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TECHNICAL
COOPERATION
GROUP



**Towards a global classification
framework for teacher policy dialogue:
Developing an International Standard
Classification for teacher training
programmes, ISCED-T**

February 2020

1. Background

For the first time the international education agenda includes an explicit target on teachers. The monitoring framework for Sustainable Development Goal 4 includes as global indicator the “proportion of teachers in: (a) pre-primary education; (b) primary education; (c) lower secondary education; 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, by sex” (Indicator 4.c.1).

Concerns have however emerged regarding the implementation of the monitoring framework. The status of the international data collection on teachers remains unsatisfactory and issues of coverage and definitions substantially undermine the achievement of a sound and sustainable monitoring of the teacher issue. A direct consequence of the situation is the inability of the global education community to engage in cross-national policy discussions.

At the 6th meeting of the Technical Cooperation Group on the Indicators for SDG 4 - Education 2030 (TCG) in Yerevan, the UNESCO Institute for Statistics (UIS) proposed to extend the International Standard Classification of Education (ISCED) to profession-specific education programmes, starting with teacher training programmes (ISCED-T). The proposal stands as a response to both a long-standing demand and a policy window initiated with the prominent role of teachers in the SDG 4 - Education 2030 Agenda. An initial proof of concept was developed based on an extensive review of 170 teacher training programmes reported in the ISCED database of the UIS. This development was acknowledged by members and observers of the TCG as a positive step towards achieving a global public good enabling global policy dialogue on teachers.

The TCG recommended that the UIS to continue developing and validating the classification by mobilizing all interested partners and stakeholders to finalize ISCED-T and subsequently engage with an official endorsement and dissemination process. This note presents a summary of discussions and recommendations from the meeting of the TCG Working Group on Indicator Development and in the plenary sessions of the TCG that followed. It highlights the main issues surrounding global monitoring and policy dialogue on teachers and a proposal for a way forward with the development of ISCED-T.

2. The need for an international classification of teacher training programmes

Discussions during the 6th TCG meeting highlighted the tension between the current definition of the global indicator to monitor target 4.c and its weak applicability as a tool for policy dialogue. Indicator 4.c.1 is classified as a Tier II indicator, which signals an indicator that “*is conceptually clear, has an internationally established methodology and standards are available, but data are not regularly produced by countries*” (Inter-agency and Expert Group on SDG Indicators, 2017). Indicator 4.c.1 is in effect, well-defined and conceptually clear. It measures the proportion of teachers who are trained according to national definitions of a trained teacher. However, by definition it is also a very heterogeneous category at the global level and includes a wide diversity of programmes and pathways to the teaching profession.

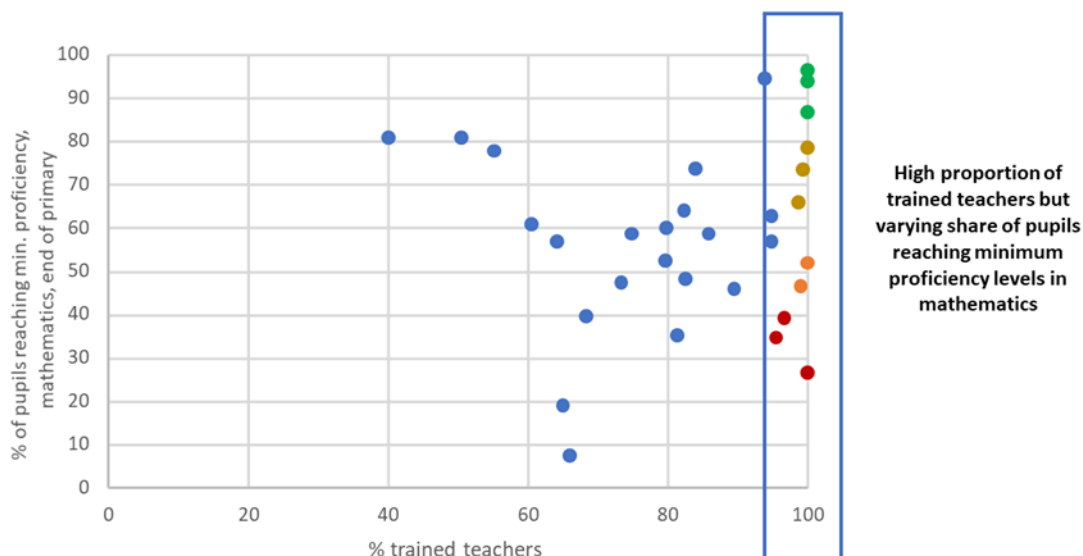
The current definition of indicator 4.c.1 does not allow for comparative perspectives on teacher training policies or teacher qualification processes. This also prevents discussing earlier

