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SDG indicator 4.3.3

Participation rate in technical and vocational programmes

(15- to 24-year-olds)

TVET

UNESCO Institute for Statistics

Abstract

This discussion paper aims to assess the accuracy of the reported SDG 4.3.3 data, based on the methodology outlined in the UIS metadata, and to explore the potential of labour force surveys (LFS) and other household-based surveys in generating reliable estimates of non-formal VET participation. The availability, quality, and use of VET statistics vary significantly across countries and regions, with notable challenges arising from the lack of standardized definitions and methodologies. These inconsistencies lead to limited comparability and coverage of VET data. In this paper, the author calculates estimates of work-based learning and VET participation rates using data from the ILO LFS and other household-based surveys. The analysis highlights the methodological issues associated with these estimates and provides insight into the reliability of the data.

SDG 4.3.3 metadata

Based on the UIS definition, the SDG indicator 4.3.3 measures the percentage of young people aged 15 to 24 years participating in technical or vocational education, either formal or non-formal, on a specific date or over a defined period.

This definition of indicator 4.3.3 implies that the numerator represents enrolment in technical and vocational education and training. While the UIS database provides satisfactory geographic coverage, **the reported data primarily reflects enrolment in TVET offered by the formal education system**, with limited coverage of other types of TVET (**Table 1**).

Referring to the typology of TVET, key challenges include measuring participation in work-based training and accounting for learning provided outside the formal education system.

(i) Another important aspect that requires further attention in the metadata formulation is **the reference period**. In the UIS database, the main data sources are administrative records, meaning the reference period typically corresponds to **the current academic year.** While differences exist in national educational systems, using the current academic year as the reference period helps ensure better comparability of data across countries.

(ii) In the metadata, **the denominator** for calculating SDG indicator 4.3.3 refers to the **population aged 15 to 24 years**. When using administrative data, it should be clearly specified whether the denominator represents the total population aged 15 to 24 or only those within this age group who are enrolled in the formal education system. For the purposes of measuring participation, the population aged 15 to 24 is more relevant.

Table 1. Typology of TVET provision[1]

<table>
<tr><td rowspan="5">1. Institution-based learning</td><td rowspan="2">Provided by the formal education system</td><td colspan="2">Under the supervision of the Ministry of Education</td></tr>
<tr><td colspan="2">Outside the supervision of the Ministry of Education</td></tr>
<tr><td rowspan="3">Provided outside the formal education system</td><td colspan="2">Public</td></tr>
<tr><td rowspan="2">Non-public</td><td>For profit</td></tr>
<tr><td>Not for profit</td></tr>
<tr><td rowspan="3">2. Workplace-based training</td><td rowspan="2">Pre-employment</td><td colspan="2">Modern apprenticeship</td></tr>
<tr><td colspan="2">Traditional apprenticeship</td></tr>
<tr><td colspan="3">In service training</td></tr>
<tr><td colspan="4">3. Combination of multiple types of training (e.g. sandwich programs, dual systems)</td></tr>
</table>

ILO database – to what extent we can rely on it to generate reliable estimates of non-formal TVET participation?

This section evaluates the estimates of work-based learning (WBL) derived from the ILO database. Table 2 presents the indicators used to analyze and obtain these WBL estimates. In the ILO repository, the table "WBL_3VET_SEX_AGE_NB_A" offers annual estimates of the youth working-age population with vocational education or training, disaggregated by sex and age (in thousands). These estimates represent the highest level of education successfully completed. However, **the ILO microdata repository lacks a specific variable that tracks current participation in technical and vocational education and training (TVET) programs**. Additionally, Labour Force Survey **(LFS) data often does not differentiate between participation in general education and vocational education**. For the purpose of

[1] Inter-Agency Working Group on TVET Indicators. (2012). *Proposed Indicators for Assessing Technical and Vocational Education and Training*. UNESCO.

this analysis, the VET attainment rate is calculated as a proxy to explore the methodological nuances of estimating TVET participation.

