



## GOAL 4

# Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

### TARGET 4.2

By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education

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### Target overview

#### SDG monitoring

SDG Target 4.2 is tracked by the following indicators:

- 4.2.1 Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex
- 4.2.2 Participation rate in organized learning (one year before the official primary entry age), by sex<sup>1</sup>

This briefing note will focus on Indicator 4.2.1 for which UNICEF is the custodian agency.

### Broader monitoring context

Early childhood development (ECD) is multidimensional and refers to several aspects of a child's well-being: physical, social, emotional and cognitive. While data and global monitoring efforts have existed for some time for certain domains of child development, there remains a critical lack of comparable evidence on children's overall developmental status.

UNICEF has been on the forefront of advancing ECD monitoring, leading development of the Early Childhood Development Index (ECDI) to measure four domains – literacy-numeracy, physical, social-emotional and learning – and to monitor children's achievement of universal developmental milestones across countries. With the inclusion of the ECDI for the first time in 2009, MICS has become an important source of data not only on factors that contribute to ECD, such as care and education, but also on actual developmental outcomes among children during the early years. MICS is now the largest source of comparable data on children's developmental status across a variety of low- and middle-income countries.

To better align with the definition set forth by SDG 4.2.1, however, there is a need to build on the ECDI approach and develop a new measure of early childhood development. There are several key reasons for development of a new measure of ECD within the context of SDG monitoring and reporting. Currently, the main differences between the existing ECDI and the formulation of SDG 4.2.1 pertain to the inclusion of the health domain and the broader age group of children under age five in the SDG formulation. In addition, the principle of universality within the SDG agenda and the need to ensure that tools are relevant and applicable for all countries should also be taken into account.

<sup>1</sup> UNESCO-UIS is custodian for 4.2.2. For more information, please refer to the SDG metadata.



## UNICEF role in monitoring

SDG target 4.2 corresponds to UNICEF's Strategic Plan Goal Area 1 (Every Child Survives and Thrives) and Goal Area 2 (Every Child Learns). As custodian agency for global reporting on this indicator, UNICEF has outlined a detailed programme of methodological work and has established a global inter-agency expert group (IAEG-ECD) whose overarching purpose is to provide inputs to the revision, testing and validation of the new ECD measure. IAEG-ECD membership includes National Statistical Offices, other UN agencies and relevant INGOs, and is advised by an Expert Advisory Panel consisting of academic and technical experts.

Other partners are engaged in ongoing methodological work to develop a set of items to measure development among children aged 0 to 35 months. This work is being led by WHO in collaboration with Harvard University and the D-score group. UNICEF has been following this work closely and the two groups have kept each other informed on progress with the idea of eventually bringing the two initiatives together to explore integration of items for children aged 0 to 23 months in the new measure being developed by UNICEF.

Monitoring children's readiness for primary education requires not just an understanding of how many children are developmentally on track, but also how many children are exposed to quality organized learning activities in the year prior to the start of primary school. This dimension is captured in Indicator 4.2.2 and data are widely available from a range of countries.

## General information and resources

- UNICEF data: <https://data.unicef.org/>
- UNICEF Multiple Indicator Cluster Surveys (MICS): <http://mics.unicef.org>
- SDG indicators: <https://unstats.un.org/sdgs/>
- Global Alliance to Monitor Learning (GAML): <http://uis.openplus.ca/gaml/>

*For further information, please contact the Child Protection and Development focal point at the Data & Analytics Section at UNICEF HQ via: [data@unicef.org](mailto:data@unicef.org)*



## INDICATOR 4.2.1

Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex

### Description

#### Definition and key terms

The proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being is currently being defined as children aged 36-59 months who are developmentally on-track in at least three of the following four domains: literacy-numeracy, physical, social-emotional and learning. This proxy indicator, for which comparable data are available, is being used while the SDG indicator's definitions for other domains are being operationalized.<sup>2</sup>

#### SDG indicator:

Numerator: Number of children under the age of five who are developmentally on track in health, learning, and psychosocial well-being

Denominator: Total number of children under the age of five in the population

#### Proxy indicator:

Numerator: Number of children aged 36-59 months who are developmentally on-track in at least three of the following four domains: literacy-numeracy, physical, social-emotional and learning

Denominator: Total number of children aged 36-59 months in the population

#### Key terms:

The domains included in the indicator currently being used as a proxy for reporting on SDG indicator 4.2.1 are operationally defined as follows:

- **Literacy-numeracy:** Children are identified as being developmentally on track if they can do at least two of the following: identify/name at least 10 letters of the alphabet; read at least 4 simple, popular words; and/or know the name and recognize the symbols of all numbers from 1 to 10.

- **Physical:** If the child can pick up a small object with two fingers, like a stick or rock from the ground, and/or the mother/primary caregiver does not indicate that the child is sometimes too sick to play, then the child is regarded as being developmentally on track in the physical domain.
- **Social-emotional:** The child is considered developmentally on track if two of the following are true: The child gets along well with other children; the child does not kick, bite or hit other children; and the child does not get distracted easily.
- **Learning:** If the child follows simple directions on how to do something correctly and/or when given something to do, and is able to do it independently, then the child is considered to be developmentally on track in the learning domain.

