

TCG4:

Development of SDG global indicator 4.3.1

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Executive summary

The concepts of affordability and quality are not covered by the indicator, but there are different strategies at the international and national level that could be adopted to take them into account.

The ISCED 2011 and the European Classification of Learning Activities provide the best conceptual framework to define the scope of formal (FET) and non-formal education and training (NFET).

Some conceptual definitions still need to be formulated for the sake of a feasible international common methodology. Among them, whether to include youth attending upper secondary (ISCED level 3), and whether to define a minimum duration for NFET programmes.

Several existing cross-national surveys can provide relevant information to monitor target 4.3. However, only the methodologies adopted by the EU Adult Education Survey and the OECD Survey of Adult Skills are fully aligned with the concepts of the global indicator 4.3.1.

National initiatives, especially in low- and middle-income countries, collect regular administrative data on non-formal programmes such as adult literacy, second-chance, and popular education. However, they do not fully cover the broader spectrum of NFET.

Labour Force Surveys (LFS) provide the most comprehensive source of information for the global indicator. The methodological heterogeneity of these sources poses a difficult challenge for comparability. Furthermore, most LFS questionnaires also restrict the scope of non-formal education and training to job-related courses/training.

1. Introduction

Following the work of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (IAEG) carried out since 2015, the global indicator framework for the SDGs was approved and endorsed by the Economic and Social Council (ECOSOC)ⁱ in June 2017 and by the UN General Assembly in July 2017. The global indicator selected for the target 4.3 was *"Participation rate of youth and adults in formal and non-formal education and training in the last 12 months, by sex"*.

To facilitate the implementation of the monitoring framework, the global indicators were classified by the IAEG into three groups (tiers) according to their level of methodological development. The global indicator 4.3.1 was classified as Tier II, meaning that the *"indicator is conceptually clear, has an internationally established methodology and standards are available, but data are not regularly produced by countries"*.

Therefore, during the third meeting of Technical Cooperation Group on the Indicators for SDG 4 – Education 2030 (TCG), held in March 2017, the TCG has decided to propose the further development of this indicator on the basis of the following main observationsⁱⁱ: i) To examine and compare questions and methodologies of the OECD's Survey of Adult Skills and EU's Adult Education Survey; ii) To consider other sources such as ILO and the possibility of adding questions to existing national surveys; iii) To adapt the methodology of the indicator for global use; iv) To develop proposals to increase the coverage of countries; and v) To submit this work for approval by the Working Group on Indicator Development (WG1) and the TCG.

This report aims to support the work of the WG1 and TCG providing a comprehensive review of the existing methodologies for the indicator as well as recommending strategies to achieve a broader coverage of countries. The WG1 and TCG are expected to analyse and decide on the best methodology for the indicator by the first semester of 2018.ⁱⁱⁱ

2. Conceptual framework

The methodological development of the global indicator 4.3.1 is highly dependent on clear and agreed definitions of concepts. Despite being classified as “conceptually clear” by the IAEG, the indicator still has concepts not yet well defined. Therefore, this section has the objective of clarifying and discussing definitions for the indicator’s main concepts.

The target 4.3 aims to, “By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university”. Three relevant concepts of the target are not covered by the proposed global indicator: i) access by orientation and level; ii) affordability; and iii) quality. The first one, access by orientation and level, is object of the two thematic indicators complementing the monitoring of the target: indicators 4.3.2 and 4.3.3. Also, according to the indicator’s metadata, “ideally, the [global] indicator should be disaggregated by types of programme such as TVET, tertiary education, adult education and other relevant types and cover both formal and non-formal programmes.” (UNESCO Institute for Statistics, 2017, p. 34).

On the other hand, the concepts of quality and affordability are not covered at all by the global or thematic indicators. At this stage, global indicators classified as Tier I or II are not going to experience any major changes. However, considering the regional and national monitoring framework, in addition to the scenario of future revisions in 2020 and 2025, it is important to reflect on strategies for the operationalization of these two concepts. The Annex II of this report provides more insights in this direction.

Youth and adults

Most indicators from the monitoring framework specify the age range when using concepts such as “adolescent” (3.7.2) or “children” (8.7.1). The two other indicators that include the concept of youth, also define the age range in the description of the indicator: “8.6.1: Proportion of youth (*aged 15-24 years*) ...” and “16.2.3: Proportion of young women and men aged 18-29 years who...”.

However, the two global indicators of the SDG4 using the concept of youth, 4.3 and 4.4, do not include such explanation in their description apart from references in the metadata. Since 1981, United Nations has adopted, for statistical purposes, a chronological definition of youth as the persons between the age of 15 and 24 years. However, it is noted as well that this definition is implemented “without prejudice to other definitions by Member States”.^{iv}

The African Youth Charter, for instance, defines youth as individuals within the age range from 15 to 35 years. Some countries such as Brazil^v and India^{vi}, adopt the 15-29 interval for policy purposes. A study covering European countries^{vii} found that for half (23 out of 47) of them, national policy frameworks use the 15-29 interval.

Nevertheless, most countries tend to adopt the 15 years old as the initial age to define youth. Therefore, the higher limit age for the definition of youth would be relevant only to disaggregate youth

and adults. It is also important to highlight that the absence of a higher limit age for adults specified in the indicator, implies the definition of 25 or older instead of the common 25-64 age interval used in statistical reports.

Formal and non-formal education and training

The concept of “formal and non-formal education and training” is not explicitly stated in the target 4.3, although it is broad enough to comprise all programs specified by the target, namely technical, vocational, and tertiary education. As pointed out in the 2016 GEM Report (Unesco, 2016), this broader perspective helps to account for an important part of the SDG 4 that is not well covered by the monitoring framework: the promotion of “lifelong learning opportunities for all”.

The International Standard Classification of Education, ISCED 2011 (UNESCO Institute for Statistics, 2012, p. 11), defines formal and non-formal education and training as follows:

Formal education is education that is institutionalised, intentional and planned through public organizations and recognised private bodies, and – in their totality – constitute the formal education system of a country. Formal education programmes are thus recognised as such by the relevant national education or equivalent authorities, e.g. any other institution in cooperation with the national or sub-national education authorities. [...] non-formal education is education that is institutionalised, intentional and planned by an education provider. The defining characteristic of non-formal education is that it is an addition, alternative and/or complement to formal education within the process of lifelong learning of individuals.

In this sense, as proposed by ISCED 2011, the range of programmes that are object of the indicator 4.3.1 covers “initial education, regular education, second chance programmes, literacy programmes, adult education, continuing education, open and distance education, apprenticeships, technical or vocational education, training, or special needs education.”.

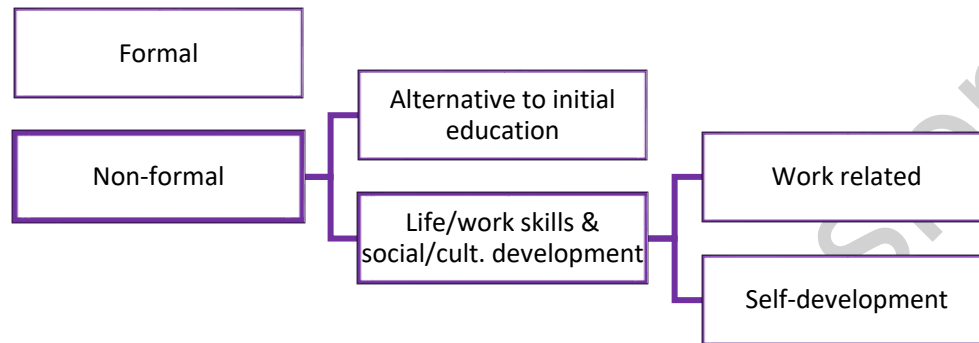
Formal education and training programmes are usually well defined and recognized by countries and individuals. Consequently, data is widely available for these programmes either through administrative data or national surveys. However, the heterogeneity and multiplicity of non-formal programmes is an obstacle for their recognition as education and training to countries and individuals responding surveys and, consequently, also hinders more systematic data collection.

The ISCED 2011 is almost entirely focused on formal education, thus all characteristics, levels and specifications for international comparability are related to formal education programmes. However, it recommends the use of the criteria of equivalency of content to classify non-formal education programmes and it also specifies the following types of programmes (UNESCO Institute for Statistics, 2012, p. 76):

“...depending on the national context, non-formal education and training can cover programmes: i) contributing to adult and youth literacy and education for out-of-school children (alternative programmes to initial education); and ii) focused on life skills, work skills, and social or cultural development. The latter can include: [i)] training in a work place to improve or adapt existing qualifications and skills, and training for unemployed or economically inactive persons; and [ii)] learning activities pursued for self-development (during a person’s private (leisure) time).”

In this sense, the scope of the indicator 4.3.1 comprehends three general types of education and training programmes: i) formal; ii) non-formal alternative to initial; and iii) non-formal for life and work skills, and social and cultural development. This categorization is particularly helpful to assess data availability as detailed further in this report.

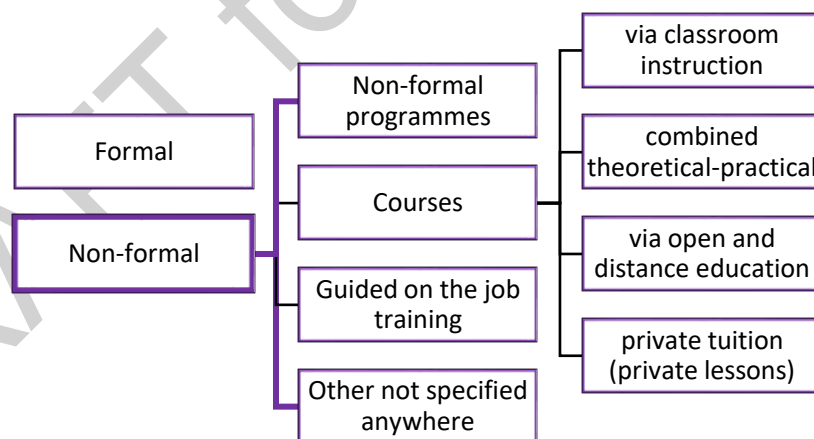
Figure 1 – ISCED 2011 non-formal education and training programmes' categories



Source: Elaborated by the author based on ISCED 2011.

The EU Classification of Learning Activities (CLA) (EUROSTAT, 2016) is a relevant source for classification of non-formal education and training programmes. The CLA is aligned with the ISCED 2011, but goes further suggesting *classes* and *subclasses* for non-formal education:

Figure 2 – CLA non-formal education classes and subclasses



Source: Elaborated by the author based on Eurostat, 2016.

Any attempt to further categorize non-formal education is inevitably a step into a delimitation of the concept. In this sense, it is important to bear in mind that the ample adoption of a European classification is also the extension of a particular perspective on youth and adult education to different regions of the world. In this case specifically, the bias towards NFET for economic and job-related purposes (Holford & Mohorčič Špolar, 2012).

Another important initiative has been advanced by the Association for the Development of Education in Africa (ADEA) aiming to establish a conceptual framework for a common core of skills in African countries contemplating non-formal education as well. The proposal is founded on a holistic perspective of education and may represent an important approach to assess the increasingly common integration of formal and non-formal programmes (Yekhlef, 2015).

