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# SDG teacher indicators: 4.c.1-4.c.4 and 4.c.5

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Second meeting of the TCG Working Group on Teachers  
26 October 2020



Part 1

# **SDG indicators 4.c.1- 4.c.4: trained and qualified teachers**



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# History of indicators 4.c.1-4.c.4

## Proposal by Technical Advisory Group of the EFA Steering Committee (TAG), 2015

- Percentage of teachers trained according to national standards
- Pupil-trained teacher ratio
- Percentage of teachers qualified according to national standards
- Pupil-qualified teacher ratio

### Concepts

- Trained to teach: learned about the theory and practice of teaching
- Qualified to teach: sufficient knowledge of the subject matter
- National standards for both

# Selection of global indicator 4.c.1

## TAG, TCG and IAEG-SDGs

- TAG recommendation: trained teachers
- Technical Cooperation Group on the Indicators for SDG 4 - Education 2030 (TCG) replaced TAG in 2016
- Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs) asked for more precise name for global indicator for target 4.c

## SDG monitoring framework adopted by UN General Assembly, July 2017

- 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

# UIS data collection

## Instruction manual for the UIS Survey of Formal Education

- 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. These requirements usually include pedagogical knowledge (broad principles and strategies of classroom management and organization that transcend the subject matter being taught – typically approaches, methods and techniques of teaching), and professional knowledge (knowledge of statutory instruments and other legal frameworks that govern the teaching profession). Some programmes may also cover content knowledge (knowledge of the curriculum and the subject matter to be taught and the use of relevant materials).
- A **qualified teacher** is one who has the minimum academic qualifications necessary to teach at a specific level of education in a given country. This is usually related to the subject(s) they teach.

# 2020 Comprehensive Review

## Refinement of indicator 4.c.1

- **New name:** Proportion of teachers with the minimum required qualifications, by education level
- **Definition unchanged:** Proportion of teachers with the minimum pedagogical training required by national standards to become a teacher
- **Classified as Tier II since 2017:** Indicator is conceptually clear, has an internationally established methodology and standards are available, but data are not regularly produced by countries

# UIS data dissemination

## September 2020: four indicators for trained and qualified teachers

- 4.c.1: Proportion of teachers with the minimum required qualifications, by education level<sup>1</sup>
- 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

*<sup>1</sup> Refinement of the indicator name approved by the Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs) on 13 March and 2 April 2020. Final approval pending the 52nd session of the Statistical Commission in March 2021.*

# Options for future UIS data collection and dissemination

## Collection of additional data on teachers

- Highest completed ISCED level of education of teachers, by teaching level of education
- Statutory minimum ISCED level of education required to teach, by teaching level of education
- Could be collected with revised version of discontinued UIS Supplementary Questionnaire on Teachers

## Possible new indicator

- Proportion of teachers with the minimum required qualifications
- Numerator: number of teachers with at least the statutory minimum level of education
- Denominator: total number of teachers at each ISCED level of education



# Discussion

- Change definitions of indicators 4.c.1-4.c.4?
- Keep or drop indicators 4.c.2, 4.c.3, 4.c.4?
- For which levels of education should 4.c.1 be reported?
- Calculate 4.c.1 with reference to national standards or an international standard?
- Apply current standards or standards from the time a teacher was trained for calculation of 4.c.1?
- Calculate pupil-teacher ratio with reference to existing or new concept of trained and qualified teachers?



Part 2

# SDG indicator 4.c.5: teacher salaries



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# Background

- No agreed methodology for 4.c.5: average teacher salary relative to other professions requiring a comparable level of qualification.
- Open questions:
  - How to calculate teacher salaries?
  - How to calculate comparator salaries?
  - How to calculate relative salaries?
- Paper presented at August 2019 TCG meeting concluded:
  - LFS are the only true measure of salary differences
  - LFS provide all data needed for SDG indicator 4.c.5
  - Regression analysis can control for various factors, e.g. years of experience
  - Other data sources can be complementary, but LFS still needed for comparator salaries
- TCG asked for additional research on data sources and calculation methods.

## Indicator development: current status

- UIS analysed survey metadata
- 1800 surveys in ILO central data catalogue: 432 surveys from 80 countries have data on occupational earnings
- Additional surveys with relevant data in World Bank microdata repository
- Completeness of data uncertain:
  - Incomplete metadata
  - Sample size sufficient for analysis at 2-digit ISCO level (all teaching professions combined)
  - Not known if sample size is sufficient for analysis at 3-digit ISCO level (e.g. primary and early childhood teachers, secondary teachers)



# Teachers in International Standard Classification of Occupations (ISCO-08)

Major group (1 digit):

- 2 Professionals

Sub-major group (2 digits):

- 23 Teaching Professionals

Minor groups (3 digits):

- 231 University and Higher Education Teachers
- 232 Vocational Education Teachers
- 233 Secondary Education Teachers
- 234 Primary School and Early Childhood Teachers
- 235 Other Teaching Professionals



# Next steps

## 1. UIS collaboration with ILO

- Scope of collaboration to be determined:
  - Methodological development
  - Long-term data production
- ILO has hundreds of LFS with harmonised variables, recoded for international comparability.
- ILO data are coded at ISCO 2-digit level, would need coding at 3-digit level.
- ILO can estimate salaries of teachers and other occupations.
- ILO has access to restricted data and could produce indicator regularly.

## 2. Analysis of UIS data on statutory teacher salaries

- Starting teachers with a minimum level of qualification
- Starting teachers with a typical level of qualification
- Teachers with typical qualifications and 15 years of experience

# Discussion

- Data source: LFS and/or administrative data?
- Comparability of data across countries?
  - LFS vs. administrative data
  - Econometric analysis vs. other approaches
- Level of analysis: ISCO 2-digit or 3-digit level?
- Disaggregation: education level, public/private, part-time/full-time?
- Interim reporting strategy?



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