### National data sources

Household surveys such as UNICEF-supported MICS have been collecting data on early childhood development (through the Early Childhood Development Index or ECDI) in low- and middle-income countries since around 2009. Many of the individual items included in the ECDI are collected through household surveys and administrative sources in high-income (OECD) countries as well.

A new measure of ECD is currently under development –see below.

### Data collection innovation

As noted above, UNICEF, in collaboration with academic and technical experts and key partners, is currently undertaking methodological work towards the development of a new measure of ECD. The methodological plan includes several steps: (1) review and map existing measures and items on ECD derived from both caregiver report and direct assessment; (2) technical consultations with experts in the field of ECD measurement and tool development; (3) cognitive testing of a bank of items across a variety of country contexts to gain understanding on how items are performing in terms of respondent interpretation and comprehension; (4) development of a series of background papers on the available literature and evidence pertaining to young children's development in health, learning and psychosocial well-being; (5) dedicated field test of the new ECD measure; (6) development of a manual for field implementation; (7) field testing of the new ECD measure in a MICS survey; (8) dissemination and capacity-building for countries to implement and use the new ECD measure.

The new measure of ECD will be made publicly available for use and inclusion by all countries in national household surveys.

<sup>2</sup> Methodological work is ongoing to define commonly agreed items and methods for more comprehensively assessing each of the domains of early childhood development referenced in SDG indicator 4.2.1 i.e. health, learning and psychosocial well-being.



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## Using the indicator

### Interpretation

Early childhood development (ECD) is a maturational and interactive process involving an ordered progression of motor, cognitive, language, socio-emotional and regulatory skills and capacities across the first few years of life. While the overall developmental process is similar across cultures, children develop at different speeds and may reach developmental milestones at different times. What is considered 'normal' child development also varies across cultures and environments, since expectations and parenting strategies may differ not only among countries but also among cultural, ethnic or religious groups within the same country.

SDG indicator 4.2.1 is intended to capture the multidimensional and holistic nature of early childhood development. For this reason, the indicator is not intended to be disaggregated by domains since development in all areas (health, learning and psychosocial well-being) are interconnected and overlapping, particularly among young children. The indicator is intended to produce a single summary score to indicate the proportion of children considered to be developmentally on track.

For all countries, the recommended target is to ensure that all boys and girls (i.e., 100%) have access to quality ECD.

### Disaggregation

As a minimum, data should routinely be disaggregated by age and sex, which are key stratifiers for this indicator. Additionally, survey data often allow for disaggregation by other standard sociodemographic factors and outcome indicators such as household wealth, place of residence, geographic location, and attendance to early childhood education. In addition to these standard levels of disaggregation, this indicator can be usefully disaggregated in some surveys by mother's level of education, ethnicity, religion, and child functional difficulty.

### Common pitfalls

For the time being, a proxy indicator (children aged 36-59 months who are developmentally on-track in at least three of the following four domains: literacy-numeracy, physical, social-emotional and learning) is being used to report on 4.2.1 until the new measure has been finalized. The proxy indicator is not fully aligned with the definition and age group covered by the SDG indicator formulation.

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## Monitoring and reporting

### National

National Statistical Offices (in most cases)

### Global

**Agencies:** UNICEF

**Process:** UNICEF maintains the global database on ECD that is used for SDG and other official reporting. UNICEF HQ updates the database annually through its collaboration with Country Offices, through the CRING process. Before the inclusion of any data point in the database, it is reviewed by sector specialists at UNICEF headquarters to check for consistency and overall data quality. This review is based on a set of objective criteria to ensure that only the most recent and reliable information is included in the databases. UNICEF HQ also updates the database on a rolling basis throughout the year by searching for additional sources of data that are vetted by the COs before they are included in the global database.

**Timing:** New country level data are released annually on UNICEF's dedicated website for statistics ([data.unicef.org](https://data.unicef.org)). The Secretary-General's report on the SDGs includes latest available country, regional and global estimates on 4.2.1 and is typically released every year in May/June.

**Discrepancies with national estimates:** The estimates compiled and presented at global level come directly from nationally produced data and are not adjusted or recalculated.

### Key resources

Indicator information and cross-country comparable estimates:

- UNICEF Data: <https://data.unicef.org/topic/early-childhood-development/overview/>
- SDG metadata: <https://unstats.un.org/sdgs/metadata/>

Tools and measurement guidance:

- MICS module: <https://data.unicef.org/wp-content/uploads/2017/12/MICS6-ECD-module.pdf>

Methodological information:

- Development of the early childhood development index in MICS surveys (MICS Methodological Papers, Paper no. 6: <https://tinyurl.com/y8t82jyk>)
- Work plan for Tier III SDG global indicators: <https://unstats.un.org/sdgs/tierIII-indicators/files/Tier3-04-02-01.pdf>