Inclusion of initial education programmes

In the expression of the indicator, “formal and non-formal education and training” is preceded by the specification of “youth and adult”. As a result, it may not be plausible to include initial primary and lower secondary programmes (ISCED levels 1 and 2), considering that these programmes are aimed at a different target population and are covered by other indicators. However, it is worth noting that the indicator’s broad proposal for education and training leads to the inclusion of initial upper secondary programmes (ISCED level 3) as well as second chance programmes (ISCED levels 1 to 3), and youth and adult literacy programmes.

Minimum duration of non-formal programmes

Not having a minimum duration for non-formal programmes pose specific challenges to collect data for the indicator. As indicated by ISCED 2011 (UNESCO Institute for Statistics, 2012, p. 77), *“The duration of a non-formal programme may be very short. In particular, job- and leisure-time training activities may cater to particular practical purposes related to the specific job or private life context. A non-formal programme may therefore often be described as a (training) course”*.

Moreover, given that formal programmes have a minimum duration specified by the ISCED 2011, the Classification of Learning Activities also proposes that the absence of a minimum duration can be one of the two main criteria to distinguish between formal and non-formal education, together with the recognition of the program by national authorities (EUROSTAT, 2016, p. 21).

The non-existence of a minimum duration may facilitate data collection via surveys as most respondents would not be able to recall or specify the duration of a non-formal programme taken in the past 12 months. On the other hand, comparability of participation rates will be affected given that programmes can vary from one hour to 12 months or more and countries have considerably different systems of non-formal education (Desjardins, 2015; Rubenson, 2018).

3. Existing methodologies

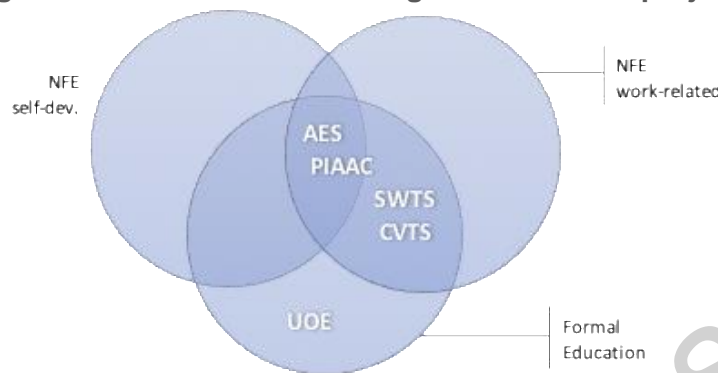
Presently, there are methodologies implemented at national and international levels collecting relevant data for the indicator 4.3.1. The following review of these existing methodologies is based on principles for indicator’s methodological development implemented during the construction of the SDG’s monitoring framework.

3.1 Cross-national initiatives

The table below describes some aspects of the main cross-national initiatives in this area. Despite some common characteristics, these projects have distinct purposes and each of them has its’ own methodological framework. The Annex I of this report explores specific aspects of these projects and

These different coverages are pertinent for the methodological coherence and the comparability of the data produced. The SWTS, for instance, covers a very diverse group of countries. This diversity is related not only to education and social aspects but also to the organization of the national statistical

Figure 4 – Main focus of existing cross-national projects



Source: Elaborated by the author

systems responsible for the administration of this survey. As discussed by Pastore (2017, p. 5) “the local statistical offices involved in the administration of the survey have adapted questions to make them more country-specific, which, on the other hand, has constrained the ability of the surveys to be fully comparable on a number of aspects of the SWTS”.

Differently, the AES has a more standardized use of the survey framework despite the fact that countries also incorporate the survey into their own national statistical offices. This is due to the well harmonized and standardized statistical norms and procedures adopted by Eurostat members. However, having countries from different regions do not necessarily damage comparability. High comparability can also be achieved by the thorough application of common methodological standards such as demonstrated by AES and PIAAC.

Purpose and scope

There is a significant variation in the scope of the participation in formal and non-formal education assessed by these different projects. Rubenson (2018, p. 337) argues that “There exists a noticeable job-related bias” on the way adult learning and education is operationalized in cross-national data collections. In fact, the CVTS and SWTS are mainly concerned with the implications of education and training to work- and job-related issues. Therefore, their conceptual framework is more limited than the broader perspective of the target 4.3. Likewise, PIAAC has a strong focus on assessing skills instead of participation in education and training. In this sense, the UOE data collection is also limited in scope given that it does not cover non-formal education.

Disaggregation

Assessing the equity dimension of youth and adult education is as important as the participation rates (Boyadjieva & Ilieva-Trichkova, 2017). It is indispensable for the methodology adopted to be able to compare participation rates between males and females.

Except for the CVTS, data coming from all these sources can be disaggregated by sex. The administrative data used by the UOE Data Collection can often allow for disaggregation by other variables at the national level. However, the enrolment data collected by UOE at the international level cannot be disaggregated by any other variables recommended by the target 4.5.

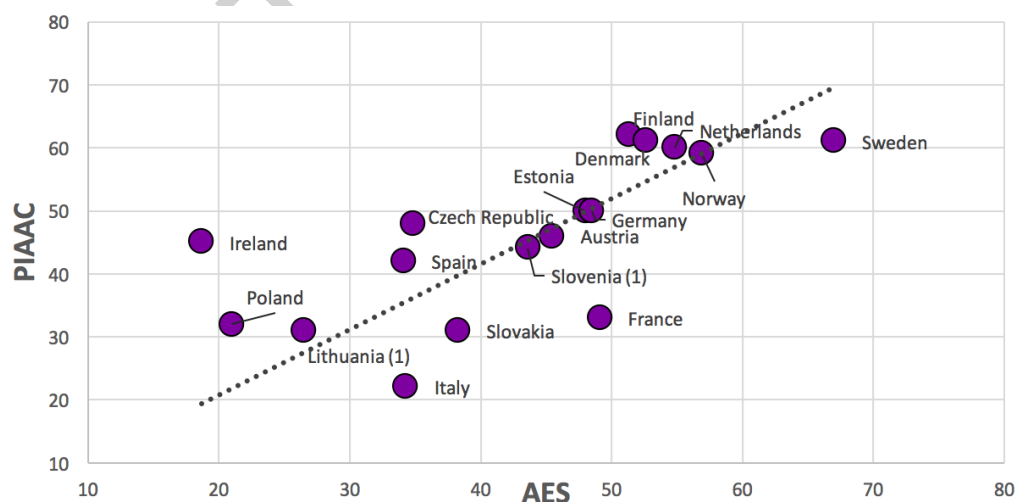
As detailed in Annex I, the SWTS, AES and PIAAC have data collections at the individual level enabling analysis by location, wealth, ethnicity, and disability (indirectly). Caution must be taken in relation to the estimates based on few observations.

Relevant questions

SWTS, CVTS and UOE data collection do not have the exact information required to calculate the indicator. Several questions from these surveys may be relevant to assess the participation of youth and adults in education and training. However, they do not provide sufficient data to estimate participation in a given country.

PIAAC and AES can provide this information through specific questions included in their instruments (questions detailed in Annex I). Both surveys use basically the same concepts stemming from ISCED 2011 and the EU Classification of Learning Activities. PIAAC and AES also employ similar wording for the questions related to participation in formal and non-formal education. For most of the countries taking these two surveys, the participation rates in non-formal education follow a similar pattern, as shown in the chart below. However, for some countries located far from the regression line on the chart below, there are substantial differences in the figures. Studies that investigated discrepancies between AES and PIAAC (Boeren, 2014, 2016; Lavrijsen & Nicaise, 2015) attribute them to methodological aspects such as sampling designs, data collection method (PAPI, CATI, Websurvey), as well as specific wording used in each country.

Figure 5 – Participation rate in non-formal education and training by data source



Source: Elaborated by the author based on the Adult Education Survey 2011 and Survey of Adult Skills 2012

Note: 25-64 age range. (1) Data come from AES 2016 and PIAAC 2015

3.2 National initiatives

Several countries that do not take part in these cross-national surveys have nevertheless implemented national initiatives to systematically collect information on formal and non-formal education and training. The formal education and training programmes' information is often based on administrative data collected regularly and most countries report these data annually through the UOE data collection.

In general, likewise to AES and PIAAC countries, non-European low- and middle-income countries emphasize non-formal education related to work and job in their national monitoring systems. However, unlike European and high-income countries, these countries prioritize youth and adult education alternative to initial education as well. This is mostly due to higher illiteracy, drop out and out-of-school rates observed in these countries which lead to education policies more attentive to second-chance programmes. This is also congruent with findings of the III GRALE Survey which shows that Sub-Saharan African and Latin American countries tend to declare more frequently that "literacy and basic skills are a top priority for ALE programmes" in their countries.

In Latin America, most of the non-formal education and training is either provided or monitored by central governmental agencies. The Mercosur Education Statistics Report, for instance, contains information on enrollment in programmes "not classified by the ISCED 2011"^{viii}. The majority is related to Youth and Adult Education ("*Educación de Jóvenes y Adultos*"). These programmes are usually aimed at youth and adult population who has not had the opportunity to complete their primary or secondary studies. The Indicator 5 of the Mercosur's publication, for example, is the percentage of students from 15 to 17 years old participating in adult education programmes in relation to the total of 15-17 students in the country. The figures are reported by sex and location.

Colombia has implemented, in 2010, the Education for Work and Human Development Information System (SIET)^{ix} to monitor all programmes of non-formal education and training provided by public and private institutions holding an operating license. This system provides public information on the number of participants, certificates and costs of programmes.

In Brazil, the basic education census carried out annually encompasses information from second chance programmes as well as short technical and vocational programmes that are provided either integrated or concomitant with formal education. Among these programmes, the National Youth Inclusion Programme (Projevem) which provides hundreds of thousands of 15-29 young people with professional qualification and human development courses.^x

In 2000, UNESCO has developed the Non-Formal Education Management Information System (NFE-MIS) which is a comprehensive methodological framework to guide and facilitate the implementation of information systems at the national and sub-national levels (Connal & Sauvageot, 2005).

The methodology has been applied since 2001 in Cambodia and is currently fully operational with linkages to the formal education management and information system. Data are produced annually in collaboration with subnational entities. The total number of institutions and participants in non-formal education are available at the Ministry of Education, Youth and Sport's website^{xi}.

African countries such as the Democratic Republic of the Congo and Tanzania have also adopted this methodology and are working towards an integrated monitoring framework comprising formal and non-formal education (Yasunaga, 2014). The Nepalese Non-Formal Education Centre (NFCE), in



collaboration with the UNESCO office in Kathmandu, has also driven efforts to adopt the NFE-MIS as a tool to establish an “Integrated Education Management Information System (I-EMIS)” comprising formal and non-formal education. The Non-Formal component involves eight governmental programmes related to alternative schooling, adult literacy and skills training (UNESCO, 2015).

In Bhutan, the web-based Education Management Information System (EMIS) is maintained by the schools and districts (dzongkhags) that update their NFET data every year in a different period (April-June) than the formal education data (January-March). The NFET data comprises information from Basic (BLC) and Post Literacy Courses (PLC) as well as continuing education and monastic education. The data from the Bhutanese EMIS are consolidated by the Ministry of Education and published in the Annual Education Statistics report which is in its 29th edition^{xii}.

