



Technical Cooperation Group
10th meeting
11 December 2023

TCG-10/W/3

DECISION ON TEACHERS' INDICATOR FRAMEWORK



I. Background

The current framework monitors the quality of teaching by looking at teacher preparation, retention, and salaries. The framework has 1 global indicator and 6 thematic indicators (see **Table 1**). The global reporting framework uses as a global indicator the “Proportion of teachers with the minimum required qualifications, by education level” (Indicator 4.c.1) that focus on trained teachers as defined by the UIS. The global indicator focuses on the quality gaps in teacher preparedness that may occur, specifically whether enough teachers have the knowledge and skills to meet the teaching needs in a continuously changing educational context. This is expressed in indicator 4.c.1 that tries to capture the percentage of qualified teachers. Additionally, six other indicators are recommended in the thematic monitoring framework that referred to qualified teacher, teacher/student ratio, teacher’s salaries, attrition, and continuous professional development. The framework has 3 indicators related to the Preparation and development of teachers group includes factors associated with initial teacher education, the certification of teachers, and the professional development of teachers during their careers (trained/qualified and participation on CDP). Two indicators are intending to measure resources by the 2 pupil-teacher ratios associated to the indicators on trained and qualified teachers. The framework is completed by a salaries’ indicator (trying to measure teaching as an attractive career choice) and teacher’s retention.

Table 1. SDG 4.C Indicators

Indicator	Definition
4.c.1	Proportion of teachers with the minimum required qualifications, by education level
4.c.2	Pupil-trained teacher ratio by education level
4.c.3	Percentage of teachers qualified according to national standards by education level and type of institution
4.c.4	Pupil-qualified teacher ratio by education level
4.c.5	Average teacher salary relative to other professions requiring a comparable level of qualification
4.c.6	Teacher attrition rate by education level
4.c.7	Percentage of teachers who received in-service training in the last 12 months by type of training

The UIS’s Technical Cooperation Group in its 9th meeting (TCG9) [decided](#) to “Approve suitable country coverage (prevalence rate) to be used to determine the global metrics for minimum standard teachers’ qualification to teach a specific level of education (ISCED 02, 1, 2, 3)”.

This document presents the analysis and the decision proposed to TCG and its implications in terms of teacher indicator framework and data collection.

II. Teachers’ preparation: Trained and qualified teachers

At the heart of the framework are the concepts of “trained” and “qualified” teacher, which are generally not understood by everyone in the same way. The first one, “trained”, is aimed to

identify the extent to which a teacher has the teacher specific pedagogical “formation” in opposition to the ones who do not have it. The second concept, “qualified”, is aimed to identify the education level of the academic diploma that this teacher holds. The current definitions are described in the following table ¹:

Table 2: Trained and qualified teacher

Indicator	Definition	Metadata (up until 2020)
Trained teachers, indicator 4.c.1 (and 4.c.2)	Proportion of teachers with the minimum required qualifications , by education level. Identify teacher who have specific pedagogical formation.	A trained teacher is one who has fulfilled at least the minimum organized teacher-training requirements (pre-service or in-service) to teach a specific level of education according to the relevant national policy or law.
Qualified teachers, indicator 4.c.3 (and 4.c.4)	Percentage of teachers qualified according to national standards by education level and type of institution. Identify the education level of the teacher’s academic qualification	A qualified teacher is one who has the minimum academic qualifications necessary to teach at a specific level of education in each country. This is usually related to the subject(s) they teach.

To give a couple of practical examples. First, a primary school teacher who is a graduate of a post-secondary teacher training institute (ISCED 4 in terms of academic qualification) is also ‘trained’ if this is the national teacher training qualification. Second, a secondary school mathematics teacher who is a university graduate in mathematics (ISCED 6 in terms of academic qualification) may be ‘trained’ (e.g. may have taken some pedagogical courses during the university studies or may have pursued a one-year training course to be ‘trained’) or may not be ‘trained.’

Global indicator, indicator 4.c.1, has been renamed during the 2020 revision as ‘Proportion of teachers with the minimum required qualifications, by education level’, refinement approved by the Inter-agency and Expert Group on SDG Indicators in April 2020 and confirmed at the 52nd session of the Statistical Commission in March 2021 (UIS, 2020)². The metadata,

¹ Instruction Manual – Survey of Formal Education – UIS, January 2023, http://uis.unesco.org/sites/default/files/questionnaires/UIS_ED_M_2023_EN.pdf (accessed 27 March 2023)

² The previous name of the indicator was: “4.c.1: proportion of teachers in (a) pre-primary; (b) primary; (c) lower secondary; and (d) upper secondary education who have received at least the minimum organized teacher training (e.g., pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country.”

however, have not changed and refer to teachers who have at least the minimum organized training required for teaching, according to national standards.

In other words, there are two challenges remaining since the 2020 revision. First, indicator 4.c.1 has become the indicator on ‘qualified’ teachers, previously represented by indicator 4.c.3, but this change has not been reflected in the metadata. Second, indicator 4.c.1 refers to minimum qualifications without specifying whether these are still national or, in some sense, global.

