

# UOE data collection on formal education

## Manual on concepts, definitions and classifications

VERSION OF 11<sup>th</sup> of July 2016

MONTREAL, PARIS, LUXEMBOURG 2016

# UNESCO-UIS / OECD / EUROSTAT

## Data Collection on formal education

### Manual on concepts, definitions and classifications

## TABLE OF CONTENTS

<b>INTRODUCTION</b>	3
<b>CHAPTER 1: COVERAGE</b>	5
1.1. General information	5
1.2. Formal initial education	6
1.3. Formal adult education	6
1.4. Early childhood education programmes	7
1.5. Special needs education	9
1.6. Vocational or technical education	10
1.7. Geographical coverage	10
1.8. Educational expenditure	12
1.9. Alignment of data on students enrolled, educational finance, and educational personnel	16
<b>CHAPTER 2: CROSS-CUTTING CONCEPTS</b>	17
2.1. Levels of education	17
2.2. Programme orientation	19
2.3. Fields of education	21
2.4. Type of educational institutions	23
2.5. Grade	26
2.6. Part-time/full-time classification and conversion to full-time equivalents	27
2.7. Age	31
2.8. International learning mobility (internationally mobile students, new entrants and graduates)	32
2.9. Region	34
2.10. Foreign languages	34
<b>CHAPTER 3: STATISTICAL UNITS</b>	36
3.1. Students enrolled	36
3.2. Repeaters	37
3.3. New entrants	37
3.4. Graduates and First-time graduates	38
3.5. Educational personnel	40
3.6. Class size	46
3.7. Expenditure	47

## INTRODUCTION

This manual presents the concepts, definitions and classifications used for the UOE data collection. It constitutes the conceptual and methodological background of the UOE data collection

The objective of the joint UNESCO-UIS/ OECD/ EUROSTAT (UOE) data collection on education statistics is to provide internationally comparable data (mostly at national level, with some insights at the subnational level) on key aspects of formal education systems, specifically on the participation and completion of education programmes, as well as the cost and type of resources dedicated to education.

Countries participating in the UOE data collection co-operate to gather the information, to develop and apply common definitions and criteria for the quality control and verification of the data.

Countries are committed to making all reasonable efforts to report their data according to the definitions, classifications, and coverage specified in the current document. Where deviations from international standards, estimations, or data aggregations are necessary, it is essential that these be documented correspondingly. The ***documentation of data is an integral part of the data collection*** and is of crucial importance for the credibility of international education statistics. In addition to the metadata asked for in the different questionnaires, EU, EFTA and EU candidate countries provide standard data quality reports as requested by Commission Regulation (EU) No 912/ 2013.

The UOE data collection is administered jointly by the United Nations Educational, Scientific, and Cultural Organization Institute for Statistics (UNESCO-UIS), the Organisation for Economic Co-operation and Development (OECD), and the Statistical Office of the European Union (EUROSTAT). These are referred to as the *data requesters* in this manual.

The UOE data collection tables are *organised by topic and by the statistical units for which data are collected* (students enrolled, new entrants, graduates, educational personnel, class size and expenditure).

The preparation of the data collection tables is guided by the search for a common denominator between UNESCO-UIS, OECD and EUROSTAT. This common denominator is reflected in the UOE tables on students, new entrants, graduates, educational personnel, finance, class size and the ISCED mappings. In addition there are OECD and EU specific tables introduced by the European Commission (EUROSTAT). These tables cover data on *population, regional enrollment* and on *foreign language learning*. These OECD and EU specific parts of the UOE data collection are managed by OECD and Eurostat respectively.

EU and candidate countries do not have to complete DEM-1: "Total population by sex and age-group" as the demographic data used for these countries will come from the Eurostat Demographic database at national and regional level.

UIS-UOE countries are also not expected to complete DEM1 as the demographic data used for these countries are sourced from the United Nations Population Division (UNPD).

**Table 1. List of countries by EU and OECD relevance**

OECD relevance	EU relevance	Which countries	Number
OECD Member	-	Australia, Canada, Chile, Israel, Japan, Republic of Korea, Mexico, New Zealand, United States of America	9
OECD Member	EU Member	Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Ireland, Latvia, Luxembourg, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, United Kingdom	22
-	EU Member	Bulgaria, Croatia, Cyprus, Lithuania, Malta, Romania	6
OECD Member	EFTA <sup>1</sup> country	Iceland, Norway, Switzerland	3
OECD Member	Candidate	Turkey	1
-	Candidate	FYR of Macedonia, Serbia	2
-	EEA country	Liechtenstein	1
UIS-UOE countries		India, Indonesia	2
Non-OECD member but INES participant		Brazil, Russian Federation	2

All data collection tools are available on the Eurostat Education, Training and Culture Statistics public web site at the address:

<https://circabc.europa.eu/w/browse/2a63f000-691a-4aa5-b4aa-d5f9c0a00ff8>

Complementary to this manual, each questionnaire includes practical guidelines and the main relevant validation rules.

<sup>1</sup> European Free Trade Association. Iceland is an EU candidate country since 2010.

## CHAPTER 1: COVERAGE

### 1.1. GENERAL INFORMATION

This data collection covers **formal education programmes** that represent at least the equivalent of one semester (or one-half of a school/ academic year) of full-time study and are provided within the reporting country's own territory.

**Formal education** is institutionalised, intentional and planned and provided by public organizations and recognised private bodies. It consists primarily of **initial education** designed for children and young people before their first entry to the labour market. It also includes other types of education such as **vocational, special needs** and **adult education** provided they are recognised as part of the formal education system by the relevant national education authorities.

The data collection covers all of a country's formal **domestic educational activity** (i.e. formal education provided within its own territory) regardless of ownership or sponsorship of the institutions concerned (whether **public** or **private**, national or foreign) or of the education delivery mechanism (whether face-to-face or at a distance).

In particular, all students studying within the country, including internationally mobile students from abroad, should be included in the statistics of the reporting country. Students who have left the reporting country to study abroad should not be included even where such students are partially- or fully-funded by national or sub-national authorities.

By contrast, formal educational activities which take place abroad – for example, in institutions run by providers located in the reporting country or study abroad by students originating from the reporting country – should be excluded.

The data collection covers formal education which **takes place entirely in educational institutions or is delivered as a combined school- and work-based programme** providing the school-based component represents at least 10% of the study over the whole programme. Entirely work-based training is excluded.

The programmes which should be reported in this data collection include:

- a. programmes provided within the country's territory i.e. **domestic educational activity**
- b. programmes representing **at least one semester** of full-time study;
- c. **school-based** or **combined school- and work-based** programmes;
- d. **formal initial education** in early childhood education programmes, pre-primary, primary and secondary schools, colleges, polytechnics, universities and in other post-secondary institutions;
- e. **formal adult education** recognised by the relevant national education authorities;
- f. **vocational** or **technical** education and **special needs education**;
- g. **distance education** (especially at the tertiary level);

- h. formal education in **public** (or state) and in **private** schools, colleges, polytechnics or universities;
- i. both **full-time** and **part-time** formal education; and
- j. education provided in the reporting country of all students whether **citizens** or **non-citizens**.
- k. formal education at all levels provided in educational institutions organised by Ministries other than the Ministry of Education (for example, Health, Agriculture, Social Affairs, Defence)

The education programmes covered by the data collection should be classified according to the levels and fields of education defined in the 2011 revision of the [International Standard Classification of Education \(ISCED 2011\)](#). Detailed information is provided in the [Joint UIS/OECD/EUROSTAT ISCED Operational Manual](#).

The following is a set of basic definitions that helps to define the scope and coverage of this data collection.

## 1.2. FORMAL INITIAL EDUCATION

**Initial education** is the education of individuals before their first entrance to the labour market, i.e. when they will normally be in full-time education. It thus targets individuals who are regarded as children, youth and young adults by their society. It typically takes place in educational institutions in a system designed as a continuous educational pathway.

**Formal education** is institutionalised, intentional and planned through public organizations and recognised private bodies. Formal education programmes are thus recognised as such by the relevant national education authorities or equivalent authorities, e.g. any other institution in cooperation with the national or sub-national education authorities. Formal education consists mostly of initial education.

## 1.3. FORMAL ADULT EDUCATION

**Adult education** is 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'.

In most countries adult education is not recognised as part of the formal education system and should therefore be excluded from this data collection. **Formal adult education** programmes included in this 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.

**Formal adult education** programmes should be assigned to the most appropriate ISCED levels. They should not be treated as a separate level of education.

#### 1.4. EARLY CHILDHOOD EDUCATION PROGRAMMES

Tables ENRL1A-INST, ENRL2-AGE&FP, ENRL3-AGE&P request data on pupils enrolled in early childhood education programmes. PERS and FINANCE questionnaires also request data on early childhood education.

**Early Childhood education programmes**<sup>2</sup> (ISCED level 0) are typically designed with a holistic approach to support children’s early cognitive, language, physical, social and emotional development and to introduce young children to organised instruction in an institutionalised setting. At this level, programmes are not necessarily highly structured but are designed to provide an organised and purposeful set of learning activities in a safe environment. They allow children to learn through interaction with other children under the guidance of staff/ educators, typically through creative and play-based activities.

**Early Childhood education programmes** are usually school-based or otherwise institutionalised for a *group* of children. As the institutions authorised to provide ISCED level 0 programmes vary between jurisdictions (e.g. centre-based, community-based, home-based), to be reported in the UOE collection both the *programme* and the *mode or institution of delivery* should be recognised within the respective early childhood education system.

Particular care should be given to programmes delivered from home-based settings – if the programme being delivered meets the criteria as set out in the ISCED-2011 manual and delivery from a private home is recognised under the respective regulations, it should be included in UOE data reporting. By contrast, ISCED level 0 excludes purely family-based arrangements that may be purposeful but do not meet the ISCED definition of a ‘programme’. Also excluded are learning activities delivered from 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 into the style of an approved early childhood education programme.

Along with an intentional child-development and educational focus, a key defining factor of **Early Childhood education programmes** is the sustained intensity and duration of delivery of intentional educational activities. These are what differentiate ISCED level 0 from other programmes, such as childcare and occasional, after hours or vacation care. To be included in UOE data reporting the intentional educational component of ISCED level 0 programme must also meet the equivalent of an intensity of at least 2 hours per day; and a duration of at least 100 days a year. Note that this is a *minimum* intensity/ duration and it is possible for both the intentional educational portion of programmes and the programmes themselves to exceed this.

If a programme meets the requirements set out in this manual and enrolled children are expected to experience intentional educational activities for at least the above intensity/ duration, the programme may in its entirety be deemed an educational programme for reporting purposes, even where the programme includes additional activities that are somewhat less educationally-focussed. Where exact information on the intensity/ duration of a programme’s intentional educational components is not available, institution opening hours or programme delivery hours should not be used as a proxy to determine a programme’s inclusion in ISCED level 0 reporting. In

---

<sup>2</sup> For more guidance on Early Childhood Education programmes, please see the Appendix A available on CIRCABC: [UOE Manual Appendix A](#)

these cases, estimation of the typical or intended intensity/ duration of the programme's intentional educational properties should be used.

Care should be taken to distinguish between the intensity/ duration of the intentional educational components of ISCED level 0 programmes, the expected intensity/ duration of attendance of enrolled children and the opening hours of the institutions which provide them, as they are not necessarily the same. Programmes should be excluded of UOE data reporting if the expected attendance of enrolled children is less than the above minimum intensity/ duration, regardless of both the hours or days that the programme is available or the intensity/ duration of the provision of intentional educational content.

Examples of programmes to be excluded from UOE reporting include:

- 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 not a sustained period of instruction or learning opportunities,
- programmes with intentional educational properties but with no minimum level of attendance, such as where 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 which are open for extended hours and providing intentional educational activities throughout these hours, but do not require a minimum intensity/duration of attendance or enrolment of children

**Early Childhood education programmes** target children below the age of entry into ISCED level 1. There are two categories of ISCED level 0 programmes: ISCED 010 - early childhood educational development and ISCED 020 - pre-primary education. ISCED 010 has intentional educational content designed for younger children (typically in the age range of 0 to 2 years), whilst ISCED 020 is typically designed for children from age 3 to the start of primary education (ISCED level 1). If occasionally children below the age of 3 are accepted in ISCED 020, also the younger children could be included. ISCED 010 is introduced as a new category in ISCED 2011 and is not covered by ISCED 1997. Pre-primary education (code 020) corresponds exactly to level 0 in ISCED 1997.

Some **Early Childhood education programmes** span the two sub-categories of ISCED 0 (i.e. education programmes for children aged 0 to the start of ISCED 1). These integrated early childhood education programmes need special consideration for classification. For programmes divided into years, stages or cycles: the distinction is based primarily on the educational properties of the programme. Where no subdivision of the programme exists, classification into the two categories should be based on the ages of the participants. For UOE data reporting purposes, data for children below 3 years of age should be reported as ISCED 010; data for children aged 3 to the starting age for ISCED 1 should be reported as ISCED 020. Data on enrolments, personnel and on finance need to be adjusted according to this coverage. For example, this may involve estimation of expenditures and personnel at levels 010 and 020 respectively.

Where the Child Care components are distinctly separate from Early Childhood Education components (for example, the two components are offered as individual programmes that must be enrolled in separately), the Child Care components must be excluded from reporting. For example, programmes that provide only childcare (supervision, nutrition and health) are excluded from UOE reporting. However, it should be noted that it is acceptable to include in UOE



reporting integrated programmes where the non-educational portion is greater than the educational portion, so long as the educational portion meets the criteria in this manual.

**Early Childhood education programmes** should be included in, recognised or approved by a regulatory framework. A regulatory framework for ISCED level 0 programmes is defined as legislation, guidelines, standards or instructions issued or recognised by whichever relevant authority governs the provision of education programmes to very young children (e.g. a ministry of education, other relevant ministry or affiliated institution). The regulatory framework may (but is not limited to) describe or designate the learning opportunities (pre-determined learning objectives or a specific set of educational tasks) provided to young children, set out the pedagogical qualifications, training or accreditation required by any person delivering an education programme to children in the years prior to primary school, as well as regulating providers.

**Early Childhood education programmes** are often delivered by staff of varying levels of qualification, depending on their role in the institution in which they are employed. For the purposes of reporting, reference should be made to the relevant regulatory framework (as defined above) for detail on requirements for persons providing or delivering an education programme to children in the years prior to primary school (such as pedagogical qualifications, training or accreditation at various staffing levels).

The beginning of compulsory education is not a sufficient criterion to distinguish ISCED level 0 programmes from ISCED level 1 programmes, even though this may be the case in some education systems. However, with the exception of the difference in the target age and type of learning targeted, ISCED 1 programmes will generally automatically meet ISCED level 0 criteria (educational properties, institutionalised setting, intensity and duration, regulatory framework, trained staff). For the purposes of UOE data reporting, countries should report all children under 6 years of age in ISCED level 0, except for where the national starting age for ISCED 1 is younger or in the case of individual children who start ISCED 1 at an earlier-than-usual age.

At ISCED 0, the boundary between formal and non-formal education is not as clear as it is for other ISCED levels. As a proxy measure, programmes may be included in ISCED level 0 reporting if they meet the main ISCED level 0 criteria (see ISCED-2011 operational manual). Further, the subsidiary criteria of staff qualifications and existence of a regulatory framework may also help in distinguishing formal early childhood education programmes from non-formal ones. In UOE data reporting, as with other ISCED levels, only formal education programmes should be reported in the UOE data collection.

Organised instruction for children with special needs should also be included at this level if either the participants are of a similar age to other students enrolled in early childhood educational development or pre-primary education, or if the instructional content is at a significantly lower level than that of the first years of primary education. This may include in particular education provided in hospitals or in special schools or training centres.

## 1.5. SPECIAL NEEDS EDUCATION

Students and personnel involved in special education should be included in all tables of the ENRL, ENTR, GRAD and PERS and FIN-STUDENTS questionnaires. However, students with special needs should be excluded from CLASS questionnaires.
--

**Special needs education** is 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.

**Formal special needs education** is treated similarly to other **initial education** programmes provided the main aim of these programmes is the educational development of the individual.

Programmes in **special needs education** may follow a similar curriculum to that offered in the parallel **regular education**<sup>3</sup> 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.

All students in special education programmes should be assigned to specific ISCED levels, either directly or by estimation. They should not be treated as a separate level of education.

## 1.6. VOCATIONAL OR TECHNICAL EDUCATION

Data on vocational and technical education programmes within the scope of the data collection should be reported in all tables from ENRL, ENTR, GRAD, PERS, CLASS and FINANCE questionnaires.

**Vocational education** is designed for learners to acquire the knowledge, skills and competencies specific to a particular occupation, trade, or class of occupations or trades. Vocational education may have work-based components. 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.

**Formal vocational education** programmes are covered by this data collection provided they are delivered either as entirely school-based programmes or as combined school- and work-based programmes in which the school-based component represents at least 10% of the total study over the whole programme. Entirely work-based training is excluded.

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 should fully include participation in the work-based components, as part of combined or hybrid systems, while teaching staff (or trainers) of this component should always be excluded. Similarly, the financing of work-based components should not be reported in education finance statistics.

## 1.7. GEOGRAPHICAL COVERAGE

The UOE data collection covers all of a reporting country's **domestic educational activity** (i.e. within its own territory) regardless of ownership or sponsorship of the institutions concerned and the education delivery mechanism. This has implications for the special cases listed below.

---

<sup>3</sup> Regular education is initial education designed for individuals without special educational needs.

- **Distance learning/e-learning involving two countries:** Students from country A who are enrolled with institutions in country B but who remain residing in country A should be reported in the statistics of country B and not in the statistics of country A.
- **Commuting students:** Commuting students are students who cross a national border on a daily basis in order to follow an education programme in another country. Commuting students, as for distance learning students, who are enrolled with institutions in country B but reside in country A should be reported in the statistics of country B.
- **Internationally mobile students in short exchange programmes** (of at least 3 months but less than one academic year) who 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 should be reported by the country in which they are enrolled.
- **Foreign campus:** An institution in country A may have a campus or out-post 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 should be 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) should be 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.

