 4.3.2 measures the gross enrolment rate in tertiary education as the total number of students enrolled in tertiary education regardless of age expressed as a percentage of the population in the five-year age group immediately following upper secondary education (typically 18-22 year-olds). However, this definition may underestimate enrolment rates in countries where students mainly enrol in programmes of short duration compared to countries where students enrol in programmes of longer durations. Other confounding factors occur in OECD countries where long periods of part-time enrolment are customary.

As mentioned above, SDG Target 4.3 is closely linked to SDG Targets 4.4, 4.6 and 4.7, which aim to increase the number of youth and adults with the necessary skills to thrive in the labour market and engage in society more generally. To this end, SDG Indicator 4.4.3 measures the "youth educational attainment rates by age group, economic activity status and programme orientation". On average across OECD countries, 41% of young adults (aged 25-34) have an upper secondary or post-secondary non-tertiary qualification as their highest level of education and 44% have attained tertiary education (see Indicator A1). SDG Indicator 4.4.3 also recognises the importance of tracking the link between educational attainment and economic activity status, which will be the focus of the next section.
Entering the labour market

The transition from education to work can be a difficult period for many young people. The risk of unemployment, job insecurity due to low-paid or temporary contracts, and the uncertainties associated with starting to live independently can make this a challenging phase in young people’s lives (OECD, 2018[9]).

Across OECD countries, youth remain at higher risks of unemployment and precarious employment compared to adults (see Indicator A3). Young people are usually less specialised and more likely to be dismissed when firms are in distress; they may also find themselves in an “experience trap”, where employers favour experienced workers and young people therefore cannot increase their own experience (Dolado, 2015[3]). On the labour supply side, there is higher worker turnover among youth than among adults, as their initial jobs may not correspond to their skills and preferences (Blanchflower and Bell, 2011[10]).

The eighth Sustainable Development Goal (SDG 8) aims to “promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all”. In this sense, it overlaps with Target 4.4, which highlights the need for skills needed for “employment and decent work”. SDG 8 also recognises the relative vulnerability of youth in the labour market and dedicates two targets specifically to them. Target 8.6 aims by 2020 to substantially reduce the proportion of youth not in employment, education or training and Target 8.8 to develop and operationalise a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization. Target 8.5 on productive employment and decent work for all women and men also confirms the relative vulnerability of youth, and specifically mentions young people as a likely disadvantaged group.

SDG Indicator 8.5.2 measures the unemployment rate by gender, age and disability status. Indicator A3 of this publication allows unemployment rates for young people and adults in older age groups to be compared.
average across OECD countries, the unemployment rate is 2 percentage points higher among 25-34 year-olds (7%) than among 35-44 year-olds (5%). Indicator A3 also highlights a clear link between educational attainment and young people’s activity status. On average across OECD countries, the unemployment rate is almost twice as high for young adults (aged 25-34) who have not completed upper secondary education (14%), compared to those with upper secondary or post-secondary non-tertiary attainment (7%) and those with a tertiary degree (6%) (see Indicator A3).

To monitor countries’ progress towards productive employment and decent work, Target 8.5 also includes a measure of the average hourly earnings by occupation, gender, age and disability status (SDG Indicator 8.5.1). Although Indicator A4 of this publication evaluates average relative yearly earnings, it could still shed light on young people’s earnings across OECD countries. It shows that, just as with activity status, earnings are also strongly associated with educational attainment: on average across OECD countries, 25-34 year-olds with a tertiary degree earn 38% more than those with upper secondary attainment (see Indicator A4). The lack of data by disability status means this dimension of Indicators 8.5.1 and 8.5.2 cannot be monitored yet.

The proportion of youth neither employed nor in education or training (NEET) remains a more relevant measure of youth participation in the labour market than the unemployment rate, since a large proportion of individuals in the age group considered will still be in education, and the indicator captures not just those who are unemployed but also those who are inactive (Dolado, 2015[3]). It is a key indicator of youth labour market performance as this is a group at high risk of marginalisation and social exclusion. SDG Indicator 8.6.1 measures the proportion of youth (aged 15-24 years) who do not participate in any form of education, whether it is formal or non-formal, nor any employment or training. Taking Indicator A2 of this publication as a proxy (as it only considers youth in formal education), on average across OECD countries, 11% of 15-24 year-olds were NEET in 2017.

Definitions

Inactive individuals are those who, during the survey reference week, were neither employed nor unemployed (i.e. individuals who are not looking for a job).

Technical and vocational education and training (TVET) is a comprehensive term commonly used by the UNESCO Institute for Statistics to refer to education, training and skills development in a wide range of occupational fields, production, services and livelihoods. Vocational education may have work-based components (e.g. apprenticeships, dual-system education programmes). Successful completion of such programmes leads to labour market-relevant, vocational qualifications acknowledged as occupationally oriented by the relevant national authorities and/or the labour market.

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<th>SDG Indicator</th>
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<td>4.1.5</td>
<td>Upper secondary out-of-school rate</td>
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<td>Gross enrolment ratio for tertiary education, by sex</td>
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<td>Participation rate in technical and vocational programmes (15- to 24-year-olds), by sex</td>
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<td>Youth educational attainment rates by age group, economic activity status, level of education and programme orientation</td>
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<td>Average hourly earnings of female and male employees, by occupation, age and persons with disabilities</td>
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<td>Unemployment rate, by sex, age and persons with disabilities</td>
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<td>Proportion of youth (aged 15-24 years) not in education, employment or training</td>
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Methodology

The parity indices are calculated using the more likely disadvantaged group as the numerator and the more likely advantaged group in the denominator. The gender parity index is calculated as the indicator value for women divided by the indicator value for men.
All indicators presented in this chapter follow the agreed SDG methodology, including for recommended data sources, and may differ in some cases from other indicators presented in *Education at a Glance*.

Please see Annex 3 for country-specific notes ([https://doi.org/10.1787/f8d7880d-en](https://doi.org/10.1787/f8d7880d-en)).

**Source**

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<td>4.1.5</td>
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**Note regarding data from Israel**

The statistical data for Israel are supplied by and are 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**


