

## Annex

### Short description of indicators

No	Indicator	Short description and source	Year used for 'last available year' in charts and tables
1010	IVET students as % of all upper secondary students	Number of students in upper secondary IVET (ISCED 3) as a percentage of all upper secondary students. (Cedefop calculations based on Eurostat, UOE) (b)	2015
1020	IVET work-based students as % of all upper secondary IVET	Number of students in combined work- and school-based upper secondary IVET (ISCED 3) as a percentage of all students in upper secondary IVET. (Cedefop calculations based on Eurostat, UOE) (b)	2015
1025	IVET students with direct access to tertiary education as % of all upper secondary IVET	Number of students in upper secondary IVET (ISCED 3) enrolled in programmes giving direct access to tertiary education as a percentage of all students in upper secondary IVET. (Cedefop calculations based on Eurostat, UOE) (b)	2015
1030	Employees participating in CVT courses (%)	Number of employees who have participated in employer-sponsored CVT courses during the reference calendar year (12 months) as a percentage of all employees in all enterprises surveyed. (Eurostat, CVTS)	2010
1040	Employees participating in on-the-job training (%)	Number of employees who have participated in employer-sponsored on-the-job training during the reference calendar year (12 months) as a percentage of all employees in all enterprises surveyed. (Eurostat, CVTS)	2010
1050	Adults in lifelong learning (%)	Percentage of the population aged 25-64 participating in education and training over the four weeks prior to the survey. (Eurostat, LFS)	2016
1060	Enterprises providing training (%)	Percentage of enterprises providing any type of vocational training to their employees during the reference calendar year (12 months). (Eurostat, CVTS)	2010
1070	Female IVET students as % of all female upper secondary students	Number of female students in upper secondary IVET (ISCED 3) as a percentage of all female students in upper secondary education. (Cedefop calculations based on Eurostat, UOE) (b)	2015
1075	Employees of small firms participating in CVT courses (%)	Number of employees of small enterprises who have participated in employer-sponsored CVT courses during the reference calendar year (12 months) as a percentage of all employees in all small enterprises surveyed (small enterprises covered by the survey are those from 10 to 49 employees). (Eurostat, CVTS)	2010
1080	Young VET graduates in further education and training (%)	Percentage of the population aged 18-24 with a medium-level vocational qualification (ISCED 3 or 4) as their highest educational attainment who participated in education and training over four weeks prior to the survey. (Eurostat calculations based on LFS) (a)	2016

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1090	Older adults in lifelong learning (%)	Percentage of the population aged 50-64 who participated in education and training over the four weeks prior to the survey. (Cedefop calculations based on Eurostat, LFS)	2016
1100	Low-educated adults in lifelong learning (%)	Percentage of the population aged 25-64 with lowest level of educational attainment (ISCED 0-2) who participated in education and training over the four weeks prior to the survey. (Eurostat, LFS)	2016
1110	Unemployed adults in lifelong learning (%)	Percentage of the unemployed population aged 25-64 who participated in education and training over the four weeks prior to the survey. (Eurostat, LFS)	2016
1120	Individuals who wanted to participate in training but did not (%)	Percentage of individuals aged 25-64 wanting to participate in education or training but did not do so. (Eurostat, AES) (c)	2011
1130	Job-related non-formal education and training (%)	Non-formal job-related learning activities as % of all non-formal learning activities. The indicator considers activities carried out in the 12 months prior to the survey by adults aged 25-64. (Eurostat, AES) (c)	2011
2010	IVET public expenditure (% of GDP)	Annual public expenditure on vocational education at upper secondary and post-secondary level (ISCED 3 and 4) as a percentage of GDP. (Eurostat, UOE) (b)	2014
2025	IVET public expenditure per student (thousands of PPS units)	Annual public expenditure in vocational upper secondary or post-secondary non-tertiary education (ISCED 3 and 4) in thousands of purchasing parity standard units (PPS) per student enrolled. The number of students enrolled used for the calculations is adjusted to the coverage of expenditure data and expressed in full-time equivalent (FTE). (Eurostat, UOE) (b)	2014
2030	Enterprise expenditure on CVT courses as % of total labour cost	Total monetary expenditure (TME) by enterprises on CVT courses as % of total labour cost (all enterprises). TME indicator excludes personnel absence costs. (Cedefop calculations based on Eurostat, CVTS)	2010
2040	Average number of foreign languages learned in IVET	Average number of foreign languages learned in vocational upper secondary education (ISCED 3). (Eurostat, UOE) (b)	2015
2050	STEM graduates from upper secondary IVET (% of total)	STEM (science, technology, engineering and mathematics) graduates from upper secondary vocational education (ISCED 3) as percentage of all upper secondary graduates across all vocational subjects. (Cedefop calculations based on Eurostat, UOE) (b)	2015
2065	Short cycle VET graduates as % of first time tertiary education graduates	Short cycle tertiary VET graduates (ISCED 554) as a percentage of all graduates from first programmes at tertiary level of education (ISCED 544, 554; 645, 655, 665; 646, 656, 666; 746, 756, 766). Annual outflows. (Cedefop calculations based on Eurostat, UOE) (b)	2015
2070	Innovative enterprises with supportive training practices (%)	Enterprises providing training to their staff to support technological innovation (as % of all enterprises reporting technological innovation in core innovation sectors). (Cedefop calculations based on Eurostat, CIS) (b)	2014