- **European schools:** European schools are schools established to provide education to children of personnel of the European Institutions and 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 cooperation between the Member States and between them and the European Commission.

Countries in which there are European schools should 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 should be considered as private institutions.

Pupils/ students in European schools should be excluded from data collection on language learning.

Please note that all the particular cases should be treated according to the same criteria as all other students. Consequently there is no need to identify the above mentioned particular cases. They are only listed to eliminate any doubt about their treatment.

## 1.8. EDUCATIONAL EXPENDITURE

### FRAMEWORK FOR EDUCATIONAL EXPENDITURE

The data collection on education finance and expenditure covers expenditure from all sources on formal education. This includes government expenditure, including expenditure from all government ministries and agencies financing or supporting education programmes; and expenditure from international and private sources. Tables FIN1-SOURCE and FIN2-NATURE request data on educational expenditure.

Data on education finance and expenditure should be reported for the same programmes as for students, teaching staff and graduates. This means they should cover spending on formal education programmes which are delivered within the national territory, irrespective of the citizenship of students enrolled in these programmes.

Expenditure should be reported whether it is on instructional or non-instructional educational institutions, public or private.

Expenditure on education includes expenditure on core educational goods and services, such as teaching staff, school buildings, or school books and teaching materials, and peripheral educational goods and services such as ancillary services, general administration and other activities.

Ideally, for the purposes of international comparison, educational expenditure should be defined as goods and services purchased. Hence, the UOE financial tables should only cover expenditure on a well-defined and comparable set of goods and services related to educational programmes within the scope of this data collection.

In practice, however, national data collections have educational institutions as their defining units rather than the educational goods and services, reflecting the traditional interest in how much schools, colleges and universities cost, and how much of that is paid for by the government. But whilst an institutional dimension is important for the finance data, it is problematic for international comparisons because some of the goods and services provided by educational institutions in one country may in fact be provided outside educational institutions in another country. Furthermore, it is often difficult to neatly separate out the educational and non-educational goods and services offered by institutions. It is necessary therefore to consider a framework for educational finance data that is built around three dimensions:

- The type of **goods and services** provided or purchased (core and peripheral goods and services);
- The **service provider** (educational and other institutions (e.g. bus company)) and
- The **source of funds** that finance the provision or purchase of these goods and services (public, private and international sources).

Figure 1 presents the matrix underlying the reporting for the UOE data collection. In order to determine the coverage of this data collection, educational expenditure first needs to be classified according to the three dimensions explained above: type of goods and services; location of service provider and source of funds.

The coverage of this data collection, as shown in Figure 1, can be summarised as follows:

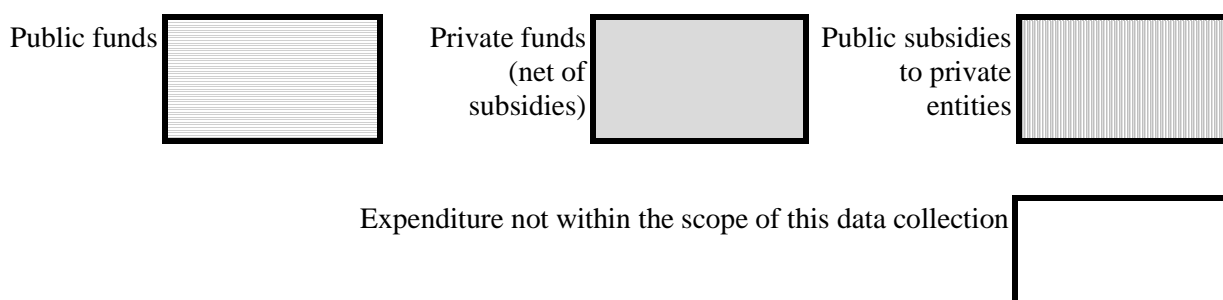
- Direct public, private and international expenditure on educational institutions;
- Private expenditure on educational goods and services purchased outside educational institutions;
- Subsidies to students from government and other private entities; plus
- Transfers and payments to other private entities.

All (public and private) educational expenditure on formal education is covered, regardless of whether it is spent on institutions or on transfers to private entities, either for living costs or for educational services.

Figure 1. Framework for educational expenditure

Type of goods and services		Location of service providers	
		Inside educational institutions	Outside educational institutions
Educational core goods and services		Public funds	Subsidised private  (books, materials, extra tuition)
		Subsidised private Private funds (tuition fees, other private entities)	Private funds
Educational peripheral goods and services	R&D	Public funds Private funds (other private entities)	
	Non-instruction	Public funds  Ancillary services: (meals, transport to schools, housing on the campus) Subsidised private Private funds (fees for services)	Subsidised private (living costs, transport, ...)  Private funds

Legend:



The rows in figure 1 reflect the different goods and services provided to students or purchased by students.

**Educational core goods and services:**

- The first row, labelled “**educational core goods and services**”, includes all expenditure that is directly related to instruction and education. It covers all expenditure on teachers, maintenance of school buildings, teaching materials, books, tuition outside schools, and administration of schools.

- The second row, labelled “**R&D**” (Research and Development) covers all expenditure related to R&D. For the purposes of the education indicators, only R&D carried out in educational institutions needs to be taken into account. This category normally applies only to tertiary education.
- The third row labelled “**non-instruction**” covers all expenditure broadly related to student living costs or services provided by institutions for the general public.

The columns in figure 1 reflect the location of the different service providers in relation to educational institutions (i.e. inside or outside educational institutions).

- The first column, “inside **educational institutions**”, covers expenditure on educational institutions. Educational institutions include teaching institutions and non-teaching institutions, such as ministries, local authorities and student unions.
- The second column, “**outside educational institutions**”, covers expenditure on educational services purchased outside institutions, e.g. books, computers, external tuition, etc. It also deals with student living costs and costs of student transport not provided by educational institutions.

The third dimension in the framework – **sources of funds** – is represented by the shading in the diagram.

- Public sector and international agencies sources of funds are indicated by horizontally shading
- Households and other private entities are indicated by the dark shading
- Private expenditure on education that is subsidised by public funds is indicated by the vertically shading.

The white, un-shaded cells indicate the parts of the framework that are **excluded** from the coverage of the data collection on finance.

## ACCOUNTING PRINCIPLES

In keeping with the system used by many countries to record government expenditures and revenues, the UOE educational expenditure data are compiled on a cash accounting rather than an accrual accounting basis. That is to say that expenditure (both capital and current) is recorded in the year in which the payments occurred. This means in particular that:

- Capital acquisitions are counted fully in the year in which the expenditure occurs;
- Depreciation of capital assets is not recorded as expenditure, though repairs and maintenance expenditure is recorded in the year it occurs;
- Expenditure on student loans is recorded as the gross loan outlays in the year in which the loans are made, without netting-off repayments from existing borrowers.

One noted exception to the cash accounting rules is the treatment of retirement costs of educational personnel (see section 3.7.1.1.3.8) in situations where there are no (or only partial) on-going employer contributions towards the future retirement benefits of the personnel. In these cases countries are asked to impute these expenditures in order to arrive at a more internationally comparable cost of employing the personnel.

A consequence of the accounting basis used is that sharp fluctuations in expenditure can occur from year to year owing to the onset or completion of school building projects which, by their nature, are sporadic.

## **1.9. ALIGNMENT OF DATA ON STUDENTS ENROLLED, EDUCATIONAL FINANCE, AND EDUCATIONAL PERSONNEL**

Where the coverage of the data on students enrolled, educational finance, and educational personnel differs, the differences must be indicated in tables PERS1-STUD and FIN-STUDENTS. These tables collect data on the number of students enrolled by level of education with some breakdowns by type of programme and by type of institution with a coverage aligned to the personnel and finance data.

. For example, if the statistics on educational finance do not cover expenditures for a particular type of institution, then the students enrolled in this type of institution should be excluded from Table FIN-STUDENTS. Similarly, if the data on educational personnel do not cover certain types of programmes or delivery mechanism (e.g. distance education) then the students enrolled in these programmes should be excluded from Table PERS1-STUD.



## CHAPTER 2: CROSS-CUTTING CONCEPTS

### 2.1. LEVELS OF EDUCATION

The data reported should be disaggregated by the levels of education defined in the 2011 revision of the [International Standard Classification of Education \(ISCED 2011\)](#). ISCED classifies education programmes by their content using two main cross-classification variables: levels of education and fields of education. Detailed information is provided in the [Joint UIS/OECD/EUROSTAT ISCED Operational Manual](#).

Education programmes should first be classified by level according to the ISCED 2011 criteria.

**Levels of education** are an ordered set grouping education programmes in relation to gradations of learning experiences, as well as the knowledge, skills and competencies which each programme is designed to impart. The ISCED level reflects the degree of complexity and specialisation of the content of an education programme, from foundational to complex.

The levels in ISCED 2011 are defined below:

**Early childhood education (ISCED level 0)** provides learning and educational activities with a holistic approach to support children's early cognitive, physical, social and emotional development and introduce young children to organized instruction outside of the family context to develop some of the skills needed for academic readiness and to prepare them for entry into primary education.

**Primary education (ISCED level 1)** provides learning and educational activities typically designed to provide students with fundamental skills in reading, writing and mathematics (i.e. literacy and numeracy) and establish a solid foundation for learning and understanding core areas of knowledge and personal development, preparing for lower secondary education. It focuses on learning at a basic level of complexity with little, if any, specialisation.

**Lower secondary education (ISCED level 2)** is typically designed to build on the learning outcomes from ISCED level 1. Usually, the educational aim is to lay the foundation for lifelong learning and human development upon which education systems may then expand further educational opportunities. Programmes at this level are usually organized around a more subject-oriented curriculum, introducing theoretical concepts across a broad range of subjects.

**Upper secondary education (ISCED level 3)** is typically designed to complete secondary education in preparation for tertiary education or provide skills relevant to employment, or both. Programmes at this level offer students more varied, specialised and in-depth instruction than programmes at lower secondary education (ISCED level 2). They are more differentiated, with an increased range of options and streams available.

**Post-secondary non-tertiary education (ISCED level 4)** provides learning experiences building on secondary education, preparing for labour market entry as well as tertiary education. It typically targets students who have completed upper secondary education (ISCED level 3), but who want to increase their opportunities either to enter the labour market or progress to tertiary education. Programmes are often not significantly more advanced than

those at upper secondary education as they typically serve to broaden – rather than deepen – knowledge, skills and competencies. It therefore aims at learning below the high level of complexity characteristic of tertiary education.

**Tertiary education (ISCED levels 5 to 8)** builds on secondary education, providing learning activities in specialised fields of education. It aims at learning at a high level of complexity and specialisation. Tertiary education includes what is commonly understood as academic education but also includes advanced vocational or professional education.

### Level completion and access

ISCED 2011 categorises education programmes and qualifications according to the outcomes and destinations to which successful completion of the programme (or the resulting qualification) can lead.

It is necessary to distinguish between the **successful completion of an education programme** and the **completion of an ISCED level**. At most ISCED levels, ISCED 2011 distinguishes between programmes which are **sufficient for level completion** and those which are not.

**Successful completion of an education programme** is the achievement of the learning objectives of the programme typically validated through the assessment of acquired knowledge, skills and competencies. Successful completion of a programme is usually documented by the award of an educational qualification.

**Completion of an ISCED level** is the **successful completion of an education programme** sufficient for level completion:

- At ISCED levels 1 and 4-8, the **successful completion of a programme** meeting the content and minimum duration criteria for the given level is considered as **level completion**.
- At ISCED levels 2 and 3 the **successful completion of any programme** granting access to programmes at higher ISCED levels (i.e. ISCED level 3 in the case of ISCED level 2 programmes and ISCED level 5, 6 or 7 in the case of ISCED level 3 programmes) is counted as **level completion** as is the completion of any terminal programme meeting the content, minimum duration (2 years) and cumulative duration criteria for the respective ISCED level (i.e. 8 years since the start of ISCED level 1 in the case of ISCED level 2 programmes and 11 years in the case of ISCED level 3 programmes).

Every programme can, in theory, be successfully completed even if it does not lead to any formal qualifications but not all programmes are sufficient for completion of the ISCED **level**. This can occur where there is a sequence of short programmes within an ISCED **level** or where there are programmes which are substantially shorter than the typical duration of the given **level**.

**Duration** of the programme is one of the main criteria for completion of an ISCED level: Programmes representing the normal duration of the ISCED **level** will usually be **sufficient for completion of the ISCED level**. At ISCED levels 2 and 3, ISCED 2011 provides for a third category of completion: programmes sufficient for partial level completion. In order to be classified as sufficient for partial level completion at ISCED levels 2 or 3, programmes need to represent:

- a. at least 2 years of study within the ISCED level; and
- b. at least 8 years (ISCED level 2) or 11 years (ISCED level 3) of cumulative study since the start of ISCED level 1.

ISCED 2011 further categorises programmes which are **sufficient for level completion** at ISCED levels 2-4 into those which give direct access to higher ISCED levels and those which do not. At ISCED level 3 'higher ISCED level' means ISCED levels 5, 6 or 7. ISCED level 3 programmes which only give access to ISCED level 4 are classified as sufficient for level completion without access to higher ISCED levels.

Education programmes and corresponding qualifications can thus be classified into four categories:

- Insufficient for level completion (with no access to higher ISCED levels);
- Partial level completion (with no access to higher ISCED levels). This category applies only at ISCED levels 2 and 3;
- Level completion without access to higher ISCED levels; and
- Level completion with access to higher ISCED levels.

## 2.2. PROGRAMME ORIENTATION

In ISCED 2011, the **orientation of a programme** is a dimension used at levels 2 to 5, with the possibility to use it at ISCED levels 6 to 8. The two categories of orientation of programmes at ISCED levels 2-5<sup>4</sup> are: general and vocational.

At tertiary education levels (ISCED levels 6-8), the terms 'academic' and 'professional' can be used in place of 'general' and 'vocational' respectively. ISCED 2011 does not yet define 'academic' and 'professional' more precisely but opens up the possibility to use national definitions if they exist. At ISCED level 5, the definitions of 'general' and 'vocational' education will be used until definitions of 'academic' and 'professional' have been developed.

In ISCED 2011, the concept of 'pre-vocational' (used in previous ISCED 97) has been abandoned. Programmes of 'pre-vocational' orientation in ISCED97 should be reported as 'general' in this data collection.

### ***General programmes***

General education programmes are designed to develop learners' general knowledge, skills and competencies, 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.

### ***Vocational programmes***

Vocational education programmes are 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 (e.g. apprenticeships, dual-system education programmes). Successful completion of such programmes leads to labour market-

---

<sup>4</sup> Please note that once international definitions are agreed the terms at ISCED 5 will be changed to 'academic' and 'professional'.

relevant, vocational qualifications acknowledged as occupationally-oriented by the relevant national authorities and/ or the labour market.

Both **general** and **vocational** programmes can contain some courses or subjects that are common to both programmes. For example, a vocational programme may contain courses on mathematics or the national language which are also taught to students in general programmes. When reporting data on certain statistical units, in particular **education personnel**, by programme **orientation** it is the classification of the programme that determines the **orientation** and not the subject being studied or taught.

### The distinction between school-based and combined school- and work-based vocational programmes

Table ENRL1A-INST requests data distinguishing between school-based and combined school- and work-based programmes.

At the upper secondary level and the non-tertiary post-secondary level, “vocational programmes” are further divided into “school-based programmes” and “combined school and work-based programmes” on the basis of the amount of training that is provided in-school as opposed to training in the work place.

In distinguishing between school-based and combined school- and work-based programmes, classification should be made according to the amount of training provided in school.

In *school-based programmes* instruction takes place (either partly or exclusively) in educational institutions. These include special training centres for vocational education run by public or private authorities or enterprise-based special training centres if these qualify as educational institutions. These programmes can have an on-the-job training component, i.e. a component of some practical experience at the workplace.

Programmes should be classified as **school-based** if at least 75 per cent of the curriculum is presented in the school environment (covering the whole educational programme) or through distance education.

Programmes are classified as **combined school- and work-based** if less than 75 per cent of the curriculum is presented in the school environment or through distance education. The 75 per cent cut-off point should be regarded as a general guideline that may need to be operationalized differently across countries. These programmes include:

- apprenticeship programmes organised in conjunction with educational authorities or educational institutions that involve concurrent school-based and work-based training; and
- programmes organised in conjunction with educational authorities or educational institutions that involve alternating intervals of attendance at educational institutions and participation in work-based training (programmes of training in alternation, sometimes referred to as “sandwich” programmes).

Note that programmes of dual-system apprenticeship usually are considered part of upper secondary (ISCED 3) education, but other programmes under this heading may be classifiable not only as ISCED 3 but also as ISCED 4 to ISCED 6.

The amount of instruction provided in-school should be counted over the whole duration of the programme.

An institution providing school- and work-based programmes is classified as either public or private according only to the school-based component.

## Classification of teachers by level or orientation of education programme

Tables PERS2-INST, PERS3-AGE and PERS4-MANA request data on teachers by level and orientation of educational programmes.

Teaching staff often work in more than one level or orientation of education programme. They may have more than one function, which makes their classification difficult. The separate collection of staff statistics for “general/ academic” education and “vocational/ professional” education therefore poses several conceptual and technical problems in countries where the direct classification of teachers by the level or orientation of the education programmes they teach is not possible. The following recommendation is made:

In classifying teachers by orientation, the criterion should be the characteristics of the education programme and not the subjects that the teacher teaches.

If countries do not have a reporting system which classifies teachers directly by level and orientation of the programmes they teach, then, for the purpose of reporting head-count data, teachers should be pro-rated according to the time they are assigned to the corresponding levels and type of educational programmes. That is, teachers teaching in different types of programmes should be divided proportionally to the number of their contractual working hours. If student-teacher ratios are known, these can be used in order to pro-rate teachers. For the reporting of full-time equivalents, teachers should be apportioned according to their contractual working time in the respective programmes.

In some countries teachers are classified by their qualification as *either* teachers of general or of vocational programmes so that the allocation is straightforward.

