

Chapter 3. Scope and coverage of internationally comparable education statistics

This chapter sets out the coverage of the OECD's internationally comparative statistics on education. It starts by defining education and proceeds to define the coverage of the statistics which follows from that definition. It discusses various boundary issues around education, in particular in relation to the coverage of early childhood programmes, special needs education, non-regular and adult education and vocational and professional education and training.

3.1. Definition of education

The basic underlying definition of education used in the collection of OECD international education statistics is derived from the International Standard Classification of Education (ISCED 2011):¹

“The basic units of classification in ISCED are the national (and subnational) education programme and the related recognized educational qualification. In ISCED, an education programme is defined as a coherent set or sequence of educational activities or communication designed and organized to achieve predetermined learning objectives or accomplish a specific set of educational tasks over a sustained period. Objectives encompass improving knowledge, skills and competencies within any personal, civic, social and/or employment-related context. Learning objectives are typically linked to the purpose of preparing for more advanced studies and/or for an occupation, trade, or class of occupations or trades but may be related to personal development or leisure. A common characteristic of an education programme is that, upon fulfilment of learning objectives or educational tasks, successful completion is certified.”

Compared to previous versions, ISCED 2011 includes improved definitions for different types of education and clarifies their application. Categories have been added to the classification of levels in recognition of the expansion of early childhood education and the restructuring of tertiary education (UNESCO-UIS, 2011_[1]).

3.2. The scope of the OECD's international education statistics

Although non-formal education is a recognised part of ISCED, the OECD international data collection exercises (mappings, surveys, censuses, etc.) restrict the coverage of international educational statistics to formal programmes for the sake of international comparability and feasibility (OECD/Eurostat/UNESCO Institute for Statistics, 2015_[2]).

The boundary between formal and non-formal programmes is therefore important and should be given specific attention. Countries will have a large variety of education programmes, such as initial education, regular education, second chance programmes, literacy programmes, adult education, continuing education, open and distance education, apprenticeships, technical or vocational education, training, and special needs education. Box 3.1 details the types of education which are not included.

The restriction to formal education programmes determines the reporting of statistics on education systems at different levels, such as enrolment, entrants and teachers and other human and financial resources. Statistics on formal education programmes can therefore provide information on the links between inputs (entrants into this system), the process (participation) and outputs (the qualification).

Formal education is institutionalised, intentional and planned through public and recognised private institutions. Formal education is recognised as such by the relevant national education or equivalent authorities. Institutionalised education occurs when an organisation provides structured educational arrangements, such as student-teacher

¹ See Chapter 5 for a full description of ISCED 2011, its development and the OECD's role in that development.

relationships and/or interactions, that are specially designed for education and learning. Formal education typically takes place in educational institutions that are designed to provide full-time education for students in a system designed as a continuous educational pathway up to their first entrance to the labour market, although some parts of adult education are also recognised as part of the formal education system.

Regular education has been defined within the new ISCED classification as the initial education designed for individuals without special educational needs.

Box 3.1. Other types of education outside the scope of international education statistics

Non-formal education, like formal education, is institutionalised, intentional and planned by an education provider and is complementary or alternative to formal education within the course of individuals' lifelong learning. However, non-formal education mostly leads to qualifications that are not recognised as formal or equivalent to formal qualifications by the relevant national or subnational education authorities, or to no qualifications at all.

Informal learning is defined as forms of learning that are intentional or deliberate, but are not institutionalised. Less organised and less structured than either formal or non-formal education, informal learning may include learning activities that occur in the family, workplace, local community and daily life, on a self-directed, family-directed or socially-directed basis.

Incidental or random learning covers various forms of learning that are not organised or that involve communication not designed to bring about learning. Incidental or random learning may occur as a by-product of day-to-day activities, events or communications that are not designed as deliberate educational or learning activities. Examples may include learning that takes place during the course of a meeting, or while listening to a radio programme or watching a television broadcast that is not designed as an education programme.

3.3. Coverage issues, specific inclusions and exclusions

As national education systems vary in the way they are organised and in the way they label different types of activity, it is necessary to clarify which areas of activity are included or excluded (OECD, 2017^[3]).

