Why does the Sustainable Development Goal on Education (SDG 4) matter for OECD countries?

EDUCATION INDICATORS IN FOCUS

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- The Sustainable Development Goal on Education (SDG 4) adopts a universal and lifelong learning perspective that widens the focus on basic education to levels and programmes outside compulsory education and to all countries.
- The Sustainable Development Goal on Education (SDG 4) sets targets for achieving quality learning at all stages of life, from early childhood (SDG Target 4.2), through schooling (SDG Target 4.1) to adulthood (SDG Targets 4.3, 4.4, and 4.6).
- The Sustainable Development Goal on Education (SDG 4) also dedicates one whole target to an issue that is highly relevant to OECD countries: equity in education (Target 4.5), including gender, socio-economic status, location, persons with disabilities, and indigenous peoples.
- The Sustainable Development Goal on Education (SDG 4) brings attention to the content of education and tackles issues at the heart of education policy and curricula development in OECD countries. Target 4.7 calls for equipping students with the knowledge and skills to foster sustainable development as well as human rights, gender equality and global citizenship, thus linking education to the wider sustainable development objectives.

In 2015, at the United Nations General Assembly, member states renewed their commitment to global development by adopting the 2030 *Agenda for Sustainable Development* (UNESCO, 2016[1]). The new agenda is a universal call for action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. It is divided into 17 Sustainable Development Goals (SDG) and commits every single country to reach the SDG targets by 2030, unlike the previous Millenium Development Goals, which only focused on low- and middle-income countries.

Sustainable Development Goal 4 commits every single country to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all", through the accomplishment of ten targets. The Goal contains the most comprehensive and ambitious objectives for global education ever attempted, and reflects education challenges of great relevance to OECD countries including lifelong learning, equity and curriculum content to help foster a sustainable future.

Sustainable Development Goal 4 defines learning as a lifelong process

Participation in education is not sufficient to ensure that individuals have the knowledge, skills and attitudes they need to achieve their objectives and well-being, and for societies to thrive. SDG 4, and its associated targets, places a focus on the *quality* of education, including learning outcomes and skills, alongside the more traditional indicators of *quantity*, such as access and participation.

Most importantly, SDG 4 adopts a universal and lifelong learning perspective that widens the focus on quality education to levels and programmes outside of compulsory education and to all countries. It emphasises the importance of learning at all stages of life, from early childhood (Target 4.2), through schooling (SDG Target 4.1) to adulthood (Targets 4.3, 4.4 and 4.6). In this lifelong learning perspective, OECD countries still face many challenges (Figure 1).

SDG Target 4.2 commits countries to "ensure that all children receive quality early childhood development, care and pre-primary education, so that they are ready for primary education". While most OECD and partner countries have successfully expanded access to education for all children one year prior to the official starting age for primary education (Global Indicator 4.2.2; see Figure 1), more data are needed to

Box 1. The Sustainable Development Goal 4 Monitoring Framework

The fourth Sustainable Development Goal (SDG 4) focuses on quality education for all and includes ten targets, each focused on a specific issue: Target 4.1 on universal primary and secondary education; Target 4.2 on early childhood development and universal pre-primary education; Target 4.3 on equal access to technical/vocational and higher education; Target 4.4 on relevant skills for decent work; Target 4.5 on gender equality and inclusion; Target 4.6 on universal youth literacy; Target 4.7 on education for sustainable development and global citizenship; Target 4.a on effective learning environments; Target 4.b on scholarships and Target 4.c on teachers and educators.

