Indicator sources, descriptions and methodology

Label	Short description and general indication of the source
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 data, UOE data collection on formal education)
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 data, UOE data collection on formal education) (a)
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 data, UOE data collection on formal education)
Workers participating in CVT courses (% of staff)	Number of staff who participated in employer-sponsored CVT courses during the reference calendar year (12 months) as a percentage of all staff employed in all enterprises surveyed (Eurostat, CVTS)
Adults (25-64 year- olds) with a learning experience in the last 4 weeks (%)	Percentage of the population aged 25-64 who participated in formal or non-formal education and training over the four weeks prior to the survey. (Eurostat, LFS)
Enterprises sponsoring training (%)	Percentage of enterprises sponsoring any type of vocational training for their staff during the reference calendar year (12 months). (Eurostat, CVTS)
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 data collection on formal education)
Small firms' workers participating in CVT courses (%)	Number of staff in small enterprises who have participated in employer-sponsored CVT courses during the reference calendar year (12 months) as a percentage of all staff employed in all small enterprises surveyed (small enterprises covered by the survey are those from 10 to 49 employees) (Eurostat, CVTS)
Young IVET 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 formal or non-formal education and training over four weeks prior to the survey (Cedefop calculations based on Eurostat, LFS data supplied at Cedefop's request)

Label	Short description and general indication of the source
Older adults (50-64 year-olds) with a learning experience in the last 4 weeks (%)	Percentage of the population aged 50-64 who participated in formal or non- formal education and training over the four weeks prior to the survey (Cedefop calculations based on Eurostat, LFS)
Low-qualified adults with a learning experience in the last 4 weeks (%)	Percentage of the population aged 25-64 with lowest level of educational attainment (ISCED 0-2) who participated in formal or non-formal education and training over the four weeks prior to the survey. (Eurostat, LFS)
Unemployed adults with a learning experience in the last 4 weeks (%)	Percentage of the unemployed adults (aged 25-64) who participated in formal or non-formal education and training over the four weeks prior to the survey. (Eurostat, LFS)
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 data collection on formal education) (a)
IVET public expenditure per student (1000 PPS units)	Annual public expenditure (PPS) per student (FTE) in vocational upper secondary and 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 equivalents (FTEs). (Eurostat, UOE data collection on formal education)
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 data, CVTS)
Average number of foreign languages learned in IVET	Average number of foreign languages learned in vocational upper secondary education (ISCED 3). (Eurostat, UOE data collection on formal education) (a)
IVET graduates as % of all upper secondary graduates	Number of graduates from upper secondary IVET (ISCED 3) as a percentage of all upper secondary graduates. (Cedefop calculations based on Eurostat data, UOE data collection on formal education)
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 data collection on formal education) (a)
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 data, UOE data collection on formal education) (a)

Label	Short description and general indication of the source
Employment rate for recent IVET graduates (20-34 year-olds) (%)	Employment rate of 20-34 year-olds who have obtained a medium level vocational qualification (ISCED 3 or 4) 1-3 years before the survey as their highest educational attainment and who are not in further (either formal or non-formal) education and training during the last four weeks prior to the survey (Eurostat, LFS)
Employment premium for recent IVET graduates (over general stream) (%)	Premium expressed as a difference (in percentage points) between two indicators: the employment rate for recent IVET graduates and the corresponding employment rate for recent graduates (20-34 year-olds) from the general stream of education, i.e. at the same ISCED levels and who also graduated 1-3 years before the survey. Calculations exclude those still in (formal or non-formal) education and training. (Cedefop calculations based on Eurostat data, LFS)
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)
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)
Unemployment rate for 20-34 year-olds (%)	Unemployment rate (%) of 20-34 year-olds. (Cedefop calculations based on Eurostat, LFS)
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 further (formal or non formal) education or training activity. (Eurostat, LFS)
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)
Employment rate for 20-64 year-olds (%)	Percentage of the population aged 20-64 in employment. (Eurostat, LFS)
Gender employment gap (%)	Difference in percentage points between the employment rates of men and women aged 20-64. (Eurostat, LFS)
Employment rate for 20-64 year-olds with lower level of educational attainment (%)	Percentage of the population aged 20-64 with lower level of educational attainment (ISCED 0-2) in employment. (Eurostat, LFS)

Label	Short description and general indication of the source
Medium/high- qualified employment (% of total in the age group of 20-64 years olds)	Share of total employment accounted for by individuals with medium- (ISCED 3-4) or high-level (ISCED 5 and above) qualifications. Calculations are specific for the age group 20-64. Level of qualifications refers to the educational attainment of individuals who are employed and not to the educational requirements of their jobs. (Cedefop calculations based on Eurostat data, LFS)

⁽a) EU averages are Cedefop estimates as weighted averages of available country data.

Methodology

All indicators and breakdowns in this report 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 systems, 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's degree or equivalent level
Level 7 -	Master's degree or equivalent level
Level 8 -	Doctor 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

	ISCED 2011 orientations
Vocational orientation	Designed for learners to acquire the knowledge, skills and competencies specific
	to a particular occupation, trade, or class of occupations or trades. Such
	programmes may have work-based components (for example 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	Designed to develop learners' general knowledge, skills and competencies, as
orientation	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 designed to

ISCED 2011 orientations

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 third digit of ISCED 2011 is used in the indicator focussing on programme destination 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 the indicator focusing on the contribution of VET at ISCED level 5 to tertiary level attainment as it accounts properly for level completion and first degrees (long and short first degrees) in the calculation of the indicator.

Enrolments in combined work- and school-based VET as opposed to school-based VET are based on the UOE methodology. A programme is classified as 'combined work- and school-based' if 25% or more of the curriculum is presented outside the school environment. The UOE data collection excludes programmes where the work-based component accounts for 90% or more of the curriculum. Under these conditions, work-based IVET includes apprenticeships.

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 adult 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. It does not include guided on the job training. In some cases, such as indicators from sample surveys (for example the LFS), ISCED levels are aggregated to compute indicators. Aggregations used are: ISCED 0-2 (low educational attainment); ISCED 3-4 (medium-level educational attainment); ISCED 5-8 (Tertiary-level 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 pre-vocational education and no aggregation is needed to derive an exhaustive and mutually exclusive distinction between general and vocational education.