Table 2: Tables from ILO data repository

Table (ILO indicator)	Description
WBL_3VET_SEX_AGE_NB	Youth working-age population with vocational education or training by sex and age (thousands)
WBL_3WBL_SEX_WBL_NB	Youth work-based learners by sex and type (thousands)
POP_XWAP_SEX_AGE_NB	Working-age population by sex and age (thousands)

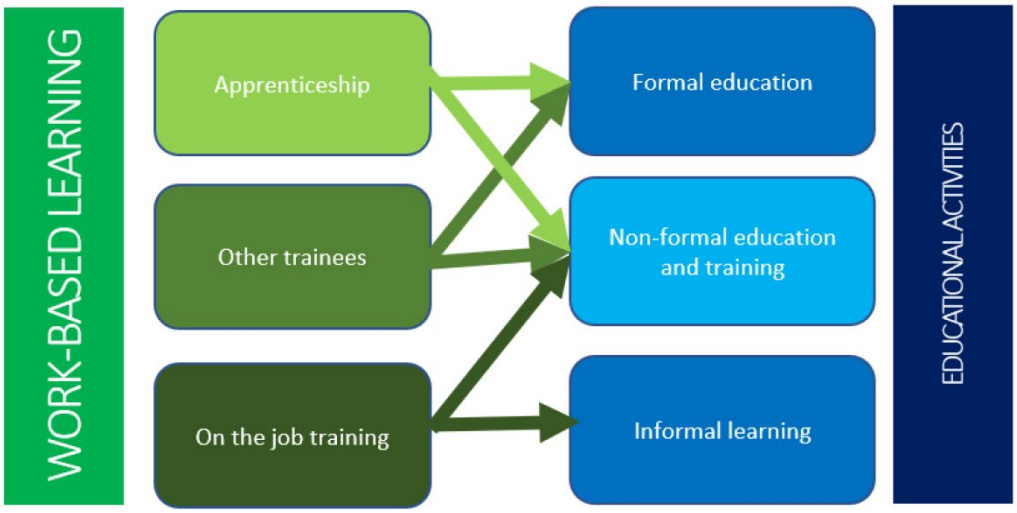
The second table, named "WBL_3WBL_SEX_WBL_NB_A", contains information on youth work-based learners by sex and type of WBL. According to ISCED-11 (UNESCO, 2012), work-based education is defined as an educational activity conducted in a work environment, usually within vocational education programs. Its purpose is to meet specific learning objectives through practical instruction and active participation in work activities, all under the guidance of experienced workers and trainers. This type of education can occur in both formal and informal educational settings.

Figure 1 below illustrates the relationship between Work-Based Learning (WBL) and educational activities. According to the Inter-Agency Working Group on WBL (comprising UNESCO, OECD, ILO, and ETF), **apprenticeships** are defined as structured programs that "provide occupational skills and typically lead to a recognized qualification." These programs combine workplace learning with school-based instruction in a systematic manner. Apprenticeships generally span several years, and in most cases, apprentices are considered employees, with a formal work contract and salary.

Traineeships and internships are workplace training opportunities that complement formal or non-formal education and training programs. These programs can range from a few days or weeks to several months in duration. Depending on the arrangement, they may or may not include a formal work contract or compensation.

On-the-job training takes place in the regular work environment and is the most common form of work-based learning throughout an individual's career.

Figure 1: Relationship between WBL and educational activities.



Source: ILO[2]

[2] https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%40dgreports/%40stat/documents/meetingdocument/wcms_895353.pdf

To map this information, the ILO examined the education and employment modules of the Labour Force Surveys (LFS) and analyzed questionnaires from various countries to identify the presence of questions and variables related to apprenticeships, internships, and traineeships. Based on this analysis, the ILO uses several questions and variables from national LFS questionnaires to identify apprentices and other work-based learners. These include:

- **Questions exploring the reasons for having a temporary job** or a contract of limited duration in the respondent's main or secondary job. One of the response options specifically identifies situations where the temporary job is linked to a training period (e.g., as an apprentice, trainee, or research assistant) (ILO, 2023).
- **Questions about the current employment status** of respondents, which include options such as "apprenticeship," "apprenticeship or internship," or "internship/traineeship." These questions assess both main and secondary job statuses (ILO, 2023).
- **Questions about the type of employment contract**, which include "apprenticeship contract" as one of the response categories (ILO, 2023).

The questions on current participation in formal education and training are not the focus of the ILO review, as they capture non-work-based learning (non-WBL) activities. However, these questions are analyzed when one of the response categories or follow-up questions specifically refers to apprenticeships.

Furthermore, the ILO does not focus on informal learning and continuous professional development of employed individuals (such as attending short courses, workshops, or seminars). As noted in the UIS estimates for the SDG indicator 4.3.1, these forms of WBL are not typically covered in national LFS questionnaires.