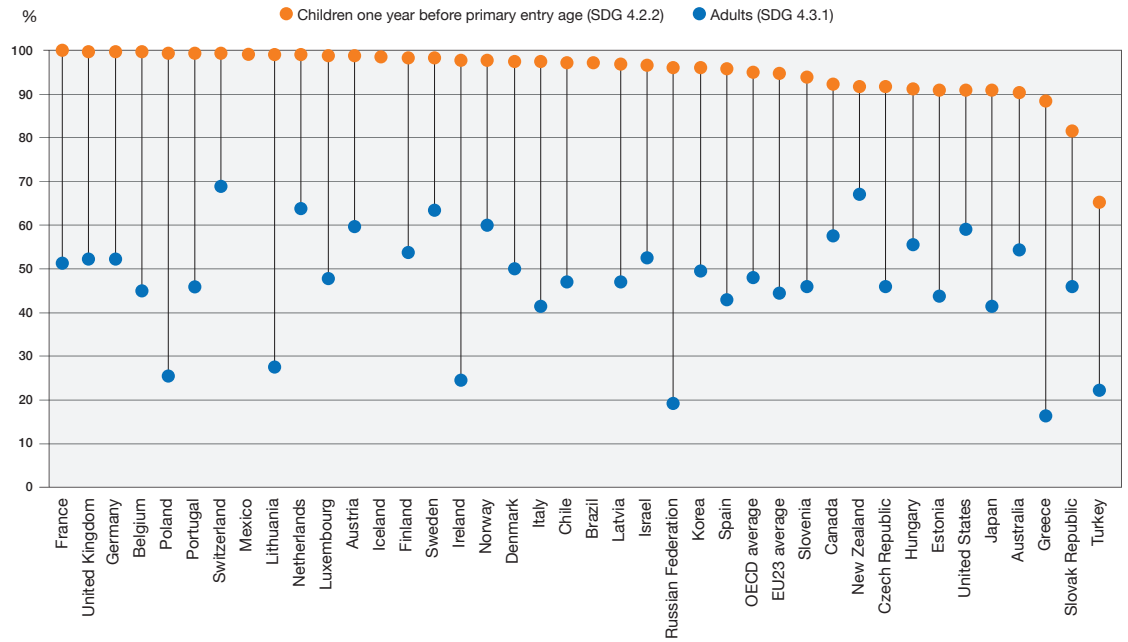
Each target has at least one global indicator and a number of related thematic indicators designed to complement the analysis and measurement of the target. In total, there are 11 global indicators and 32 thematic indicators included in the SDG 4 monitoring framework.

Further details can be found in (UNESCO-UIS, 2018[2]). The list of all targets and related indicators can be found at https://sustainabledevelopment.un.org/sdg4.

assess whether these children are receiving quality care to ensure desired health, learning and psychosocial outcomes (Global Indicator 4.2.1). By setting indicator 4.2.1 as a global one, the SDG 4 agenda aims to move away from the limited focus of pre-primary education and steer the international community towards holistic early childhood programmes for younger children.

FIGURE 1 / Participation in education among young children and adults (2016)

Indicator 4.2.2 – Participation rate in organised learning one year before the official primary entry age and Indicator 4.3.1 – Participation rate of adults in formal and non-formal education



Countries are ranked in descending order of the participation rate in organised learning one year before the official primary entry age.
Source: (OECD, 2018[3]), The Education Sustainable Development Goal, Table 1.

SDG Target 4.1 focuses on free, equitable and quality primary and secondary education. It expands the focus on universal access to primary education to include secondary education, and expressly specifies the role of education to "[lead] to relevant and effective learning outcomes". Global Indicator 4.1.1.c measures the "proportion of young people achieving at least a minimum proficiency level in (i) reading and (ii) mathematics". The OECD Programme for International Student Assessment (PISA) provides a useful way to compare students' learning outcomes across countries. By setting PISA Level 2 as the "minimum proficiency level", Global Indicator 4.1.1.c reveals large discrepancies in students' performance in mathematics and reading across countries. For example, less than 50% of 15-year-old students achieve at least PISA Level 2 in mathematics in Mexico (43%) and Turkey (49%) while almost 90% do in Estonia (89%) and Japan (89%) (OECD, 2018[3]).

Focusing on older age groups, Target 4.3 aims to ensure equal access for all women and men to affordable and quality technical, vocational, and tertiary education, including university. Global Indicator 4.3.1 measures the participation rate of adults (25-64 year-olds) in formal and non-formal education and training in the previous 12 months. By focusing on this wide age group, this indicator demonstrates the objective to measure continuous learning throughout life. It also includes both formal and non-formal education, thus aiming to capture participation in any type of programme that aims to improve knowledge, skills and competencies from a personal, civic, social or employment-related perspective (UNESCO, 2016[1]). In most OECD and partner countries, at least 20% of 25-64 year-olds have participated in formal or non-formal education and training in the previous 12 months (OECD, 2018[3]) (Figure 1).

Target 4.3 is also closely linked to Target 4.4, which focuses on youth and adult skills for employment, decent work and entrepreneurship, and Target 4.6, which focuses on youth and adult literacy and numeracy. Target 4.4 tackles very relevant issues for OECD countries, and more definition and data collection efforts are required to monitor the related indicators: Global Indicator 4.4.1 measures the percentage of youth and adults with information and communications technology (ICT) skills and Thematic Indicator 4.4.2 monitors the percentage of adults who have achieved at least a minimum level of proficiency in digital literacy skills.

