

SDG 4.c.7 RECENT PROFESSIONAL DEVELOPMENT

The document compiles two component. The first part presents the methodological note to propose the use of Cross National Assessment to report for indicator 4.c.7 in addition to TALIS, approved in TCG6. The second part elaborated by the OECD Secretariat describes the in details how PISA and TALIS could serve to report for indicator 4.c.7.

SDG 4.c.7: Percentage of teachers who received in-service training in the last 12 months by type of training

Note: the same document is also reviewed by the Working Group on Teachers (ref.: WG/T/7)

Abstract

All cross-national assessments reviewed in this study (LLECE 2013, PASEC 2014, PISA 2018, TIMSS 2015) collect data from teachers on whether they have received professional development in the past 12 to 24 months, depending on the survey. Of these CNAs, only PISA provides an estimate of the percent of teachers who have received professional development recently; the remaining CNAs are representative of students' teachers and provide estimates of the percent of students whose teachers have received in-service professional development. Comparability across assessments is also limited by how teachers are asked about professional development which ranges from a simple yes or no response to asking whether the teacher has participated in any of a pre-defined list of professional development activities.

Background

Teacher qualification and in-service training is a fundamental policy lever and largest expenditure item for education systems. Cross national studies of education finance find that teacher salaries and training is the largest expenditure item (OECD 2017). Teachers have been found to be the most important source of variation in learning within schools after household factors (Darling-Hammond et al., 2017). Given that the predominant employment model for teachers is a “career-based” approach in which removal of teachers for unsatisfactory performance is difficult (OECD 2018), the qualifications and preparation of teachers as well as in-service training are crucial for the quality of education provision.

Many countries particularly low and middle income countries face severe shortages of qualified teachers and the qualifications and training of teacher are indicators for the SDGs. To reach universal primary education, UNESCO (2014) estimated that 93 countries have a substantial teacher shortage and would need to recruit approximately four million teachers to close the gap. The rapid expansion of education provision in many countries has resulted in a large number of unqualified teachers. In one third of countries, fewer than 75 percent of primary teachers meet qualification requirements and more than 50 percent of teachers in some of the world’s poorest countries. A series of SDGs designated as 4.c have been defined to monitor the qualification and professional development of teachers.

The reviewed large-scale CNAs collect data on the educational qualifications of teachers but do not collect data on whether the teachers are properly qualified for their teaching position. All surveys collected data on the highest level of schooling attained by teachers (**Table 1**). In previous rounds, TIMSS 2007 for example, a question was included on whether the teacher was certified; this appears to be no longer included in recent international assessments. PISA asks about how teachers obtained their education or professional qualification, and LLECE asks whether the teacher has obtained the teacher certificate (*título de profesor*).

Table 1. Teacher qualification data collected by selected CNAs

Survey	Sampled population	Scope of teacher qualification questions
LLECE 2013 (TERCE)	Teachers of 4th and 6th grades	Highest level of education
PASEC 2014	Teachers of 2nd and 6th grades	Highest level of education
PISA 2018	Teachers in secondary schools attended by 15 year-olds	Highest level of education
TIMSS 2015 G8	Math and science teachers	Highest level of education
TIMSS 2015 G4	Math and science teachers	Highest level of education

All reviewed CNAs also collect data on whether teachers have received in-service professional development, though the scope and time period varies. The PASEC 2014 assessment asked the most general question of whether the teacher has received any professional development in the previous two years (**Table 2**). LLECE asked whether the teacher had participated in any of predefined list of professional development types in the previous two years. TIMSS collected data from teacher

depending on whether they were teaching mathematics or science. As with LLECE, the TIMSS questionnaire asked whether the teacher had participated in any of a predefined list of professional development types in the previous two years, but this list was restricted to mathematics or science depending on the questionnaire. Finally, PISA 2018 administered two types of teacher questionnaires. The first was directed to general teachers that asked whether the teacher had participated in any of a predefined list of professional development activities in the previous year. This question was not asked to language teachers, but rather asked what percent of their professional development in the previous year was allocated to different types of activities. Annexe Table 1 presents the questions responses for each survey.