The remainder of this paper discusses the reliability of estimates based on Labor Force Survey (LFS) data for the **VET attainment rate** and **WBL rate** among the young population aged 15 to 24. Tables 3 and 4 present two different indicators:

1. The first indicator, calculated by the author, is the **WBL rate**, based on LFS data or other household-based surveys (ILO database).

2. The second indicator, calculated by the author, is the **VET attainment rate** derived from LFS data (ILO database).

There are 18 countries for which the WBL rate for the young population aged 15 to 24 could be estimated for at least one year between 2010 and 2023. However, these WBL estimates are subject to various methodological and reliability issues, as outlined below.

(i) Significant Fluctuations and Inconsistent Data

Slovakia: The WBL rate fluctuates significantly, ranging from 7.2% in 2010 to 0.07% in 2023. The large drop after 2016 (from 10.19% to 0.07%) could signal either a reporting issue, a policy change, or a change in the methodology used to measure WBL.

Montenegro: Similar to Slovakia, the WBL rate exhibits significant fluctuations, dropping sharply from 1.95% in 2016 to 0.56% in 2020. This substantial variation can be attributed to the small number of observations in the data.

United Kingdom: The data shows a steady trend from 3.03% in 2017 to 3.87% in 2020. However, there are missing values for 2021 and 2022, which leaves some uncertainty about more recent trends.

Switzerland: The WBL rate remains relatively stable over the years, fluctuating between 22.76% in 2023 and 24.93% in 2011. While stable, these values are quite high compared to other countries, indicating that Switzerland has strong work-based learning programs for young people.

France: The WBL rate is relatively stable, ranging from 4.5% in 2010 to 12.16% in 2023. The upward trend is noticeable, especially from 2017 onwards, and this may reflect increasing efforts or improvements in work-based learning opportunities in the country.

Greece: There is a marked decline in the WBL rate from 2.04% in 2016 to 0.64% in 2023. This could contribute to changes in how the data is collected.

Cyprus: The WBL rate fluctuates in recent years, with data available for 2018-2023 showing low values (ranging from 0.41% in 2021 to 0.86% in 2023).

(ii) High Values in Some Countries

Austria: The WBL rate is quite high, hovering around 12-13% over several years (2011-2018), with slight fluctuations. Austria seems to maintain a relatively high level of work-based learning, which could be a result of strong vocational training programs.

Switzerland: As mentioned earlier, Switzerland has high WBL rates compared to other countries. However, these figures should be cross-checked with other data sources to confirm their accuracy.

(iii) Countries with Low or Negligible WBL Rates

Jordan: The WBL rate remains very low (0.01% in 2021), indicating either an underdeveloped system of work-based learning or a lack of data in this area.

Greece: The steady decline in WBL rates over time indicates the need for further investigation to determine if this trend is driven by data issues.

Tanzania, Côte d'Ivoire, and Ethiopia: These countries show very low WBL rates (mostly under 1%) with sparse data points, making it difficult to analyze trends. This could indicate that there are severe data reporting gaps.

(iv) Data Quality and Reporting Issues

Several countries show signs of **data reporting issues**:

Missing data: Countries such as **Afghanistan, Pakistan, and Spain** have significant missing data.

Fluctuating data: Countries like **Slovakia, Montenegro, and Greece** show highly volatile WBL rates, which could be indicative of inconsistent data collection or actual changes in work-based learning opportunities.

Sparse data: Countries like **Côte d'Ivoire, Tanzania, and Ethiopia** have very sparse data points, limiting the ability to track trends or draw meaningful insights.

Using the ILO indicator *WBL_3VET_SEX_AGE_NB* (Youth working-age population with vocational education or training by sex and age, in thousands), VET attainment rate estimates have been obtained for 121 countries. However, it should be noted that it is unclear whether the ILO has included non-formal VET in these estimates. The methodological inconsistencies make it challenging to directly compare VET attainment rates across countries and regions. Below is an analysis of the VET attainment rate data for the countries listed across various regions (Table 4 in Annex, with highlight potential issues, trends, and key points in the data.