recommendations officially endorsed by countries, such as the recommendations of the Special Intergovernmental Conference on the Status of Teachers, which states for instance that “admission to teacher preparations should be based on the completion of appropriate secondary education” (UNESCO, 1966) or more recent recommendations by international teacher unions (Education International, 2012).

It was also recognized that SDG 4 targets are interrelated and consequently that discussing trained teachers according to national definitions might not always lead to useful conclusions if discussed independently of context. In particular, trained teachers are implicitly meant as trained to ensure that pupils learn. In practice, however, there are situations where countries have high shares of trained teachers (as per their national definitions) yet still fail to reach significant shares of children achieving minimum levels of learning. And conversely there are countries achieving high levels of learning despite reporting a low proportion of trained teachers (Figure 1).

A second issue highlighted during the 6th TCG meeting concerns the possibility of benchmarking countries’ performance and setting global targets. Indicator 4.c.1 was highlighted by members of the TCG and major regional organizations as a key indicator that would require benchmarking. A UIS consultation with regional organizations even stressed indicator 4.c.1 as the indicator which should have the highest priority for benchmarking (UNESCO Institute for Statistics, 2019a). Yet, one of the conclusions of the discussions at the TCG meeting was that the current definition of trained teacher does not enable such an exercise, reiterating issues of feasibility highlighted during the regional consultation.

Figure 1: Share of trained teachers (national definitions) and learning achievement, primary education, most recent year



Source: UIS database, 2019

Finally, the TCG Working Group on Indicator Development put forward the issue of global definitions of trained and qualified teachers. While there currently exist two definitions, international reporting suggests that the distinction might not add much value to the monitoring exercise (UNESCO Institute for Statistics, 2019b). In effect, countries often report

either the same value for trained and qualified teacher or simply report one of the two. Only a subset of countries report on both trained and qualified teachers and in some cases, differences between the two are marginal.

In light of these points the proposal made by the UIS to develop ISCED into an expanded classification scheme that details and classifies profession-specific training programmes was welcomed as a fit-for-purpose, feasible and sustainable solution. An international classification of teacher training programmes, ISCED-T, would reinstate the possibility of a global policy dialogue on teacher training by providing a global public good that makes the link between national definitions of trained teachers and international standards and recommendations.

3. From ISCED to ISCED-T

Analyses by the UIS presented during the TCG meeting shows the high level of diversity among teacher training programmes and among pathways to the teaching profession. At least nine dimensions can be used to describe teacher training programmes: pre-requisites for entry, duration, modality, training accent, educational philosophy, length and conditions of probationary or induction periods, additional criteria for admission to teacher education programmes, quality assurance processes/frameworks for programmes, certification or licensing processes. For pathways to the teaching profession, three main categories are usually highlighted: consecutive, concurrent and alternative.

The ISCED-T proposal enables classification of teacher training programmes according to entry requirements and duration, which are the two dimensions already available and measurable. Furthermore, teacher training programmes are education programmes in the first place, therefore their ISCED classification already constitutes a differentiating and overarching dimension. ISCED-T thus builds on ISCED and further integrates dimensions pertaining to teacher training programmes only. The proposal is to expand the three-digit ISCED code to an initial six-digit code, with the three last digits indicating the following dimensions:

1. Target level for which teachers are trained to teach
2. Minimum entry requirements, represented by the highest ISCED level completed needed to enter
3. Duration of the programme in years

These three dimensions were proposed on the following basis:

- The first digit – for target level – is a critical source of variation, as well as an important variable that policy-makers would want to have, to compare teacher training programmes with the same objective.
- The last two digits – for entry requirements and programme duration – are recognized among the nine quality differentiating dimensions listed in the literature, easily measurable and collected, and in many cases already available in UIS database.
- Among the nine dimensions listed above, they are ordinal variables and thus enable the discussion on minimum standards.