Table 2. In-service professional development collected by selected CNAs

Survey	Sampled population	Scope of PD questions	Time period
LLECE 2013 (TERCE)	Teachers of 4th and 6th grades	whether received various types of in-service professional development	Previous 2 years
PASEC 2014	Teachers of 2nd and 6th grades	whether received any professional development	Previous 2 years
PISA 2018	Teachers in secondary schools attended by 15 year-olds	whether received various types of in-service professional development except language teachers	Previous year
TIMSS 2015 G8	Math and science teachers	whether various types of math or science PD depending on which subject being asked of the teacher	Previous 2 years
TIMSS 2015 G4	Math and science teachers	whether various types of math or science PD depending on which subject being asked of the teacher	Previous 2 years

Main methodological issues

1. Populations differ by CNA: As described in Table 2, the population for which estimates of teacher's participation in professional development varies by CNA. For PISA, teachers are sampled from each school participating in the PISA study separately from student sampling which provides a sample that is representative of teachers of the modal grade of 15 year-olds in a country or jurisdiction. For LLECE, PASEC and TIMSS, the students' teachers are sampled. To complicate the interpretation further, teachers from the subjects tested in LLECE and TIMSS are sampled which results in students having multiple teachers. Estimates are therefore representative of students' teachers rather than of teacher themselves. An important advantage of this population, however, is that it is possible to disaggregate the indicator by gender and socioeconomic status of students.

2. Time period of recent professional development: Except for PISA 2018, the other CNAs ask whether a teacher received professional development in the past 24 months rather than 12 months. This provides estimates that are different than the definition of the SDG indicator and may limit the comparability of estimates between PISA and the other CNAs.

3. Differences in questionnaire items across CNAs: The CNAs, apart from PASEC, ask teachers to select which professional development activities they have participated in the previous 12 to 24 months, depending on the CNA. The lists are not standard and differ between countries. It may be possible, as a result, that some types of professional development to be included in some CNAs and excluded in others. PASEC simply asks whether or not a teacher has received in-service professional development rather than a list. PISA includes a broad list of potential types of training including reading of professional literature and research undertaken by the teacher (see Annexe Table 1).

Proposed indicator for recent in-service professional development

SDG Indicators: 4.c.7 (Percentage of teachers who received in-service training in the last 12 months)

Definition and methodology: CNAs would provide the percent of students whose teacher has received professional development in the past two years. This is because the sampling of teachers is not representative of teachers but rather of the teachers of students and because the questionnaires ask about training received in the past two years. The indicator would measure whether the teacher has participated in any type of professional development included in the survey questionnaire (see Annexe Table 1 for definition of indicator based on question items in the surveys).