### 2.3. FIELDS OF EDUCATION

Tables ENRL4-FIELD, ENRL5-MOB&FIELD, ENTR3-FIELD, GRAD5-FIELD and GRAD6 – MOB&FIELD request data by fields of education.

Please note that from data collection 2016 (reference year 2015) onwards, the *Eurostat's Fields of Education and Training 1999 (FOET 1999)* are replaced by the new classification *ISCED Fields of Education and Training 2013 (ISCED-F 2013)*.

The fields of education used in the UOE data collection instruments are the fields of education and training defined in the UNESCO document: *International Standard Classification of Education: Fields of Education and Training 2013 - Detailed field descriptions*, available at the following address on Circabc:

[ISCED-F 2013 \(fields of education and training\)](#)

[\(UNESCO documents are also available online here: \*ISCED Fields of Education and Training \(ISCED-F 2013\)\* and \*ISCED Fields of Education and Training 2013 \(ISCED-F2013\), the Manual to accompany the International Standard Classification of Education 2011\*\)](#)

The same classification by field of education is used for all levels of education. The fields of education are not defined within levels, but are independent of levels. It is recognised, however, that not all fields appear at all levels.

**Fields of Education and Training** are defined as the subject matter taught in an education programme.

The rationale of the classification for fields of education and training is the subject content approach. The fields are determined by closeness in subject matter content. They are aggregated to narrow and broad fields, based on 'knowledge closeness'.

The distinction between fields does not take into account the personal purposes of the participation in the programmes (e.g. pleasure, leisure, to get a job etc.)..

The following criteria are used in priority order when trying to decide 'closeness in subject matter content':

- Theoretical content, which is by far the most important criteria.
- Purpose of learning,
- Objects of interest,
- Methods and techniques,
- Tools and equipment.

The main broad fields are the following:

- **Generic programmes and qualifications**
- Education
- Arts and Humanities
- Social Sciences, Journalism and Information
- Business, Administration and Law
- Natural Sciences, Mathematics and Statistics
- Information and Communication Technologies
- Engineering, Manufacturing and Construction
- Agriculture, Forestry, Fisheries and Veterinary
- Health and welfare
- Services

Students, new entrants and graduates not classifiable by field of education should be allocated to the category "Field of education unknown or unspecified".

**For problematic areas for classifying the field of education please refer to UNESCO documents on ISCED-F 2013.**

NB: For the attention of EU, EFTA and EU candidate countries: In application of Commission Regulation n° 912/ 2013 of 23 September 2013, the third level of detail of fields of education is required in the Enrolments and Graduates questionnaires (please refer to the specific questionnaires for more practical information).

## 2.4. TYPE OF EDUCATIONAL INSTITUTIONS

### 2.4.1. BASIC DEFINITION OF EDUCATIONAL INSTITUTIONS

This data collection covers all educational institutions within the reporting country.

**Educational institutions** are defined as entities that provide either educational core or peripheral goods and services to individuals and other educational institutions.

**Remark:**

Even if an entity is classified as an educational institution, this does not imply that all of its expenditure is included.

Most obvious examples are general-purpose units of public authorities. In their case, expenditure needs to be broken down by function in order to identify educational expenditure. Other entities which are clearly deemed to be educational institutions may provide, besides instruction, services that do not fall under the scope of the UOE data collection, e.g. child care services.

### 2.4.2. INSTRUCTIONAL AND NON-INSTRUCTIONAL EDUCATIONAL INSTITUTIONS

Educational institutions can be either *instructional* or *non-instructional* institutions.

**Instructional** educational institutions are those that provide **educational programmes** for students as their main purpose (e.g. schools, colleges, universities) that fall within the scope of education statistics. Such institutions are normally accredited or sanctioned by the relevant national education authorities or equivalent authorities. Educational institutions may also be operated by private organizations, such as religious bodies, special interest groups or private educational and training enterprises, both for profit and non-profit.

**Non-instructional** educational institutions are educational institutions that provide education-related administrative, advisory or professional services for individuals or other educational institutions, although they do not enrol students themselves.

**Remark:**

Whether or not an entity qualifies as an educational institution is not contingent upon which public or private authority (if any) has responsibility for it.

For example, tertiary institutions are classified as educational institutions regardless of which ministry or other authority may have ultimate responsibility for them. In some cases, the Ministry of Agriculture or Defence might have responsibility.

Non-Instructional educational institutions include the following entities:

Entities administering educational institutions: institutions such as national, state, and provincial ministries or departments of education; other bodies that administer education at various levels of government (e.g. administrative offices of local education authorities and education officers of municipalities); and analogous bodies in the private sector (e.g. diocesan offices that administer Catholic schools, and agencies administering admissions to universities).

Entities providing support services to other educational institutions include institutions that provide educational support and materials as well as operation and maintenance services for buildings. These are commonly part of the general-purpose units of public authorities.

Entities providing ancillary services: separate organisations that provide such education-related services as vocational and psychological counselling, placement, transportation of students, and student meals and housing. General-purpose units of public authorities (States, municipalities) in many countries provide maintenance and ancillary services such as student

transport administration. Although they cannot be defined as educational institutions as a whole, the expenditure and personnel committed to the education-related services they provide are included in the data collection. In that sense, general-purpose units of public authorities are treated as educational institutions to the extent that they provide services to schools or students.

### 2.4.3. CLASSIFYING BETWEEN PUBLIC AND PRIVATE INSTITUTIONS

Tables ENRL1A-INST, ENRL1B-INST, GRAD1-INST, FIN-STUDENTS, FIN1-SOURCE, FIN2-NATURE, PERS1-STUD, PERS1-INST and CLASS1 request data distinguishing between public and private institutions.

#### 2.4.3.1. BASIC CLASSIFICATION CRITERIA

Educational institutions are classified as either **public** or **private**. Private institutions are further classified between **government dependent private** and **independent private institutions**.

The classification between **public** and **private** is made according to whether a public agency or a private entity has the overall control of the institution and not according to which sector provides the majority of the funding. *Overall control* is decided with reference to who has the power to determine the general policies and activities of the institution including the appointment the staff and officers managing the school and, where relevant, the majority of members of the governing body. Overall control will usually also extend to the decision to open or close the institution. As many institutions are under the operational control of a governing body, the constitution of that body will also have a bearing on the classification.

An institution is classified as **public** if it is controlled and managed:

- Directly by a public education authority or agency of the country where it is located or,
- Either by a government agency directly or by a governing body (council, committee etc.), most of whose members are either appointed by a public authority of the country where it is located or elected by public franchise.

An institution is classified as **private** if:

- It is controlled and managed by a non-governmental organisation (e.g. a church, a trade union or a business enterprise, foreign or international agency), or
- Its Governing Board consists mostly of members not selected by a public agency.

#### Remarks:

**Classification criteria:** In classifying educational institutions as either public or private, only the school-based component of combined school- and work-based programmes is considered. Similarly, for the classification of students enrolled in public or private institutions, only the school-based component of combined school- and work-based programmes is considered.

For example, if a student performs the school-based component in a public school and the work-based component in a private enterprise, the enrolment for this student is reported under the “public” heading.

- **Source of funds:** The extent to which an institution receives its funding from public or private sources does not determine the classification status of the institution between public and private. It is possible, for example, for a privately managed school to obtain all of its funding from



public sources and for a publicly controlled institution to derive most of its funds from tuition fees paid by households.

- **Ownership:** The issue of whether or not a public or private body owns the buildings and site of a school is not crucial to the classification status. The term “ownership” may refer to the ***ownership of school buildings and site***, or alternatively ownership of the institution in the sense of ultimate management control. Only in the latter sense is ownership a relevant concept in classifying institutions.

- **Regulation:** Privately managed but publicly funded schools may be subject to some regulation or control by public authorities, but these institutions are nevertheless classified as private, provided that they are ultimately subject to private control. Public regulation may extend to areas such as curriculum, staffing appointments, admissions policies, and other matters. In practice, publicly regulated private schools may pose problems of classification in cases where the extent of regulation is on a par with that of publicly controlled schools. This may especially be the case at tertiary level where institutions may be autonomous and self-governing but subject to considerable public control. Control over such functions as the selection and dismissal of staff, the setting of curricula, the examination and testing of students, and the admission of students may be shared between a public authority and a Governing Board. Also, it is not uncommon for private schools in many countries to be required to teach a national curriculum and be subject to more or less the same regulations as public schools, in return for public funding of these schools. Nevertheless, in all of these cases, if the school is privately managed as defined above it should be classified as private.

- **Legal basis:** In the case of some institutions, a legal basis for its foundation may exist in a Public Charter, Deed of Trust, or even legislation enacted by Parliament. In general, the legal instrument on which the institution is founded affects its classification status **only to the extent** that such a legal instrument enables a public authority to exercise ultimate authority or control over the institution. The issue of public recognition or licensing of private schools should not be confused with the issue of overall control.

#### 2.4.3.2. DIFFICULT CASES FOR CLASSIFICATION BETWEEN PUBLIC AND PRIVATE INSTITUTIONS

- Public authorities in many countries lay down minimum conditions for private schools (both Government-Dependent and Independent) in relation to curriculum or qualifications of staff. In deciding on borderline cases, pertinent data must be compared to that of other countries

- Some countries have autonomous, self-governing universities, nonetheless owned and managed by self-perpetuating governing boards made up of private members that are publicly chartered and considered to be performing a “public” function. Nevertheless, these institutions should be classified as private.

- In other cases, a public agency may have granted so much educational and fiscal autonomy to individual schools (sometimes vesting authority in school governing boards composed of private members) that few significant elements of public control or governance remain. Nevertheless, these institutions should be classified as public as it was the choice of the public agency which had overall control to grant additional freedom to the schools.

- In still other cases, the degree of public regulation of nominally privately owned and managed institutions may be so great that few vestiges of private decision-making authority remain. Nevertheless, these institutions should be classified as private.

- European schools should be classified as private institutions, because they are not directly controlled or managed by a public education authority or agency of the country where they are located. In fact, they are managed by an intergovernmental institution, the Board of Governors, pursuant to a distinct international treaty. They are classified as private independent

institutions, because they receive less than 50% of its core funding from the government agencies of the host countries (most of its funding 59% comes from the European Commission's operating budget).

#### 2.4.3.3. CLASSIFYING BETWEEN GOVERNMENT DEPENDENT AND INDEPENDENT PRIVATE INSTITUTIONS

The terms "**government-dependent**" and "**independent**" refer only to the degree of a private institution's dependence on funding from government sources; they do not refer to the degree of government direction or regulation.

A **government-dependent private** institution is one that either receives **at least** 50 per cent of its core funding from government agencies or one whose teaching personnel are paid by a government agency – either directly or through government.

An **independent private** institution is one that receives less than 50 per cent of its core funding from government agencies and whose teaching personnel are not paid by a government agency.

The "**Core funding**" refers to the funds that support the basic educational services of the institutions. It therefore **EXCLUDES**:

- Funds provided specifically for research projects,
- Payments for services purchased or contracted by private organisations, or
- Fees and subsidies received for ancillary services, such as lodging and meals.

Tuition fees and other fees paid to institutions by students are **not** considered government funds unless the fees are financed by government scholarships or loans to the students or households **and** the student has no choice but to use the fee in that class of institution.

The classification of institutions as government-dependent or independent is made for classes of institutions rather than for individual institutions.

For example, if a country has a number of church-affiliated upper secondary schools, the determination depends on whether such schools in general, receive a majority of their core funding from government sources. If the answer is yes, all the schools in the category are considered to be government-dependent, even if it happens that some individual schools in the class receive less than a majority share of core funds.

## 2.5. GRADE

Tables ENTR4-G1&Age, ENRL7-REP and ENRL8-INIT request data on grades.

Education programmes in **initial education** are often sub-divided into **grades**. This data collection covers enrolment and repeaters by grade at ISCED levels 1 and 2.

A **grade** is a specific stage of instruction in initial education usually covered during an academic year. Students in the same grade are usually of similar age. This is also referred to as a 'class', 'cohort' or 'year'.

Students generally remain within the same grade for the duration of the school year and on successful completion, proceed to the next grade the following year. If a grade is not successfully completed then it may be repeated.

Students enrolled in programmes, which do not follow the same grading structure as regular education programmes (i.e. **initial education** for those without special educational needs) or for which the grade is not known should be reported under “unspecified or residual grade”.

## 2.6. PART-TIME/FULL-TIME CLASSIFICATION AND CONVERSION TO FULL-TIME EQUIVALENTS

Tables ENRL1A-INST, ENRL1B-INST, PERS1\_STUD and FIN-STUDENTS request data on intensity of participation of students (full-time and part-time). Tables PERS2-INST request data on the employment status of educational personnel.

Both the intensity of participation of students and the employment status of educational personnel can be classified as either **full-time** or **part-time** according to similar principles and their total numbers (headcount) can be expressed in **full-time equivalents** (FTEs).

Students should be classified between full-time and part-time on the basis of the **intended study load of the student** within the reference school or academic year.

Educational personnel should be classified according to their **contractual working hours**. In order to determine whether they are full-time or part-time, their study load and working hours should be compared to those required to study or work full-time for the full reference school or academic year according to the national norms or conventions at the given level of education.

### Full-time and part-time students

At the student level, the part-time/ full-time classification is regarded as an *attribute of student participation* rather than as an attribute of the educational programmes or the provision of education in general. In the data collection tables, this classification is correspondingly presented together with other individual attributes of students.

**Intended study load** is the study time or resource commitment during a single school or academic year expected of a student enrolled in the given education programme.

For study that is predominantly classroom-based, an adequate measure for this would be time in classroom. This is a proxy measure of the amount of instruction time that a student receives and can be counted in hours of instruction during the reference school or academic year, the number of course credits taken or some combination of the two.

**Normal full-time annual study load** is the study time or resource commitment expected of a typical student to complete a full-time full-year of a given education programme.

**Intended study load** should be measured in the same units as **normal full-time annual study load**, so as to allow the assessment of the relationship between the two to determine whether the student is full-time or part-time.

A **full-time student** is one who is enrolled in an education programme whose **intended study load** amounts to at least 75% of the **normal full-time annual study load**.

A **part-time student** is one who is enrolled in an education programme whose **intended study load** is less than 75% of the **normal full-time annual study load**.

*Early childhood education* is a special case, since the concepts used to define full-time and part-time participation at other ISCED levels, such as study load, student participation and the

academic value or progress which the study represents, are not easily applicable to ISCED level 0. Additionally, the daily or weekly hours that represent a typical full-time enrolment in an educational programme at ISCED level 0 varies widely between countries. Because of this, full-time-equivalents cannot be calculated for ISCED level 0 programmes in the same way as for other ISCED levels. A consensus has not been reached on a methodology for calculating FTE for Enrolments at ISCED 0 but it is recommended in UOE reporting to estimate pupils enrolled in Full-time equivalents by ISCED 0 Enrolment Headcount (i.e. all enrolments counted as full-time).

It is recognised that many countries still make the full-time/ part-time distinction based on characteristics of the education programmes and use corresponding conversion factors at the programme level to transform the measures into full-time equivalents. The definitions and instructions for this data collection accept therefore both individual- and programme-based measurement methods of the degree of participation.

In practice, the national data available to countries tends to dictate which methods countries use to categorise students as full-time or part-time and these tend to vary by level of education. For primary and secondary education student attendance at the institution or time in classroom is used most frequently, whereas at tertiary level study load is more likely to be measured in terms of instructional hours and credit accumulation.

An important consequence of these definitions is that a part-time student will usually require a longer period of time than a full-time student to complete an equivalent programme.

**Remark:**

When determining full-time/ part-time status, the work-based component in combined school- and work-based programmes should be included.

For example, students participating in dual-system apprenticeship programmes on a full-time basis should be classified as full-time students even though the school-based component comprises only part of the programme.

### **Full-time and part-time educational personnel**

At the educational personnel level, the part-time/ full-time classification is regarded as an attribute of their individual contract of employment rather than as an attribute of the educational programmes or the provision of education in general in which they are involved. The **contractual working hours** of educational personnel are those specified in their contract of employment or implied by their type of employment.

The **normal or statutory working hours** of educational personnel are those necessary to meet the requirements according to the official national policies or laws of full-time employment at a specific level of education - or in the job or role in which they are employed - over a full school or academic year.

The **contractual working hours** and the **normal or statutory working hours** should be expressed as annual hours in order to allow a comparison between the two to determine the full- or part-time status of educational personnel.

**Full-time educational personnel** are employed for at least 90% of the normal or statutory working hours of educational personnel in the same job or role at the given level of education.

**Part-time educational personnel** are employed for less than 90% of the normal or statutory working hours of educational personnel in the same job or role at the given level of education.

Note that the 90% cut-off point for educational personnel is different from the 75% cut-off point for students. This reflects the greater standardisation within countries on the normal working hours of full-time educational personnel in a given job or role compared with the intended study load of full-time students.

### 2.6.1. CONVERSION OF HEAD-COUNT DATA TO FULL-TIME EQUIVALENTS

Tables ENRL1A-INST, ENRL1B-INST, PERS1-STUD and FIN-STUDENTS request data on full-time equivalent students. Table PERS2-INST requests data on full-time equivalent educational personnel.

The conversion of headcounts to full-time equivalents (FTE) is similar for students and educational personnel. The aim is to express study loads and working hours during the reference period in a single standard unit which equates to a full-time, full-year student or educational personnel respectively. In order to determine the FTEs of a given student or educational personnel, their intended study load or contractual working hours should be divided by the corresponding normal annual study load or normal or statutory working hours for the reference period. As the measures of study load may be based on a period which is different from the reference period (e.g. number of hours per week rather than number of hours per school year), it is important to ensure that the study load or working hours are calculated over the whole reference period.