3.3.1. Coverage of early childhood programmes

According to ISCED 2011, early childhood programmes are considered as educational when they have an intentional education component. These programmes aim to develop the cognitive, physical and socio-emotional skills needed to participate in school and society. ISCED level 0 covers early childhood education for all ages, including very young children. Programmes are sub-classified into two categories depending on age and the level of complexity of the educational content: early childhood educational development (code 010) and pre-primary education (code 020). Early childhood educational development programmes are a new class of education, not included in the ISCED-97 classification, and are generally designed for children between the ages of 0 and 2, while pre-primary education corresponds exactly to what was previously known as level 0 in ISCED-97.

Programmes classified at ISCED level 0 may be referred to in many ways, for example early childhood education and development, play school, reception, pre-primary, preschool or *educación inicial*, *krippen*. Programmes provided in crèches, day-care centres, nurseries or *guardería*, *kindergärten* must meet the ISCED level 0 classification criteria to be **included** in international education statistics. This means they must:

- have adequate intentional educational properties
- be institutionalised
- be targeted towards children from the age of 0 up to the age of entry into ISCED level 1 education
- meet minimum levels of intensity/duration (an intensity of at least 2 hours per day and duration of at least 100 days a year).

Wherever possible, programmes should also have a regulatory framework recognised by the relevant national authorities and have trained or accredited staff as set out in the appropriate regulatory framework.

The following programmes are **excluded from ISCED-2011**:

- Programmes that provide childcare only (i.e. supervision, nutrition and health). Integrated programmes in which the non-educational portion is greater than the educational portion.
- Purely family-based arrangements that may be purposeful but do not meet the UOE definition of a “programme” (e.g. informal learning by children from their parents, other relatives or friends is not included under ISCED level 0).
- Learning activities delivered in private homes or other institutionalised centres that are outside the jurisdiction of an appropriate national early childhood education authority or regulatory body, regardless of whether the activities are organised in the style of an approved early childhood education programme. An example of this would be a private citizen who, of his or her own volition, provides learning opportunities for young children that nominally meet the ISCED level criteria around intentional education, intensity/duration and staff qualification requirements, but who is not recognised by an authorising body.
- Programmes where attendance can be ad hoc or of a drop-in style where individual children will not experience a continuity of structured learning opportunities.
- Short-duration programmes, such as vacation care, which may have an educational curriculum but do not offer a sustained period of instruction or learning opportunities.
- Programmes with intentional educational properties but with no minimum level of attendance, such as when parents are free to choose an intensity and duration of their child’s attendance that does not meet the ISCED level 0 criteria.
- Early childhood services that are open for extended hours and provide intentional educational activities during these hours, but do not require a minimum intensity/duration of attendance or enrolment.

Some countries may define early childhood education more broadly than others. Some countries have a so-called “integrated care and education on level ISCED 0” (where

ISCED 01 and ISCED 02 enrolments cannot be separated). This is an integrated system of care and education before entering primary education, but preschool curriculum is not directly integrated with the curriculum of primary education. Thus, comparability of international statistics on programmes at ISCED level 0 depends on each country's ability to report data for this level according to a standard international definition, even if that definition may diverge from the one it uses in compiling its own national statistics. In this regard, the data reported in *Education at a Glance* (OECD, 2018^[4]) as ISCED level 0 programmes may differ from national reporting of early childhood education (see Chapter 5 for more detail on the implementation of the ISCED 2011 classification).

3.3.2. Coverage of special needs education

The ISCED 2011 manual defines special needs education as:

“education designed to facilitate learning by individuals who, for a wide variety of reasons, require additional support and adaptive pedagogical methods in order to participate and meet learning objectives in an education programme. Reasons may include (but are not limited to) differences in physical, behavioural, intellectual, emotional and social capacities (including disabilities, difficulties or disadvantages). Education programmes in special needs education may follow a similar curriculum as that offered in the parallel regular education system, but they take individual needs into account by providing specific resources (e.g. specially-trained personnel, equipment or space) and, if appropriate, modified educational content or learning objectives. These programmes can be offered to individual students within already-existing education programmes or as a separate class in the same or separate educational institutions.”

While there was agreement on the need to include special needs education with the overall scope of the UOE data collection (with certain specific exclusions), there remained difficulties in terms of defining special needs students as a separate reporting group in an internationally comparable manner. The ISCED 2011 classification considerably improved the definition of special needs education, although types of provision may vary across countries. Countries differ, for example, in the programmes offered, the degree to which special needs education is integrated into the regular education system, the classification of types of special needs and type of support given to these students. The UOE data collection recommends only excluding special needs programmes from data on numbers of classes and students in primary and lower secondary education by type of institutions (UNESCO-UIS / OECD / EUROSTAT, 2017^[5]) (UNESCO-UIS, 2013^[6]).