All these national initiatives and efforts to monitor and collect information are crucial for countries to assess education and training beyond the formal system. There are important developments related to the compilation and organization of administrative data stemming from diverse sources and ministries/agencies. The UNESCO’s NFE-MIS is an emblematic tool of these developments. However, not all countries would be able to monitor participation in all types of non-formal education and training programmes via administrative data. The scope of non-formal education and training is so wide (short distance learning courses, seminars and workshops, on-the-job training, etc.) that it is not feasible to expect full coverage using administrative data, at least in the near term. The heterogeneity, multiplicity and ever-changing nature of non-formal education and training is a challenge for established standardized information systems based on administrative data.

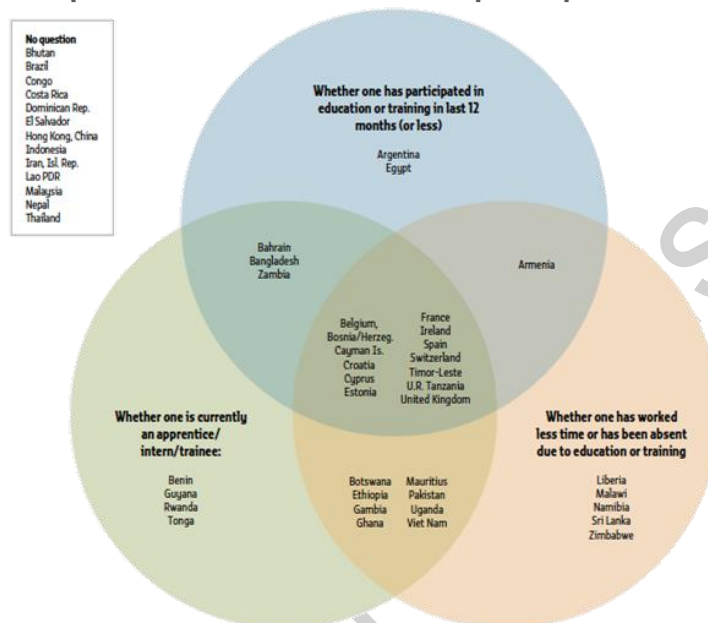
Furthermore, without a very organized data structure based on a unique identification of individuals, it is probable that statistics regarding participation in non-formal education and training based on administrative data will certainly result in data duplication, i.e. estimating a higher number of participations than participants.

Taking this into consideration, the most reliable sources to estimate participation in non-formal programmes, guaranteeing full coverage and preventing double counting, are labour force surveys. The next section reviews how countries are monitoring participation in formal and non-formal education and training based on labour force surveys.

4. Labour force surveys

An analysis of 49 national labour force surveys (LFS) conducted by the 2017 GEM Report Team (Unesco, 2017) found that they differ substantially on their questions related to youth and adult education. As shown in the Figure 3, only 19 of the 49 countries analysed have a question related to participation in education or training in the last 12 months.

Figure 6: Types of questions on adult education participation in 49 national LFS



Source: GEM Report team analysis of labour force surveys.

Source: GEM Report team analysis of labour force surveys. UNESCO, 2017

Similarly, the UIS Latin American Regional Office has systematised the data availability for the SDG4 indicators based on the Economic Commission for Latin America and the Caribbean (CEPAL) Household Surveys Database^{xiii}. Among the 18 countries listed in the study, 7 were found to have a relevant question for the indicator 4.3.1, and 2 additional countries included adult education among the education categories in the attendance question.

Based on these analyses, some countries were selected to further investigate the feasibility of using LFS as an alternative data source for the indicator 4.3.1. The countries that were classified as having “no question” by the GEM Report or CEPAL/UIS were included to estimate the work that would need to be done via adaptation or inclusion of a new question. Additionally, some alternative national household surveys were analysed using the survey catalog from the International Household Survey Network (IHSN)^{xiv}. Specific details about these LFS can be found in Annex III.

European countries have comparable questions in their LFS for participation in education and training, including formal and non-formal. These questions are similar to the ones used by the Adult Education Survey, except for the coverage of the non-formal programmes and the reference period. Non-formal education and training is more limited in the EU Labour Force Survey (EU-LFS) given that

it does not incorporate the category “guided on-the-job training” present in the AES. Additionally, the AES and PIAAC request more information for each of the activities declared.

The main difference between the two methodologies is related to the reference period. Instead of referring to the last 12 months, the standard question for the EU-LFS adopts the period of 4 weeks. Goglio and Meroni (2014, p. 4) explore the main implications of this for the surveys’ results and describe some pros and cons of each approach. The authors conclude that 4-week period is more precise and appropriate to measure the intensity of participation at a given moment in time, whereas “considering a time span of 12 months is much more inclusive and tends to provide higher proportions...”.

Holford and Mleczo (2011) have also investigated the comparability of the relevant questions in the European labour force surveys and raised concerns particularly related to translation and adaptations of the questionnaire for some countries. In conclusion, the authors indicate that “There appears to be some association between high participation rates and the extent of apparent national contextualisation” resulting from the translation and adaptation of the instrument.

Despite these limitations, the European labour force surveys provide an important source of comparable information on education and training. Besides, the availability of methodologically similar LFS data sources around the world could facilitate a truly universal SDG 4.3 monitoring.

Nevertheless, as discussed in the GEM Report (Unesco, 2017, p. 156), “Outside the European Union, labour force surveys may capture data on adult education, but definitions and methodologies vary too much for the data to be internationally comparable”. Countries include questions related to participation in formal education and the format is rather consistent among the surveys, as they are based on the ISCED 2011. Even though, questions related to non-formal education and training show substantial differences among them and indeed lack comparability.

Conceptual Alignment

The main discrepancies among national LFS reside in the conceptual alignment with the ISCED 2011. The scope of non-formal education and training varies significantly. Although the documentation of these surveys not always bring definitions for NFET, the relevant questions’ alternatives and wording are sufficient to recognise these differences.

Most countries associate NFET to work-related education and training. 19 out of the 49 LFS questionnaires analysed by the GEM Report team, only have NFET questions associated either with their current jobs or with their job’s absences/hour reduction. Even among those countries in which the question is more general (i.e. not included in a “job section”), the wording is majorly associated with work purposes. In Pakistan, for instance, the question is formulated as “Has... ever completed any technical/vocational training such as auto or engine mechanics, carpentry, typing, computer, tailoring etc.”. Uganda includes the following wording: “Did (you/Name) participate in any business, entrepreneurship, or microenterprise development training?”.

Differently, fewer countries such as Bolivia and Timor-Leste offer a broader range of activities in their questionnaires. Bolivia refers to “alternative education” comprising “alternative youth education”, “adult education”, “special education” and “post-literacy” programmes. Timor-Leste provides the following categories for the purpose of the training: “job preparation, upgrading my skills, refresh skills that I learned in the past, to kill time”. Lastly, most of the instruments do not go beyond the

participation question, i.e. they do not collect any further information on the NFET programmes like the AES or EU-LFS do.

Reference period

The reference period differs significantly among countries, ranging from “4-weeks”, as adopted in Egypt, to no time limit in Pakistan. Most countries use either 4-weeks or 12-months period though. These differences regarding the reference period are also difficult to reconcile as the experience of EU-LFS and AES demonstrates. An alternative would be to include an additional question for 12-months period for those respondents who declared not having participated in any NFET in the last 4-weeks^{xv}.

Target population

As mentioned before, most countries restrict NFET questions to the scope of job-related section of the questionnaire. Therefore, these questions are often addressed exclusively to those who are currently working (on-the-job NFET or reasons for absence/reduced hours).

For countries that include general NFET questions, it is addressed to all household members aged 15 years or more, but in Egypt, for example, the question is restricted to those not enrolled in formal education, and Armenia limits the age up to 75 years old.

Disaggregation

One of the greatest advantages of LFS compared to other methodologies is the high number of contextual variables included in the main questionnaire. Therefore, not only the disaggregation suggested by the Target 4.5 but any other relevant disaggregation at the regional and national level is potentially viable.

An important note of caution is necessary regarding the reliability thresholds of the estimates for disaggregated data. In many low- to middle-income countries, the percentage of the youth and adult population declaring to participate in non-formal education is expected to be very low and, therefore, the number of observations might not allow further disaggregation.

LFS without a relevant question

From the 49 countries analysed by the GEM Report team, 13 of them were identified as not having a relevant question to be used as source for participation in NFET. Among this group, 4 countries (Bhutan, Costa Rica, El Salvador, and Indonesia) have relevant questions in other official surveys as shown in Annex III. For the remaining 9 countries, i.e. 18% of the countries analysed, no relevant questions were found in official national household surveys.

5. Comparative analysis

The table below highlights and summarizes main aspects in existing methodologies for the global indicator. For the sake of brevity and clarity, the CVTS, SWTS, and UOE data collection were not included as they present narrower scopes when compared to other methodologies.

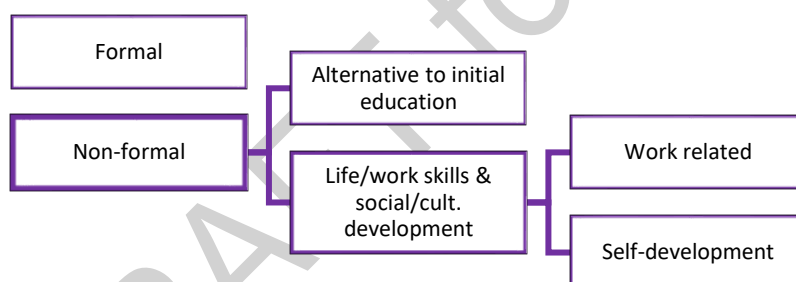
	AES	PIAAC	Nat. Adm. Data	LFS
Conceptual alignment	ISCED & CLA	ISCED & CLA	ISCED for FET; no align. for NFET	ISCED for FET; no align. for NFET
Frequency	5 years	NA	~yearly	~yearly
Country coverage	~30 countries	33 countries	100+ countries	100+ countries
Reference period	12 months	12 months	Multiple	Most 4-week or 12-months
Target public	25 – 64 yo	16 – 65 yo	Most 15+	Most 15+
Disaggregation	Sex, Location, Wealth	Sex, Location, Wealth	Multiple	Most Sex, Location, Wealth, Disability, Indigenous and National relevant

6. Recommendations

Concept alignment

Formal and non-formal education and training definitions based on the ISCED 2011

ISCED 2011 is the main reference for the definition of formal and also non-formal education and training. Despite brief, the ISCED 2011 description of non-formal education and training provides enough elements to guide the data collection and international comparison. The following categorization of NFET is particularly relevant for the global indicator.



No minimum duration for NFET: Even considering the implications for the comparability of the indicator, following the description of the ISCED 2011 for NFET, as well as the guidelines adopted by data collections such as the AES and PIAAC, it is not recommended to establish a minimum duration for NFET programmes.

Inclusion of formal ISCED level 3 and second-chance programmes: Considering the importance of the ISCED level 3 and programmes alternative to initial education for youth and adult education, it is important to have included second chance programmes (ISCED levels 1 to 3), and youth and adult literacy programmes.