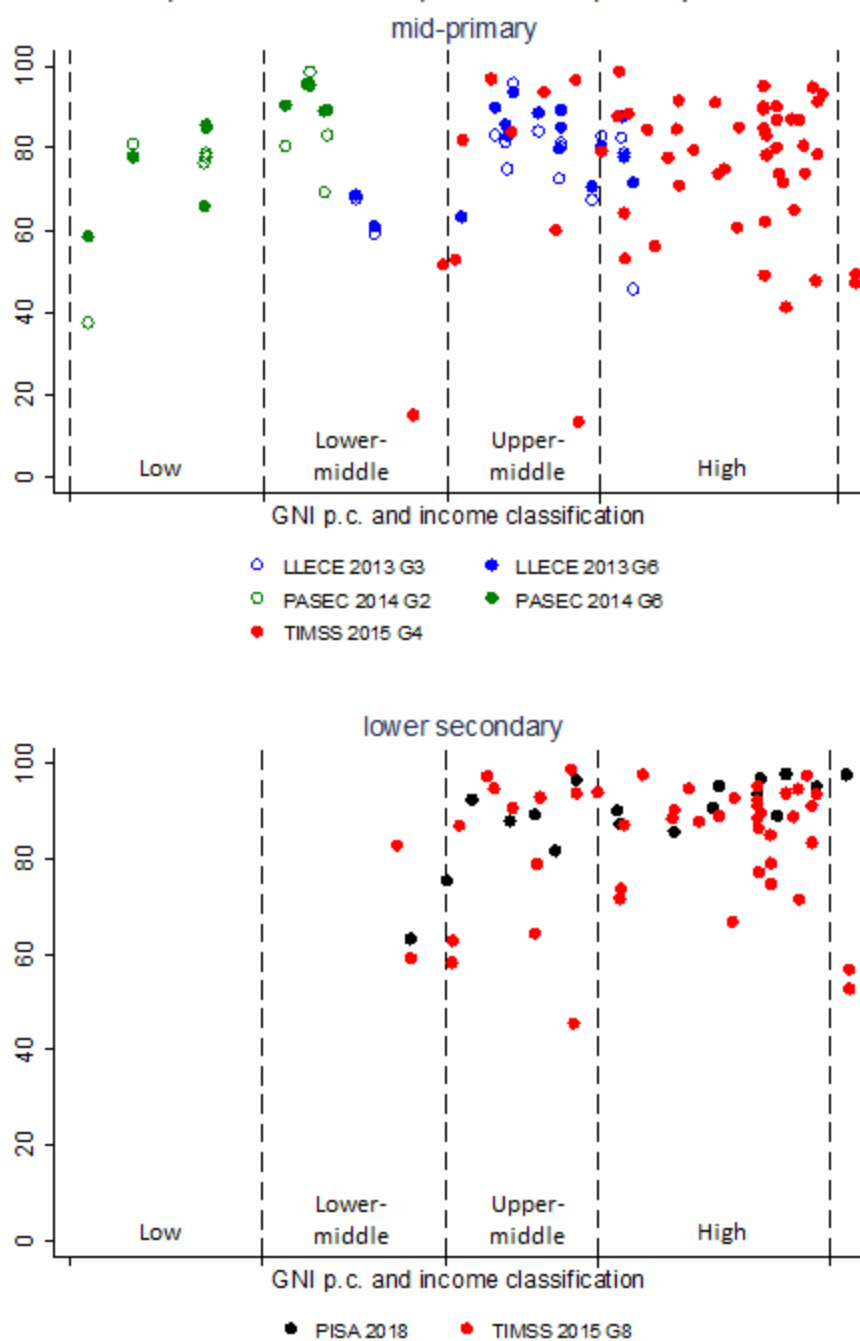
Surveys and target populations: As above, an indicator would be calculated for primary-level schooling using data from the 3rd and 6th grade LLECE, 2nd and 6th grade PASEC, and 4th grade TIMSS. An 8th grade indicator would be estimated using TIMSS grade 8 and an indicator derived from PISA would be for the modal grade of 15 year-olds, typically grade 9 or 10..

Cross-survey reliability and comparability

As discussed above, the main constraint to comparability (in addition to the differing target populations of the surveys) is that the LLECE and TIMSS questionnaires ask about specific professional development activities. In TIMSS, these activities are specific to a particular field, either mathematics or science. The result is that some professional development activities may not be captured by TIMSS if they are not specific to mathematics or science. For LLECE, it is theoretically possible for a professional development activity to be excluded from their list; however, the LLECE list reflects typical types of professional development in its participating countries.

Comparing estimated indicators for each country and grade level reveals no systematic differences across CNAs except for PISA 2018. Figure 1 presents estimates for the indicator at the primary and lower secondary levels. As demonstrated, no CNA source apart from PISA 2018 results in lower or higher values than other CNAs, though there are some low values found in TIMSS. For PISA, the definition of training is quite broad compared to the other CNAs (including reading professional literature, research undertaken by the teacher, in addition to activities that other CNAs include). The mapping used in the proposed definition, however, closely matches that of TALIS 2018. TALIS is a teacher survey, not a CNA, and outside the scope of this note, but is described in more detail in the metadata.

Fig. 1. Percent of students with teachers who have received in-service professional development in the past 2 years



Notes: PISA figures are the percent of teachers receiving professional development in the past year. TIMSS figures are the percent of students whose math and science teachers have received professional development in the past two years. LLECE figures are the percent of students whose math, language and, for 6th grade, science teachers have received professional development in the past two years. Source: author's calculations using LLECE, PASEC, PISA and TIMSS data.

Annex I.

Table 1. Data sources, target population, and questions on recent in-service training