For example if the normal study load or normal or statutory working hours during the reference school or academic year is 30 hours per week, someone who studies or works 15 hours per week would have an FTE of 0.5. Given the definitions of full-time and part-time stated earlier it is possible for a full-time student or educational personnel to have an FTE of less than 1. For example, a teacher who works 90% of the normal or statutory working hours of a full-time teacher should be recorded as full-time but their FTE should be 0.9. It is also possible for a full-time student or educational personnel to represent more than 1 FTE if they are enrolled in more than one education programme or have more than one employment contract during the reference school or academic year. In these cases, they should be reported as 1 full-time student or educational personnel but with FTEs greater than 1 (calculated in the same way as described above).

The number of full-time equivalents reported in the questionnaires is the sum of all FTEs for students (or educational personnel) and therefore includes the FTEs of both full-time and part-time students (or educational personnel).

For the conversion of head-count data of **students** to FTEs, the following recommendations are made:

s Where data and norms on individual participation are available, then the calculation of FTE should be:

*FTE = [actual study load/normal study load] \* [actual duration of study during reference period/normal duration of study during reference period].*

So, for example if the normal study load for a full-time student during the reference period is 30 hours per week for 20 weeks, a student who studies 30 hours per week for 10 weeks would have an FTE of 0.5.

s Where data and norms on individual student study load are not available: then a full-time student should be considered equal to one FTE. Most countries will use this assumption for the primary and secondary level of education. If equivalent programmes exist separately as full-time and part-time programmes, then the ratio of the theoretical durations of these programmes can be used as a proxy for the conversion factors of part-time data into full-time equivalents.

The conversion to FTEs is often difficult for **non-teaching educational personnel**. Some countries collect data on the number of contracted hours worked in a typical week for certain categories of non-teaching staff, which are then converted into FTEs.

The full-time equivalence of part-time educational personnel is determined by calculating the ratio of hours worked by part-time personnel to the statutory hours worked by a full-time employee during the entire school year. Estimates can be based on other information (e.g. salary).

Countries should calculate full-time equivalents in person-years. If countries choose instead to calculate FTEs on a specific date, then seasonal variations in personnel should be accounted for.

### **Classification of educational personnel involved in multiple education programmes.**

The classification of educational personnel whose work is divided for example between different types of institutions (public/ private), different levels of education, different orientations (general/ vocational or between different functions (e.g. teaching and administration), can be difficult.

. Examples are teachers who divide their work between public and private institutions, between levels of education, or between different functions.

The guidance that countries should follow in these circumstances differs depending on whether the reported data are *headcounts* or *full-time equivalents*. The following recommendations are made:

s For the reporting of **head-counts**, firstly, the total numbers of educational personnel should be accurately split into those who are full-time and those who are part-time by aggregating their contractual working hours over all of their activities. The full-time and part-time numbers should then be pro-rated between education levels, education programmes, types of institutions, and functions on the basis of the most appropriate data available relating to the splits.

. For example, in the absence of any better information, the numbers of educational personnel who work exclusively in public and private institutions respectively can be used to pro-rate the numbers who share their time between the two.

If 100 teachers are teaching both ISCED 2 and ISCED 3, and their working hours are such that this equates to 60 full-time and 40 part-time teachers, then the 60 and the 40 would be pro-rated between ISCED 2 and ISCED 3 on the basis of the relative proportions of teachers teaching solely ISCED 2 and those teaching solely ISCED 3.

As a last resort, pupil numbers can be used as the basis for pro-rating though this will introduce circularity in the calculation of staff to student ratios.

s For the reporting of **full-time equivalents**, data on educational personnel should be apportioned to the different levels, education programmes, types of institutions, and functions based on the proportion of their contractual working time that they spend on each function.

So, for example a teacher whose working time totals 0.8 of an FTE and who spends 50 per cent of their time teaching ISCED 2 and 50 per cent teaching ISCED 3 should have 0.4 FTE allocated to each of ISCED 2 and ISCED 3.

This methodology ensures that the employment status (full-time/ part-time) is reported accurately, while the numbers reported by level, education programme, type of institution, and

function will be subject to some error (though not necessarily bias). The alternative (i.e., reporting full-time educational personnel as multiple part-time educational personnel in the different categories), would destroy the employment status variable and also bias the overall count of individuals employed in education.

## 2.7. AGE

Tables ENRL2-AGE&FP, ENRL3-AGE&P, ENRL8-INIT, ENRL9-ADULT, ENTR1-AGE, ENTR2-MOBILE&AGE, ENTR4-G1&AGE, GRAD2-AGE, GRAD3-FIRST&AGE, GRAD4-MOB&AGE and PERS3-AGE request data by age.

According to the common reference point for ages, students, graduates, new entrants, teachers and academic staff are classified by their **age as of 1<sup>st</sup> January of the year in which the school or academic year ends** (e.g. 1<sup>st</sup> January 2015 for academic year 2014/ 2015). Age at 1<sup>st</sup> January is the difference between the year of observation and the year of the person's birth. Individuals not classifiable by age should be allocated to the category "Age unknown".

Age groups for teachers and academic staff are reported in half open intervals [... [. For countries who would like to report data by 5-year age groups after the age of 24, they should include 25-29 year-old individuals in 25, 30-34 year-old individuals in 30, etc., indicating clearly the over-coverage and inclusions with the relevant missing and X codes.

For example, in a country whose school year runs from September 2014 to August 2015, a teacher born on 31<sup>st</sup> December 1984 will be reported as aged 30 (date of reference : 01/ 01/ 15), whereas a teacher born on 1<sup>st</sup> January 1985 will be reported as aged 29 (date of reference : 01/ 01/ 15).

The choice of a common reference date, such as 1<sup>st</sup> January, across all countries can however be problematic when the school years being reported vary greatly between countries. This particularly applies in Japan, Korea and New Zealand where the school year begins early in the year and so a reference date of 1<sup>st</sup> January would record students' ages at the end of the school year. This is in contrast to most other countries where the 1<sup>st</sup> January reference date falls towards the start of the school year. This anomaly may affect the comparability of net enrolment rates by single year of age, particularly before and after compulsory schooling. Therefore, in those countries where the choice of 1<sup>st</sup> January would fall at the end of the school year it is more appropriate to reference the ages at some time closer to the start of the school year and use population data on that same basis in calculating participation rates.

The reference dates for ages can be different from 1<sup>st</sup> January but should be the same in all the questionnaires (ENRL, GRAD, ENTR, PERS and DEM) in order to accurately calculate participation, graduation and entry rates.

Where the available data on students, new entrants, graduates or educational personnel for a country refer to ages at some date other than January 1<sup>st</sup>, data providers should re-distribute the data across ages on the basis of estimation in order to shift the age reference date to January 1<sup>st</sup>.

This adjustment can make a significant difference in the calculation of net enrolment rates by single year of age before and after compulsory schooling. It should be noted that the reference date for enrolment is independent of the reference date for the ages of pupils or students enrolled.

## Typical age

The typical age is a conventional age of graduation or entry into an education level or programme that is used in the OECD calculations of entry and graduation rates when information by age is not available.

The typical age of entry into an education level is defined as the age range with at least half of the new entrant population and the typical age of graduation into an education level is defined as the age range under with at least half of the graduate population. The typical age is calculated taking into account the reference date for students' ages, which is by default January 1st of the reference year.

## 2.8. INTERNATIONAL LEARNING MOBILITY (INTERNATIONALLY MOBILE STUDENTS, NEW ENTRANTS AND GRADUATES)

Internationally mobile students, new entrants and graduates studying in the reporting country should be included in all tables in ENRL, ENTR, GRAD, CLASS, PERS1-STUD and FIN-STUDENTS questionnaires.

Tables ENRL5-MOB&FIELD, ENRL6-MOB&COUNTRY, ENTR2-MOBILE&AGE GRAD4-MOB&AGE, GRAD6-MOB&FIELD and GRAD7-MOB&COUNTRY ask for specific separate information on internationally mobile students, new entrants or graduates.

**Internationally mobile students, new entrants and graduates** are individuals who have physically crossed an international border between two countries with the objective to participate in educational activities in the country of destination, where the country of destination of a given student is different from their country of origin. Mobile students are enrolled as regular students in any semester/ term of a programme taught in the country of destination with the intention of graduating from it in the country of destination. The programme would require the students' presence for the majority of courses taught i.e. distance learners are not considered as mobile. Detailed information is provided in the Eurostat '*Methodological manual on learning mobility in tertiary education*'.<sup>5</sup>

For the purposes of measuring **international learning mobility**, individuals (e.g. students, new entrants or graduates) are categorised according to their **country of origin**. In this data collection the focus is on the **international learning mobility** of students in tertiary education.

The **country of origin** can be defined in several different ways but given that we wish to measure international mobility in education it is recommended that the definition is based on students' education careers prior to entering tertiary education. For operational purposes this concept is measured relative to upper secondary education even though some students may enter tertiary education from post-secondary non-tertiary programmes.

The **country of origin** of a tertiary student is the **country in which their upper secondary qualification was obtained (i.e. ISCED level 3 or 4 completion with access to tertiary education programmes)**. This can also be referred to as the country of prior education.

Where countries are unable to operationalize this definition, it is recommended that they use the country of usual or permanent residence to determine the country of origin. Where this too is not possible and no other suitable measure exists, the country of citizenship may be used – but

<sup>5</sup> Available on CIRCABC Eurostat: [Methodological manual on learning mobility in tertiary education](#)



only as a last resort. Countries are asked to provide the criteria used to define **country of origin** in the general information section of the relevant questionnaires.

The country of prior education can be captured by:

- Direct information on education prior to and qualifying for the education now studied. All students have to document their qualifying education for entering a given level of education. Information can be collected from institutions and students.

NB: Upper secondary education is accepted generally as qualifying for entrance to tertiary education.

- Inference (indirectly) using student registers: tracking the educational careers of individuals to establish that the qualifying prior education was not received in the reporting country.

The country of usual residence can be captured by:

- Postal address when students are applying for enrolment. The information can be collected from institutions and students
- Formal resident status i.e. student visa. The information can be collected from institutions and registers.
- Immigration registers

The country of citizenship may be used as a proxy but only as a last resort as foreign students living in the reporting country, but not explicitly for the purpose of studying, will be recorded as mobile.

Students/ graduates who are citizens of the destination country but received their prior upper secondary certificate abroad (i.e. 'Homecoming nationals') should be classified as mobile students/ graduates. In other words, and more generally, citizenship has nothing to do with the mobility status.

As usual residence is not the determining criteria to define mobility: "commuting students" should be considered as mobile if they study at tertiary level in different country from the one they were awarded their upper secondary leaving certificate.

The status as an internationally mobile student is dependent on the crossing of an international border for the purpose of education and is not dependent on formal resident status in the reporting country of destination. The status as an internationally mobile student is maintained for as long as continued education at the same level of education lasts. This may involve several consecutive education programmes with no or only minor gaps between. Gaps should be less than one year. Note that all tertiary programmes are considered as belonging to the same level. An internationally mobile student entering a programme at one level of tertiary education remains an internationally mobile student if upon graduation the student continues in a programme at another level outside their country of origin<sup>6</sup>.

Any transfer between education systems which does not involve the physical crossing of an international border is not considered as **international learning mobility**. *In particular, participation in the following are not forms of international learning mobility:*

- distance learning programmes provided by institutions based in the reporting country to students based in another country;
- programmes offered to students originating from the reporting country by foreign-based institutions based in the reporting country leading to foreign degrees;

---

<sup>6</sup> For more details on the implementation of the degree mobility, please see the Eurostat's [Methodological manual on learning mobility in tertiary education](#)

- programmes offered by a different sub-national education system from the student's education system of origin (e.g. where students transfer between provinces or regions of their own country).

Students in exchange programmes that undertake part of their studies at an educational institution abroad but are credited at their home institution should be **excluded** from the enrolment statistics of the host country and be reported only in the country of original enrolment. Exchange programmes (or short-term postings) are characterised as normally lasting between 3 months (or one trimester) and less than a full academic year.

The defining characteristic of such students is that they are given credits for their stay abroad by their home institution where they originally enrolled. Students in exchange programmes do not obtain their qualifications from the host institution abroad. It is recognised that this will result in under-reporting of student mobility as these students are currently outside the scope of the data collection.

## 2.9. REGION

Data in the REGIO questionnaire are to be provided by EU, EFTA and EU Candidate Countries, by region according to NUTS 2013/ EU-28 classification (Nomenclature of Territorial Units for Statistics) at level II, available at the following address:

[NUTS classification](#)

Pupils/ students should be counted in the region in which they study.

## 2.10. FOREIGN LANGUAGES

The ENRLLNG questionnaire collects data from EU, EFTA and EU Candidate Countries on the number of pupils/ students learning foreign languages which are taught as subjects of instruction. Such languages should be taken into account, even if they are also used as instruction languages in the country. A language is considered as an instruction language when it is not the subject of instruction but rather the medium to transmit content.

The questionnaire includes all modern spoken living languages that are taught as "*foreign languages*". Ancient Greek, Latin, Esperanto and sign languages should therefore be excluded. The educational curriculum drawn up by the central education authorities in each country defines the languages, which are to be considered as "foreign languages" in the country. Regional or minority languages (for example, Basque, Catalan, Galician and Valencian in Spain) should be taken into account and reported in the row "Other modern languages", if they are considered as alternatives to foreign languages in the curriculum.

The cases of taught foreign languages to be included in the data collection are those where they are studied as compulsory subject or as a compulsory curriculum option. Foreign languages studied as extra-curricula subject have to be excluded as well as the following categories:

- Non-nationals studying their native language in special classes or those studying the language of the host country;
- Pupils/ students from international and European schools that are not under authority of the Ministry of Education should be excluded from UOE data collection on language learning;
- Pupils/ students with special education needs enrolled in special schools.

## CHAPTER 3: STATISTICAL UNITS

### 3.1. STUDENTS ENROLLED

All tables from ENRL, ENTR, GRAD and CLASS questionnaires request data on students. In addition, students are reported in FINANCE and PERSONNEL questionnaires for alignment with expenditure and educational personnel.

The number of **students** enrolled refers to the count of students studying in a given education programme in the reference period of the data collection. The term “student” is used for both pupils and students.

This data collection covers data on students enrolled and not on enrolments. This means that each student should be counted once only. Data collection methods which are based on the total number of students enrolled in a given period that may result in the double-counting of students enrolling in two or more programmes during the course of the reference school or academic year should be avoided. Similarly, students enrolled in different jurisdictions, institutions or levels of education should only be counted once.

If students are enrolled in more than one programme, level or field of education, their numbers should be pro-rated according to the percentage of **intended study time** devoted to each programme, level or field during the reference school or academic year. Where this information is unknown, students should be pro-rated in equal shares to each programme, level or field studied during the reference year. When full-time equivalents are reported, students' intended study time should be apportioned across the programmes and fields correspondingly.

For example, if 100 full-time students are enrolled in a programme of which 70% is Biology and 30% is Chemistry, then 70 full-time students should be reported under the field “Biology” and 30 full-time students under the field “Chemistry”. If countries cannot pro-rate students, they should classify the students according to the main emphasis of the programme or study and provide a corresponding note. If the main emphasis of the programme is not known then 50 full-time students should be reported in each field.

Where national data collection systems permit and for cross-national comparability, the statistics reported should reflect the number of students enrolled at the beginning of the reference school or academic year. Preferably, the end (or near-end) of the first month of the reference year should be chosen. If several rounds of data collection are conducted per year, the one closest to the end of the first month of the reference school or academic year should be used.

Exceptions to this may be required at the early childhood and tertiary levels of education: at the early childhood education level a gradual inflow may exist and, therefore, an average over several counting dates would be preferable. At the tertiary level the enrolment of students may not be stable enough at the beginning of the academic year and therefore a count at a later point may be preferable.

## 3.2 REPEATERS

Table ENRL7-REP requests data on repeaters. The data are collected only for initial primary and secondary general education.

A **repeater** is a student who is enrolled in the same grade for a second or further time.

Students who participate in a second or further education programme at the same level of education having successfully completed a first programme are not regarded as **repeaters**. A **repeater** is one who repeats predominantly the same subject matter as in a previous year. **Repeaters** include re-entrants to the same programme.

## 3.3. NEW ENTRANTS

Tables ENTR1-AGE, ENTR2-MOBILE&AGE, ENTR3-FIELD and ENTR4-G1&AGE request data on new entrants.

Data on new entrants are required in order to measure the intake in education levels/ programmes. If students enter from more than one programme at the same ISCED level in the data collection reference year they should be reported at the highest programme within the level. They are used to calculate entry ratios and can also be combined with data on graduates for calculation of proxy completion ratios for cohorts that entered at some points. The data collection contains information on new entrants to levels of education and to orientations (i.e. general or vocational) within levels of education. It also collects information on new entrants to tertiary education as a whole and on new entrants to primary education with prior experience of early childhood education.

### 3.3.1. NEW ENTRANTS TO A LEVEL OF EDUCATION

**New entrants to a level of education** are students who, during the course of the reference school or academic year, enter for the first time any programme in a given level of education, irrespective of whether the students enter the programme at the beginning or at an advanced stage of the programme (e.g. by virtue of credits gained for relevant work experience or courses taken at another level of education).

### 3.3.2. NEW ENTRANTS TO A GENERAL/ACADEMIC OR VOCATIONAL/PROFESSIONAL PROGRAMME AT EACH LEVEL OF EDUCATION

**New entrants to a general/academic or vocational/professional programme at each level of education** are students who, during the course of the reference school or academic year, enter for the first time in a given orientation at this level of education, irrespective of whether the students enter the programme at the beginning or at an advanced stage of the programme).

A distinction needs to be made between new entrants to a level of education and new entrants to a given orientation (i.e. general/ academic or vocational/ professional) at that level of education. At most levels of education a new entrant to the level will also be a new entrant to a given orientation at that level. However, new entrants to a given orientation may not be new entrants to the level if they have studied a programme of a different orientation at the same level in the past. This means, for example, that the sum of new entrants to general programmes and to vocational programmes at ISCED level 3 may be greater than the total number of new entrants to upper secondary education.

When reporting data on new entrants by other breakdowns the total number of new entrants should be determined for the relevant level of education or orientation first. The above

mentioned population being known, data should then be disaggregated according to different dimensions, including fields of education.