Age intervals: 15-24 and 25-64: Notwithstanding some national differences regarding definition of youth and adults, most data collections shall be able to provide information by the widely used intervals of 15-24 and 25-64.

Quality and affordability at the national/regional monitoring: The lack of information related to quality and affordability for NFET programmes hinders the inclusion of these dimensions into the global indicator, at least in the short run. However, the monitoring at the regional and national levels should prioritize the analysis on quality and affordability of F&NFET also aiming at the implementation of measurements that could be associated to the main indicator. The 4-A scheme (Tomaševski, 2006) provides a useful strategy to operationalise the quality dimension including: i) Availability of programmes in all locations of the territory; ii) Accessibility to these programmes free of charge/affordable and with adequate transportation; iii) Acceptability of these programmes with trained educators formally employed; and iv) Adaptability in terms of language of provision and content tailored for the target public.

Methodology

Methodological flexibility without compromising comparability: Thanks to ISCED 2011, methodology related to indicators of participation in formal education and training is sound and well established throughout most countries. However, the existent methods to measure participation in non-formal education and training varies substantially across the globe. Although AES and PIAC participating countries will have a higher degree of comparability, many non-participating countries will also be able to provide comparable data for NFET using national methodologies. However, considering the multiplicity and heterogeneity of methodologies for NFET data, some methodological principles will have to be established.

Full national coverage: Availability of NFET data may be restricted to specific locations in the country and, consequently, cause a bias in the participation rate. Therefore, countries should only report NFET figures if they represent all national territory.

Disaggregation by sex: To provide relevant information aligned with the main concept of the target, a minimal requirement for the global indicator is to have data disaggregated by sex.

Use of official data: In the absence of a national survey, combination of different data sources may be the only way of gathering relevant information. In these cases, special attention must be given to the origin of the data as the monitoring framework is committed to be based on official data sources.

Combination of data sources: Having all data (i.e. participation in FET, NFET and population data) coming from the same source, would benefit quality control as well as comparability among countries and over time. Considering that many countries will not be able to conduct regular national household surveys to estimate the participation rate, a combination of data sources may be an alternative. For instance, the UIS survey's figures on formal education could be combined with NFET data coming from administrative sources or NFET surveys. However, two major points need to be addressed in these situations: i) duplicated data (i.e. same individuals participating in FET and NFET) can have a substantial impact over general participation rate for some countries; and ii) disaggregation and error estimates can be compromised for variables such as location, disability, and wealth.

Scope of NFET for administrative data: It is expected that countries will provide NFET data based on household surveys. Alternatively, countries may be able to provide information only from

administrative data sources. In this case, it is important to ensure that the whole spectrum of NFET programmes is covered. The ISCED 2011 definition of non-formal education and training and the NFET categories used by AES and PIAAC are relevant to assess the scope of NFET.

Reference period of 12-months: Aiming at the most comprehensive time-frame measure for participation, the 12-months period should be adopted as the standard for the indicator. For countries adopting a shorter period (e.g. 4-week) for NFET in LFS, an alternative would be to include a 12-months period question for those respondents who declared not having participated in any NFET in the last 4-weeks.

Standard relevant question for NFET in LFS: Countries already have their own tested structure for questions related to participation in formal education, which are comparable via ISCED 2011. However, the absence of international standards for NFET entails a minimum wording alignment of survey questions to enable international comparison. The replication of the NFET question battery suggested by AES would be ideal for comparability purposes, but this might not be feasible considering the multiple costs involving the adaptation or inclusion of a single new question in national household surveys (respondent burden, financial and operational costs, etc.). Therefore, the following simplified version of the AES's main NFET question is suggested to be included right after the question on participation in formal education:

Source	Wording
Simplified (based on AES)	During the last 12 months, have you participated in any <i>other</i> organised learning activities with the intention to improve knowledge or skills in any area (including hobbies) either in leisure time or in working time?
	Example of activities: courses, workshops and seminars, guided on-the-job training, or private lessons.

Some instruments from existing national household surveys already include questions that are comparable to the simplified one suggested above, such as the ones presented below:

Sample of comparable questions:

Source	Wording
AES	During the last 12 months have you participated in any of the following activities - completed or ongoing - with the intention to improve knowledge or skills in any area (including hobbies) either in leisure time or in working time? a) Courses b) Workshops and Seminars c) Guided on-the-job training d) Private lessons?
PIAAC	We would now like to turn to other organised learning activities you may have participated in during the last 12 months, including both work and non-work related activities. We will distinguish between courses mentioned on this show card.
Timor-Leste	In the last 12 months, how many training courses including private lessons have you attended?
Costa Rica	Regular education aside, has (Name) been registered in a course or any other type of learning for which this person has received a diploma or been certified?

Likewise, other questionnaires contain similar items that would require few adjustments to become comparable. The following table show some examples of this case:

Sample of partially comparable questions:

Source	Wording	Issues
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Armenia	Did you take any course/ vocational training during the last year? 1-Yes, connected with my present job / activity 2- Yes, other	The term vocational can be restrictive.
Bangladesh	In the last 12 (twelve) months have you attended any vocational training?	The term vocational can be restrictive.
Bhutan	Did [NAME] ever receive other type of learning (traditional, non-formal, self learning, other)?	“self-learning” is not aligned with the definition for NFET
Bolivia	During this year, have you registered for or enrolled in any course of school education, alternative education, higher or post-graduate education?	Reference period. NFET is not completely covered
EU LFS	Did you attend any courses, seminars, conferences or received private lessons or instructions outside the regular education system (hereafter mentioned as taught learning activities) within the last 4 weeks	Reference period.
Egypt	Did you have any type of training (vocational-skilled) during the previous four weeks?	Reference period. Restricted to “vocational-skilled”
Indonesia	Has (NAME) ever had training/course and got certificate?	Reference period.

Finally, there is another set of questions that present a low level of comparability as they are not conceptually aligned with the indicator or do not sufficiently cover the scope of NFET:

Sample of **not** comparable questions:

Source	Wording	Issues
El Salvador	Have you participated in any course in the institution or company that you work for?	Reference period. Restricted to work qualifications.
Guatemala	In the last six months, have you attended courses for work qualification?	Reference period. Restricted to work qualifications.
Pakistan	<i>Has... ever completed any technical/vocational training such as auto or engine mechanics, carpentry, typing, computer, tailoring etc.</i>	Reference period. Restricted to work qualifications.
Uganda	<i>Did (you/Name) participate in any business, entrepreneurship, or microenterprise development training?</i>	Reference period. Restricted to work qualifications.
Zambia	Hasever received any skills training? (restrict to crafts training)	Reference period. Restricted to work qualifications.

UNSD/IAEG or ILO recommendations on LFS: The implementation of a NFET standardized question in the LFS of different countries can be articulated via a resolution or recommendation of the UNSD/IAEG to countries. Alternatively, as suggested by the GEM Report (Unesco, 2017, p. 156), the International Congress of Labour Statisticians (ICLS), with the request and approval of the ILO, could develop a resolution in relation to NFET data collection in Labour Force Surveys.

Work Plan

The following actions are recommended to facilitate the implementation of the indicator:

#	Action	Period	Responsible
1	Agreement on definitions and methodology: Confirm conceptual and methodological definitions for the indicator	2018/1Q	TCG

2	Administration of a quick survey with TCG countries and others to confirm data availability and methodology for NFET	2018/1Q	UIS
3	Contact with UNSD/IAEG or ILO to confirm feasibility of a recommendation related to NFET in Labour Force Surveys	2018/1Q	UIS
4	Articulation between UIS, Eurostat and OECD to confirm best strategy for AES and PIAAC countries' data collection	2018/2Q	UIS
5	Administration of the UIS pilot survey on non-formal education and training	2018/2Q	UIS

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Bibliography

Boeren, E. (2014). Evidence-based policy-making: the usability of the Eurostat Adult Education Survey. *International Journal of Lifelong Education*, 33(3), 275–289. <https://doi.org/10.1080/02601370.2014.891887>

Boeren, E. (2016). *Lifelong learning participation in a changing policy context: an interdisciplinary theory*. Houndmills, Basingstoke, Hampshire New York, NY: Palgrave Macmillan.

Boyadjieva, P., & Ilieva-Trichkova, P. (2017). Between Inclusion and Fairness: Social Justice Perspective to Participation in Adult Education. *Adult Education Quarterly*, 67(2), 97–117. <https://doi.org/10.1177/0741713616685398>

Connal, C., & Sauvageot, C. (2005). NFE-MIS Handbook. Developing a Sub-National Non-Formal Education Management Information System. UNESCO.

Desjardins, R. (2015). Participation in adult education opportunities: Evidence from PIAAC and policy trends in selected countries, background paper for the Education for All Global Monitoring Report 2015. Retrieved from <http://unesdoc.unesco.org/images/0023/002323/232396e.pdf>

EUROSTAT. (2016). *Classification of learning activities (CLA). MANUAL 2016 edition*. (2016th ed.). Luxembourg: Publications Office of the European Union. Retrieved from <http://ec.europa.eu/eurostat/documents/3859598/7659750/KS-GQ-15-011-EN-N.pdf/978de2eb-5fc9-4447-84d6-d0b5f7bee723>

Goglio, V., & Meroni, E. C. (2014). *Adult participation in lifelong learning: technical briefing*. Luxembourg: Publications Office. Retrieved from <http://dx.publications.europa.eu/10.2788/43117>

Holford, J., & Mleczko, A. (2011). The European indicator of adult participation in lifelong learning: the significance of interview questions. *Paper Presented at the 41st Annual SCUTREA Conference, 5-7 July 2011*. Retrieved from www.leeds.ac.uk/educol/documents/200854.pdf

Holford, J., & Mohorčič Špolar, V. A. (2012). Neoliberal and inclusive themes in European lifelong learning policy. *Lifelong Learning in Europe: Equity and Efficiency in the Balance*, 39–62.

International Labour Office. (2010). *ILO School-to-work transition survey: a methodological guide*. Geneva: ILO.

Lavrijsen, J., & Nicaise, I. (2015). Patterns in life-long learning participation. A descriptive analysis using the LFS, the AES and PIAAC.

Murakami, Y., & Blom, A. (2008). Accessibility and Affordability of Tertiary Education in Brazil, Colombia, Mexico and Peru within a Global Context. *Policy Research Working Paper*, (4517). Retrieved from <http://hdl.handle.net/10986/6427>

Niens, L., Van de Poel, E., Cameron, A., Ewen, M., Laing, R., & Brouwer, W. (2012). Practical measurement of affordability: an application to medicines. *Bulletin of the World Health Organization*, 90(3), 219–227. <https://doi.org/10.2471/BLT.10.084087>

OECD. (2013). *OECD skills outlook 2013: first results from the survey of adult skills*. Retrieved from <http://site.ebrary.com/id/10824366>

OECD. (2016). *The Survey of Adult Skills*. OECD Publishing. <https://doi.org/10.1787/9789264258075-en>

Pastore, F. (2017). Analysis of Education and Training Using the ILO School-to-Work Transition Survey. Unesco. Retrieved from <http://unesdoc.unesco.org/images/0025/002595/259575e.pdf>

Rubenson, K. (2018). Conceptualizing Participation in Adult Learning and Education: Equity Issues. In M. Milana, S. Webb, J. Holford, R. Waller, & P. Jarvis (Eds.), *The Palgrave International Handbook on Adult and Lifelong Education and Learning* (pp. 337–357). London: Palgrave Macmillan UK. https://doi.org/10.1057/978-1-137-55783-4_18

Tomaševski, K. (2006). *Human rights obligations in education: the 4-A scheme*. Nijmegen: Wolf Legal Publishers (WLP).