No	Indicator	Short description and source	Year used for 'last available year' in charts and tables
2080	Employment rate for IVET graduates (20-34 year-olds)	Employment rate of 20-34 year-olds not in (either formal or non-formal) education and training during the past four weeks and having a medium level qualification (ISCED 3 or 4) from the VET stream as their highest educational attainment. (Eurostat, LFS)	2016
2090	Employment premium for IVET graduates (over general stream)	Premium expressed as a difference (in percentage points) between two indicators: the employment rate for young VET graduates (indicator 2080) and the employment rate for young graduates (20-34 year-olds) from the general stream of education at the same ISCED levels. Calculations exclude those still in (formal or non-formal) education and training. (Cedefop calculations based on Eurostat, LFS)	2016
2100	Employment premium for IVET graduates (over low-educated)	Premium expressed as a difference (in percentage points) between two indicators: the employment rate for young VET graduates (indicator 2080) and the employment rate for young graduates (20-34 year-olds) who have at most lower secondary education (ISCED 0-2) as their highest level of educational attainment. Calculations exclude those still in (formal or non-formal) education and training. (Cedefop calculations based on Eurostat, LFS)	2016
2110	Workers helped to improve their work by training (%)	Individuals who answered 'Strongly agree' or 'Tend to agree' to the statement 'The training has helped me improve the way I work' as a percentage of all surveyed workers who participated in training paid by their employer or by themselves. (Eurofound, EWCS) (a)	2015
2120	Workers with skills matched to their duties (%)	Percentage of employed people surveyed who answered 'My present skills correspond well with my duties' to the question 'Which of the following alternatives would best describe your skills in your own work?'. Other possible answers are 'I need further training to cope well with my duties', 'I have the skills to cope with more demanding duties'. (Eurofound, EWCS)	2015
3010	Early leavers from education and training (%)	Percentage of the population aged 18-24 who have completed, at most, lower secondary education and are not involved in further education or training. (Eurostat, LFS)	2016
3020	30-34 year-olds with tertiary attainment (%)	Percentage of the population aged 30-34 who have successfully completed tertiary-level education. Tertiary education is defined as ISCED 5 and higher. (Eurostat, LFS)	2016
3030	NEET rate for 18-24 year-olds (%)	Percentage of the population of age 18-24 years not employed and not involved in further education or training. (Eurostat, LFS)	2016
3040	Unemployment rate for 20-34 year-olds (%)	Unemployment rate (%) of 20-34 year-olds. (Cedefop calculations based on Eurostat, LFS)	2016

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3045	Employment rate of recent graduates (%)	Share of the employed population among those having all the following characteristics: a) are aged between 20 and 34 years old; b) have an educational attainment at least at upper secondary level; c) graduated 1, 2 and 3 years before the reference year; d) are not currently enrolled in any further education or training activity. (Eurostat, LFS)	2016
3050	Adults with lower level of educational attainment (%)	Percentage of the population aged 25-64 who have completed, at most, lower secondary education (ISCED 0-2). (Eurostat, LFS)	2016
3060	Employment rate for 20-64 year-olds (%)	Percentage of the population aged 20-64 in employment. (Eurostat, LFS)	2016
3065	Employment rate for 20-64 year-olds with lower level of educational attainment (%)	Percentage of the population aged 20-64 and with lower level of educational attainment (ISCED 0-2) in employment. (Eurostat, LFS)	2016
3070	Medium/high-qualified employment in 2025 (% of total)	Share of total employment accounted for by individuals with medium- (ISCED 3-4) or high-level (ISCED 5 and above) qualifications in 2025. Level of qualifications refers to the educational attainment of individuals who will be employed and not to the educational requirements of their jobs. (Cedefop forecasts)	2016

(a) Data supplied at Cedefop request.