3.3.3. Coverage of non-regular or adult education

Regular education has been defined within the new ISCED classification as the initial education designed for individuals without special educational needs. Non-regular education covers adult education.

Adult education is education specifically targeted at individuals who are regarded as adults by their society to improve their technical or professional qualifications, further develop their abilities, enrich their knowledge with the purpose to complete a level of formal education, or to acquire, refresh or update their knowledge, skills and competencies in a particular field. This also includes what may be referred to as “continuing education”, “recurrent education” or “second chance education”, as opposed to initial education.

Initial education is defined as education taken by people in preparation for their initial entry into work. Initial education typically follows a continuous path or paths of progression prior to initial entry into full-time employment.

Formal adult education programmes included in data collection may be designed as second chance programmes for youth or adults and offered in the same or similar formal settings as **initial education**. They do not have the same typical entry age as equivalent programmes in initial education and may have a different, usually shorter, duration but with subject content similar to initial education, leading to similar qualifications as corresponding initial programmes. Data on these are assigned to the most appropriate ISCED levels according to the instructional content of the programmes.

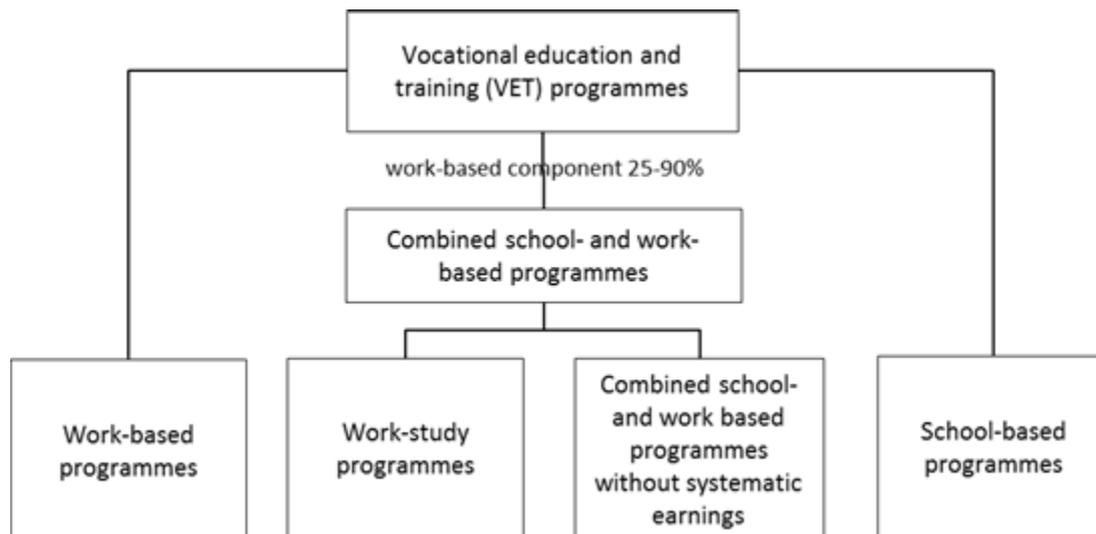
In some countries, adult education is not recognised as part of the formal education system and is therefore **excluded** from data collection. Conversely, for instance, in Belgium data on adult education is included in the data collection.

3.3.4. Coverage of vocational and professional education

For secondary, post-secondary non-tertiary and short-cycle tertiary education (ISCED levels 2 to 5), programme orientations can be general or vocational. ISCED 2011 also allows for the possibility of coding academic and professional orientation categories at the tertiary levels (ISCED levels 6 to 8). However, internationally agreed definitions on these orientation categories for tertiary education are still to be developed.

Vocational education and training (VET) programmes prepare participants for direct entry into specific occupations without further training. Successful completion of such programmes leads to a vocational or technical qualification that is relevant to the labour market. Vocational programmes are further divided into two categories (school-based programmes and combined school- and work-based programmes), based on the amount of training provided in school as opposed to the workplace. The degree to which a programme has a vocational or general orientation does not necessarily determine whether participants have access to tertiary education. In several OECD countries, vocationally oriented programmes are designed to prepare students for further study at the tertiary level, and in some countries general programmes do not always provide direct access to further education.

Figure 3.1 summarises the different combinations of vocational and training programmes.