(i) Stable High VET attainment rates in Developed Economies

- **Europe**:

European countries such as **Austria**, **Germany**, and **Switzerland** consistently maintain high VET attainment rates, often well above 20%. **Switzerland**, in particular, has a stable rate of around 23% across the years, reflecting the country's strong vocational training culture, which is deeply integrated into its education system.

Countries like **France** and **Belgium** also show high rates, often around 20-30%, indicating a strong focus on VET as a key pathway for youth.

Romania stands out in Europe, where VET attainment rates surged dramatically from around 30% in 2020 to 47.89% in 2023. This could indicate substantial reforms or investments in the vocational education system to address youth employment challenges.

- **Northern America**:

Canada and **the United States** maintain relatively high VET attainment rates, with **Canada** seeing consistent VET attainment rates around 35-37% and **the USA** generally below 20%. VET systems in North America are often characterized by a strong link between vocational training and labor market needs.

(ii) Fluctuating TVET Rates in Latin America

- **Latin America**:

Countries such as **Chile**, **Brazil**, and **Mexico** show notable fluctuations in VET attainment rates. **Chile**, for example, had relatively high rates in the 2010s, with rates around 29.82% in 2013, but these gradually declined to around 19.82% by 2023.

Brazil has high participation in the early 2010s but then shows a sudden absence in data post-2014, possibly indicating gaps in data collection.

In Mexico, VET attainment rate remains low, hovering just below 1% in the last few years, suggesting that TVET is not a primary focus within the country's education system.

(iii) VET attainment rates in Smaller and Island Nations

- Oceania:

Smaller countries in Oceania, such as Australia, Papua New Guinea, and Samoa, show varying VET attainment rates. Australia has moderate rates, generally between 12-15%.

Countries like Vanuatu, Solomon Islands, and Samoa show signs of emerging VET systems with increases in VET attainment rates in recent years.

Pacific Islands such as Fiji, Kiribati, and Marshall Islands have seen limited VET data. standards and meet local labor market demands.

(iv) Wide Disparities Between Countries Within Regions

- Sub-Saharan Africa and Central Asia:

There is a stark contrast within regions, where some countries show rapid growth (e.g., Senegal, Zimbabwe) and others still lag with very low participation in VET (e.g., Benin, Burundi). This might suggest that VET implementation and outcomes in these regions are highly variable, potentially due to economic, political, and social factors.

Afghanistan and Pakistan have very low rates, with Afghanistan showing 1.64% in 2023. This reflects the challenges these countries face in establishing effective and widespread vocational education programs.

Methodological considerations regarding VET attainment rate

The data on VET attainment rates from various countries across different regions exhibit several methodological inconsistencies and issues that may affect the interpretation of the trends and patterns. These inconsistencies could be due to differences in data collection methods, changes in reporting standards, variations in how VET is defined across countries, and gaps in the available data. Below are some key methodological inconsistencies to consider:

(i) Variation in VET Definitions and Scope

Country-Specific Definitions: The definition of VET can vary significantly across countries. Some countries may include a broader range of technical or vocational programs, while others might focus exclusively on certain sectors (e.g., technical skills, trades, or apprenticeships). For instance, Germany and Switzerland have well-established, formalized VET systems that cover apprenticeships and vocational education linked to employment, while other countries may have a more limited definition of what constitutes vocational education.

Program Inclusion: VET attainment rates could include only formal education programs or may encompass informal and non-formal training as well. In some countries, informal apprenticeships or on-the-job training might not be captured in the VET statistics, leading to an underestimation of actual VET attainment.

(ii) Differences in Data Collection Methods

Surveys Data: The **Labour Force Surveys (LFS)** may not always capture VET accurately, especially because it focuses more on employment status rather than educational attainment or enrollment in VET programs.

Timing of Data Collection: Data collection methods might differ significantly across years and between countries. For example, some countries may collect data annually, while others may report less frequently. This discrepancy can result in time gaps or incomplete reporting, as seen in countries like **Brazil** (which has missing data after 2014), **Mexico**, and several countries in **Sub-Saharan Africa**.

Sampling Issues: Some countries might use **small sample sizes** or limited geographic coverage in their LFS or other HH-based surveys, which can skew results, especially in regions with highly dispersed populations or where informal training is common.

(iii) Data Gaps and Missing Data

Absence of Data: Several countries have years where VET attainment rates are either completely missing or incomplete. For example, **Bangladesh** has a large gap in the early years (2010-2013), with data appearing only in 2014 and beyond. Similarly, countries like **Afghanistan**, **Guinea**, and **Venezuela** have data missing for multiple years. The gaps in reporting could reflect challenges in data collection or inconsistent reporting periods.