Data source	Target population	Recent in-service training questionnaire items	Mapping to indicator
LLECE 2013 (TERCE)	Teachers of 3 rd grade students; teachers of 6 th grade students	<p>Have you participated in any of the following professional development activities in the last two years? Check all relevant answers:</p> <ul style="list-style-type: none"> • Obtained a Master's Degree • Obtained a diploma • Professional development course (60 hours or more) in language, mathematics, sciences, or another subject related to teaching (separate items) • Have not participated in any professional development 	Yes if any of the responses (except have not participated....) were selected. No if have not participated was selected. Missing if no responses were selected.
PASEC 2014	Teachers of 2 nd grade students; teachers of 6 th grade students	Have you received additional on-the-job training (educational course, training seminar, educational resource and development centre...) during the past two years? Yes or no	Mapped as stated; missing if no answer.
PISA 2018	Teachers of the national modal grade for 15 year-olds (excluding those teaching language classes as they were given an alternate questionnaire that did not include this question)	<p>During the past 12 months, did you participate in any of the following professional development activities? (yes or no to the following)</p> <ul style="list-style-type: none"> • Courses / workshops (e.g.: on subject matter or methods and/or other education-related topics) • Education conferences or seminars (where teachers and/or researchers present their research results and discuss educational issues) • Observation visits to other schools • Observation visits to business premises, public organisations, non-governmental organisations • In-service training courses in business premises, public organizations, non-governmental organisations <p>During the last 12 months, did you participate in any of the following activities? (yes or no to the following)</p>	Yes if yes to any of these; No if no to all of them that were answered. Missing if all are unanswered.

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- Qualification programme (e.g. a <degree programme>)
 - Participation in a network of teachers formed specifically for the professional development of teachers
 - Individual or collaborative research on a topic of interest to you professionally
 - Mentoring and/or peer observation and coaching, as part of a formal school arrangement
 - Reading professional literature (e.g. journals, evidence based papers, thesis papers)

Note: the following activity was also included under this question but excluded from this list as it does not fit well with the definition of in-service training: “Engaging in informal dialogue with your colleagues on how to improve your teaching”

TIMSS 2015	Teachers of 4 th grade students; teachers of 8 th grade students	<p>M10 In the past two years, how many hours in total have you spent in formal <in-service / professional development> (e.g., workshops, seminars, etc.) for mathematics? (check one only)</p> <ul style="list-style-type: none"> • none • less than 6 hours • 6 – 15 hours • 16 – 35 hours • more than 35 hours <p>S9 In the past two years, how many hours in total have you spent in formal <in-service/professional development> (e.g., workshops, seminars, etc.) for science?</p> <ul style="list-style-type: none"> • responses as above 	<p>No if answered none to both questions; otherwise yes unless no answer for both question, then coded as missing. Teachers that teach only mathematics or science may be asked only one of these two questions, in which case, the unanswered question is treated as missing.</p>
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Annex II. Metadata for SDG 4.C.7

SDG 4.c.7: Percentage of teachers who received in-service training in the last 12 months by type of training

Definition: Percentage of students whose teachers have received in-service training in the past 12 to 24 months as reported in cross-national assessments (CNAs) and teacher surveys.

Purpose: The proposed indicator is designed to match SDG 4.c.7 as closely as possible given the sampling design and data collection instruments of CNAs and teacher surveys.

Calculation method: The calculation method varied by type of survey (see **Table 1** below). Estimates were made following the guidelines provided by each survey on how to estimate teacher-level indicators. In general, teachers were defined to have either received in-service training in the past 12 to 24 months based on their responses to their respective questionnaires. An indicator variable was defined for each teacher equal to one if they had received in-service training, zero if they had not, and missing if there was no response to the questionnaire items on recent teacher training. For surveys whose teacher data is representative of teachers in the country or jurisdiction, the indicator is calculated as the percentage of teachers who received in-service training as a mean of the indicator variable (weighted by the appropriate sample weights). For surveys whose teacher data is representative of students' teachers, the unit of measure is the student. In which case, an indicator variable is defined for students whose value equals that of their teacher. The indicator is calculated as the percentage of students whose teachers received in-service training as a mean of student indicator value (weighted by the appropriate sample weights). In some surveys, students have more than one teacher, and the average of his or her teacher's indicator variable is used.

Interpretation: The indicator may be interpreted as either the percent of teachers or percent of students' teachers receiving in-service training in the past 12 to 24 months, depending on the survey (see Table 1).

Type of data source: International student assessments and teacher surveys that collect data on teachers' professional development.

Disaggregation: By level of schooling, and for data representative of students' teachers, by student's sex, socioeconomic status, and school's urban or rural location (see common metadata for CNAs for description of how sub-populations were defined).