Number of new entrants (either *into a level of education* or *into a general/academic or vocational/professional programme at each level of education*) by field of education are students who started a programme (in a given level or orientation within this level) who are reported according to the field in which they entered. Students who enter multiple fields within the same level or orientation during the reference year should be pro-rated between the fields of education according to the percentage of intended study time which is expected to be devoted to each field during the reference school or academic year. If the information on intended study time is not available, countries should classify the new entrants according to the main emphasis of the programme of study and provide a corresponding note. If the main emphasis of the programme is not known then equal numbers of new entrants should be reported in each field of the programme. Please note that the totals in the ENTR1-Age and ENTR3-Field questionnaires should be the same.

### 3.3.3. NEW ENTRANTS TO TERTIARY EDUCATION WITHOUT PREVIOUS EDUCATION AT ANY OTHER TERTIARY LEVEL

**New entrants to tertiary education without previous education at any other tertiary level** are new entrants at ISCED levels 5, 6 or 7 who, at the same time, are entering tertiary education for the first time.

For example, a student who has entered an ISCED 5 programme and then decides to enter an ISCED 6 programme should not be counted as a new entrant to tertiary education.

### 3.3.4. NEW ENTRANTS TO GRADE 1 OF PRIMARY EDUCATION WITH PRIOR EXPERIENCE OF EARLY CHILDHOOD EDUCATION

**New entrants with prior experience of early childhood education** are new entrants to the first grade of primary education who have previously been enrolled in any pre-primary or early childhood educational development programme.

## 3.4. GRADUATES AND FIRST-TIME GRADUATES

Tables GRAD1-INST, GRAD2-AGE, GRAD3-FIRST&AGE, GRAD4-MOB&AGE, GRAD5-FIELD, GRAD6-MOB&FIELD and GRAD7-MOB&COUNTRY request data on **graduates**.

Table GRAD3-FIRST&AGE requests data **on first-time graduates**.

This data collection covers graduates and not graduations. This means that each graduate should be counted once only. If students graduate from more than one programme at the same ISCED level in the data collection reference year they should be reported at the highest programme within the level. This is particularly important at secondary and tertiary levels of education where a sequence of programmes may exist within a given level of education.

A **graduate** is a person who, during the reference school or academic year, has successfully completed an education programme.

In this data collection, graduates from an ISCED level include those who entered and successfully completed an education programme which is classified as level completion and, at ISCED level 3 (upper secondary), those who successfully completed programmes sufficient for partial level completion. Countries are asked to report these data separately to avoid double-

counting those who go on to successfully complete other programmes at the same level in the same or subsequent years.

In some countries, students enrolled in a given ISCED level may complete a programme and/ or obtain a qualification after a period of time, which may be considered too short for the purposes of classification as full or partial completion of the given ISCED level. These students should not be counted as graduates.

Successful completion can be accomplished through passing (i.e. succeeding in) a final curriculum-based examination or series of examinations; or accumulating the specified number of study credits throughout the programme; or a successful formal assessment of the knowledge, skills and competencies acquired during the programme. In formal education, a successful completion usually results in a qualification which is recognised by the relevant national education authorities.

Education programmes at ISCED levels 1 and 2 do not always lead to a qualification. In these cases, other criteria should be used to determine successful completion of the programme (e.g. having attended the full final year of the programme or having access to a higher ISCED level). Graduates should be reported by the country in which they graduate regardless of whether they were enrolled in programmes delivered by institutions based abroad or by foreign institutions based in the reporting country.

In a few countries, there are second degrees following the first doctoral degree (e.g. *Habilitation* in Germany or *doktor nauk* in the Russian Federation). Graduates from these post-doctoral programmes are usually very few in number and, in many cases, countries do not have data on them. Therefore, for the purposes of cross-national comparability, graduates from these types of second degree should be excluded from the data collection.

All graduates that can be attributed to the reference school or academic year should be reported. Although some graduates may complete their final examinations or programme requirements only after the school or academic year ends they should still be included.

A student who has not completed the final year of an education programme, but later successfully completes a recognised “equivalency” examination based on knowledge learned outside of the education system, should not be counted as graduates. Similarly, those who were never enrolled in an education programme but acquire the same qualification as those who were enrolled should not be reported as graduates in this data collection.

## FIRST-TIME GRADUATES

**Table GRAD3-FIRST&AGE collects the number of first-time graduates:** for those who have graduated from ISCED 5, 6, 7 and 8 for the first time during the reference year.

This data collection covers data on **first-time graduates** at each ISCED level from 3 to 8 and on **first-time graduates at the tertiary level** (at ISCED levels 5-7).

A **first-time graduate** at a given level of education is a person who, during the reference school or academic year, has successfully completed an education programme at the given level for the first time.

First-time graduates only include those that have never graduated from programmes at the same ISCED level before *or at tertiary level when considering first-time graduates at tertiary level*. The number of first-time graduates is in general smaller than the total of all graduates in the reference year.

Double-counting of individuals across categories over time is permissible (i.e. a student obtaining a degree for the first time at ISCED level 6 in the reference year who had obtained a qualification at ISCED level 5 in an earlier year should be reported as first-time graduate at ISCED level 6 – *but not as a first-time graduate at the tertiary level*).

First-time graduates normally graduate from a 1<sup>st</sup> degree/ qualification in the national degree structure. It may however occur in some countries that students also graduate for the first time from 2<sup>nd</sup> or further degrees.

A **first-time graduate at the tertiary level** is a person who, during the reference school or academic year, has successfully completed an education programme at the tertiary level for the first time. They may have completed the programme at either ISCED level 5, 6 or 7.

### 3.5. EDUCATIONAL PERSONNEL

Tables PERS2-INST, PERS3-AGE and PERS4-MANA (and ad-hoc module on all types of personnel employed in educational institutions) request data on Teachers (ISCED 0-4) and Academic staff (ISCED 5-8), School level management personnel and Teachers aides (ISCED 0-3).

Educational personnel comprises all those employed in educational institutions (as defined in section 2.4) covering both instructional and non-instructional institutions.

#### 3.5.1. COVERAGE OF DATA ON PERSONNEL

This data collection covers educational personnel and not their assignments to specific programmes, **levels** or **grades**. This means that each staff member should be counted once only in the data collection. If staff are assigned to more than one level or grade or if they have more than one contract, their numbers should be pro-rated according to the percentage of **contractual working hours** devoted to each programme, **level** or **grade** during the reference school or academic year. Where this information is unknown, staff should be pro-rated in equal shares to each programme, **level** or **grade** to which they are assigned during the reference year.

The coverage of the term *Education personnel* is broad and activity remains a criterion for the inclusion of teacher and other personnel. As a consequence it

#### **INCLUDES:**

- Those involved in student instruction
- Those providing professional support for students (whether it is academic support or health/ social support)
- Those involved in the management and administration of the education service (both inside and outside of school); and
- Personnel who support the maintenance and operations of the schools.
- *Personnel temporarily not at work* (e.g. for reasons of illness or injury, maternity or parental leave, holiday or vacation).
- Temporary replacements as well as the teachers or other personnel that are replaced. The work load of temporary replacements should be calculated according to the rules given for classification of full-time and part-time staff in section 2.6 .

- Personnel working for enterprises that provide services to schools or other educational institutions as sub-contractor – are included **if** the personnel hired by the subcontractor are working exclusively or mainly for the school / educational institution throughout the period of the contract. For example, if the preparation of school meals is subcontracted to a catering company, but staff are working exclusively at the school for which they provide food they should be included as if they were employed by the educational institution

**EXCLUDES:**

- If services are subcontracted and the personnel cannot be distinguished from other non-education services provided by the subcontractor, the personnel should be excluded. A typical example would be that of a local transport company carrying out the school bus service as well as other activities during the day. Similar situations might be encountered for building maintenance and school cleaning.
- *Retired teachers* including those who retire early regardless of whether their salaries are still reported amongst the expenditure on teacher salaries in the finance data.
- Educational personnel in the *work-based component* of combined school and work-based programmes. This approach is designed to improve comparability across countries because virtually no country is able to report personnel in the work-based component. This exclusion, however conflicts with the coverage of the student data where both the work and school based elements are normally counted. For the calculation of student-staff ratios, therefore, it is necessary to collect a version of student full-time equivalents which similarly excludes the work-based element.

The classification of educational personnel, intended to serve as a framework to classify school personnel for all levels of education (ISCED 0 through 8), is based on the **primary or major functions** performed by staff and organises staff into four main functional categories; three of the four main functions contain sub-functions with specialised types of personnel. The classification is:

**I. Instructional Personnel**

- A. Classroom Teachers (ISCED 0-4); Academic Staff (ISCED 5-8)
- B. Teacher Aides (ISCED 0-4); Teaching / Research Assistants (ISCED 5-8)

**II. Professional Support for Students**

- A. Pedagogical Support (ISCED 0-4); Academic Support (ISCED 5-8)
- B. Health and Social Support (ISCED 0-8)

**III. Management/Quality Control/Administration**

- A. School Level Management (ISCED 0-8)
- B. Higher Level Management (ISCED 0-8)
- C. School Level Administrative Personnel (ISCED 0-8)
- D. Higher Level Administrative Personnel (ISCED 0-8)

**IV. Maintenance and Operations Personnel (ISCED 0-8)**

The following definitions of educational personnel should be applied:



### 3.5.2. INSTRUCTIONAL PERSONNEL

#### 3.5.2.1. CLASSROOM TEACHERS AND ACADEMIC STAFF

Tables PERS2-INST and PERS3-AGE (and ad-hoc module on all types of personnel employed in educational institutions) request data on classroom teachers (ISCED 0-4) and academic staff (ISCED 5-8).

m ***In ISCED levels 0-4: Classroom Teachers*** are employed in a professional capacity to guide and direct the learning experiences of students, irrespective of their training, qualifications or delivery mechanism (i.e. face-to-face or at distance). Teaching involves planning, organising and conducting group activities whereby students' knowledge, skills and competencies develop as stipulated by the educational programme in which they participate.

The classification **INCLUDES**:

- Classroom teachers
- Special education teachers in whichever setting they teach;
- Other teachers who work with students as a whole class in a classroom, in small groups in a resource room, or one-on-one inside or outside a regular classroom,

but **EXCLUDES**

- Educational staff who have few or no teaching duties but whose primary function is not teaching (e.g. it is managerial or administrative).
- Student teachers, teachers' aides, and paraprofessionals

m Early childhood education is a special case. ISCED level 0 programmes are often delivered by staff of varying levels of qualification, depending on their role in the institution in which they are employed. For the purposes of reporting, reference should be made to the relevant regulatory framework (as defined in section 1.4) for detail on requirements for persons providing or delivering an education programme to children in the years prior to primary school (such as pedagogical qualifications, training or accreditation at various staffing levels).

#### m ***Academic Staff (ISCED 5-8)***

This sub-category **INCLUDES**:

- Personnel employed at the tertiary level of education whose primary assignment is instruction or research,.
- Personnel who hold an academic rank with such titles as professor, associate professor, assistant professor, instructor, lecturer or the equivalent of any of these academic ranks,
- Personnel with other titles, (e.g. dean, director, associate dean, assistant dean, chair or head of department), if their principal activity is instruction or research.

It **EXCLUDES** student teachers, teachers' aides and paraprofessionals.

Personnel for whom the teaching function and the management function are equally important should be treated as teachers and recorded in PERS-1 only.

. For example: a full-time teacher teaching for 60% of the teaching time of a full-time teacher and having some management responsibilities should be reported in PERS-1 (and not reported in PERS-2): as 1 Full-time teacher, and as 0.6 in Full-time equivalent.

. For example: a full-time teacher teaching for 40% of the teaching time of a full-time teacher and having management responsibilities should NOT be reported in PERS-1 (and is reported in PERS-2).

### 3.5.2.2. TEACHER AIDES

Table PERS4-MANA (and ad-hoc module on all types of personnel employed in educational institutions) requests data on teachers' aides (ISCED 0-3).

#### m **Teacher Aides (ISCED 0-4)**

This category **INCLUDES**:

- Non-professional personnel who support teachers in providing instruction to students,
- Teachers' aides and other paraprofessional personnel who are employed on a full-time or part-time basis by an education system.

It **EXCLUDES** student teachers or other personnel who do not get paid for their employment. At early childhood education level, support personnel should not be regarded as teachers' aides unless they perform educational functions involving groups of pupils on a regular basis.

### 3.5.2.3. TEACHING/ RESEARCH ASSISTANTS(ISCED 5/ 8)

Only the ad-hoc module on all types of personnel employed in educational institutions requests data on teaching/ research assistants (ISCED 5/ 8).

#### m **Teaching/Research Assistants (ISCED 5-8)**

This sub-category **INCLUDES** all students employed on a part-time basis for the primary purpose of assisting in classroom or laboratory instruction or in the conduct of research. Personnel in these positions are usually graduate students who hold such titles as teaching assistant, teaching associate, teaching fellow, research assistant, or equivalent personnel with other titles.

### 3.5.3. PROFESSIONAL SUPPORT FOR STUDENTS

Only the ad-hoc module on all types of personnel employed in educational institutions requests data on teaching/ research assistants (ISCED 5/ 8).

m **Professional Support for Students** includes two sub-categories.

- The first (A) is Pedagogical Support at ISCED 0-4 and Academic Support at ISCED 5-8;
- The second (B) is Health and Social Support at ISCED 0-8.

m **Pedagogical Support (ISCED 0-4)** covers professional staff who providing services to students to support their instructional programme. In many cases these personnel were licensed originally as teachers but then moved into other professional positions in education systems. This staff classification includes the following types of personnel: guidance counsellors, librarians, educational media specialists, and attendance officers.

m **Academic Support (ISCED 5-8)** covers all personnel whose primary responsibility is to support the academic programme of students. It **INCLUDES**:

- All staff included under **Pedagogical support**, as well as
- Other professional support staff employed in tertiary education institutions.

m **Health and Social Support** covers all personnel employed in education systems who provide health and social support services to students. It **INCLUDES** the following types of personnel:

- Health professionals such as doctors, dentists, ophthalmologists, optometrists, hygienists, nurses, and diagnosticians;
- Psychiatrists and psychologists;
- Speech pathologists and audiologists;
- Occupational therapists; and
- Social workers.

### 3.5.4. MANAGEMENT/QUALITY CONTROL/ADMINISTRATION

#### 3.5.4.1. SCHOOL LEVEL MANAGEMENT PERSONNEL

Table PERS4-MANA (and ad-hoc module on all types of personnel employed in educational institutions) requests data on School level management personnel.

m **School Level Management Personnel (ISCED 0-4)** covers professional personnel who are responsible for school management/ administration.

- It **INCLUDES** principals, assistant principals, headteachers, assistant headteachers, and other management staff with similar responsibilities.

- It **EXCLUDES** receptionists, secretaries, clerks, and other staff who support the administrative activities of the school.

m At **ISCED 5-8, Institutions Level Management** covers personnel whose primary or major responsibility is the management of the institution, or a recognised department or subdivision of the institution. This category **INCLUDES** personnel with the following titles or their equivalents, if their principal activity is administrative: president, vice president, dean, director, associate dean, assistant dean, executive officer or department head.

#### 3.5.4.2. HIGHER LEVEL MANAGEMENT

Only the ad-hoc module on all types of personnel employed in educational institutions requests data on higher level management.

m At **ISCED 0-4, Higher Level Management** covers personnel whose primary responsibility is quality control and the management of the education system at the higher level. These personnel may be employed by local boards of education, state or regional ministries or departments of education, or by national ministries or departments of education. Their work may involve direct administration or other functions that support the operation of education systems, (e.g., planning, evaluation, budgeting and accounting, public information, etc.). The category **INCLUDES** the following types of personnel: superintendents of schools, associate and assistant superintendents, commissioners of education, associate and assistant commissioners, directors of instruction and curriculum, directors of planning and evaluation, and other equivalent titles.

m At **ISCED 5-8, Higher Level Management INCLUDES**

- Personnel with similar functions described above for ISCED 0-4, and also

- Other administrative/ management positions that are specific to the tertiary education sector.

Table PERS4-MANA includes school level management personnel and teachers aides. It includes all personnel whose primary activity is either school level management or teachers aides. It excludes personnel whose main activity is teaching but has some management responsibilities

#### 3.5.4.3. SCHOOL LEVEL ADMINISTRATIVE PERSONNEL

Only the ad-hoc module on all types of personnel employed in educational institutions requests data on school level administrative personnel.

m At **ISCED 0-4, *School Level Administrative Personnel*** covers all personnel who support the administration and management of the school. It **INCLUDES** receptionists, secretaries, typists and word processors, bookkeepers and clerks, photocopying assistants, etc.

m At **ISCED 5-8, *Institution Level Administrative Personnel*** covers:

- All personnel with similar functions described above for ISCED 0-4 and
- Other personnel who support the administrative/ management functions of the institutions. These other personnel **INCLUDE**: accountants, analysts, auditors, computer programmers, systems analysts, evaluators, financial aid officers, grant developers, lawyers, network administrators, public relations/ informational services officers, registrars, and others with similar functions and responsibilities.

m At all ISCED levels ***Higher Level Administrative Personnel*** covers personnel who support the administrative/ management functions of the education system at the higher level. These personnel may be employed by local boards of education, state or regional ministries or departments of education, or by national ministries or departments of education.

***School level management with teaching responsibilities*** – some analysis will wish to record the teaching responsibilities of all staff whether classified as instructional personnel or not. For this purpose, school management personnel that spend at least 0.25 FTE of their working time teaching to a group or class of students should be considered as having “**at least some teaching responsibilities**”.

#### 3.5.5. MAINTENANCE AND OPERATIONS PERSONNEL (ISCED 0-8)

Only the ad-hoc module on all types of personnel employed in educational institutions requests data on Maintenance and Operations personnel (ISCED 0-8).

m At *all* ISCED levels, **Maintenance and Operations** Personnel covers personnel who support the maintenance and operation of schools, colleges and universities, school security, and ancillary services, such as the transportation of students to and from school, food services operations. It **INCLUDES** the following types of personnel:

- masons, carpenters, electricians, locksmiths, maintenance repairers, painters and paperhangers, plasterers, plumbers, and vehicle mechanics,
- bus drivers and other vehicle operators, construction workers, gardeners and groundskeepers, bus monitors and crossing guards, cooks/ food caterers, custodians, food servers, dormitory supervisors, and security guards.