Discrepancies in Reporting Frequency: Some countries report data annually (e.g., **Germany**, **France**, **Australia**), while others may report less frequently or only in certain years (e.g., **Burkina Faso**, **Senegal**, **Madagascar**). These differences can make it difficult to track consistent trends over time or compare countries effectively.

(iv) Inconsistent Timeframes and Reporting Periods

Disparate Timeframes: The VET attainment rates are reported annually, but the data may not consistently follow the same reporting calendar or reference period. For instance, some countries (e.g., **Romania** and **Portugal**) show a sudden change in rates in 2020-2021, possibly due to changes in education policy, government programs, or COVID-19 impacts, which might be reflected differently across the years.

Reporting Gaps: The gaps in reporting—particularly in years like 2020 and 2021—could be due to disrupted data collection during the COVID-19 pandemic, when many countries faced challenges in collecting or reporting educational data.

(v) Political and Economic Influences

Policy Changes: Countries undergoing **political instability** or **economic crises** may report inconsistent VET data due to changes in government priorities, data collection capabilities, or policy shifts. For example, **Venezuela**'s significant fluctuation in data might reflect the

country's ongoing economic crisis and political instability, which could have disrupted data collection and reporting.

Program Initiatives and Reform: In countries with rapidly expanding VET systems (e.g., Bangladesh, Turkey), VET attainment rates might spike suddenly due to new reforms, large-scale government investments, or international partnerships in vocational education.

(vi) Regional Disparities

Sub-regional Variations: Even within regions (e.g., **Sub-Saharan Africa**, **Eastern and South-Eastern Asia**), countries may report different types of VET attainment data. Countries like **Republic of Korea** and **Singapore** show high, stable TVET rates (often exceeding 40%), while others in the same region (e.g., **Cambodia** and **Laos**) have rates as low as 1-5%. These stark differences could be due to varying educational systems, government focus, or the role of TVET within each economy.

Conclusions

As previously noted by the Technical Cooperation Group (TCG5, 2018)[3], although a single household or labour force survey would be the preferred source for the SDG indicator 4.3.3, it is recognized that the small number of participants in TVET programs in many countries may not be adequately captured by survey data alone but also likewise same applies to administrative data. Therefore, it is recommended to also consider the use of TVET completion gathered by LFS in case participation is not available. For the sake of reporting the recommendation is to report in separate line the different sources (as currently done with Out of School Children- 4.1.4) and to resort to Bayesian modelling estimates to produce country and aggregated trends provided the annotated metadata points are documented.

Here's a summary of the most critical points:

- LFS or other HH-based surveys exhibit data gaps, year-to-year fluctuations, inconsistent trends. The variation in **VET attainment** and **WBL rate** over time suggests potential issues with data reporting or classification.
- VET attainment and WBL rates have notable fluctuations that could indicate **data collection issues**, such as changes in sampling methods, differences in how data was recorded, or issues with the accuracy of reporting over time.
- The data presents a number of **reliability concerns**, primarily due to **inconsistent trends**, and **outliers** that may stem from changes in education systems. There are sudden spikes or drops in enrollment and attainment rates, especially in countries like Bangladesh, Pakistan, and Kyrgyzstan.

[3] https://tcg.uis.unesco.org/wp-content/uploads/sites/4/2019/01/TCG5-REF-4-indicator-4.3.1.pdf

- **Missing or sparse data** in many countries (e.g., Afghanistan, Côte d'Ivoire, and Tanzania) make it difficult to draw conclusions about trends or the availability of work-based learning in these regions.