Eventually, discussions regarding additional dimensions would be needed, in particular to include content-related dimensions in the coding scheme. The proposal also partially enables identification of the pathways and should subsequently be developed with this objective in mind.

It is also of strategic interest to UNESCO to envisage the development of profession-specific classifications of training programmes as globalization of the economy has led countries and international organizations to conduct comparative exercises of training programmes in several fields (health notably), but has also highlighted the difficulty of such exercises due to the absence of an international standard. The letter “T” (for “teachers”) signals feasibility of expanding classification and comparability to any domain- or profession-specific types of programmes (e.g. for nurses, military, police officers, etc.). While not within the scope of the initial discussion, this would position ISCED as a core tool to classify any profession-specific education or training programme.

Table 1 presents the three digits for categorization with their proposed values. A choice was made to keep the same values used in the current ISCED whenever the category corresponds to an existing ISCED level. The first column also proposes a grouping for the initial ISCED classification of teacher education programmes. While there might be some loss of information these grouped categories better reflect the variations observed. Eventually, one could also revert to the longer three-digit initial ISCED classification of a programme. Annex 2 illustrates with practical examples how the classification scheme could be applied to existing teacher training programmes.

Table 1: Initial proposal for ISCED-T: Categorization of ISCED classification, target level, pre-requisite, and duration of teacher training programmes

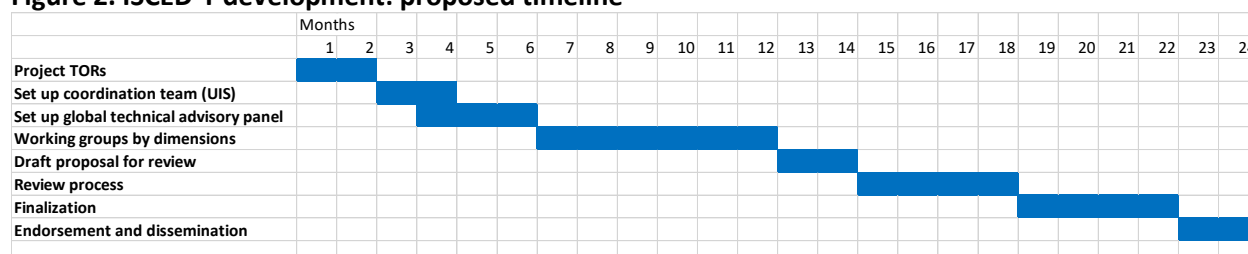
ISCED classification of the programme (grouped)	First digit: Target level	Second digit: Pre-requisite: minimum educational level completed	Third digit: Duration
S: ISCED 2 and 3: secondary education	0: ISCED 0, pre-primary	2: ISCED 2	1: short (1 year or less)
PS: ISCED 4: Post-secondary non-tertiary	1: ISCED 1, primary	3: ISCED 3	2: 2 years
TB: ISCED 5,6: tertiary, bachelor’s degree	6: ISCED 0-1, multilevel pre-primary and primary	4: ISCED 4 or some tertiary (ISCED 5 or 6, incomplete)	3: 3 years
TM: ISCED 7 and higher: tertiary, master’s degree	2: ISCED 2, lower secondary	5: ISCED 5 and 6 7: ISCED 7	4: long (4 years or more)
	3: ISCED 3, upper secondary		
	7: ISCED 2-3, secondary		
	8: ISCED 1-2-3, multilevel primary and secondary		

4. Development, validation and endorsement

While an initial proposal was developed there is still a long path to a validated, operational and officially endorsed classification as a global public good. It was proposed during the TCG meeting that development of ISCED-T follow a similar process, albeit faster, as the one for the ISCED revision that was adopted in 2011. The process included an official recognition by UNESCO Member States that a revision was needed, the formation of a global technical advisory panel comprising international education and statistics experts, an extensive review process through regional expert meetings and a formal global consultation with all UNESCO Member States invited to take part. At the end of the process, the 2011 revision was formally adopted by the General Conference of UNESCO Member States. An indicative timeline is proposed in Figure 2.