III. Implementation of TCG9 decision on global ISCED reference

In response to the TCG decision, which was to develop a global metric of minimum standard teachers’ qualification to teach a specific level of education based on a review of national standards, the UIS has assembled a [new database](#) to document the differences in teacher requirement policies around the world, including the teachers’ academic qualifications. The database covers between 165 and 200 countries depending on target ISCED level. Analysis of the new UIS dataset on teacher requirements shows that, for all levels of education being taught, the most common requirement is a bachelor’s degree or an equivalent tertiary education level qualification (ISCED 6) or higher.

The proportion of countries with this requirement increases with the level of education being taught. For instance, 4 out of 10 countries require pre-primary and primary teachers to have an ISCED 6 qualification while 5 out of 10 and 6 out of 10 countries require an ISCED 6 qualification at the lower secondary and upper secondary levels, respectively (**Table 3**).

Disparities in teaching requirements exist between regions especially at the pre-primary and primary level particularly in Africa and Asia.

Table 3: Prevalent minimum ISCED qualification required to teach by education level and region

Region	ISCED 02 Pre-primary	ISCED 1 Primary	ISCED 2 Lower secondary	ISCED 3 Upper secondary
Sub-Saharan Africa	3	3	5	6
Oceania	4	4	6	6
Eastern and South-Eastern Asia	3	6	6	6
Central and Southern Asia	4	6	6	6
Latin America and the Caribbean	6	6	6	6
Northern Africa and Western Asia	6	6	6	6
Europe and Northern America	6	6	7	7
World	6	6	6	6

IV. Implications for teacher indicator framework, metadata, and data collection

The adoption of a global minimum standard reference (ISCED 6) will:

- a. be implemented for indicator 4.c.1 demanding a revision of its metadata;
- b. require data on teachers by teaching level of education and highest level of education completed that today is not collected;
- c. require time series data that should go back to the adoption of the indicator since 2015 collection; and
- d. require indicator 4.c.2, that expresses the pupil/teacher ratio, to be adjusted to reflect pupil/qualified teacher according to the minimum global standard (indicator 4.c.1).

If global indicator 4.c.1 metadata change to “Teachers with the global minimum academic qualification level” then there are two options for indicator 4.c.3:

1. Keep Indicator 4.c.3 as is, i.e. reflecting the same concept of minimum qualified teachers but according to national standards; or
2. Make indicator 4.c.3 reflect the concept of trained teachers by adopting the metadata of current indicator 4.c.1 and changing also the name to indicator to trained teacher according to the national minimum standards.

Depending on the option indicator 4.c.4 may or may not change accordingly.

Table 4: Proposal on qualified and trained teacher

Indicator 4.c.1	Proposed metadata	Change name	Change metadata	New data collection	Impact on other indicator
Proportion of teachers with the minimum required qualification, by education level (4.c.1).	A qualified teacher has the minimum ISCED qualification necessary to teach at a specific level of education according to a global reference.	No	Yes, as now refers to trained teacher.	Yes. Teachers by teaching level of education and highest level of education completed (also by sex); needs to cover since 2015	Yes. 4.c.2 needs to change name and metadata.

Options for indicator 4.c.3	Proposed metadata	Change name	Change metadata	New data collection	Impact on other indicator
Option 1. Proportion of teachers with the minimum required academic qualification, according to national definition , by education level.	A qualified teacher is one who has the minimum required national qualifications necessary to teach at a specific level of education.	Yes. Current name "4.c.3 Percentage of teachers qualified according to national standards by education level and type of institution "	Yes. Clarify national minimum ISCED level of qualification required to teach. Eliminate 'by type of institution'.	No.	Yes. It would eliminate the trained teachers indicator from the framework.
Option 2. Percentage of teachers with the minimum teacher training requirements, by education level.	A trained teacher is one who has fulfilled at least the minimum teacher-training requirements according to the relevant national policy or law.	Yes. It must be changed to reflect trained teachers.	No. Takes metadata of indicator 4.c.1.	No	Yes. Current 4.c.2 should now be 4.c.4

V. For TCG approval

Based on the information presented, the UIS is proposing to the TCG:

1. To establish ISCED level 6, equivalent to a Bachelor's degree, as the global minimum education level required for teaching in ISCED levels 02 (Pre-primary) to 3 (Upper secondary).
2. To modify the metadata of SDG indicators 4.c.1 and 4.c.2 to align them with the global minimum education level required for teaching.
3. To approve the UIS new data collection to collect:
 - The most recent available data on the number of teachers by teaching level of education and highest level of education completed (also by sex), to generate indicators 4.c.1 and 4.c.2 with the new definition.
 - Retroactively collect data from 2015 onwards on the number of teachers based on the highest level of education completed, to produce indicators 4.c.1 and 4.c.2 with the new definition.
4. For indicator 4.c.3, choose between the following two options:
 - Maintain its current form: "Percentage of teachers qualified according to **national standards by education level and type of institution.**"
 - Replace it with the **current definition of indicator 4.c.1 (trained teachers according to national standards).**
5. Adjust the definition of indicator 4.c.4 depending on the new definition of 4.c.3 approved.
6. To report indicators 4.c.1 to 4.c.4 with metadata points to indicate:
 - The coverage (e.g., public/private institutions).
 - The source of the national standards for qualified teachers.