Sustainable Development Goal 4 reaffirms the importance of equity in education

The international community has adopted a strong equity focus in the *2030 Agenda for Sustainable Development*, and in the SDG 4 objectives in particular. One whole target, Target 4.5, is dedicated to equity in education.

Global Indicator 4.5.1 sets the parity index as the main measure of equity in education. This indicator casts a wide net to measure equity, as it is meant to be applied to all other SDG 4 indicators with available data, and measures equity over a range of dimensions (such as gender, socio-economic status and location). In particular, it enables the same indicator to be analysed across multiple equity dimensions. For example, applying Global Indicator 4.5.1 to Global Indicator 4.1.1 shows that students' ability to perform at least at PISA level 2 in mathematics is relatively weakly associated to their gender, but remains strongly determined by the location of students' schools (rural or urban) in the majority of OECD and partner countries, and by socio-economic status as measured by the PISA index of economic, social and cultural status (ESCS[1]) in all OECD and partner countries (Figure 2).

The parity index also allows the tracking of how equity varies across several age groups for a given dimension. For example, measuring the gender parity index associated with SDG 4 indicators confirms that students' gender does not influence children's participation in education one year before the primary entry age (SDG 4.2.2) in all OECD countries, and is weakly associated with the ability of 15-year-old students to perform at least at PISA Level 2 in mathematics (SDG 4.1.1). However, gender is associated with participation in technical and vocational education and training among 15-24 year-olds (SDG 4.3.3) and with participation in adult education (SDG 4.3.1). In most OECD and partner countries, 15-24 year-old young men are at least 40% more likely than young women to enrol in vocational education. Participation in adult education is

[1] The PISA index of economic, social and cultural status (ESCS) was created on the basis of the following variables: 1) the International Socio-Economic Index of Occupational Status (ISEI); 2) the highest level of education of the student's parents, converted into years of schooling; 3) the PISA index of family wealth; 4) the PISA index of home educational resources; and 5) the PISA index of possessions related to "classical" culture in the family home. See PISA 2015 Results (Volume I): Excellence and Equity in Education (OECD, 2016[7]) for more information.

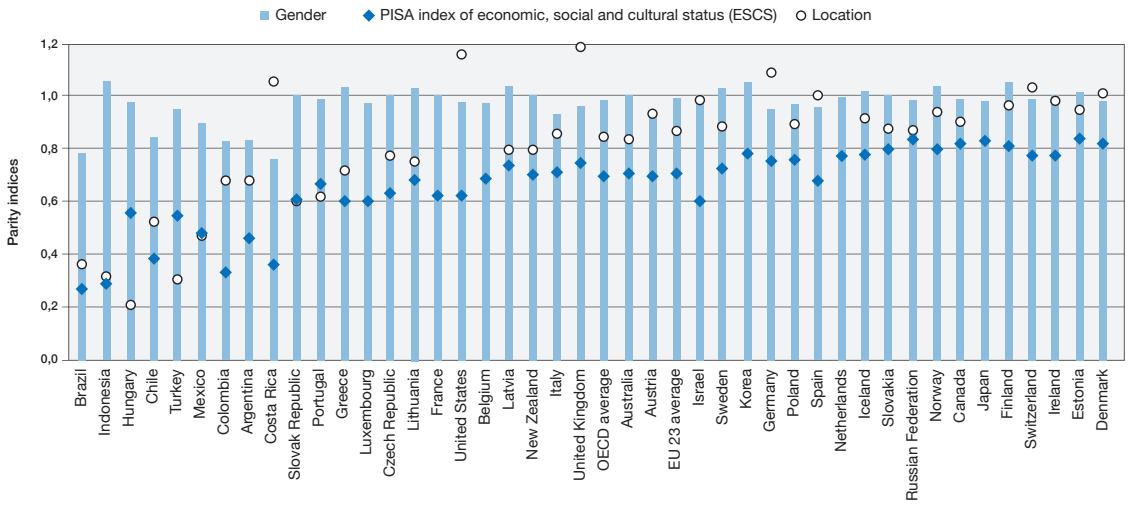
higher among women in 17 countries and higher among men in 13 countries, with the most extreme cases in Turkey, where participation among women is about 30% lower than for men, and in Estonia, Lithuania and the Russian Federation, where it is at least 30% higher (OECD, 2018[3]).