Data sources: Table 1 lists data sources used. Estimates from CNAs were calculated by the UIS; estimates using the OECD's TALIS were presented in the TALIS report. Methodology for estimates by UIS using CNAs is presented in the common metadata document. For PISA 2018 teacher data, estimates are computed using the grade non-response adjusted school base weight and standard errors are estimated to be robust to intra-cluster correlation at the school level using a linearized model as part of the SVY module for Stata. For TIMSS 2015, the unit of analysis was each teacher-student combination and the teacher weight was used; standard errors were estimated as described in the common meta-data. For LLECE, the same approach was applied with the sample weight divided by the number of teachers per student following TIMSS 2015.

Meta-data points: The meta-data points indicate the source of data (Table 1 provides details for each data source). For estimates provided by UIS, they also include standard errors and confidence intervals estimated based on the methodologies suggested by the assessment programmes.

Table 2. Data sources, target population, and questions on recent in-service training

Data source	Target population	Recent in-service training questionnaire items	Mapping to indicator
LLECE 2013 (TERCE)	Teachers of 3 rd grade students; teachers of 6 th grade students	<p>Have you participated in any of the following professional development activities in the last two years? Check all relevant answers:</p> <ul style="list-style-type: none"> • Obtained a Master's Degree • Obtained a diploma • Professional development course (60 hours or more) in language, mathematics, sciences, or another subject related to teaching (separate items) • Have not participated in any professional development 	Yes if any of the responses (except have not participated....) were selected. No if have not participated was selected. Missing if no responses were selected.
PASEC 2014	Teachers of 2 nd grade students; teachers of 6 th grade students	Have you received additional on-the-job training (educational course, training seminar, educational resource and development centre...) during the past two years? Yes or no	Mapped as stated; missing if no answer.
PISA 2018	Teachers of the national modal grade for 15 year-olds (excluding those teaching language classes as they were given an alternate questionnaire that did not include this question)	<p>During the past 12 months, did you participate in any of the following professional development activities? (yes or no to the following)</p> <ul style="list-style-type: none"> • Courses / workshops (e.g.: on subject matter or methods and/or other education-related topics) • Education conferences or seminars (where teachers and/or researchers present their research results and discuss educational issues) • Observation visits to other schools • Observation visits to business premises, public organisations, non-governmental organisations • In-service training courses in business premises, public organizations, non-governmental organisations <p>During the last 12 months, did you participate in any of the following activities? (yes or no to the following)</p> <ul style="list-style-type: none"> • Qualification programme (e.g. a <degree programme>) • Participation in a network of teachers formed specifically for the professional development of teachers • Individual or collaborative research on a topic of interest to you professionally • Mentoring and/or peer observation and coaching, as part of a formal school arrangement 	Yes if yes to any of these; No if no to all of them that were answered. Missing if all are unanswered.

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- Reading professional literature (e.g. journals, evidence based papers, thesis papers)

Note: the following activity was also included under this question but excluded from this list as it does not fit well with the definition of in-service training: “Engaging in informal dialogue with your colleagues on how to improve your teaching”

TALIS 2018	Teachers of lower secondary education	<p>During the last 12 months, did you participate in any of the following professional development activities?</p> <ul style="list-style-type: none"> a) Courses/seminars attended in person b) Online courses/seminars c) Education conferences where teachers and/or researchers present their research or discuss educational issues . d) Formal qualification programme (e.g. a degree programme) e) Observation visits to other schools f) Observation visits to business premises, public organisations, or nongovernmental organisations g) Peer and/or self-observation and coaching as part of a formal school arrangement h) Participation in a network of teachers formed specifically for the professional development of teachers i) Reading professional literature j) Other 	Indicator data reported by UIS is taken from OECD, TALIS 2018 Database, Table I.5.1.
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TIMSS 2015	Teachers of 4 th grade students; teachers of 8 th grade students	<p>M10 In the past two years, how many hours in total have you spent in formal <in-service / professional development> (e.g., workshops, seminars, etc.) for mathematics? (check one only)</p> <ul style="list-style-type: none">• none• less than 6 hours• 6 – 15 hours• 16 – 35 hours• more than 35 hours <p>S9 In the past two years, how many hours in total have you spent in formal <in-service/professional development> (e.g., workshops, seminars, etc.) for science?</p> <ul style="list-style-type: none">• responses as above	No if answered none to both questions; otherwise yes unless no answer for both question, then coded as missing. Teachers that teach only mathematics or science may be asked only one of these two questions, in which case, the unanswered question is treated as missing.
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Annex III. SDGs and PISA 2018 indicators for teachers' professional development

The UN SDGs have acknowledged the importance of implementing adequate continuous professional development (CPD) as a crucial policy lever for ensuring teachers' learning and improvement throughout their career. Consequently, UNESCO defined the following strategy for educational systems: "Review, analyse and improve the quality of teacher training (pre service and in service) and provide all teachers with quality pre service education and continuous professional development and support" (p.55)¹.