UIL. (2016). *3rd Global report on adult learning and education: the impact of adult learning and education on health and well-being; employment and the labour market; and social, civic and community life*. Hamburg: UNESCO Institute for Lifelong Learning (UIL).

UNESCO. (2015). *Achieving literacy for all: NFE-MIS report 2014-15*. Nepal: UNESCO Office Kathmandu.

Unesco (Ed.). (2016). *Education for people and planet: creating sustainable futures for all* (Second edition). Paris: Unesco.

Unesco. (2017). *Accountability in education: Meeting our commitments*. (First Edition). Paris: Unesco.

UNESCO Institute for Statistics. (2012). *International standard classification of education: ISCED 2011*. Montreal, Quebec: UNESCO Institute for Statistics. Retrieved from <http://www.uis.unesco.org/Education/Documents/isced-2011-en.pdf>

UNESCO Institute for Statistics. (2017, July). Metadata for the global and thematic indicators for the followup and review of SDG 4 and Education 2030. Retrieved from <http://sdg4monitoring.uis.unesco.org/metadata-global-thematic-indicators-follow-up-review-sdg4-education2030-2017.pdf>

UNESCO, OECD, & EUROSTAT. (2016). UOE data collection on formal education: Manual on concepts, definitions and classifications. VERSION OF 11th of July 2016. Retrieved from http://uis.unesco.org/sites/default/files/documents/uoe2016manual_11072016_0.pdf

Usher, A., & Cervenán, A. (2005). Global Higher Education Rankings: Affordability and Accessibility in Comparative Perspective, 2005. *Online Submission*.

World Health Organization (Ed.). (2010). *Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies*. Geneva: World Health Organization.

Yasunaga, M. (2014). Non-formal education as a means to meet learning needs of out-of-school children and adolescents. *Background Paper Prepared for Fixing the Broken Promise of Education for All: Findings from the Global Initiative on Out-of-School Children*. Montreal: UNESCO Institute for Statistics, 120.



Yekhlef, A. (2015). *Développement d'une approche conceptuelle et méthodologique d'un socle commun de compétence qui intègre le non formel et la vision holistique: rapport d'étude*. Association pour le Développement de l'Education en Afrique (ADEA). Retrieved from http://www.adeanet.org/sites/default/files/etude_sur_un_socle_commmun_de_compentes_qui_integre_le_non_formel-0.4.pdf

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Annex I – Existing cross-national initiatives

EU Adult Education Survey(AES)

The Adult Education Survey (AES) is one component of the European statistical system on Adult Education. The other two components are the Continuing Vocational Training Survey (CVTS) and the Labour Force Survey (LFS). The AES is a household-based sample survey carried out twice since 2007. The first wave, AES 2007, had 22 participating countries and in the second one, AES 2011, 30 countries implemented the survey. The third wave AES 2016 is currently being conducted and the full results are expected to become available in the first semester of 2018. All information described below refer to the third wave^{xvi}, except when stated otherwise.

Target population: National population aged 25 to 64 years old.

Time reference: Previous 12 months prior to the interview day

Coverage: 35 countries participated in the 2016 AES: Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, the United Kingdom, Norway, Switzerland, Serbia and Turkey. Albania, Bosnia and Herzegovina, as well as the Former Yugoslav Republic of Macedonia also participated in the 2016 round.

Definitions: Concepts of formal and non-formal education are aligned with ISCED 2011. Four types of non-formal education programmes are singled-out: i) Courses; ii) Workshops or seminars; iii) Guided on-the-job training (planned periods of education, instruction or training directly at the workplace, organised by the employer with the aid of an instructor); and iv) Lessons.

Main relevant questions:

ID	Wording
FED	During the last 12 months, that is since <<month, year>> have you been a student or apprentice in formal education or training? [1] Yes [2] No
NFE	During the last 12 months have you participated in any of the following activities - completed or ongoing - with the intention to improve knowledge or skills in any area (including hobbies) either in leisure time or in working time? a) Courses b) Workshops and Seminars c) Guided on-the-job training d) Private lessons? [1] Yes [2] No

Each of these questions are succeeded by questions requesting additional information regarding the education or training. In relation to NFE, the respondent is also asked to report the number of activities that he/she has participated in and provide further information for up to seven of them (type and job relation).

Disaggregation:

Group	ID	Question
Sex	SEX	No specific question used. It can be filled in directly by the interviewer.
Location	DEG_URB	Degree of urbanisation of the area the respondent lives in. [1] Cities [2] Towns and suburbs [3] Rural areas
Wealth	HHINCOME	The “net monthly equivalised income of the household”

Disability	NA	No direct question. There is a relevant information in "MAINSTAT - the respondent's main current labour status". Answer [33] Permanently disabled
Indigenous	NA	NA
Conflict	NA	NA

Reliability thresholds: "...Eurostat systematically ensures that at least three people of a given sample are used for any estimates computed on that sample [...] The following rules – identical to those used for the publication of EU-SILC data (Statistics on Income and Living Conditions) – are applied to AES results: An estimate should not be published if it is based on less than 20 sample observations or if the non-response for the item concerned exceeds 50%. An estimate should be published with a flag ('u' for low reliability) if it is based on 20 to 49 sample observations or if non-response for the item concerned exceeds 20% and is lower or equal to 50%. An estimate shall be published normally when based on 50 or more sample observations and the item's non-response does not exceed 20%." ^{xvii}

EU Continuing Vocational Training Survey (CVTS)

The Continuing Vocational Training Survey (CVTS) is another component of the European statistical system on Adult Education. The CVTS is an enterprise-based survey carried out since 1993 and it is currently disseminating the results from its fifth wave. All information described below refer to the fifth wave except when stated otherwise.

Target population: Enterprises with at least 10 or more employed persons and belonging to a certain group of economic activities in each country.

Time reference: Previous year

Coverage: Data of the following 22 countries are available in the CVTS 4 microdata file: Belgium, Bulgaria, Czech Republic, Denmark, Germany, Estonia, Spain, France, Italy, Cyprus, Lithuania, Luxembourg, Hungary, Malta, Poland, Portugal, Romania, Slovakia, Finland, Sweden, United Kingdom and Norway.

Definitions: The survey does not use the same concepts of formal and non-formal education and training. Instead, the instrument focuses on Initial Vocational Training (IVT) and Continuing Vocational Training (CVT). The latter is defined as "*training measures or activities which have as their primary objectives the acquisition of new competences or the development and improvement of existing ones and which must be financed at least partly by the enterprises for their persons employed who either have a working contract or who benefit directly from their work for the enterprise such as unpaid family workers and casual workers*"^{xviii}

Main relevant questions:

ID	Wording
B1	In 2015, did your enterprise provide internal or external CVT courses?

This question is followed by a series of questions related to the type of CVT and the proportion of all persons employed who took part in each of the CVT's types.

Disaggregation: The unit of analysis is the enterprise. Therefore, there are no information on employees' individual characteristics.

Reliability thresholds: "Eurostat systematically ensures that at least three enterprises are used for estimates. Additional rules are decided bilaterally with each country to avoid the publication of results presenting some risks of disclosure of information. Some breakdowns are therefore published with the flag 'c' (confidential) for this purpose."^{xix}

ILO School-to- Work Transition Survey (SWTS)

The ILO School-to-Work Transition Survey (SWTS) is a methodological framework being implemented by several countries, since 2004, to generate labour market information on young people. The information detailed below refers to the methodological guide designed in 2009. (International Labour Office, 2010)

Target population: National population aged 15 to 29 years old.

Time reference: Previous 12 months prior to the interview day

Coverage: The first surveys were implemented in three countries: Indonesia, Sri Lanka and Viet Nam. Currently, there are datasets available for 34 countries: Bangladesh, Cambodia, Nepal, Samoa, Viet Nam, Armenia, FYR Macedonia, Kyrgyzstan, Republic of Moldova, Montenegro, Russian Federation, Serbia, Ukraine, Brazil, Colombia, Dominican Republic, El Salvador, Jamaica, Peru, Egypt, Jordan, Lebanon, Occupied Palestinian Territory, Tunisia, Benin, Liberia, Madagascar, Malawi, Republic of Congo, Sierra Leone, Togo, Uganda, United Republic of Tanzania and Zambia.

Definitions: There are no explicit definitions of formal and non-formal education and training. However, the framework includes information on initial education of respondents as well as participation in education and training for those who are employed.

Main relevant questions:

ID	Wording
C1	Most recent educational activity (Asked to all)
C20	In the last week, what was your main activity? [1] Attend education/training
F28	Did you receive any training for your current activity?
F29	What was the main type of training? (choose the main one)

Disaggregation:

Group	ID	Question
Sex	B3	[1] Female [2] Male
Location	B6	Describe your current place of residence: [1] Rural area [2] Small town in rural area [3] Metropolitan area [4] Large city
Wealth	B18	On average, what is the total income of your household per month?
Disability	NA	NA
Indigenous	NA	No relevant questions in the main framework, however the survey manual "recommend[s] an additional question be added in section B along the lines of the

		following that was used in the questionnaire for Kosovo: What is your ethnic belonging? • Albanian • Serbian • Other, please specify
Conflict	NA	NA

Reliability thresholds: Although the SWTS framework implements general sampling guidelines, each country has its' own sampling procedures and characteristics.

OECD Survey of Adult Skills

The Survey of Adult Skills is part of the OECD's Programme for the International Assessment of Adult Competencies (PIAAC) and aims to assess adult's proficiency in literacy, numeracy and problem-solving skills. The first round of the survey was conducted in 2011-2012 and additional countries participated in a second round of the survey in 2014-2015. (OECD, 2016)

Target population: Non-institutionalised population, aged 16-65 years, residing in the country at the time of data collection.

Time reference: Previous 12 months prior to the interview day

Coverage: 24 countries in the first round: Australia, Austria, Belgium, Canada, the Czech Republic, Cyprus, Denmark, Estonia, Finland, France, Germany, Ireland, Italy, Japan, Korea, the Netherlands, Norway, Poland, the Russian Federation, the Slovak Republic, Spain, Sweden, the United Kingdom and the United States. 9 countries in the second one: Chile, Greece, Indonesia, Israel, Lithuania, New Zealand, Singapore, Slovenia and Turkey.

Definitions: Concepts of formal and non-formal education are aligned with ISCED 2011.

Main question:

ID	Wording
B_Q04a	During the last 12 months, that is since [^MonthYear], have you studied for any formal qualification, either full-time or part-time?
B_R12	We would now like to turn to other organised learning activities you may have participated in during the last 12 months, including both work and non-work related activities. We will distinguish between courses mentioned on this show card. This introduction is succeeded by questions related to participation and number of activities for these types of courses: B_Q12a - open or distance education; B_Q12c - organized sessions for on-the-job training or training by supervisors or co-workers; B_Q12e - seminars or workshops; and B_Q12g - courses or private lessons, not already reported.