Figure 3.1. Taxonomy of formal vocational education and training programmes

In **combined school- and work-based programmes**, at least 10% but less than 75% of the curriculum is presented in the school environment or through distance education. Therefore, the work-based component of a school- and work-based programme would be a minimum of 25% and a maximum of 90%. These programmes can be organised in conjunction with education authorities or institutions. They include apprenticeship programmes that involve concurrent school-based and work-based training, and programmes that involve alternating periods of attendance at educational institutions and participation in work-based training (sometimes referred to as “sandwich” programmes). Combined programmes include **work-study programmes**, which are formal education/training programmes combining interrelated study and work periods for which the student/trainee receives earnings, as well as combined school- and work-based programmes without systematic earnings. Hence, students participating in work-study programmes are considered to be both “in education” and “in employment” (OECD, 2017^[7]).

Experience shows that for combined school- and work-based programmes, the coverage of work-based components in national data collections is uneven. In order to ensure comparability across countries, the reporting of student numbers fully includes participation in the work-based components, as part of combined or hybrid systems, while the teaching staff (or trainers) for this component are always **excluded**.

In **school-based programmes**, instruction takes place (either partially or exclusively) in educational institutions. These include special training centres run by public or private authorities, or enterprise-based special training centres if they qualify as educational institutions. These programmes can have an on-the-job training component involving some practical experience in the workplace. Programmes are classified as school-based if at least 75% of the programme curriculum is presented in the school environment. This may include distance education.

Work-based programmes are learning that takes place through some combination of observing, undertaking and reflecting on productive work in real workplaces. The school-based component makes up less than 10% of the time. Work-based programmes are

usually non-formal education programmes or informal learning leading to a qualification that is recognised by national education authorities (or equivalent).

3.4. Challenges in measuring student mobility

It has become increasingly important to measure mobility in education in recent years. For example, European Union Council conclusions² on the modernisation of higher education have set a target of at least 20% of higher education graduates on average in the EU having a “period of higher education-related study or training (including work placement) abroad representing a minimum of 15 European Credit Transfer or lasting a minimum of three months” by 2020. Defining mobile students and the criteria for identifying them, types of learning mobility and proper indicators are among the challenges faced in developing international statistics on this phenomenon.

The OECD international statistics on education report on **domestic educational activity** (i.e. within a country’s own territory) regardless of ownership or sponsorship of the institutions concerned and the education delivery mechanism. This has implications for some special cases:

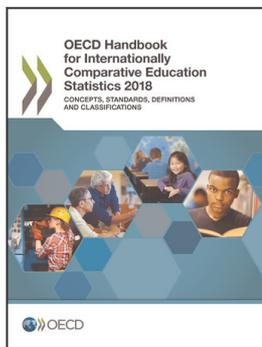
- **Distance learning/e-learning** involving two countries: students from country A who are enrolled with institutions in country B but who continue to live in country A are reported in the statistics of country B and not in the statistics of country A.
- **Commuting students** who cross a national border daily in order to follow an education programme in another country. As with distance learning, commuting students who are enrolled with institutions in country B but reside in country A are reported in the statistics of country B.
- **Internationally mobile students in short exchange programmes** (of at least three months but less than one academic year) that remain enrolled in their home institution (country A) and where credits for successful completion of the study abroad (country B) are awarded by the home institution. Students in such exchange programmes do not obtain their qualifications from the host institution abroad but at their home institution where they originally enrolled, and are reported by the country in which they are enrolled (country A).
- **Foreign campus:** an institution in country A may have a campus or outpost in country B (i.e. a foreign campus). Country B should report the enrolments and finance for the foreign campus in the same manner as it reports activities of its domestic educational institutions. The mobile status of the students at these campuses is determined as for all other students. Foreign campuses that in practice do not accept students from the host country (for example schools provided for the children of military personnel based outside their home country) are treated in the same way as other foreign campuses. Although in practice the host country may not have access to the data to report such students, their numbers are not likely to be statistically significant. In cases where it is not possible in practice to report these students, this should be noted.

² http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/educ/126375.pdf

- **European schools** are schools established to provide education to children of personnel of the European institutions, leading to the European Baccalaureate. Other children may be admitted subject to the availability of places and must pay fees. It is a unique system that implements a form of co-operation between the member states and between them and the European Commission. Countries in which there are European schools report the enrolments, entrants, graduates, personnel and finance data in the same manner as for foreign campuses, i.e. like activities of its domestic educational institutions. European schools are considered private institutions. Students in European schools are excluded from data collection on language learning.

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