To help systems fulfil this strategy, SDG Goal 4.c. encompasses a series of measurable indicators on teachers' work and development. The OECD's Programme for International Student Assessment (PISA) is able to provide data to meet the requirements of indicator 4.c.7: "Percentage of teachers who received in service training in the last 12 months, by type of training".

Overview of PISA teacher and schools questionnaires

PISA uses questionnaires administered to teachers and their school principals to elicit information about student backgrounds, the school learning environment and to assess factors associated with student outcomes. Its main goal in respect of gathering data from teachers and their school principals is to generate internationally comparable information relevant to developing and implementing policies focused on school leaders, teachers and teaching, with an emphasis on those aspects that affect student learning as measured through PISA's cognitive test instruments. PISA also collects data from students about their schools and teachers (e.g. teacher support, school climate etc.). PISA has been conducted every three years since 2000, with PISA 2018 being its seventh assessment.

For its 2018 assessment, 19 systems administered the teacher questionnaire while all 79 systems participating in the assessment administered the school questionnaire and the student questionnaire. The international target population for PISA is 15-year-old students in grade 7 and above and all these students' teachers and their school principals in public and private schools. In addition to the PISA teacher and school principal questionnaire, 9 countries and economies participating in PISA 2018, also conducted the TALIS 2018 survey.

In each participating country/economy, a representative sample of a minimum of 150 schools was randomly selected for the study and in each of these the school principal completed a questionnaire. In the 19 systems that administered the teacher questionnaire, over 107 000 teachers responded to the survey. It is important to note that PISA 2018 teacher questionnaire data were intended to be used to add context to student data from the same school, that is, to describe the learning environment of typical 15-year-old students in the country/economy. The teacher questionnaire data should be aggregated at the school level and then merged with student-level data before analysis.

The next cycle of PISA will take place in 2022.

SDG 4.c.7 indicator and PISA 2018 data.

The PISA indicators on professional development from its teacher questionnaire are perfectly aligned with the 4.c.7 indicator. In PISA 2018, the percentage of participation in training is derived from teachers who have at least attended one of the following types of professional development in the 12 months prior to the survey:

- courses/seminars attended

¹ UNESCO (2016), Education 2030: Incheon Declaration and Framework for Action for the Implementation of Sustainable Development Goal 4, http://uis.unesco.org/sites/default/files/documents/education_2030_incheon_framework_for_action_implementation_of_sdg4_2016_en_2.pdf.

- education conferences
- observation visits to other schools
- observation visits to business premises, public organisations, or non-governmental organisations
- other types of professional development activities
- peer and/or self-observation and coaching
- participation in a network of teachers
- reading professional literature

CPD indicators in the PISA 2018 Teacher questionnaire².

CY7_201710_QST_MS_TCQ-G_NoNotes

TC193 **During the last 12 months, did you participate in any of the following professional development activities?**

(Please select one response in each row.)

		<i>Yes</i>	<i>No</i>
TC193Q01HA	Courses/workshops (e.g. on subject matter or methods and/or other education-related topics)	<input type="checkbox"/> ₀₁	<input type="checkbox"/> ₀₂
TC193Q02HA	Education conferences or seminars (where teachers and/or researchers present their research results and discuss educational issues)	<input type="checkbox"/> ₀₁	<input type="checkbox"/> ₀₂
TC193Q03HA	Observation visits to other schools	<input type="checkbox"/> ₀₁	<input type="checkbox"/> ₀₂
TC193Q04HA	Observation visits to business premises, public organisations, non-governmental organisations	<input type="checkbox"/> ₀₁	<input type="checkbox"/> ₀₂
TC193Q05HA	In-service training courses in business premises, public organisations, non-governmental organisations	<input type="checkbox"/> ₀₁	<input type="checkbox"/> ₀₂

² The PISA 2018 teacher questionnaire is free to download here
http://www.oecd.org/pisa/data/2018database/CY7_201710_QST_MS_TCQ-G_NoNotes_final.pdf

CY7_201710_QST_MS_TCQ-G_NoNotes

TC020 **During the last 12 months, did you participate in any of the following activities?**
(Please select one response in each row.)