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ANNEX

Table 3: Work-based learning rate

Region	Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Central and Southern Asia	Afghanistan											2.05			
Central and Southern Asia	Pakistan									0.45					
Europe and Northern America	Austria					13.34	13.36	13.21	12.85	13.24	12.93	13.63			
Europe and Northern America	Bosnia & Herzegovina												0.61	0.56	0.40
Europe and Northern America	France	4.5	4.56	4.81	5.72	5.11	5.18	5.09	5.14	5.67	5.72	6.06	9.86	11.56	12.16
Europe and Northern America	Greece					2.04	2.54	0.91	0.85	0.76	0.7	0.64			
Europe and Northern America	Ireland								1.09	1.51	1.68	1.58			
Europe and Northern America	Montenegro							1.95	1.08	1.80	2.41	0.56			
Europe and Northern America	Slovakia	7.2	7.35	7.81	7.48	10.19	10.10	3.03	3.32	3.15	2.77	2.52	0.07	0.14	
Europe and Northern America	Spain												1.57	1.74	
Europe and Northern America	Switzerland	23.65	24.93	24.54	24.79	24.38	23.47	23.72	24.68	24.66	23.58	23.28	22.76	23.44	21.9
Europe and Northern America	United Kingdom					3.03	3.30	3.55	3.50	3.59		3.64	3.51	3.94	3.87
Northern Africa and Western Asia	Cyprus							0.74	1.03	0.74		0.41	0.76	0.86	
Northern Africa and Western Asia	Jordan								0.04	0.03	0.01	0.01	0.03	0.02	
Sub-Saharan Africa	Côte d'Ivoire										7.94				
Sub-Saharan Africa	Ethiopia				0.04								0.04		
Sub-Saharan Africa	Senegal							7.05			8.82				
Sub-Saharan Africa	Tanzania					3.79									

Table 4: VET attainment rate for the young population aged 15 to 24

Region	Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Central and Southern Asia	Afghanistan											1.64			
Central and Southern Asia	Bangladesh				5.48				32.72					15.61	
Central and Southern Asia	India									7.79	10.56	12.14	12.99	16.15	20.77
Central and Southern Asia	Kyrgyzstan				56.39										
Central and Southern Asia	Nepal								10.90						
Central and Southern Asia	Pakistan									13.19	2.95				
Central and Southern Asia	Sri Lanka						33.85	33.90	34.63	36.29	37.25	39.94	39.41	37.34	
Central and Southern Asia	Tajikistan							4.34							
Eastern and South-Eastern Asia	Cambodia					1.76					14.92				
Eastern and South-Eastern Asia	Indonesia														17.52
Eastern and South-Eastern Asia	Lao People's Democratic Republic								5.29					3.37	
Eastern and South-Eastern Asia	Mongolia	4.05	4.85	3.08		5.83		7.18		7.76	12.43	10.67	10.9	11.31	11.07
Eastern and South-Eastern Asia	Republic of Korea						44.12	46.28	46.10	45.21	43.95	42.39	42.91	42.59	42.33
Eastern and South-Eastern Asia	Singapore												24.62	25.51	23.08
Eastern and South-Eastern Asia	Thailand	10.3			8.96				9.84		8.27				
Eastern and South-Eastern Asia	Timor-Leste							2.31					0.5	13.69	
Eastern and South-Eastern Asia	Viet Nam						25.39				6.16			3.81	
Europe and Northern America	Albania		54.08	56.97	54.14	48.25	44.43	43.78	42.73	2.89	2.53				
Europe and Northern America	Austria	49.9	50.65	51.69	51.71	57.64	57.79	57.49	56.35	56.84	55.56	55.29	54.66	53.61	53.28
Europe and Northern America	Belarus							17.81	16.92	15.18	15.45	14.81	13.77	13.00	12.31
Europe and Northern America	Belgium					20.20	22.56	18.04	17.01	16.09	20.92	20.13	20.53	18.30	
Europe and Northern America	Bosnia and Herzegovina											58.36	44.01	42.53	40.11
Europe and Northern America	Bulgaria					25.89	21.05	23.38	20.15	18.57	18.13	18.55	18.5	30.59	