One of the main messages conveyed by members of the TCG Working Group on Indicator Development was the critical need for collaboration and coordination. There have been several attempts in the past to work on a classification of teacher training programmes but all fell short to date. The OECD and Estonia, co-chairs of the Network for the Collection and Adjudication of System-Level Descriptive Information on Educational Structures, Policies and Practices (NESLI), invited the UIS to present its proposal and link with efforts of the group as the UIS develops the international standard classification. Organizations such as the OECD and Eurostat are also natural candidates for the technical advisory panel, as they took part in the ISCED revisions. It is also important to recognize that the technical advisory panel needs to go beyond OECD countries to minimize the risk of developing a tool geared at policy discussion in a narrower set of countries.

Figure 2. ISCED-T development: proposed timeline

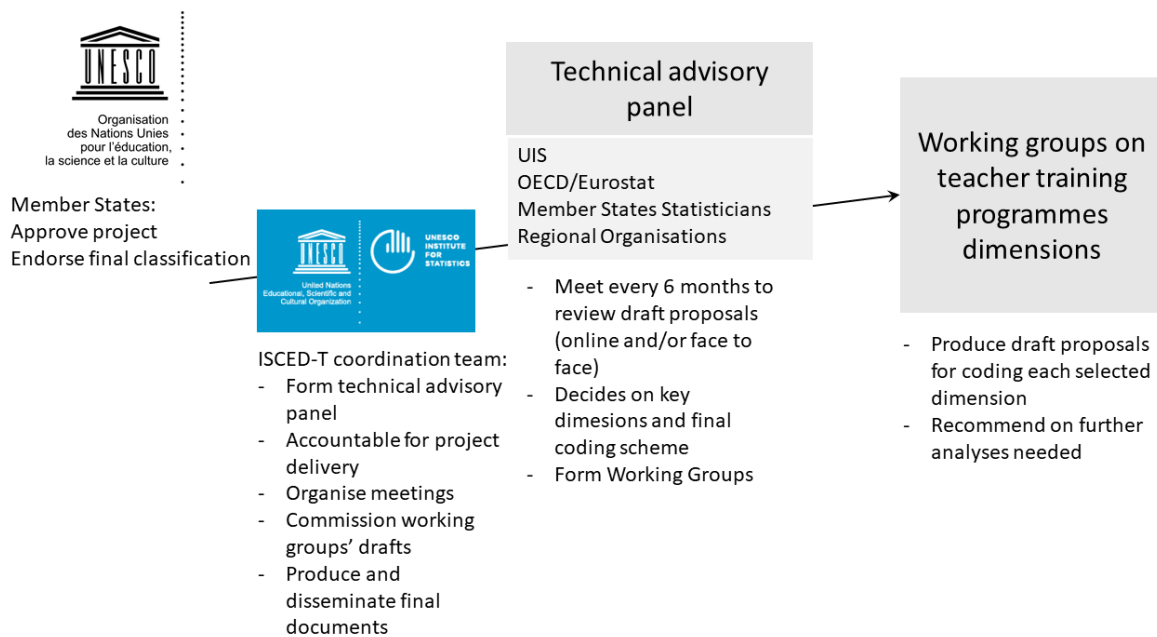


The proposal is for the UIS, as UNESCO’s statistical agency, to coordinate and ensure the production of the new classification in collaboration with relevant partners. Similar to earlier ISCED revisions, the UIS would host the coordinating mechanism and be held responsible for the advancement and achievement of the new ISCED-T, but would rely on a representative group of experts to develop and draft the classification coding scheme. The work of the technical advisory panel remains to be defined but it would include:

- Methodological processes to validate dimensions and classify programmes (including pathways).
- Discussing possibilities for coding additional criteria for admission (e.g. entrance exams, specific grades, etc.), which are usually available in the ISCED questionnaire. While not ordinal, these would bring informative background to discussions on teacher training programmes.
- Adding other dimensions (modality, training accent, educational philosophy, length and conditions of probationary or induction periods, quality assurance processes/frameworks for programmes, certification or licensing processes).
- Provide inputs to develop the draft proposal for review.

Additionally, it is expected that Working Groups be formed to make recommendations on each selected dimension of the coding scheme. A governance and workflow scheme is proposed in Figure 3.