	<i>Yes</i>	<i>No</i>
TC020Q01NA Qualification programme (e.g. a <degree programme>)	<input type="checkbox"/> ₀₁	<input type="checkbox"/> ₀₂
TC020Q02NA Participation in a network of teachers formed specifically for the professional development of teachers	<input type="checkbox"/> ₀₁	<input type="checkbox"/> ₀₂
TC020Q03NA Individual or collaborative research on a topic of interest to you professionally	<input type="checkbox"/> ₀₁	<input type="checkbox"/> ₀₂
TC020Q04NA Mentoring and/or peer observation and coaching, as part of a formal school arrangement	<input type="checkbox"/> ₀₁	<input type="checkbox"/> ₀₂
TC020Q05NA Reading professional literature (e.g. journals, evidence-based papers, thesis papers)	<input type="checkbox"/> ₀₁	<input type="checkbox"/> ₀₂
TC020Q06NA Engaging in informal dialogue with your colleagues on how to improve your teaching	<input type="checkbox"/> ₀₁	<input type="checkbox"/> ₀₂

The PISA indicators on professional development from its school principal questionnaire are not so well aligned with the 4.c.7 indicator, but some relevant information is provided.


CPD indicators in the PISA 2018 School Principal questionnaire³

CY7_201710_QST_MS_SCQ_CBA_NoNotes

SC025 **During the last three months, what percentage of teaching staff in your school has attended a programme of professional development?**

A programme of professional development here is a formal programme designed to enhance teaching skills or pedagogical practices. It may or may not lead to a recognised qualification. The programme must last for at least one day in total and have a focus on teaching and education.

(Please move the slider to the appropriate percentage. If none of your teachers participated in any professional development activities select "0" (zero).)

SC025Q01NA All teaching staff at your school 

Slider bar: parking position, "0-100"; step=1.

Through its indicator on professional development, PISA is committed to helping countries monitor and report their work towards achieving and sustaining the SDGs.

³ The PISA 2018 school principal questionnaire is free to download here http://www.oecd.org/pisa/data/2018database/CY7_201710_QST_MS_SCQ_NoNotes_final.pdf

Annex IV. SDGs and TALIS 2018 indicators for teachers' professional development

The UN SDGs have acknowledged the importance of implementing adequate continuous professional development (CPD) as a crucial policy lever for ensuring teachers' learning and improvement throughout their career. Consequently, UNESCO defined the following strategy for educational systems: "Review, analyse and improve the quality of teacher training (pre service and in service) and provide all teachers with quality pre service education and continuous professional development and support" (p.55)⁴.

To help systems fulfil this strategy, SDG Goal 4.c. encompasses a series of measurable indicators on teachers' work and development. The Teaching and Learning International Survey (TALIS) is able to provide data to meet the requirements of indicator 4.c.7: "Percentage of teachers who received in service training in the last 12 months, by type of training".

Overview of TALIS

TALIS uses questionnaires administered to teachers and their school principals to gather data. Its main goal is to generate internationally comparable information relevant to developing and implementing policies focused on school leaders, teachers and teaching, with an emphasis on those aspects that affect student learning. TALIS has been conducted every five years since 2008, with TALIS 2018 being its third cycle.

For its 2018 cycle, 48 systems participated in TALIS. The international target population for TALIS is composed of lower secondary teachers and their school leaders in mainstream public and private schools. TALIS 2018 offered three additional options: 15 countries and economies, also surveyed teachers and school leaders in their primary schools (ISCED level 1), 11 countries and economies did so in their upper secondary schools (ISCED level 3) and 9 countries and economies, conducted the survey in schools that participated in the 2018 OECD Programme for International Student Assessment (PISA).

In each country, a representative sample of 4 000 teachers and their school principals from 200 schools was randomly selected for the study. Across all survey components, approximately 260 000 teachers responded to the survey, representing more than 8 million teachers in 48 participating countries and economies.

The next cycle of TALIS will take place in 2024.

SDG 4.c.7 indicator and TALIS 2018 data.