### 3.6. CLASS SIZE

Table CLASS-1 requests data on average class size for primary and lower secondary education.
--

In general, the calculation of **average class size** is simply the total number of pupils divided by the total number of classes. Students attending **special needs programmes** should be excluded from this data collection in order to simplify the questionnaire and to ensure comparability between countries.

At primary and secondary education levels, class size is computed on the base of the **division concept**.

A “**division**”, often commonly referred to as a “class” is made up of the students who are following a common course of study. Pupils/ students are grouped together in a division based on the highest number of common courses, usually the compulsory studies. A “division” is the pedagogical structure in which each student is registered. Regardless of his level of study a student is registered in only one division in general by the principal.

In term of methodology, two distinct methods are found in countries in the presentation of statistics on average class size:

- average based on the concept of “**division**”,
- average based on the concept of “**group**”.

A “group” generally refers to a sub-group of students in a division who are following some specific options or partitions. The division can be divided in two or more groups in order to follow these modules. A group may also be comprised of students from several different classes (e.g in modern or ancient languages). In fact, pupils can be enrolled in a class and follow different partitions in the programme.

The difficulty in the statistics on class size is to take into account all the courses of study, whether they are conducted in a “group” or in a “division”. The method used can generate some differences in the statistics on class size in function of the inclusion or exclusion of the part of the teaching that is done to “groups” of students. It is evident though that **at primary and lower secondary level of education**, this type of teaching **is less frequent** than in upper secondary education where several partitions are proposed to pupils. Thus, in order to fill this questionnaire for primary and lower secondary education, the concept of “division” has been chosen. Further research and developmental work will be needed before this questionnaire can be extended to the upper secondary level of education.

For example, if a teacher has a division of 28 pupils during 8 hours, and this division is also divided in two groups of 14 students during one hour for a specific module. The average size of the class should be calculated by **excluding the teaching in sub-group**, and should equal to:

E/ D= Number of students per division =  $28/1=28$  with E standing for the total number of enrollees and D representing the total number of divisions.

### 3.7. EXPENDITURE

Tables FIN 1-SOURCE and FIN 2-NATURE request data on educational expenditure.

#### 3.7.1. EXPENDITURE ON EDUCATIONAL GOODS AND SERVICES AND ITS LOCATION IN RELATION TO THE EDUCATIONAL INSTITUTION

The coverage of the finance data:

##### INCLUDES:

- Goods and Services of educational institutions: All direct public, private and international expenditure whether educational or non-educational (e.g. ancillary services), but with some exceptions (see below) and;
- Goods and Services purchased outside educational institutions: private expenditure on educational goods and services; plus
- Public subsidies to students for student living costs regardless of where or how the student spends these subsidies.

##### EXCLUDES:

- R&D outside of educational institutions – as this is clearly outside the scope of education;
- Private, non-subsidised expenditure on student living costs outside of educational institutions.
- Expenditure on educational activities outside the scope of the UOE data collection: Some educational institutions offer, besides the educational programmes that fall under the scope of the UOE data collection, educational activities for which neither participants nor graduates should be considered. Examples would be evening courses provided by schools or universities for adults that should be classified as leisure courses and do not fall under the scope of the UOE data collection.

#### 3.7.1.1. EXPENDITURE ON GOODS AND SERVICES INSIDE EDUCATIONAL INSTITUTIONS

The following list indicates the coverage within the expenditure data of goods and services provided by educational institutions:

##### 3.7.1.1.1. INCLUSION OF:

##### 3.7.1.1.1.1. *Educational core goods and services*

Instruction (i.e., teaching costs), including in teaching hospitals as it relates to the teaching of medical students;

Educational goods (books, materials, etc.) provided by institutions;

Training of apprentices and other participants in combined school and work-based educational programmes at the workplace.

Administration;

Capital expenditure and rent;

Special educational needs; guidance;

3.7.1.1.1.2. *Educational peripheral goods and services:*

R&D

Educational research and curriculum development (including in teaching hospitals- but see below);

Research and development performed at higher education institutions;

Non-instructional goods and services (Ancillary Services)

Student transportation, school meals, student housing, boarding, student health services;

Services for the general public provided by educational institutions;

3.7.1.1.2. EXCLUSION OF:

Activities of public authorities (e.g. Ministries etc.) that is not directly related to education (e.g. culture, sports, youth activities etc.) **unless** it is provided as ancillary service;

Teaching hospitals' expenditure as it relates to patient care and other non-education related general expenditure;

Debt servicing (i.e. payments of interest or repayments of the principal);

Depreciation of capital assets and capital charges;

Good and services Tax (GST);

Research and Development outside of educational institutions.

3.7.1.1.3. DIFFICULT CASES

The following sections provide special instructions concerning categories of spending on educational institutions that have posed problems for international comparability in the past.

3.7.1.1.3.1. *Expenditures on research and development (R&D)*

**All expenditure on research performed at universities and other institutions of tertiary education is INCLUDED** in educational expenditure, regardless of whether the research is funded from general institutional funds or through separate grants or contracts from public or private sponsors. This includes all research institutes and experimental stations operating under the direct control of, or administered by, or associated with, higher education institutions. (See also "Expenditure for Teaching Hospitals", below).

3.7.1.1.3.2. *Expenditure for teaching hospitals*

Expenditure by or on teaching hospitals (sometimes referred to as academic hospitals or university hospitals) is **EXCLUDED** from educational expenditure, particularly all costs of patient care and other general expenses of academic hospitals, even if such expenses are paid by the education authorities.

However, expenditure by or on teaching hospital that it is directly and specifically related to the training of medical students, expenditure on R&D at teaching hospitals are **INCLUDED to the extent that it is included in the OECD/DSTI data collection on R&D**.

3.7.1.1.3.3. *Expenditure on ancillary services*

"Ancillary services" are defined as services provided by educational institutions that are peripheral to the main educational mission. The two main components of ancillary services are:

- **student welfare services** – at ISCED levels 0-3 – student welfare services include, such things as meals, school health services, and transportation to and from school. At the tertiary level, they include halls of residence (dormitories), dining halls, and health care
- **services for the general public**, these include such things as museums, radio and television broadcasting, sports, and recreational or cultural programmes.

All such ancillary services in educational institutions are **INCLUDED** in the coverage of the expenditure data **except for** day or evening child care provided by pre-primary and primary institutions.

#### 3.7.1.1.3.4. *The special case of free transportation*

The classification of some public expenditure is ambiguous, since it may be classified either as ancillary services or as public subsidies to students in-kind.

This applies especially to free or subsidised transport of students to travel to school or for students' use more generally.

In exceptional cases special public subsidies to students will be paid to educational institutions as fees for ancillary services, i.e. for lodging, meals, health services, or other welfare services furnished to students by the educational institutions. **Those payments that go to institutions have to be carefully singled out** in order to attribute them as public subsidies to the institutions receiving them.

#### 3.7.1.1.3.5. *Distinction between ancillary services and special public subsidies in the case of free or subsidised transport for students*

Free or subsidised transport can be provided to students in two different forms:

- **Special school buses** organised to bring the students to the school. Free or subsidised transportation of students provided through a special school bus service is classified as an ancillary service offered by the educational institution.
- **Free/subsidised tickets** for (local) transport companies.
- If the main purpose of the expenditure is to fund the students' transport to school, the expenditure is classified as expenditure on an ancillary service.
- If, the purpose of the expenditure is to fund the general use of the transport system by the student, then the expenditure is recorded as subsidies to students' in kind. Note also in the latter case, that the allocation of the subsidy must be contingent on the recipient being a student

#### 3.7.1.1.3.6. *Day and evening child care*

In some countries, institutions providing pre-primary and primary education also provide extended day or evening child care. In the interest of international comparability, a country where institutions provide these extended day or evening services should attempt to exclude the cost of such services from any reported expenditure statistics, especially at ISCED levels 0 and 1.

#### 3.7.1.1.3.7. *Educational expenditure at the workplace to train participants in combined school and work-based training programmes*

Expenditure by private companies on certain combined school and work-based programmes that take place at the workplace, and public subsidies for such programmes, should be regarded as **expenditure by independent private educational institutions** for the purposes of this data collection.



Expenditure on these programmes INCLUDES expenditure on training per se (e.g. salaries and other compensation of instructors and other personnel, and costs of instructional materials and equipment). It EXCLUDES salaries or other compensation paid to students or apprentices.

For example, if the estimated total cost of a dual-system apprenticeship programme to the employer is EUR 10 billion, of which EUR 6 billion is the estimated cost of training and EUR 4 billion is the cost of apprentices' salaries, social security contributions, and other compensation, only EUR 6 billion are included in rows E3 and E5a. EUR 4 billion are not considered part of educational expenditure.

**Remark:**

Coverage of full-time equivalents students (in table FIN-STUDENTS) should be aligned to the coverage of expenditure. As a consequence, countries that cannot provide data on expenditure at the workplace need to adjust the coverage of full-time equivalents students to reflect only the school-based part of the programme.

For example, 10 000 students are enrolled in school and work-based programmes with 2 days of school and 3 days at the workplace per week. The expenditure that occurs at the workplace is excluded from the financial data. In this case, table ENRL2 should report the students as full-time students, but the FTE number of students should be reduced by 60 per cent, i.e. to 4,000.

#### 3.7.1.1.3.8. *Measurement of expenditure for contributions on pension schemes*

Employee costs reported for educational institutions should **include** the cost to the employer of contributions for retirement schemes for the currently active educational employees.

**Retirement expenditure** is defined, in principle, as the actual or imputed expenditure *by employers or third parties* (e.g. social security agencies, pension agencies or finance ministries) to finance retirement benefits for *current* educational personnel. Pension contributions made *by the employees* themselves, whether deducted automatically from their gross salaries or otherwise, are **not included** in retirement expenditure of educational institutions.

Depending on the types of retirement schemes in operation in a country, estimates will need to be provided. Three different types of pension systems exist:

- In a **fully funded**, contributory pension system, employers pay contributions for each of their current employees into a fund which is sufficient to pay the required pension when the employees retire. In this case, the expenditure on retirement to be reported equates to the current employer contribution to the pension fund.
- In a **completely unfunded** retirement system, there are no on-going contributions into a fund by the employer and instead the government meets the cost of retirement as it arises. This is the type of scheme (sometimes called "pay as you go") used to provide pensions for civil servants in many countries. In this case, the expenditure on retirement must be estimated or imputed.
- Likewise, in **partially funded systems** where employers contribute to a retirement system but the contributions are inadequate to cover the full costs of future pensions, it is necessary to impute the contributions which make-up the short fall. Thus, retirement expenditure is the sum of actual employers (or third party) contributions and the imputed contribution necessary to cover the projected funding gap.

#### 3.7.1.2. EXPENDITURE OUTSIDE EDUCATIONAL INSTITUTIONS

Student or household expenditure related to education that occurs outside institutions:

**INCLUDE**

- *Educational* goods and services purchased outside institutions, in the free market

- Student living costs **if they are subsidised** through financial aid to students by public or private entities

**EXCLUDE**

- Student foregone earnings,
- Expenditure on student living costs outside educational institutions **which are not subsidised** through financial aid to students by public or other private entities.

3.7.1.2.1 STUDENTS AND HOUSEHOLDS EXPENDITURE ON EDUCATIONAL SERVICES AND GOODS PURCHASED OUTSIDE EDUCATIONAL INSTITUTIONS

It **INCLUDES**:

- Expenditure on educational goods which are requested for participation in the programmes and which are therefore imposed on the student either directly or indirectly by the educational institutions. Examples are school uniforms, books requested for instruction, athletic equipment, and materials for arts lessons.
- Expenditure on educational goods which are not required by institutions, but which students and households choose to buy in support of their study in the programmes in scope of the data collection. Examples are additional books or computer, learning software to be used at home.
- Fees for private out of school tuition related to the educational programmes being pursued. This will be the main type of educational service purchased outside institutions. Outside school tuition is restricted to tuition intended to support the participation in programmes that fall under the scope of the data collection.
- Purchases from commercial enterprises operated or sponsored by educational institutions (e.g. university bookstores) are regarded as expenditure outside educational institutions.

Expenditure on educational goods and services purchased outside institutions will usually be measured by household expenditure surveys, so the definition of goods and services will tend to be dictated by those used in the national survey instrument. Care therefore needs to be taken to ensure that this does not result in double counting with expenditure on educational institutions and that student living costs are not included.

For example, if private expenditure on educational institutions (row H5) is reported on the basis of school accounts, and includes fees paid by households for laboratory materials and art supplies besides tuition fees, it needs to be ensured that the same fees are not counted again as for payments outside institutions (row H16) on the basis of households report in educational expenditure surveys.

3.7.1.2.2. STUDENT LIVING COSTS

It is only included if it is subsidised through financial aid to students by public or private entities. The rationale for including these subsidies is that in many countries, public and private scholarships, grants, or loans are provided to students not primarily or exclusively to cover the tuition fees charged by educational institutions but rather to subsidise student living expenses. It is therefore desirable to capture this expenditure in order to maintain a complete picture of total investment by public and other private entities in education.

**Note**, however, that fees paid by private households to educational institutions for ancillary services (i.e. student and household expenditure for living costs which are paid to educational institutions) as for student accommodation is included in private expenditure regardless of whether it is subsidised or not.

### 3.7.2. SOURCES AND TRANSFERS OF FUNDS: THE EXPENDITURE CATEGORIES OF TABLE FIN1-SOURCE

#### 3.7.2.1. THE STRUCTURE OF TABLE FIN1-SOURCE

Table FIN1-SOURCE is headed “Educational expenditure by source, type of transaction, and level of education”.

The expenditure is classified by **sources of funds**:

- Government (central, regional, local),
- International agencies and other foreign sources,
- Households and Other private entities (including firms and religious institutions and other non-profit organisations).

Moreover, three types of **financial transactions** can be distinguished:

- Direct expenditure/ payments on educational institutions (disaggregated according to the type of service provider to which, or for which, the payments are made; public institutions, government-dependent private institutions, and independent private institutions).
- Intergovernmental transfers for education and
- Transfers to students or households and to other private entities.

Individual rows in the table FIN1-SOURCE are identified by combinations of letters and numbers, in which the letters correspond to funding sources, as follows:

C = central government expenditure

R = regional government expenditure

L = local government expenditure

G = government expenditure (all levels of government combined)

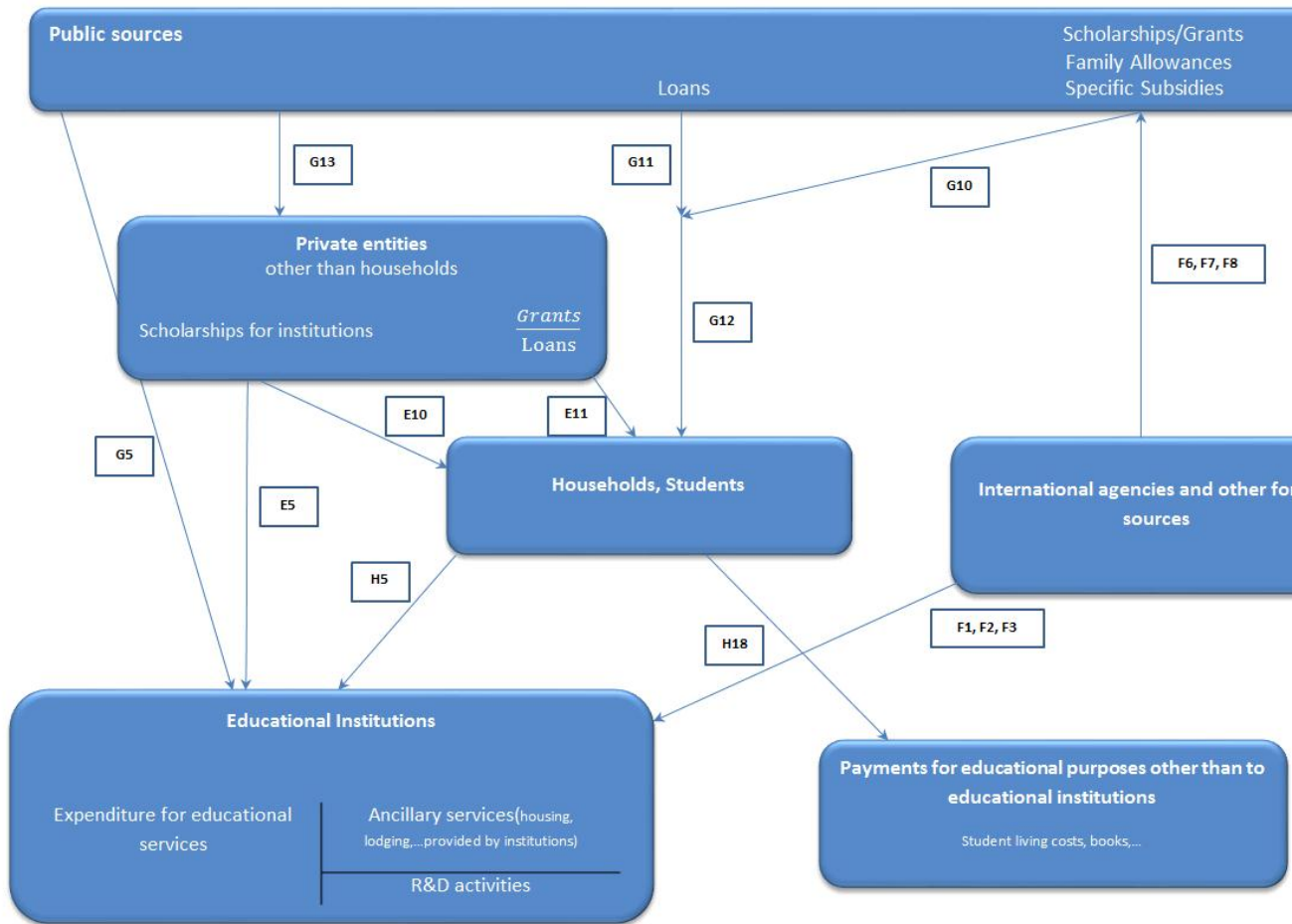
F = funds from international agencies and other foreign sources

H = household expenditure

E = expenditure by other private entities

P = private-sector expenditure (households and other private entities combined)

N = combined public and private expenditure





### 3.7.2.2. GOVERNMENT (PUBLIC) SOURCES

**Public expenditure** refers to spending of public authorities at all levels. Expenditure on education by other ministries or equivalent institutions, for example Health and Agriculture is included. It includes subsidies provided to households and other private entities (often in the form of financial aid to students) which can be attributable to educational institutions (e.g. fees) or not (e.g. private living costs outside of institutions). Expenditure that is not directly related to education (e.g., culture, sports, youth activities, etc.) is excluded unless provided as ancillary services.