Disaggregation:

Group	ID	Question
Sex	A_N01	Is the respondent male or female?
Location	AA1	"Name of town". This information is used to generate derived variables such as TL2 region, Size of community, Other regional, community or neighbourhood characteristics.
Wealth	D_Q16a	"What is the easiest way for you to tell us your usual gross wage or salary for your current job?" Depending on the answer, further questions are asked related to this wage or salary for those who received.

Disability	NA	No direct question. There is a relevant information in "C_Q07" Please look at this card and tell me which ONE of the statements best describes your current situation. [7] Permanently disabled
Indigenous	NA	NA
Conflict	NA	NA

Reliability thresholds: Estimates based on a sample with less than 30 observations were flagged in the first report of the survey (OECD, 2013).

UOE data collection

UNESCO, OECD and Eurostat organize every year a collection of national data on formal education and training. Countries report data on enrolment in programmes from ISCED level 0 to 8 usually based on administrative sources. Adult education programmes not recognised as part of the formal education system are not included in this data collection. Entirely work-based training is also excluded. (UNESCO, OECD, & EUROSTAT, 2016)

Target population: Population enrolled in formal education and training programmes.

Coverage: 102 countries have reported data on enrolment in upper secondary vocational programmes in 2015.

Definitions: The concept of formal education is aligned with ISCED 2011.

Time reference: Previous calendar/academic year.

Disaggregation: Data on enrolment is collected by sex.

Reliability thresholds: Most of countries use administrative data. Estimates of coverage of these data, however, is not explicitly stated by countries.

Annex II- Affordability and Quality

Affordability is a concept that is found in different goals of the SDGs. The goals 3, 6, 7 and 9 have at least one target mentioning the concept of affordability. However, only one global indicator approved by the ECOSOC in 2017 has affordability among its constructs^{xx}.

The indicator 3.b.3 is related to the provision of affordable medicines. Even though there is no metadata published for this indicator yet ^{xxi}, the World Health Organization (2010, p. 61) has developed a standardized methodology for administering surveys of medicine prices and affordability. To operationalize the concept, affordability is estimated by the number of daily wages that “the lowest-paid unskilled government worker” (LPGW) would need to spend on a standard treatment. This methodology has been criticized, particularly for international comparisons, because it does not indicate the proportion of the population for which the treatment is unaffordable and disregards the income distribution of a given country (Niens et al., 2012).

The adaptation of this methodology to education would face some additional challenges considering that there is no standardized methodology to collect data on costs of education and training programmes. There are few international data sources available and they are often based on administrative data of students’ fees charged by universities. Annual international reports such as the OECD’s “Education at a Glance” and the European Commission’s “National student fee and support systems in European higher education” publish information annually on these data. However, there is no analysis regarding affordability in these publications. The few analysis in this area are limited to higher education and rely either on combination of data sources (Unesco, 2016, 2017; Usher & Cervenán, 2005) or household expenses from national surveys (Murakami & Blom, 2008). The possible adoption of latter strategy could benefit from an initiative of the Intersecretariat Working Group on Household Surveys (ISWGHS) implemented in 2017: The “Task Force on standards for education spending estimates based on household survey data”.

Alternatively, the operationalization of the concept of affordability could also be substituted by the proportion of publicly funded education and training provided free of charge. Both 4.1.7 and 4.2.5 thematic indicators propose the use of administrative data to calculate the number of grades in primary and secondary “free from tuition fees”. Additionally, the Education 2030 - Framework for Action also advocates that tertiary education programmes should be made “*progressively free*”.

The concept of **quality** is not covered by the global indicator either, nor has it a clear definition implemented by the monitoring framework. The concept pervades all sustainable development goals and it is explicitly mentioned in the first three targets of the SDG4. In fact, most of the SDG4 global and thematic indicators are themselves efforts to operationalize specific dimensions of quality education.

To describe national initiatives for quality assessment and assurance, the 2016 and 2017 GEM Reports (UNESCO, 2016, 2017) focuses separately on Adult Education, TVET and Higher Education. This is due to the significantly different nature of these types of programmes, specially concerning the availability of quality assessments. Apart from initiatives related to tertiary level institutions and programmes, there are no established cross-national mechanisms to assess quality in TVET or non-formal youth and adult education. The main challenge, therefore, would be to create a mechanism to assess quality on formal and non-formal programmes regardless of level or orientation, with a comparative

approach. Some international projects provide information that could work as proxy measures to assess quality.

Similar to what was proposed by the indicators 4.7.1 and 4.1.2, a feasible alternative would be to collect information on the extent to which governments implement national frameworks for quality assessments and assurance. At the tertiary level, some international initiatives related to quality assurance have been in place for at least 10 years, three examples are the UNESCO/OECD Guidelines for Quality Provision in Cross-border Higher Education, the standards and guidelines for quality assurance in the European Higher Education Area (ESG), and the MERCOSUL Arcu Sul Accreditation System.

Taking the whole education system into consideration, the 4-A scheme (Tomaševski, 2006) provides a useful strategy to operationalise the quality dimension including: i) Availability of programmes in all locations of the territory; ii) Accessibility to these programmes free of charge/affordable and with adequate transportation; iii) Acceptability of these programmes with trained educators formally employed; and iv) Adaptability in terms of language of provision and content tailored for the target public.

The Third Global Report on Adult Learning and Education – III GRALE (UIL, 2016) presents the results of a survey with valid answers from 139 countries that provided information regarding several dimensions of quality. For instance, the survey found that 66% of the participating countries gather data about completion rates, and 81% of them provide pre-service and in-service training for adult educators and facilitators. Information on educators and their training/education as well as indicators such as teacher per pupil are particularly easier to be collected among countries. The survey also found that 70% of the participating countries confirm to “have a policy framework to recognize, validate and accredit non-formal and informal learning”.

Despite the absence of the affordability and quality concepts in the global indicator, the TCG in its second meeting has classified the indicator 4.3.1 as having a “fair” proximity of the concept and proximity of the target. This gives an acceptable level of agreement to proceed with the indicator such as it is proposed currently by the global monitoring framework.

However, the lack of alignment with the concepts of “affordability” and “quality” must be addressed by the methodological work on the global indicator. This is possible at least in three ways: i) with conceptual adjustments in the indicator to better reflect the target, ii) through the inclusion of these concepts in new regional or national indicators, or iii) via more substantial changes during the first revision planned for 2020. The recommendations’ report has a more detailed discussion on strategies to incorporate these two concepts into the monitoring framework.

Annex III – Participation in NFET questions

Armenia

Source: Labour Force Questionnaire No. 2 – 2015 - Approved by the order No. 04-A, from January 30, 2014 of the State Council of Statistics of RA

Available at: <http://www.ilo.org/surveydata/index.php/catalog/1388/download/10564>

Accessed [04/11/2017]

Filter: Household members aged 15-75 (including).

Page	Variable	Wording	Alternatives
11	47	Did you take any course/ vocational training during the last year?	1-Yes, connected with my present job / activity 2- Yes, other 3- No 4 - Do not know

Bangladesh

Source: Quarterly Labour Force Survey 2015

Available at: <http://www.ilo.org/surveydata/index.php/catalog/1545/download/11983>

Accessed [05/11/2017]

Filter: Household members who are 15 years and above

Part B: Vocational Training (Outside the General Education System)

Page	Variable	Wording	Alternatives
8	31	In the last 12 (twelve) months have you attended any vocational training?	1-Yes 2- No -> 35
8	32	For how long did you attend this training? (In case of multiple trainings, the most important one should be	1 <1week 2 1 – 2 weeks 3 3 – 4 weeks 4 1 – 3 months 5 4 – 6 months 6 > 6 months
8	33	What type of training did you receive?	2-digit List
8	34	From what source did you receive this training (diploma/ certificate)?	1 Government institute 2 Non-government institute 3 NGO 4 Foreign institute 5 Joint venture institute 6 Others
8	35	What type of training does she/he wants to receive?	00 No need for training 2-digit list q33

Bolivia

Source: Encuesta de hogares 2015

Available at: <http://www.ilo.org/surveydata/index.php/catalog/1443/download/11182>

Accessed [04/11/2017]

Filter: Persons aged 4 years or older.

Page	Variable	Wording ^{xxii}	Alternatives
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9	4	During this year, have you registered for or enrolled in any course of school education, alternative education, higher or post-graduate education?	1-Yes 2-No
9	5	To which level and course of school, alternative, higher or postgraduate education have you registered or enrolled this year?	12. Literacy course 13. Initial education or pre-school 41. Primary (1 to 6 years) 42. Secondary (1 to 6 years) 61. Alternative Youth Education (EJA) 62. Adult Primary Education (EPA) 63. Adult Secondary Education (ESA) 64. Post-Literacy National Literacy Programme 65. Special Education 71. Normal 72. University 73. Postgraduate diploma 74. Master postgraduate 75. Doctotal postgraduate 76. University technical 77. Institute technical (longer or equal to 1 year) 78. Military and Police Institute 79. Adult Technical Education (ETA) 80. Other courses (shorter than one year)

Egypt

Source: Labour Force Survey – Long questionnaire 2014

Available at: <http://www.ilo.org/surveydata/index.php/catalog/1361/download/10378>

Accessed [05/11/2017]

Filter: For persons six years or above and not enrolled in education.

Page	Variable	Wording	Alternatives
6	110	Did you have any type of training (vocational-skilled) during the previous four weeks?	1-Yes 2- No

EU LFS

Source: EU Labour Force Survey Database User Guide Version: September 2017

Available at: <http://ec.europa.eu/eurostat/documents/1978984/6037342/EULFS-Database-UserGuide.pdf>

Accessed [04/11/2017]

Filter: Everybody aged 15 years or more

Page	Variable	Wording	Alternatives
NA	COURATT	Did you attend any courses, seminars, conferences or received private lessons or instructions outside the regular education system (hereafter mentioned as taught learning activities) within the last 4 weeks	1 Yes 2 No 9 Not applicable (child less than 15 years) Blank) No answer

NA	COURLEN	Number of hours spent on all taught learning activities within the last 4 weeks	3 dig.) Number of hours 999) Not applicable (COURATT=2,9,blank) Blank) No answer
NA	COURPURP	Purpose of the most recent taught learning activity (optional)	1)Mostly job related (professional) 2)Mostly personal/ social 9)Not applicable (COURATT=2,9,blank) Blank) No answer
NA	COURFILD	Field of the most recent taught learning activity (optional)	
NA	COURWORH	Did the most recent taught learning activity take place during paid working hours? (optional)	1)Only during paid working hours 2)Mostly during paid working hours 3)Mostly outside paid working hours 4)Only outside paid working hours 5)No job at that time 9)Not applicable (COURATT=2,9,blank) Blank)No answer

Guatemala

Source: ENCUESTA NACIONAL DE EMPLEO E INGRESOS – ENEI 2016

Available at: <http://www.ilo.org/surveydata/index.php/catalog/1504/download/11761>

Accessed [09/11/2017]

Filter: Household members aged 13-29.

