



**unesco**

Institute for Statistics

**SDG 4 Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all**

**METADATA**

**Target 4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States**

**4.c.6 Teacher attrition rate by education level**

**Definition**

Percentage of teachers at a given level of education leaving the profession in a given school year.

**Purpose**

Teacher shortage is a significant contributing factor that widens equity gaps in education access and learning. Assessing and monitoring teacher attrition is essential to ensuring a sufficient supply of qualified and well-trained teachers as well as to their effective deployment, support and management.

**Calculation method**

The number of leavers is estimated by subtracting the number of teachers in year **t** from those in year **t-1** and adding the number of new entrants to the teaching workforce in year **t**. The attrition rate is the number of leavers expressed as a percentage of the total number of teachers in year **t-1**.

$$TAR_{n,t} = \frac{(T_{n,t-1} - T_{n,t}) + NET_{n,t}}{T_{n,t-1}}$$

where:

$TAR_{n,t}$  = teacher attrition rate from level **n** of education in year **t**

$T_{n,t}$  = teachers in level **n** of education in year **t**

$T_{n,t-1}$  = teachers in level **n** of education in year **t-1**

$NET_{n,t}$  = new entrant teachers to level **n** of education in year **t**

**n** = 02 (pre-primary education), 1 (primary education), 2 (lower secondary education), 3 (upper secondary education) and 23 (secondary education)

**Interpretation**

A high value indicates high levels of teacher turnover which can be disruptive for the learning of students. Where teachers teach for 30-40 years, the attrition rate will be well below 5%. Attrition rates above 10% indicate that the average teaching career lasts only 10 years.

**Type of data source**

Administrative data.

**Disaggregation**

By sex and level of education.

**Data required**

Number of teachers at each level of education in years  $t$  and  $t-1$  and number of new entrant teachers at each level in year  $t$ .

**Data sources**

Administrative data from schools and human resources records on educational personnel.

**Quality assurance**

The indicator should be based on teacher data for the given level of education, from all types of educational institutions (public and private) for two consecutive academic years ( $t$  and  $t-1$ ), and on newly recruited teacher data for the same level of education in academic year  $t$ .

**Limitations and comments**

In calculating this indicator, care should be exercised to avoid double counting regarding teachers that teach more than one level of education. Also, the existence of part-time teaching, school-shifts, multi-grade classes and other practices that may affect the precision of the number of teachers and the new entrants to the teaching profession should be taken into account.

This indicator does not provide information about the reasons why teachers leave the profession. Analysis of factors leading to teacher attrition usually requires detailed data collection (e.g. survey of teachers who have left the profession, annual school censuses) which may be challenging due to low response rates or large numbers of teachers leaving the profession for unknown reasons.