Europe and Northern America	Canada	36.52	35.97	36.33	35.79	35.42	36.04	36.50	36.28	36.44	36.4	37.41	35.76	33.47	33.22
Europe and Northern America	Croatia					48.76	50.32	46.17	44.28	44.40	43.02	42.82	43.46	39.56	
Europe and Northern America	Czechia					13.89	14.18	13.91	13.40	12.34	12.33	11.7	10.68	11.01	
Europe and Northern America	Denmark														
Europe and Northern America	Estonia	2.2	2.03	2.19	1.75	10.96	11.78	11.16	10.50	9.74	8.98	8.25	8.53	7.07	
Europe and Northern America	Finland					23.36	19.00	23.50	22.52	23.58	23.15	23.41	22.27	19.44	
Europe and Northern America	France	27.62	27.58	26.84	30.24	30.87	31.17	23.63	30.31	30.13	29.75	28.47	23.88	23.10	22.18
Europe and Northern America	Germany					14.95							17.62	19.92	
Europe and Northern America	Greece					12.75	11.20	11.03	11.54	11.41	11.03	10.32	10.59	10.50	
Europe and Northern America	Hungary	0.83	0.75	0.73	0.93	11.06	11.18	10.96	10.69	11.21	11.72	10.92	12.87	13.46	
Europe and Northern America	Iceland					4.43	3.31	5.24	4.14	3.73					
Europe and Northern America	Ireland					42.06	41.05	41.76	43.18	43.95	44.39	44.87			
Europe and Northern America	Italy					44.43	44.28	44.28	44.65	44.05	43.96	44.46			
Europe and Northern America	Latvia					12.85	13.31	14.32	11.06	12.10	10.29	9.67	9.83	8.12	
Europe and Northern America	Lithuania					12.67	12.48	11.85	10.14	11.68	11.64	11.07	7.73	7.76	
Europe and Northern America	Luxembourg					18.97	22.11	25.86	28.28	22.99	19.5	16.66	5.4	23.60	
Europe and Northern America	Malta	4.52	1.32	1.22	1.37	7.29	7.09	6.33	10.27	12.44	11.17	13.8	42.57	0.54	
Europe and Northern America	Montenegro					51.09	52.93	54.99	54.77	54.65	55.36	53.4			
Europe and Northern America	Netherlands					18.45	20.64	18.36	16.99	15.95	14.78	14.55	14.78	14.18	
Europe and Northern America	Norway					8.33	8.40	8.12	9.08	9.62	8.43	7.84			
Europe and Northern America	Poland	8.22	8.23	8.38	8.37	8.89	22.70	24.56	24.55	24.43	24.45	23.75	23.65	24.26	22.81
Europe and Northern America	Portugal					0.63	11.20	12.52	13.72	15.16	15.07	15.48	46.35	46.21	45.67

Europe and Northern America	Republic of Moldova	13.26	13.73	14.47	16.11	16.39	16.53	17.55	18.15	18.74	19.6	18.73	18.15	16.42	15.91
Europe and Northern America	Romania	1.22	0.66	0.48	0.32	30.38	31.40	30.98	29.40	30.33	34.11	37.02	47.75	47.89	46.4
Europe and Northern America	Russian Federation						4.51							15.48	15.84
Europe and Northern America	Serbia						45.65	46.59	46.98	47.00	47.23	46.17	48.35		
Europe and Northern America	Slovakia	49.08	12.07	11.89	9.96	10.53	10.42	9.57	8.99	8.86	8.25	7.58	32.06	32.16	
Europe and Northern America	Slovenia	1.84	1.81	2.41	2.65	33.12	32.73	31.81	32.37	32.52	33.68	33.39	34.89	34.72	
Europe and Northern America	Spain					5.71	5.89	6.32	7.52	7.44	7.01	7.1	7	7.10	
Europe and Northern America	Sweden					23.93	19.65	18.74	19.78	14.75	12.29	9.71	11.25	12.42	
Europe and Northern America	Switzerland	26.97	27.57	28.1	26.75	27.53	26.86	27.12	26.61	25.51	24.53	24.84	26.51	26.85	25.76
Europe and Northern America	United Kingdom of Great Britain and Northern Ireland					9.78	30.95	30.15	30.17	30.30		30.34	30.59	27.15	29.95
Latin America and the Caribbean	Bahamas										3.49				3.27
Latin America and the Caribbean	Barbados						7.18	8.94	6.68	10.84	10.15				
Latin America and the Caribbean	Bolivia (Plurinational State of)							4.42	5.67	5.70	6.25				
Latin America and the Caribbean	Brazil			29.58											
Latin America and the Caribbean	Chile	26.42	27.73	29.2	29.82	29.08	28.81	27.13	25.74	25.34	23.98	23.31	21.67	20.47	19.82
Latin America and the Caribbean	Costa Rica								9.82	10.93	11.66	11.87	11.91	12.59	11.9
Latin America and the Caribbean	Dominican Republic						0.87					1.64	1.71	1.77	2.16
Latin America and the Caribbean	Ecuador				0.88	0.77	0.83	1.03	1.39	1.30	1.36		2.04	2.28	2.55
Latin America and the Caribbean	El Salvador											13.83	14.2	13.42	11.73
Latin America and the Caribbean	Grenada									2.72	5.58	6.31			
Latin America and the Caribbean	Guatemala													10.74	