Page	Variable	Wording ^{xxiii}	Alternatives
5	1	In the last six months, have you attended courses for work qualification?	1-Yes 2- No -> Skip to 5
	2	Which institution or company organized the last course that you attended?	
5	3	Besides what you have learned, what was the main benefit of the qualification that you have received in the last six months?	1- To get a paid job 2- To create your own company (with employees) 3- To be self-employed. 4- To get a raise in the income that you had. 5 - To get a diploma, certificate or license 6 - To get a job promotion 7 - To improve the productivity of your company or activity 8 -No benefit Other.....
5	4	¿How did you pay for your last qualification course?	1 - From my money 2- Someone or relative have paid 3 - I used funding offered by the government 4- I attended free qualification courses offered by others 5-My employer has offered the qualification

5	5	Are you interested in undertaking any course for work qualification?	1-Yes 2- No -> Skip to section D
5	6	In which area would you like to receive qualification?	1 - Computers 2- Cooking 3 - Languages 4 - Sewing 5 - Sales 6 - Beauty consultant 7- Painting, design, arts 8- Auto mechanics 9-Other

Pakistan

Source: Labour Force Survey (2014-15) – Annex II

Available at: <http://www.ilo.org/surveydata/index.php/catalog/1044/download/6755>

Accessed [05/11/2017]

Filter: All persons 10 years and over

Page	Variable	Wording	Alternatives
3	(4.11)	Has... ever completed any technical/vocational training such as auto or engine mechanics, carpentry, typing, computer, tailoring etc.	Yes on job 10. During last year 11. 2-3 years ago 12. 4-5 years ago 13. 6-7 years ago 14. 8 years or more ago Yes off job 15. During last year 16. 2-3 years ago 17. 4-5 years ago 18. 6-7 years ago 19. 8 years or more ago 20. No (Skip to (Col.4.15))
3	(4.12)	Type/Field of Training	
3	(4.13)	Duration of training (in weeks)	
3	(4.14)	Provider of training	1. Employer/ establishment 2. Private training provider 3. Public/Govt. training provider 4. Other (Specify)

Timor-Leste

Source: Timor-Leste Labour Force Survey 2013- Draft Questionnaire Version 01-10-2013

Available at: <http://www.ilo.org/surveydata/index.php/catalog/1163/download/8031>

Accessed [04/11/2017]

Filter: Persons aged 10 years and over

Training within the last 12 months (outside of the general education system i.e. schools, universities)
For

Page	Variable	Wording	Alternatives
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6	H13	In the last 12 months, how many training courses including private lessons have you attended?	- 0 training course => H21 - 1 training course - 2 training courses, - 3 or more training courses
6	H14	What was the (subject) topic of the last training that you attended in 12 months?	Check List of Training Courses
7	H15	What was the purpose of this training?	1. job preparation 2. upgrading my skills 3. refresh skills that I learned in the past 4. to kill time 5. not sure
7	H16	For how long did you attend (Name Course) training?	1= Less than 1 week 2= 1 week to < 2 weeks 3= 2 weeks to < 3 weeks 4= 3 weeks to < 4 weeks 5= 1 month to < 3 months 6= 3 months to < 6 months 7= 6 months or longer
7	H17	Who provided this training?	1. Private lessons from an individual 2. Attended this training outside Timor-Leste 3. Name of the training institution if training attended in Timor-Leste (Refer to the list of training providers)
7	H18	Was any official certificate granted to you at the end of this training?	1= Yes 2= No □ H21
7	H19	What was the title of the certificate awarded to you and the year?	
8	H20	What happened after you completed the training?	1. Nothing 2. I was able to get a job 3. My salary increased 4. I was promoted at work 5. My job skills have improved 6. I got an internship/traineeship with a company 7. It was a waste of time and money

Uganda

Source: 2011/2012 Labour Force and Child Labour Survey

Available at: <http://www.ilo.org/surveydata/index.php/catalog/1400/download/10664>

Accessed [05/11/2017]

Filter: All usual and regular household member age 5 years and above.

Page	Variable	Wording	Alternatives
5	HB26	Did (you/Name) participate in any business, entrepreneurship, or microenterprise development training?	1=Yes 2=No
5	HB27	Did (you/Name) learn a trade or technical skill?	1=Yes 2=No
5	HB28	What type of trade or technical skill did (you/Name) learn?	(SEE CODES IN CODE LIST, ANNEX 1)



5	HB29	How did (you/Name) acquire this trade or skill?	1=Vocational school/Course 2=Apprenticeship or on the job training 3=Learned from a friend or family member 4=From an NGO or community organization 5=Other, specify
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Zambia

Source: 2014 LABOUR FORCE SURVEY – FORM B

Available at: <http://www.ilo.org/surveydata/index.php/catalog/1495/download/11571>

Accessed [04/11/2017]

Filter: Household members aged 15 years or older.

Page	Variable	Wording	Alternatives
4	B9	Hasever received any skills training? (restrict to crafts training)	1. Yes 2. No>>Section C
4	B10	How didacquire this training?	1. On the Job 2. At Government/Public learning institution 3. At private learning institution 4. Apprenticeship 5. Self trained>>B14 6. Other (Specify)
4	B11	Hasobtained any certification in this skill?	1. Yes 2. No
4	B12	The last time.....received training, how long did it last?	1. Less than 3 months 2. 3months but less than 6 months 3. 6 months but less than 1 year 4. 1 year but less than 3 years 5. 3 years and above
4	B13	The last time..... was trained, in what field was he/she trained?	ENTER THE FIELD TRAINING IN THE SPACE PROVIDED GET THE CODES FROM THE MANUAL ON PAGE 65.
4	B14	Has..... been able to apply this/these skills in any way possible?	1.Yes, Wage employment 2.Yes, Own business/Self employed agric 3.Yes, Own business/Self employed non-agric 4.Yes, benefit household 5.Not beneficial at all 6.No, Still unemployed 7.Yes, voluntary work

Bhutan



Source: Bhutan Living Standards Survey 2012 Report. Appendix 4 Questionnaire

Available at: <https://www.adb.org/sites/default/files/publication/30221/bhutan-living-standards-survey-2012.pdf>

Accessed [09/11/2017]

Filter: Age above 3

Page	Variable	Wording	Alternatives
164	ED12	Did [NAME] ever receive other type of learning (traditional, non-formal, self learning, other)?	a. Yes, traditional b. Yes, non-formal BLC c. Yes, non-formal PLC d. Yes, self learning e. Yes, other (specify) _____ f. No (>> ED17)
164	ED13	b. What is the Name of t Where did [NAME] attend or is attending?	1. Public 2. Private
164	ED14	How many years of this learning did [NAME] complete?	
164	ED15	Is [NAME] attending this learning this year?	1. Yes 2. No (>>BLOCK 1.3)
164	ED16	Where does the [NAME] currently attending?	1. Bhutan (>>BLOCK 1.3) 2. Outside Bhutan (>> next member)

Costa Rica

Source: Encuesta Continua de Empleo July 2014

Available at: http://www.inec.go.cr/sites/default/files/documentos-biblioteca-virtual/meecehousehold_03.pdf

Accessed [09/11/2017]

Filter: For people of 15 years of age or older

Page	Variable	Wording	Alternatives
7	A18	Regular education aside, has (Name) been registered in a course or any other type of learning for which this person has received a diploma or been certified?	1-Yes 2- No -> Move to A20
7	A18	b. What is the Name of the course?	(If the person mentions more than one course, enter the most relevant one for work, the most significant one, for which the person received a diploma or was certified)
7	A19	Which institution was in charge of the course?	INA.....01 Private Institute (Jimenez, Boston, etc).....02 Two-year college (CUNA,CUC, etc)...03 Public University.....04 Private University.....05 Public Institution.....06 Private company.....07 Abroad.....08 Other.....09

El Salvador

Source: Encuesta de Hogares de Propósitos Múltiples 2015

Available at: <http://www.ilo.org/surveydata/index.php/catalog/1487/download/11504>

Accessed [09/11/2017]

Filter: For those who are permanently or temporarily in a paid job (416=6 or 416=7)

Page	Variable	Wording	Alternatives
13	425A	Have you participated in any course in the institution or company that you work for?	1-Yes 2- No 3-DN/NA

Indonesia

Source: National Labor Force Survey (SAKERNAS) 2015, February

Available at: <http://catalog.ihsn.org/index.php/catalog/6770/download/81318>

Accessed [09/11/2017]

Filter: Household member aged 10 years and over

Page	Variable	Wording	Alternatives
7	1c.	Has (NAME) ever had training/course and got certificate?	1-Yes 2- No -> SUB BLOCK V.B
7	1d.	If "Yes", please stated the two main training/courses based on priority use:	

ANNEX IV – Draft metadata

The following metadata come from the UNESCO Institute for Statistics (2017, p. 34) and contain few suggestions for adaptation which are highlighted in the text.

4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex

Definition:

Percentage of youth and adults in a given age range (e.g. 15-24 years, 25-64 years, etc.) participating in formal or non-formal education or training in a given time period (e.g. last 12 months). Ideally, the indicator should be disaggregated by types of programme such as TVET, tertiary education, adult education and other relevant types and cover both formal and non-formal programmes. formal and non-formal education.

Formal education and training is defined as education provided by the system of schools, colleges, universities and other formal educational institutions that normally constitutes a continuous 'ladder' of full-time education for children and young people, generally beginning at the age of 5 to 7 and continuing to up to 20 or 25 years old. In some countries, the upper parts of this 'ladder' are organized programmes of joint part-time employment and part-time participation in the regular school and university system.

Non-formal education and training is defined as any organized and sustained learning activities that do not correspond exactly to the above definition of formal education. Non-formal education may therefore take place both within and outside educational institutions and cater to people of all ages.

Depending on national contexts, it may cover educational programmes to impart adult literacy, lifeskills, work-skills, and general culture.

Purpose:

To show the level of participation of youth and adults in education and training of all types.

Calculation method:

The number of people in selected age groups participating in formal or non-formal education or training is expressed as a percentage of the population of the same age.

$$PR_{AGi} = \frac{E_{AGi}}{P_{AGi}}$$

where:

PR_{AGi} = participation rate of the population in age group i in formal and non-formal education and training

E_{AGi} = enrolment of the population in age group i in formal and non-formal education and training

P_{AGi} = population in age group i

i = 15-24 years, 15 years and above, 25-64 years etc.

Interpretation:

A high value indicates a large share of the population in the relevant age group is participating in formal and non-formal education and training.

Type of data source:

Administrative data, household surveys.

Disaggregation:

By age and sex from administrative sources, and by age, sex, location and income from household surveys. Data by disability status is not currently available from most administrative or household survey sources. should only be reported if there are enough observations to provide reliable estimated.

Data required:

Numbers of participants by single year of age in formal and non-formal education and training; population estimates by single year of age.

Data sources:

Administrative data from schools and other places of education and training or household survey data on participants in formal and non-formal education and training by single year of age; population censuses and surveys for population estimates by single year of age (if using administrative data on enrolment). Data should also, ideally, be disaggregated by type of education or training.