(b) EU averages are weighted averages of available country data.

(c) 2011 data instead of 2010 are used to approximate the 2010 baseline.

## Additional notes

AES	adult education survey
CIS	community innovation survey
CVET	continuing vocational education and training
CVT	continuing vocational training
CVTS	continuing vocational training survey
EWCS	European working conditions survey
ISCED	international standard classification of education
IVET	initial vocational education and training
LFS	European Union labour force survey
NEET	not in employment, education or training
PIAAC	programme for the international assessment of adult competencies
UOE	UNESCO (United Nations Educational, Scientific and Cultural Organisation) / OECD (Organisation for Economic Cooperation and Development) / Eurostat (Statistical Office of the European Communities) joint data collection on education
VET	vocational education and training

All indicators and breakdowns are subject to the specific methodology of the source from which they originate.

For indicators and related breakdowns derived from the LFS and the UOE data collection on education, the definitions used for levels, orientations and access to higher levels of formal education are those agreed in ISCED 2011. By using the first digit of the classification, ISCED 2011 distinguishes and defines the following levels of education:

ISCED 2011 levels of education	
Level 0 -	Early childhood education
Level 1 -	Primary education
Level 2 -	Lower secondary education
Level 3 -	Upper secondary education
Level 4 -	Post-secondary non-tertiary education
Level 5 -	Short cycle tertiary education
Level 6 -	Bachelor or equivalent level
Level 7 -	Master or equivalent level
Level 8 -	Doctoral or equivalent level

At levels 2 to 5, by using the second digit of the classification, ISCED 2011 distinguishes and defines general and vocational orientation:

ISCED 2011 orientations	
Vocational orientation	Designed for learners to acquire the knowledge, skills and competences specific to a particular occupation, trade, or class of occupations or trades. Such programmes may have work-based components (e.g. apprenticeships, dual-system education programmes). Successful completion of such programmes leads to labour market-relevant, vocational qualifications acknowledged as occupationally-oriented by the relevant national authorities and/or the labour market.
General orientation	Designed to develop learners' general knowledge, skills and competences, as well as literacy and numeracy skills, often to prepare participants for more advanced education programmes at the same or a higher ISCED level and to lay the foundation for lifelong learning. These programmes are typically school- or college-based. General education includes education programmes that are designed to prepare participants for entry into vocational education but do not prepare for employment in a particular occupation, trade, or class of occupations or trades, nor lead directly to a labour market-relevant qualification.

At higher levels of education, ISCED 2011 does not distinguish between general and vocational education. It considers, but does not yet define, a distinction between academic and professional education; the distinction, therefore, is not used in this report. The third

digit of ISCED 2011 is used in indicator 1025 as it allows distinguishing between upper secondary vocational programmes with or without direct access to tertiary programmes at levels 5, 6 or 7. The third digit is also used in indicator 2065 to account properly for level completion and first degrees (long and short first degrees) in the calculation of the indicator.

Indicator 1020 considers enrolments in combined work- and school-based VET as opposed to mainly school-based VET (UNESCO-UIS, OECD, Eurostat, 2016). A programme is classified as 'combined work- and school-based' if 25% or more of the curriculum is presented outside the school environment. Programmes where the work-based component accounts for 90% or more of the curriculum are excluded from the UOE data collection. Under these conditions, apprenticeships are included in work-based IVET.

CVTS indicators on employer-sponsored CVET refer to education and training paid for (at least partly) by the employer. Partial payment includes the use of paid working time for training.

Lifelong learning indicators from the LFS refer to adults' participation in formal and non-formal education and training in the four weeks prior to the survey; the non-formal component includes participation in courses, seminars, conferences or private lessons or instructions outside the regular education system.

In some cases, such as indicators from sample surveys like the LFS, ISCED levels are aggregated to compute indicators. Used aggregations are: ISCED 0-2 (low educational attainment); ISCED 3-4 (medium educational attainment); ISCED 5-8 (tertiary educational attainment). Individuals whose highest level of education derives from completion of ISCED 3 programmes of duration of less than two years are considered as having low educational attainment. Contrary to ISCED 1997, ISCED 2011 no longer provides for the category of prevocational education and no aggregation is needed to derive an exhaustive and mutually exclusive distinction between general and vocational education.