Table FIN1-SOURCE recognises three main types of government expenditure (at central, regional or local levels) on education:

- Direct expenditure on educational institutions,
- Intergovernmental transfers for education, and
- Transfers or other payments from governments to households and other private entities.

#### 3.7.2.2.1. CLASSIFICATION OF LEVELS OF GOVERNMENT

The sections on government expenditure distinguish between different levels of government. All government sources (apart from international sources) should be classified in three levels:

- Central (national) government
- Regional government (province, state, land, etc.)
- Local government (municipality, district, commune, etc.).

#### Remarks:

- **Clarification for ambiguities of classification:**
  - If a country only has two levels of government, the lower level usually must be designated local, not regional.
  - If there are four or more levels, the second level usually must be designated regional and the third (and following ones), local.
  - If a city (such as the national capital) has dual status as both regional and local government, its expenditure is reported as expenditure of regional level of government (e.g. the Stadtstaaten Hamburg, Bremen and Berlin in Germany).
- **Regional and local government responsibilities:** The terms “regional” and “local” apply to governments whose responsibilities are exercised within certain geographical subdivisions of a country. They do not apply to government bodies whose roles are not geographically circumscribed but are defined in terms of responsibility for particular services, functions, or categories of students.

#### 3.7.2.2.2. DIRECT EXPENDITURE ON EDUCATIONAL INSTITUTIONS

“**Direct expenditure on educational institutions**” by a government may take either of two forms:

- **Purchases** by a government agency **of educational resources** to be used by educational institutions.

Examples include direct payments of teachers' salaries by a central or regional education ministry, direct payments by a municipality to building contractors for the construction of school buildings, and procurement of textbooks by a central or regional authority for subsequent distribution to local authorities or schools.

- **Payments** by a government agency **to educational institutions** that have the responsibility of purchasing educational resources themselves.

Examples of such payments include a government appropriation or block grant to a university, which the university then uses to pay staff salaries and to buy other resources, government allocations of funds to fiscally autonomous public schools, government subsidy to private schools; and government payments under contract to private companies conducting educational research.

The coverage of direct expenditure on educational institutions

**INCLUDES:**

- Current expenditure on staff compensation (salaries for teaching and non-teaching staff, expenditure on retirement and other non-salary compensation)
- Expenditure designated for capital, for ancillary services and for R&D

**EXCLUDES:**

- Expenditure on servicing debts (i.e. payments of interests on the amounts borrowed for educational purposes and repayments of the principal).
- Tuition fees that the families of students enrolled in public educational institutions are paying to regional or local government rather than directly to educational institutions **to avoid double counting** as they are included under household payments to institutions.

*3.7.2.2.2.1. Direct expenditure designated for capital*

Table FIN1-SOURCE request data on direct expenditure designated for capital in specific rows (C5a, R5a, L5a and G5a).

Note that the concept reflected in these data categories is that the expenditure in question has been explicitly designated, or “earmarked,” for capital. Actual capital expenditure (on buildings, equipment, etc.) may exceed the amounts designated for capital if funds not specifically earmarked by governments for capital formation are used to finance capital outlays.

*3.7.2.2.2.2. Direct expenditure designated for ancillary services*

Table FIN1-SOURCE request data on public expenditure designated for ancillary services in row G5b.

Note that the concept reflected in this category is that the expenditure in question has been explicitly designated, or “earmarked,” for ancillary services. The amounts actually spent for ancillary services may exceed the amounts designated for ancillary services by public and other private sources plus fees paid by households in cases where funds not specifically earmarked by governments are used to finance ancillary services.

*3.7.2.2.2.3. Direct expenditure for R&D activities*

Table FIN1-SOURCE request data on Direct public expenditure for R&D activities in rows G1 to G5, and also separately in row G5c.

Note that although direct public expenditure for R&D activities is reported separately, it is desirable to include them in rows G1 to G5.

Note that the concept reflected in this category is the amount actually spent on R&D activities which are **financed by central, regional or local levels of government**.

#### 3.7.2.2.3. INTERGOVERNMENTAL TRANSFERS

In table FIN1-SOURCE, net transfers payments for education from central to regional government should be reported in row C7, central to local transfers should be reported in row C8, and total central government transfers (C7 + C8) should be reported in row C9. Transfers from regional to local government should be reported in row R8.

“**Intergovernmental transfers**” are transfers of funds designated for education from one level of government to another. They are defined as **net transfers from a higher level to a lower level of government**.

**Every transfer from one level to another level needs to be reported as expenditure at the level of government receiving the funds.** The design of the UOE table ensures that double counting in total expenditure by all level of government (rows G1 to G20) is avoided. Expenditure that is only reported as a transfer, but not as expenditure at the receiving level of government is to be excluded from the totals.

For example, the regional authorities spend from their own sources 100 million LCU on educational institutions, and receive an additional 200 million LCU as transfers from the Ministry of Education for expenditure on educational institutions. The ministry also spends 50 million LCU directly on educational institutions. In that case 200 million LCU should be reported in row C7 as a transfer, 300 million LCU (200+100) should be reported as spending by the regional level on educational institutions in row R5 and 50 million LCU as central spending in row C5. The total public spending on institutions (row G5) will be calculated as to 350 million LCU, C5 plus R5.

#### Remarks:

- **Negative transfers:** It appears, however, that in a few situations (specifically in the Nordic countries), transfers from local to regional authorities may be greater than transfers from regional to local authorities. Where such situations occur, the resulting net flows of funds should be reported as **negative transfers by the higher-level government**.

- **Passing of central government transfers to local government through regional government:** Sometimes, central government transfers to local governments are “passed through” regional governments; that is, the regional governments are responsible for disbursing central government funds to local authorities. In cases where this disbursement is compulsory (i.e., regional governments may not retain the funds for their own use), the payments in question should be classified as central government transfers to local rather than to regional governments.

#### 3.7.2.2.4. PUBLIC PRIVATE TRANSFER

Transfers and payments for education to private entities are divided into two categories:

- **Public subsidies to households** (a distinction is made between two forms of aid,

(1) Scholarships and other grants (including child allowances contingent to student status, special public subsidies in cash or in kind that are contingent on student status) and

(2) Student loans (including those not attributable to household payments for educational institutions, such as subsidies for student living costs).

- **Transfers and payments to other private entities** (e.g. government transfers and certain other payments (mainly subsidies) to other private entities such as commercial companies and non-profit organisations).



They **EXCLUDE**:

- **Any tax benefits** to students or their families, such as tax credits or deductions from taxable income
- **Allowances that are independent of the educational status** of a child.

**Remark on reporting practice:** government scholarships, child allowances contingent on student status and loans must be attributed to the level of government directly responsible for providing funds to students, even if another level of government ultimately covers some or all of the cost.

For example, if students receive loans from provincial (i.e. regional) authorities, who in turn are reimbursed fully or partly by the central government, the loans should still be reported as coming from regional (i.e., provincial) governments. The reimbursements of the provinces by central government must be included in intergovernmental transfers from central to regional governments.

#### 3.7.2.2.4.1. *Scholarships and other grants*

In table FIN1-SOURCE, Government scholarships and other government grants to students and households are reported in rows C10, R10 or L10, depending on which level of government provides them. The amounts entered in these rows should include the following items:

##### - ***Scholarships and grants***

This category **INCLUDES**

- Public scholarships and
- All kinds of similar public grants, such as fellowships, awards and bursaries for students.

Government scholarships that are channelled through educational institutions for administrative purposes are considered government transfers to students.

##### - ***Special public subsidies in cash and kind***

Special public subsidies are all those transfers to households that are linked to specific spending by students and are contingent upon the student status.

The special subsidies **EXCLUDE**

- all kinds of tuition costs, with the exception of tuition and other fees paid to institutions abroad. Only in exceptional cases will the payments go to educational institutions as fees for ancillary services, i.e. for lodging, meals, health services, or other welfare services furnished to students by the educational institutions. Those payments that go to institutions have to be treated with care so that subsidies attributable to institutions are separated out.

The special subsidies **INCLUDE**:

- Special subsidies for transport;
- Special subsidies for medical expenses;
- Special subsidies for books and supplies;
- Special subsidies for social and recreational purposes;
- Special subsidies for study abroad; and
- Other special subsidies.

Special public subsidies should cover the total value of special subsidies provided to students, either in cash or in kind, such as reduced-price travel on public transport systems.

**- Family allowances or child allowances contingent upon student status.**

Family allowances or child allowances

- **INCLUDE** allowances that are **contingent upon student status**
- **EXCLUDE** allowances that are **independent of the educational status** of a child

For example, if a country provides family allowances for all children up to age 18 regardless of educational status and provides additional allowances for young people aged 19-25 who are enrolled in an educational institution, the allowances for young people 19-25 are included in scholarships and other grants, but the allowances for those aged 18 and below are excluded.

*3.7.2.2.4.2. Student Loans*

In table FIN1-SOURCE, Public loans to students and/ or households are reported in rows C11, R11, L11 and G11 depending on which level of government provides them.

Students' loans are reported on a gross basis - that is, without subtracting or netting out repayments or interest payments from the borrowers (students or households). Thus, student loan expenditure represents the total value of loans paid by government to students during the reference year. The cost to government of servicing these loans (i.e. interest rate subsidies and the cost of default payments) is not included.

Students' loans

**INCLUDE**

- Public loans to students and/ or households (gross amount)

**EXCLUDE**

- Interest payments and repayment of the principal,
- Government subsidy to private lenders of student public sector loans (included in public subsidies to other private entities),
- Government payments to compensate for defaults under programmes of government-guaranteed private loans (included in public subsidies to other private subsidies).

**Remarks:**

Governments also support loans paid to students by private financial institutions (e.g. through interest subsidies, the cost of guaranteeing the loans, the cost of default payments). These are **not included** as public subsidies to households but as public transfers to other private entities (rows C13, R13, L13 or G13).

Student loans provided by private financial institutions (rather than directly by a government) are reported as loans from other private entities to students (row E11).

*3.7.2.2.4.3. Transfer and payments to other private entities*

In table FIN1-SOURCE, Government transfers and certain other payments (mainly subsidies) to other private entities (commercial companies and non-profit organisations), reported in rows C13, R13, and L13, **INCLUDE**, for example:

- Transfers to business or labour associations that provide adult education within scope of the collection;

- Subsidies to private companies (or labour organisations or associations of such entities) for the provision of training at the workplace as part of combined school and work-based programmes, including apprenticeship programmes; and,
- Interest rate subsidies or defaults guarantee payments to private financial institutions that provide student loans.

**Remarks:**

- **Before payments are classified as transfers to other private entities**, it needs to be determined whether the receiving entities should be classified as educational institutions.

For example, non-profit organisations that provide student housing or student meals are most likely to be classified as non-instructional educational institutions and transfer to them consequently as **direct expenditure** on government-dependent or independent private educational institutions.

- Similarly, government purchases of services from private companies or non-profit organisations are reported as **direct government expenditure** on private institutions.

Examples of expenditure on such services include government payments for research or evaluation performed by private research organisations, payments to private organisations that develop or administer examinations, and fees paid to private financial institutions that operate student loan programmes.

***Public subsidies to other private entities for the provision of training at the workplace in combined school and work-based programmes***

Public subsidies to other private entities for the provision of training at the workplace are reported as Transfer and payments to other private entities in rows C13, R13 and L13.

Consequently they are included as well in rows E3 and E5a as spending by other private entities.

Note that it is crucial to report all public payments for expenditure at the workplace also as Transfer and payments in G13 and as expenditure in E3 and E5a.

3.7.2.2.5. TOTAL EXPENDITURE BY LEVEL OF GOVERNMENT

In table FIN1-SOURCE, Total educational expenditure by central government, regional governments, and local governments should be reported in rows C20, R20, and L20, respectively.

Note that these totals are gross expenditure figures, which include intergovernmental transfers and other transfer payments and subsidies. They cannot be summed without first netting out duplication through intergovernmental transactions.

3.7.2.2.6. EXPENDITURE FOR ALL LEVELS OF GOVERNMENT COMBINED

In table FIN1-SOURCE, **Consolidated educational expenditure** by the public sector (all levels of education combined) is calculated in rows G1 to G20. All entries on these rows are calculated values, based on data reported in parts C, R and L.

**No expenditure should be included in these totals if they have not also been included in expenditure by individual levels of government.**

A distinction is made between:

- Direct public expenditure on education by service provider (rows G1 to G5),
- Direct expenditure designated for capital (row G5a),
- Direct expenditure designated for ancillary services (row G5b),

- Direct expenditure designated for R&D activities (row G5c),
- Public transfers and other payments to students and to other private entities (rows G10 to G14) and
- The combined total of direct public expenditure on educational institutions and public transfers and payments to the private sector appears (row G20).

Note that intergovernmental transfers do not appear in part G of the table because all such transfers are internal to the public sector and are netted out when total public-sector spending on education is calculated.

### 3.7.2.3. FUNDS FROM INTERNATIONAL AGENCIES AND OTHER FOREIGN SOURCES

The UOE data collection distinguishes:

- Funds from international sources paid to governments and
- International funds paid directly to educational institutions.

International funds consist of funds from public multilateral organisations for development aid to education. These organisations include multilateral development banks (the World Bank and regional development banks), the United Nations agencies and other intergovernmental organisations, bilateral development co-operation government agencies and international NGO agencies established in the receiving country. International funds also include other foreign grants for R&D at tertiary institutions.

Note that the data on expenditure

- **INCLUDE** all expenditure in the year of reference, regardless of whether the expenditure was financed from current revenue or by borrowing. Consequently, educational expenditure based on loans from intergovernmental organisations, such as World Bank loans, are fully included as funds from intergovernmental organisations, and
- **EXCLUDE** repayments to international organisations.

International funds are reported as follows in FIN1-SOURCE:

- International payments direct to public, government-dependent private and independent private institutions, respectively, in rows F1, F2 and F3. An example would be a research grant from a foreign corporation to a public university.
- International payments direct to all type of educational institutions for R&D activities, already included in rows F1 to F5, are reported separately in row F5c. Note that although payments for R&D activities are reported separately, it is still desirable to include them in rows F1 to F5.

. For example, a grant from a foreign corporation to a public university should be reported in rows F1, F5 and F5c.

- Transfers of funds from international sources to central, regional, and local governments respectively in rows F6, F7 and F8.
- Total of all transfers to governments in row F9.
- Total funds from international sources (the sum of rows F5 and F9) in row F20.

Note that transfers of funds from international sources to governments are not automatically included in the total of expenditure on educational institutions. Like all transfer payments reported in UOE, payments need to be reported as expenditure at the level of the recipient of the funds, i.e. in sections C, R, L or G. All totals in the UOE data collections are calculated in such a way, that funds are only taken into account once. If transfers are not reported again as expenditure, they will not be included in the totals and the total expenditure will be underestimated.

For example, a transfer of education funds from the European Union to a provincial (i.e. regional) authority should be reported in row F7. The funds received are used by the provincial (i.e. regional) authority to pay for special programmes at public schools. This expenditure needs to be included as direct expenditure on educational institutions by regional government in row R1.

### 3.7.2.4. PRIVATE SOURCES

#### 3.7.2.4.1. DEFINITION OF PRIVATE SOURCES

Tables FIN1-SOURCE and FIN2-NATURE recognise two private sources of education funds:

- “**Households**”, to refer to students and their families.
- “**Other private entities**”, including private businesses and non-profit organisations, including religious organisations, charitable organisations, and business and labour associations. It also includes expenditure by private companies on the work-based element of school and work-based training of apprentices and students.

Note that private educational institutions are regarded as **service providers**, not funding sources. All the funds available to these institutions are regarded as coming from the public, private or international funding sources.

For example, if a private university earns interest on its investments or obtains rental income by leasing buildings or land, the interest receipts or rental payments should be classified as funds from “other private entities.”

#### 3.7.2.4.2. HOUSEHOLD EXPENDITURE

##### **INCLUDE**

- Transfers to households and students (public and private scholarships, grants, or loans), although the student living costs themselves are not to be taken into account,
- Fees on ancillary services furnished by educational institutions and
- Costs borne by private households for the purchase of educational goods and services.

##### **EXCLUDE**

In general, the living expenses of students (costs of housing, meals, clothing, recreation, etc.).

##### 3.7.2.4.2.1. *Payments to educational institutions*

In most countries, **fees** paid to educational institutions represent the main form of direct household expenditure on education.

These consist of:

- Tuition fees,

- Other fees charged for educational services (such as registration fees, laboratory fees, and charges for teaching materials) plus fees paid for lodging, meals, health services, and
- Fees paid for other welfare services furnished to students by the educational institutions.

Table FIN1-SOURCE provides separate rows (H1, H2 and H3) to report total student and household payments to public institutions, government-dependent private institutions, and independent private institutions respectively. In row H4 (the sub-total for the two types of private institutions) countries that have no separate data for government-dependent and independent private institutions may enter figures for both types of private institutions combined. Row H5 is simply the total of rows H1, H2 and H3 or, equivalently, H1 plus H4.