SDG 4.5.1 highlights other equity dimensions, and draws attention to a range of vulnerable groups, including persons with disabilities, indigenous peoples and children in vulnerable situations. While international data on these groups are still lacking, one of the benefits of the SDG 4 indicators could be to push for the collection of more and better quality data on vulnerable groups.

Finally, ensuring equity in education relies on the availability and proper targeting of resources. For this reason, Target 4.5 also includes three thematic indicators which assess if, and how, financing mechanisms ensure equity in education, both at the national and international level: the extent to which explicit formula-based policies reallocate education resources to disadvantaged populations (SDG 4.5.3), education expenditure per student by level of education and source of funding (SDG 4.5.4) and the percentage of total aid to education allocated to least developed countries (SDG 4.5.5) (OECD, 2018[3]).

FIGURE 2 / Mathematics performance and gender, socio-economic status and school location parity indices (2015)

Indicator 4.1.1 - Proportion of 15-year-olds achieving at least a proficiency Level 2 (PISA) in mathematics and Indicator 4.5.1 - Parity Index



Countries are ranked based on the average distance of each index from 1 (high to low).
Note: The gender parity index refers to the ratio of the female value over the male value. ESCS refers to the PISA index of economic, social and cultural status. The ESCS parity index refers to the ratio of the value for the bottom quartile over the value for the top quartile of the ESCS index. Location parity is measured using the PISA definition of rural and urban areas. The location parity index refers to the ratio of the value for rural areas over the value for urban areas.
Source: (OECD, 2018[3]), The Education Sustainable Development Goal, Figure 1.

Sustainable Development Goal 4 recognises the importance of knowledge, skills, attitudes and values for a sustainable future

Through Target 4.7, SDG 4 focuses on the content of education beyond reading and mathematics, and explicitly links education to the broader sustainable development agenda. It calls for equipping students with the knowledge and skills to foster sustainable development – for instance through education for sustainable development – as well as education for human rights, gender equality and the promotion of global citizenship.

A growing number of countries are recognising the relevance of these competences and the crucial role of education in promoting them. For instance, in Singapore, the curriculum is centred around competences such as civic literacy, global awareness and cross-cultural skills – together with others including critical and inventive thinking, communication and collaboration (Ministry of Education of Singapore, 2018[4]).Similarly, in Norway, the notions of cultural diversity, environmental awareness, ethics, equity and co-operation are at the core of schools' curricula (Norwegian Directorate for Education and Training, 2017[5]).

Although the data available are currently limited, there are ongoing international efforts to find suitable data sources and methodologies to monitor Target 4.7. Box 2 gives examples of OECD initiatives that may contribute to measuring this target.

Box 2. Selected OECD contributions to Target 4.7 monitoring

Several OECD projects are expected to contribute to the monitoring of Target 4.7. For instance, PISA has developed a global competence framework to evaluate students' ability to examine local, global and intercultural issues, to understand and appreciate the perspectives of others, and to act for collective well-being and sustainable development (OECD, 2018[6]). This is done through 1) a cognitive test evaluating background knowledge and cognitive skills to navigate global and intercultural issues; and 2) questionnaires collecting self-reported information on students' skills, attitudes and awareness of global issues, as well as information from teachers and schools on activities to promote global competence.

In addition, the OECD Future of Education and Skills 2030 project is investigating to what extent competencies reflecting emerging demands are included in existing curricula, and in which learning areas they are embedded. These competencies include literacy for sustainable development and global competency – together with a variety of others such as respect, co-operation, creative thinking or media literacy. The second phase of the project, starting from 2019, will start exploring how teachers and learning environments can support students to develop such competencies (OECD, 2018[8]).

The bottom line

The Sustainable Development Agenda is a universal and ambitious agenda that challenges every single country in the world to achieve the Sustainable Development Goals by 2030 – and this is why it matters for OECD countries. In this context, Sustainable Development Goal 4 sheds light on education policy issues which were not traditionally included in the international development agenda and which remain highly relevant for OECD member and partner countries. In particular, Sustainable Development Goal 4 stresses the importance of providing equitable access to education and lifelong learning opportunities that lead to effective learning outcomes. It also emphasises the need to adapt the content of education to include relevant topics such as human rights and gender equality. The challenge, however, remains to collect quality and comparable data to monitor the wide range of Sustainable Development Goal 4 indicators. With the 2030 deadline in view, OECD countries can play an important role in pushing strongly for the collection of more and better quality data and developing the methodologies to assess education systems in OECD countries and beyond.



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