Latin America and the Caribbean	Guyana									3.93	3.87				
Latin America and the Caribbean	Jamaica											10.78	33.37	8.56	7.49
Latin America and the Caribbean	Mexico												1.02	0.94	0.87
Latin America and the Caribbean	Nicaragua			1.83											
Latin America and the Caribbean	Panama												22.3		
Latin America and the Caribbean	Peru				8.16										
Latin America and the Caribbean	Suriname							8.16							
Latin America and the Caribbean	Trinidad and Tobago						18.26	18.12			10.59	7.68	7.55	6.40	
Latin America and the Caribbean	Uruguay										12.37				
Latin America and the Caribbean	Venezuela (Bolivarian Republic of)	6.96	7.1	6.32				6.01							
Northern Africa and Western Asia	Armenia	11.18	11.04	11.23	11.31	9.48	8.24	10.53	10.56	2.33	1.91	1.98	1.69		
Northern Africa and Western Asia	Cyprus					38.29	40.48	41.45	40.17	41.29	42.2	41.34	13.37	13.88	
Northern Africa and Western Asia	Egypt					21.68		18.44	18.06	17.75	18.06	18.86	19.33	18.53	
Northern Africa and Western Asia	Georgia								5.56	5.73	4.55	4.45			
Northern Africa and Western Asia	Jordan								2.46	1.86	1.72	1.7	2	1.85	
Northern Africa and Western Asia	Palestine						3.95								
Northern Africa and Western Asia	Türkiye					10.14	10.81	11.71	12.83	14.05	14.8	14.99	15.81	15.97	15.4
Oceania	Australia	12.37	13.47	14.13	13.07	14.45	14.96	15.26	14.18	14.36	13.28	11.37	12.08		
Oceania	Cook Islands										2.52				
Oceania	Fiji							26.75							
Oceania	Kiribati										0.64				
Oceania	Marshall Islands										11.99				
Oceania	Nauru												1.49		
Oceania	Niue													2.58	
Oceania	Palau					4.76						2.27			

Oceania	Papua New Guinea													1.34	
Oceania	Samoa			5.39					9.08						
Oceania	Solomon Islands				0.44										
Oceania	Tonga									7.21					
Oceania	Tuvalu							7.23	28.26					8.48	
Oceania	Vanuatu										5.47				
Sub-Saharan Africa	Benin														
Sub-Saharan Africa	Burkina Faso									1.45	0.87			0.47	2.28
Sub-Saharan Africa	Burundi					0.52									
Sub-Saharan Africa	Cameroon					5.64							10.01		
Sub-Saharan Africa	Chad									10.02					
Sub-Saharan Africa	Comoros					20.44									
Sub-Saharan Africa	Côte d'Ivoire										2.82			1.18	
Sub-Saharan Africa	Ethiopia				5.16								4.24		
Sub-Saharan Africa	Ghana						2.85							2.21	
Sub-Saharan Africa	Guinea										16.82				
Sub-Saharan Africa	Lesotho										14.28				
Sub-Saharan Africa	Madagascar						0.93								
Sub-Saharan Africa	Malawi				0.10										
Sub-Saharan Africa	Mali										1.92	1.42		1.81	
Sub-Saharan Africa	Mauritania								2.01		0.12				
Sub-Saharan Africa	Mozambique						0.97								
Sub-Saharan Africa	Niger										0.25			0.32	
Sub-Saharan Africa	Rwanda											7.26	5.61	5.65	6.85
Sub-Saharan Africa	Senegal		3.8					3.36	3.23		4.00			0.50	
Sub-Saharan Africa	Seychelles											22.05			20
Sub-Saharan Africa	South Africa				2.12	1.99	2.20	4.76	6.83	6.07	6.78	9.67	9.75	8.80	8.64
Sub-Saharan Africa	Togo					1.50			28.80		0.57			0.59	
Sub-Saharan Africa	United Republic of Tanzania				4.41	35.53									
Sub-Saharan Africa	Zimbabwe										22.40		22.88	21.68	20.56

SDG indicator 4.3.3

Participation rate in technical and vocational programmes (15- to 24-year-olds) – TVET

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