Limitations and comments:

Formal and non-formal education and training can be offered in a variety of settings including schools and universities, workplace environments and others and can have a variety of durations.

Administrative data often capture only provision in formal settings such as schools and universities. Participation rates do not capture the intensity or quality of the provision nor the outcomes of the education and training on offer.

ANNEX V – Draft structure of UIS F&NFET data collection

T1: Number of students participating in formal and non-formal education and training by age-group, sex, and type of education and training.

Sex	Age group (years)	Formal education			Non-formal Education							
					NFET - Alternative to Initial Education		NFET - Life/work skills & social/cult. development		NFET - Total			
Males	15 - 20											
	21-24											
	25-44											
	45-65											
	>65											
	Age unknown											
	Total											
Females	15 - 20											
	21-24											
	25-44											
	45-65											
	>65											
	Age unknown											
	Total											
Males and females	15 - 20											
	21-24											
	25-44											
	45-65											
	>65											
	Age unknown											
	Total											

DRAFT

ANNEX VI - Principles for the indicator development

The expert groups responsible for building the monitoring framework have established several principles for the selection, development, and refinement of the indicators. The observation of these principles is essential to prevent the methodological development from deviating the indicators' original purposes. Apart from the "[Fundamental Principles of Official Statistics](#)", the indicators are expected to be also based on three sets of principles proposed for their selection and development, as well as refinement and revision.

Selection and development

In its report to the 47th Session of the UN Statistical Commission, the IAEG stated that the indicator framework for global monitoring followed five principles during the review of proposals and selection of the global indicators. These five principles had been taken into account since the presentation of a discussion paper by the United Nations Statistics Division (UNSD) in 2015^{xxiv}. This paper stressed the importance of the indicators to be methodologically sound, measurable, accessible, relevant, timely, internationally comparable, and limited in number.

These general principles were created with the intention of guiding the selection of indicators for the 169 targets of the SDGs in the beginning of the process. More recently, the UIS (2016, p. 26), as the custodian agency for the SDG4 indicators, has implemented five criteria to choose their indicators: relevance, alignment, feasibility, communicability and interpretability.

Refinement and revision

At the same time, the IAEG was also called to outline the basis for the long-term development of the indicators. For the benefit of the "alignment [...] with the target and issues of methodological soundness"^{xxv}, the indicators may experience yearly refinements or undergo two general revisions, planned for 2020 and 2025. For that, the IAEG has agreed on the criteria to define whether specific developments ought to be considered a refinement or a revision.

According to the IAEG, the scope of the refinements is limited to "specifying or correcting unit of measurement; simple clarification of terms used in the indicator; spelling and other obvious errors; "splitting" indicators into their components in multiple component indicators.". It is also conceded as a refinement "a minor change in an indicator [...] that will, in a simple way, solve a problem that is spotted when the collection of data has begun". All alterations beyond these refinements, including removing or adding new indicators, must only be considered at the 2020 and 2025 revisions.

Furthermore, the UN Statistical Commission, as well as the TCG, have emphasized in multiple occasions the need for the indicators to be disaggregated by, at least, sex, location, wealth, disability status, indigenous peoples and conflict-affected. It has also been subject of constant concern to the international organizations the use of official statistics produced at the national level. As stressed by the ECOSOC^{xxvi}, "official statistics and data from national statistical systems constitute the basis needed for the global indicator framework". Similarly, during its third meeting, the TCG^{xxvii} highlighted that "Data must be used and the focus should always be focussed at production at the national level."

As shown in the box below, some principles are consistent over time and fora. In addition, some principles are clearly related such as "communicability and interpretability", proposed by UIS, and

“accessibility”, which was originally formulated by the UNSD as “Easy to interpret and communicate”, and “Easily accessible”.

Box 1 – SDG general principles for the indicator development

Forum	Year	Purpose	Principles
UNSD	2015	Selection of indicators	Methodologically sound, measurable, accessible, relevant, timely, internationally comparable, and limited in number.
IAEG	2016	Refinement and Revision	Alignment of indicators with the target, and methodological soundness
UIS	2016	Selection of indicators	Relevance, alignment, feasibility, communicability, and interpretability
ECOSOC and TCG	2016-2017	Development of indicators	Disaggregation, Use of official data produced at the national level

Source: Elaborated by the author.

The review of existing methodologies for the indicator 4.3.1, presented in this report, makes use of these general principles as parameters for appraisal, particularly the principles outlined by UIS and ECOSOC, considering their level of development and adequacy for the work of the TCG. These principles are also used as guidelines for the recommendations detailed in the second part of the overall work.

ⁱ ECOSOC, 2017. Resolution adopted by the Economic and Social Council on 7 June 2017. E/RES/2017/7. Available at: <http://undocs.org/E/RES/2017/7> [Accessed in 10/10/2017].

ⁱⁱ TCG, 2017. Third TCG Meeting. Session 3a: Results of WG1 Indicator Development. Presentation by Lotta Larsson. Available at: http://tcg.uis.unesco.org/files/resources/meetings/3rd/Session%203a_Results_WG1_Indicator%20Development.pdf [Accessed: 06/10/2017]

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^{iv} Secretary-General’s Report to the General Assembly, A/36/215, 1981. Available at <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N81/165/83/PDF/N8116583.pdf?OpenElement> [Access: 17/10/2017]

^v Estatuto da Juventude. Law 12852/2013. Available at http://www.planalto.gov.br/ccivil_03/ato2011-2014/2013/lei/l12852.htm [Access: 17/10/2017]

^{vi} National Youth Policy 2014. Available at http://www.rgniyd.gov.in/sites/default/files/pdfs/scheme/nyp_2014.pdf [Access: 17/10/2017]

^{vii} Defining Youth in Contemporary National Legal and Policy Frameworks across Europe. Analytical paper prepared by Bojana Perovic for EU-CoE youth partnership. Available at <http://pjp-eu.coe.int/documents/0/1668203/Analytical+paper+Youth+Age+Bojana+Perovic+4.4.16.pdf/eb59c5e2-45d8-4e70-b672-f8de0a5ca08c> [Access: 17/10/2017]

^{viii} Indicadores Estadísticos del Sistema Educativo del Mercosur 2012. Available at <http://edu.mercosur.int/pt-BR/estatisticas/finish/1328-indicadores-educacionais-mercosur/822-indicadores-educacionais-mercosur-2012.html> [Access: 31/10/2017]

^{ix} Sistema de Información de la Educación para el Trabajo y el Desarrollo Humano. Available at <http://www.mineducacion.gov.co/1759/w3-article-234976.html> [Access: 03/11/2017]

^x Programa Nacional de Inclusão de Jovens – Projovem. Available at http://www.planalto.gov.br/ccivil_03/ato2007-2010/2008/lei/l11692.htm [Access: 03/11/2017]

^{xi} Non Formal Education Department. Ministry of Education, Youth and Sport. Available at <http://www.moeys.gov.kh/en/nfe/non-formal-education-department.html> [Access: 03/11/2017]

^{xii} Bhutan. Ministry of Education. Annual Education Statistics 2017. Available at <http://www.education.gov.bt/statistic> [Access: 09/11/2017]

^{xiii} Analysis based on the CEPAL “Banco de datos de Encuestas de Hogares”. Available at: <http://interwp.cepal.org/badehog/acercade.asp> [Access: 09/11/2017]

^{xiv} Available at <http://catalog.ihnsn.org> [Access: 09/11/2017]

^{xv} “A possible, more efficient implementation is to first ask the regular questions with a 4 week period, followed by a question with a reference period of 12 months whenever a respondent answered ‘no’ for the 4 week period”. Revision of education variables in the EU Labour Force Survey – summary of the 2010 Eurostat grant action. Page 6. Available at https://circabc.europa.eu/d/a/.../Rev_educ_var_summary_20131114-final.pdf [Access: 18/11/2017]

^{xvi} EUROSTAT. (2017). 2016 AES manual Version 3. Retrieved from https://circabc.europa.eu/sd/a/700a220d-33dc-42d4-a5c4-634c8eab7b26/2016%20AES%20MANUAL%20v3_02-2017.pdf

^{xvii} EU Adult Learning Statistics. Complementary Methodological Information. Section 1: AES. Version 24/10/2017. Available at [https://circabc.europa.eu/sd/a/d3bbb686-e9fe-4448-a74a-a35aeec43703/LLL_Metadata_Section1_AES\(0\).htm](https://circabc.europa.eu/sd/a/d3bbb686-e9fe-4448-a74a-a35aeec43703/LLL_Metadata_Section1_AES(0).htm) [Access: 31/10/2017]

^{xviii} EUROSTAT. (2016, p. 24). CVTS 5 manual Version 1.2. Retrieved from https://circabc.europa.eu/sd/a/43cebda2-6b09-4298-b9b9-ba57d1f42301/1_CVTS5manual_V1-2_20161201.pdf

^{xix} EU Adult Learning Statistics. Complementary Methodological Information. Section 2: CVTS. Version 24/04/2017. Available at [https://circabc.europa.eu/sd/a/747a7122-6692-4821-815c-f967913f70b1/AL_Metadata_Section2_CVTS\(0\).htm](https://circabc.europa.eu/sd/a/747a7122-6692-4821-815c-f967913f70b1/AL_Metadata_Section2_CVTS(0).htm) [Access: 31/10/2017]

^{xx} Global targets and indicators that make reference to the concept of affordability:

Targ/Ind	Title
3.b	Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to <i>affordable</i> essential medicines and vaccines...
3.b.3	Proportion of health facilities that have a core set of relevant essential medicines available and <i>affordable</i> on a sustainable basis.
6.1	By 2030, achieve universal and equitable access to safe and affordable drinking water for all.
7.1	By 2030, ensure universal access to affordable, reliable and modern energy services
9.1	Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all
9.3	Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets

Source: ECOSOC, 2017. Elaborated by the author.

^{xxi} UNSD, 2017. SDG Indicators - Metadata repository. Available at: <https://unstats.un.org/sdgs/metadata/?Text=&Goal=3&Target=> [Access: 16/10/2017]

^{xxii} Freely translated by the author.

^{xxiii} Freely translated by the author.

^{xxiv} UNSD, 2015. Discussion paper on Principles of Using Quantification to Operationalize the SDGs and Criteria for Indicator Selection. ESA/STAT/441/2/58A/14. Available at: https://unstats.un.org/unsd/post-2015/activities/egm-on-indicator-framework/docs/Background%20note_Principles%20of%20using%20quantification%20to%20operationalize%20the%20SDGs%20and%20criteria%20for%20indicator%20selection_Feb2015.pdf [Accessed: 09/10/2017]



^{xxv} IAEG, 2016. 4th IAEG Meeting. General principles for refining the indicator framework.

^{xxvi} ECOSOC, 2017. Resolution adopted by the Economic and Social Council on 7 June 2017. E/RES/2017/7. Available at: <http://undocs.org/E/RES/2017/7> [Accessed in 10/10/2017].

^{xxvii} TCG, 2017. Summary of the Third Meeting of the Technical Cooperation Group on SDG 4 – Education 2030 Indicators. Available at http://tcg.uis.unesco.org/files/resources/meetings/3rd/TCG_Meeting3_Summary_Finalized.pdf [Accessed: 06/10/2017]

DRAFT for discussion