The TALIS indicator on professional development is perfectly aligned with the 4.c.7 indicator. In TALIS 2018, the percentage of participation in training is derived from teachers who have at least attended one of the following types of professional development in the 12 months prior to the survey:

- courses/seminars attended in person
- online courses/seminars
- education conferences
- formal qualification programmes
- observation visits to other schools
- observation visits to business premises, public organisations, or non-governmental organisations

⁴ UNESCO (2016), Education 2030: Incheon Declaration and Framework for Action for the Implementation of Sustainable Development Goal 4, http://uis.unesco.org/sites/default/files/documents/education_2030_incheon_framework_for_action_implementation_of_sdg4_2016_en_2.pdf.

- peer and/or self observation and coaching
- participation in a network of teachers
- reading professional literature
- other types of professional development activities

CPD indicator in the TALIS 2018 Teacher questionnaire⁵

22. During the last 12 months, did you participate in any of the following professional development activities?

Please mark one choice in each row.

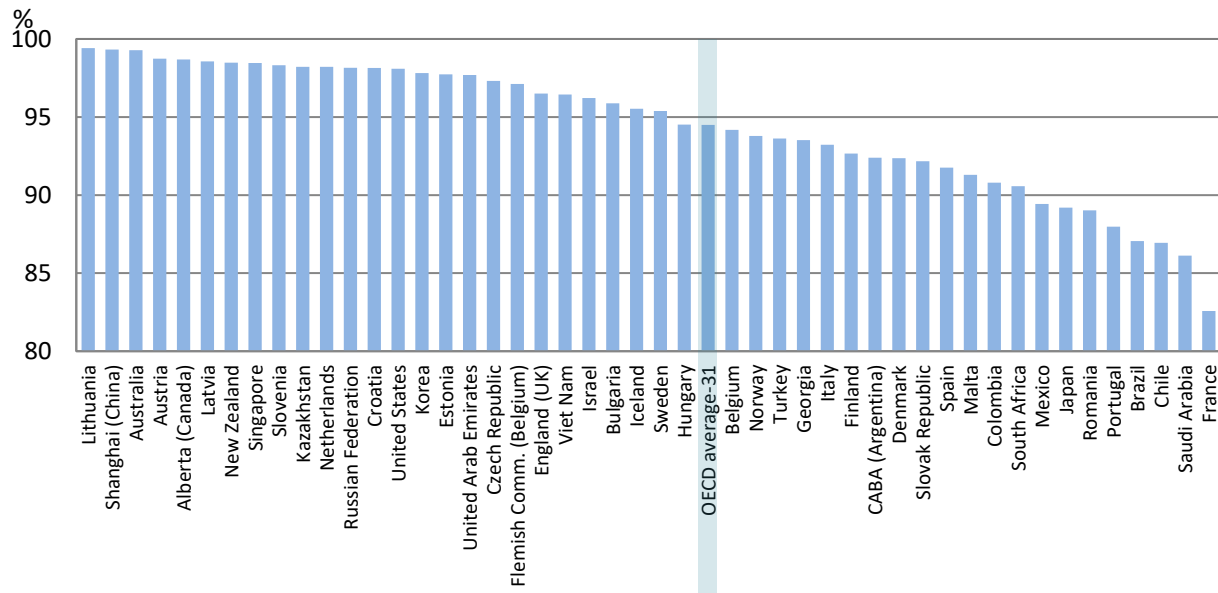
	Yes	No
a) Courses/seminars attended in person	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂
b) Online courses/seminars	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂
c) Education conferences where teachers and/or researchers present their research or discuss educational issues	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂
d) Formal qualification programme (e.g. a degree programme)	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂
e) Observation visits to other schools	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂
f) Observation visits to business premises, public organisations, or non-governmental organisations	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂
g) Peer and/or self-observation and coaching as part of a formal school arrangement	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂
h) Participation in a network of teachers formed specifically for the professional development of teachers	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂
i) Reading professional literature	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂
j) Other	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂

An example of how these results can be displayed is shown in Figure 2

⁵ The TALIS 2018 teacher questionnaire along with the school leader questionnaire is free to download here <http://www.oecd.org/education/school/talis2018questionnaires.htm>

Figure 2. Participation in professional development activities

Percentage of lower secondary teachers who participated in professional development activities



Refers to professional development activities in which teachers participated in the 12 months prior to the survey.

Countries and economies are ranked in descending order of the percentage of teachers who participated in professional development activities in the 12 months prior to the survey.

Source: OECD, TALIS 2018 Database, Table I.5.1.

Through its indicator on professional development, TALIS is committed to helping countries monitor and report their work towards achieving and sustaining the SDGs.