Figure 3. ISCED-T governance and workflow scheme



5. Responding to a global need with an adequate tool and commensurate resources

In summary, it was agreed during the meeting of the TCG Working Group on Indicator Development that despite a clear conceptual definition for indicator 4.c.1 the indicator does not necessarily lead to meaningful policy dialogue as it builds on national definitions, which are numerous and diverse. In addition, the distinction between “trained” and “qualified” teachers remains unclear for a number of stakeholders, including countries that report data to the UIS. The distinction also does not necessarily lead to differences in reporting between trained and qualified teachers, requiring consultation of reporting countries by the UIS for clarification of the submitted data.

The proposed ISCED-T was viewed by the TCG as a positive response to these issues and the group recommended that the UIS and partners build on the initial proposal and continue developing an international standard classification of teacher training programmes to be subsequently proposed for official endorsement by countries. The classification should be developed as a collaborative exercise between all relevant partners to avoid duplication of efforts.

While welcoming the proposal for an ISCED-T, the Working Group on Indicator Development and the TCG also expressed concerns about the level of resources that would have to be dedicated to such a project. The development of ISCED-T as an official member of the United Nations International Family

of Classifications should be secured with dedicated resources and appropriate institutionalization of the project. Finally, the development of ISCED-T is only the first step towards sound data collection on teachers. Further resources would be needed for capacity building in countries and in the global education community to produce and respond to teacher-related surveys. The absence of capacity building for collection and reporting is a second critical obstacle to better data on teachers and should be addressed to enable full effectiveness of a new global public good to classify teacher training programmes.

References

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Annexes

Annex 1: Indicators to monitor teachers in the SDG 4 - Education 2030 agenda

- 4.c.1: Proportion of teachers in: (a) pre-primary education; (b) primary education; (c) lower secondary education; 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, by sex
- 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

Source: UNESCO Institute for Statistics, 2018

Annex 2: ISCED-T application examples

Some examples are given below to illustrate how the proposed coding scheme might be used. While quite simple, the scheme enables a partial ordering of teacher training programmes and also provides a rapid understanding of some of the characteristics of the programmes.

To take an example at the primary level, the *Diplôme d'Instituteur* in Burundi is a four-year teacher education programme entered at age 16 with the requisite that ISCED 2 has been completed. The programme is classified as 354 according to its ISCED mapping. The long coding (including the initial ISCED code) would therefore be 354-124 while the short code would be S-124.

The *Diplôme d'Instituteur adjoint* in Côte d'Ivoire, for teachers at the primary level, is also entered after completion of lower secondary education but is only 2 years long and is classified as 353 (ISCED 3 completion but without access to tertiary education). The classification would thus be 353-122 or S-122. The programmes from Burundi and Côte d'Ivoire have the same entrance requirements and classification and only the durations differ, one would therefore be able to position both programmes in relation to each other should this be needed.

At the secondary level, Lesotho delivers all its teacher certificates through teacher training delivered at the College of Education. According to the ISCED mapping data, all programmes have the same entrance requirements (completion of ISCED 3) and duration (3 years). These programmes are initially classified as ISCED 554. Using ISCED-T, the classification would be 554-833 or TB-833.

Burundi	<i>Diplôme d'Instituteur: Enseignement post fondamental pédagogique: theoretical entrance age 16, trains teacher for the primary level, and has a theoretical duration of 4 years. Initial ISCED classification 354.</i>						
	Initial ISCED mapping				Target level	Min. ISCED level required	Duration
Long	3	5	4	-	1	2	4
Short	S			-	1	2	4

Côte d'Ivoire	<i>Diplôme d'Instituteur adjoint: Formation des Instituteurs adjoints: theoretical entrance age 16, trains assistant teachers for the primary level, and has a theoretical duration of 2 years. Initial ISCED classification 353.</i>						
	Initial ISCED mapping				Target level	Min. ISCED level required	Duration
Long	3	5	3	-	1	2	2
Short	S			-	1	2	2

Lesotho	<i>Primary Education teacher diploma and Secondary Education teacher certificate: College of education - Teacher training: theoretical entrance age 18, trains teachers for the primary and secondary level, and has a theoretical duration of 3 years. Initial ISCED classification 554.</i>						
	Initial ISCED mapping				Target level	Min. ISCED level required	Duration
Long	5	5	4	-	8	3	3
Short	TB			-	8	3	3