Note that:

- Payments from students and households to institutions are reported as **net amounts** - that is, after subtracting any scholarships or other forms of financial aid (such as reductions in tuition fees or waivers of fees) provided to students by the educational institutions themselves.  
 . For example, if the normal university tuition fee is USD 2,000 per student but some students are offered free tuition or charged only USD 1,000, the figures entered in rows H1 to H5 should reflect the reduced amounts actually paid by students, not the hypothetical full tuition fees.
- Scholarships and other financial aid to students from governments or other private entities are **not be netted out**, even if such aid is administered by, or passed through, the institutions.

Student/ household payments to public educational institutions

- INCLUDE tuition fees that the families of students enrolled in public educational institutions are paying to regional or local government rather than directly to the educational institutions
- BUT in order to avoid double counting of such payments, the tuition fees received by governments are not counted as part of government expenditure on the institutions in question. For example, the tuition fee paid by an upper secondary student attending a municipally operated school to the municipality is counted only as student/ household tuition fee paid to a public institution. It should not also be counted as part of the municipality's expenditure on upper secondary schools.

#### 3.7.2.4.2.2. Fees for ancillary services

In FIN1-SOURCE, private fees on ancillary services, already included in rows H1 to H5, are reported separately in row H5b. Note that although fees for ancillary services are now reported separately, it is still desirable to include them in rows H1 to H5. Similar rows on ancillary services by source of funds are provided for the public sector (G5b) and for other private entities (E5b).

#### 3.7.2.4.2.3. Payments on educational goods and services purchased outside educational institutions

In FIN1-SOURCE, rows H15 to H18 report expenditure on educational goods and services purchased by households and students outside educational institutions, in the free market.

It is understood that many countries do not have the detailed student or household survey data needed to quantify these direct purchases and thus may be compelled to enter the

symbol for “not available” in row H15 to H18. Some may have data for certain levels of education but not for other levels. However, countries are invited to include estimates of spending on direct purchases if there is a reasonable basis for doing so.

Note that double counting must be avoided. Amounts reported in rows H1, H2 and H3 as fees paid to educational institutions – e.g. for laboratory use or teaching materials – should not be reported again in rows H16 or H17.

#### 3.7.2.4.2.4. *Total household expenditure*

In FIN1-SOURCE, total household payments to educational institutions are shown in row H5. Total household expenditure other than on educational institutions is shown in row H18. Total educational expenditure by households (the sum of row H5 and row H18) should be entered in row H20.

#### 3.7.2.4.3. EXPENDITURE OF OTHER PRIVATE ENTITIES

The table FIN1-SOURCE allows for two types of expenditure by other private entities:

- Direct payments to educational institutions and
- Subsidies to students or households.

##### 3.7.2.4.3.1. *Direct expenditure on educational institutions*

Direct payments by other private entities to educational institutions **INCLUDE:**

- Contributions or subsidies to vocational and technical schools by business or labour organisations;
- Payments by private companies to universities under contracts for research, training, or other services;
- Grants to educational institutions from non-profit organisations, such as private foundations;
- Charitable donations to educational institutions (other than from households);
- Rents paid by private organisations; and earnings from private endowment funds; and
- Expenditure by private employers on the training of apprentices and other participants in mixed school- and work-based educational programmes.
- Public subsidies to other private entities for the provision of training at the workplace (already reported in rows C13, R13 and L13) are included as well in rows E3 and E5a as spending by other private entities.

Payments by other private entities to public institutions, government-dependent private institutions, and independent private institutions are reported in rows E1, E2 and E3, respectively. Row E4 is the sub-total of rows E2 and E3 but may also be used by countries that do not have separate data for government-dependent and independent private institutions to report expenditure on both combined. Row E5 is the total for all three types of educational institutions combined.

##### 3.7.2.4.3.2. *Private educational expenditure at the workplace for the training of participants in combined school and work-based training programmes*

Expenditure made by businesses within the work-based element of the combined school-and-work-based educational programmes which fall within the scope of the UOE data collection

are included. It is considered as expenditure by other private entities on independent private schools, and hence reported in row E3.

Because of the scale of expenditure of private companies in some countries on the work-based element of school and work-based training of apprentices and students, a special row (E5a) has been added to table FIN 1-SOURCE to distinguish this expenditure from other expenditure of private entities other than households.

Public subsidies to other private entities for the provision of training at the workplace are reported as public subsidies to other private entities in rows C13, R13 and L13. Consequently, they are included in rows E3 and E5a as spending by other private entities.

#### 3.7.2.4.3.3. *Fees paid to institutions for ancillary services*

In FIN 1-SOURCE private fees on ancillary services, already included in rows E1 to E5, are reported separately in row E5b. Note that although fees for ancillary services are reported separately, it is desirable to include them in rows E1 to E5. Similar rows on ancillary services by source of funds are provided for the public sector (G5b) and for other private entities (H5b).

#### 3.7.2.4.3.4. *Payments of other private entities designated for R&D activities*

In FIN 1-SOURCE payments of other private entities for R&D activities, already included in rows E1 to E5, are reported separately in row E5c. Note that although payments designated for R&D activities are reported separately, it is desirable to include them in rows E1 to E5. Similar rows on payments designated for R&D activities by source of funds are provided for the public sector (G5c) and for international agencies and other foreign sources (F5c).

#### 3.7.2.4.3.5. *Financial aid to students*

In FIN 1-SOURCE, Total private financial aid to students (scholarships plus loans) is reported in row E12 and **INCLUDE**

- Scholarships and other grants provided to students by other private entities (reported in row E10). These include scholarships provided by businesses and religious or other non-profit organisations.

- Student loans from banks and other private lenders (reported in row E11, even if such loans are guaranteed or subsidised by government, or made through programmes of private lending organised by the government). Like the government loans, private loans must be reported as gross amounts, without the subtraction of payments of interest or repayments of the principal by the borrowers.

Note that public subsidies related to private loans that are guaranteed or subsidised by the government, or made through programmes of private lending organised by the government, must also be reported as public subsidies to other private entities in row G13.

#### 3.7.2.4.3.6. *Total expenditure of other private entities*

In FIN 1-SOURCE expenditure of other private entities is classified as follows:

- Total payments by other private entities to educational institutions in row E5.
- Total financial aid from other private entities to students or households in row E12.
- Total educational expenditure by other private entities (the sum of rows E5 and E12) in row E20.



### 3.7.2.5. TOTAL PRIVATE EXPENDITURE AND COMBINED PUBLIC, PRIVATE, AND INTERNATIONAL EXPENDITURE

#### 3.7.2.5.1. TOTAL PRIVATE EXPENDITURE

In FIN1-SOURCE total expenditure by the private sector, consisting of expenditure by students and households and expenditure by other private entities, are reported in part P of the table. They are classified by type of institution:

- Payments to public institutions (row P1),
- Payments to government-dependent private institutions (row P2),
- Payments to government-independent private institutions (row P3).

Rows P1, P2 and P3 (payments to educational institutions) are the sums of payments to institutions reported in parts H and E of the table (e.g.  $P1 = H1 + E1$ ).

Row P4 is the sub-total of P2 and P3. P5, the sum of P1, P2 and P3, or equivalently,  $P1 + P4$ , gives the total of private-sector payments to all three types of educational institutions.

Household payments other than to educational institutions (H18) represent the only other element of total private expenditure. Total private education expenditure, row P20, is the sum of P5 and H18.

Note that private expenditure on financial aid to students does not appear in Part P because **such financial aid is internal** to the private sector and has been netted out in calculating total private spending.

#### 3.7.2.5.2. COMBINED PUBLIC, PRIVATE, AND INTERNATIONAL EXPENDITURE

In FIN1-SOURCE total educational expenditure from all sources – public, private, and international – is reported in part N of the table. Again they are classified by type of institution:

- Payments to public institutions (row N1),
- Payments to government-dependent private institutions (row N2),
- Payments to government-independent private institutions (row N3)

Rows N1, N2 and N3, expenditure on educational institutions, are the sums of payments to institutions reported in parts G, F and P of the table.

For example,  $N1 = G1 + F1 + P1$ . N4 is the sub-total of N2 and N3. N5, the sum of N1, N2 and N3 or equivalently,  $N1 + N4$ , is total expenditure on all types of educational institutions from all funding sources combined.

Combined public, private and international expenditure designated for ancillary services, already included in rows N1 to N5, is reported separately in row N5b. Note that although combined public, private and international expenditure designated for ancillary services is now reported separately, it is still desirable to include them in rows N1 to N5.

Combined public, private and international expenditure for R&D activities, already included in rows N1 to N5, is reported separately in row N5c. Note that although combined public, private and international expenditure for R&D activities is now reported separately, it is still desirable to include them in rows N1 to N5.

The only other element of total educational spending is household payments other than to educational institutions (H18). Total educational expenditure, row N20, is the sum of N5 and H18.

Note that the **total expenditure** shown for public, government-dependent private, and independent private educational institutions in rows N1, N2, and N3 of table FIN1-SOURCE should correspond, to the totals shown in table FIN2-NATURE.

### 3.7.3. RESOURCE CATEGORIES FOR EXPENDITURE ON EDUCATIONAL INSTITUTIONS: THE EXPENDITURE CATEGORIES OF TABLE FIN2-NATURE

#### 3.7.3.1. THE STRUCTURE OF TABLE FIN2-NATURE

In table FIN2-NATURE “Education expenditure by service provider, expenditure category, and level of education”, the expenditure is classified by

- Expenditure categories (current and capital expenditure)
- Type of service provider (public institutions, government-dependent private institutions, and independent private institutions), *without regard to sources of funds (whether they are public or private)*. These expenditure figures are intended to represent the total cost of services provided by each type of institution.

The function of this table is to obtain the data needed to construct indicators of the cost of education (total and per student) and the composition of educational expenditure by nature and type of resource, disaggregated by both level of education and service provider.

#### 3.7.3.2. EXPENDITURE BY TYPE OF INSTITUTION: PUBLIC AND PRIVATE INSTITUTIONS

Table FIN2-NATURE consists of five parts. Individual rows in the table FIN2-NATURE are identified by combinations of letters and numbers, in which the letters correspond to funding sources, as follows:

- A = Public and private institutions;
- X = Public institutions;
- W = All private institutions;
- Y = Government dependent private institutions and
- Z = Independent private institutions.

Note that the expression “expenditure by or on (...) institutions” **is used to make clear that countries should include both expenditure by the institutions themselves** (e.g. salaries paid by a fiscally autonomous university) **and expenditure by governments on, or on behalf of, the institutions** (e.g. salaries paid by a national education ministry directly to the individual teachers employed in public or private schools).

#### Remarks:

- **Unavailable/missing data:** Although table FIN2-NATURE is designed to obtain data concerning all three types of educational institution, it is recognised that not all countries can supply complete expenditure figures for their private institutions. **A country unable to provide expenditure figures for either its government-dependent or independent private institutions, for some or all ISCED levels, is invited to indicate this by inserting appropriate missing data codes in the relevant columns of parts Y and Z.**
- **Consistency with data from table FIN-STUDENTS:** Countries are asked to report enrolment data in table FIN-STUDENTS which are fully compatible with the scope of

the finance table. **Moreover, efforts should be made to ensure complete consistency between missing codes used in tables FIN-STUDENTS and FIN2-NATURE.**

- **Complete data:** Countries are asked to carefully review whether the expenditure on the different types of private institution is complete. If large portions of the budgets of the relevant institutions are missing, the whole section must be reported as missing rather than with understated figures.

### 3.7.3.3. EXPENDITURE BY RESOURCE CATEGORY

In table FIN2-NATURE, within educational institutions, expenditure is classified into current and capital expenditure and these two categories are the standard ones used in national income accounting.

- **Current expenditure (rows A6 to A14, X1 to X14, W6 to W14, Y1 to Y14 and Z1 to Z14)** is expenditure on goods and services consumed within the current year, i.e., expenditure that needs to be made recurrently in order to sustain the production of educational services. Minor expenditure on items of equipment, below a certain cost threshold, is also reported as current spending.
- **Capital expenditure (rows A15, X15, W15, Y15 and Z15)** is expenditure on assets that last longer than one year. It includes spending on construction, renovation and major repair of buildings and expenditure on new or replacement equipment. (It is understood that most countries report small outlays for equipment, below a certain cost threshold, as current rather than capital spending.)

Separate rows for identification of any expenditure on ancillary services (rows A30, X30, W30, Y30 and Z30) and on R&D activities (rows A40, X40, W40, Y40 and Z40), included in current and capital spending, are included in table FIN2-NATURE.

#### 3.7.3.3.1. CURRENT EXPENDITURE

Current expenditure is broken down, into expenditure on compensation of personnel, and expenditure on other (non-personnel) resources.

##### 3.7.3.3.1.1. *Expenditure on compensation of personnel*

In table FIN2-NATURE expenditure on compensation of personnel (rows A6, X6, W6, Y6 and Z6) is classified in two ways:

- by type of personnel (rows X1, X5, Y1, Y5, Z1, Z5)
- by type of compensation (rows X7 to X9, Y7 to Y9)

#### ***Categories of educational personnel***

Table FIN2-NATURE recognises two categories of educational personnel:

- The “**teachers**” category includes only personnel who participate directly in the instruction of students. Under expenditure for on compensation of teachers, (rows X1, Y1 and Z1), countries should report the full compensation of full-time teachers plus appropriate portions of the compensation of staff who teach part-time.

For example, if the head-teachers or principals of a country's primary schools teach for a quarter of their time, on average, and perform administrative functions for the other three quarters of their time, only one quarter of head-teachers' compensation is included in compensation of teachers. The remaining three quarters are included in compensation of other educational, administrative and professional personnel.

- The **Non-teaching staff category** (“Other pedagogical, administrative, and professional personnel + support personnel” in FIN2-NATURE) includes, in addition

to head-teachers and other administrators of schools, supervisors, counsellors, school psychologists, school health personnel, librarians or educational media specialists, curriculum developers, inspectors, educational administrators at the local, regional, and national level, clerical personnel, building operations and maintenance staff, security personnel, transportation workers, food service workers, etc. The exact list of occupations included in this category will vary from one country to another.

Expenditure on compensation of the two categories of personnel is reported in rows X1 and X5 respectively, and on the corresponding rows of parts Y and Z of the table.

### ***Breakdown of expenditure on compensation of personnel***

Total expenditure on compensation of personnel, shown in rows X6 and Y6 are broken down by type of compensation as follows:

**Salaries** (rows X7 and Y7) means the gross salaries of educational personnel, before deduction of taxes, contributions for retirement or health care plans, and other contributions or premiums for social insurance or other purposes. **Error! Bookmark not defined.**

**Expenditure on retirement**, i.e. pension schemes (rows X8 and Y8), means actual or imputed expenditure by employers or third parties **to finance retirement benefits for current educational personnel**. This expenditure does not include pension contributions made by the employees themselves, or deducted from their gross salaries. The reference to third parties is included to cover situations in which costs of retirement are not borne by the education authorities directly but rather by other public authorities, such as social security or pension agencies or finance ministries. (see specific instructions included in section 3.6.1.1.3.8. of this manual)

**Expenditure on other non-salary compensation** (row X9 and Y9) (fringe benefits) includes spending by employers or third parties on employee benefits other than pensions. These benefits may include such things as health care or health insurance, disability insurance, unemployment compensation, maternity and childcare benefits, other forms of social insurance, non-cash supplements (e.g. free or subsidised housing), free or subsidised child care, and so forth. The list of employee benefits varies from country to country, and often between sectors or categories of personnel within the same country.

Note that the breakdown of compensation of personnel into salaries and non-salary components is not requested for independent private institutions as it has not been possible to obtain these data for a significant number of countries. The underestimation of non-salary compensation, especially in countries where no reliable estimates exist for future pension liabilities of current expenditure, remains a significant potential bias in comparisons of expenditure data.

#### *3.7.3.3.1.2. Current expenditure other than compensation of personnel*

In table FIN2-NATURE all expenditure on goods and services used in education other than compensation of educational personnel is reported in rows A13, X13, W13, Y13 and Z13. This type of current expenditure includes the following categories:

- **Expenditure on contracted and purchased services** is expenditure on services obtained from outside providers, as opposed to services produced by the education authorities or educational institutions themselves using their own personnel. The services most commonly obtained under contracts are:
  - Support services, such as maintenance of school buildings, and
  - Ancillary services, such as preparation of meals for students.
  - Rents paid for school buildings and other facilities are also included in this category. In a few rare cases, the educational authorities may even contract out

teaching services by engaging a private company to operate certain schools. The providers of contracted services may be private companies or public agencies.

. An example of services under contracts is a private company that cleans school buildings.

. An example of rent payments is when a general public building authority that constructs school buildings and leases them to the education authorities.

- **Expenditure on other resources** covers the purchases of other resources used in education, such as teaching and learning materials, other materials and supplies, items of equipment not classified as capital, fuel, electricity, telecommunications, travel expenses, and insurance.
- **Required payments other than expenditure on educational resources and services.**

. For example, the property taxes that educational institutions are required to pay in some countries are reported here.

**Remark:**

Financial aid to students **is not included** in FIN2-NATURE **UNLESS it is provided by the institution's own funds** in form of a reduction in tuition fees or waivers of fees **and it exceeds household payments to institutions.**

#### 3.7.3.3.2. CAPITAL EXPENDITURE

The capital expenditure reported in FIN2-NATURE represents the value of educational capital assets acquired or created during the year in question – that is, the *amount of capital formation* – regardless of whether the capital expenditure was financed from current revenue or by borrowing. In other words, capital outlays must be recorded in the years in which they are made. The cost of the depreciation of capital assets is not included.

. For example, if a school building costing 10 million Euros is constructed in 2010, the full 10 million Euros should be reported as capital expenditure for 2010, even if the building is financed by a loan, with repayment spread over 20 years. If the building was constructed over the two-year period, 2009 to 2010, with 7 million Euros of the cost of construction paid in the first year and 3 million Euros in the second year, capital outlays of 7 and 3 million, respectively, should be included in the 2009 and 2010 data.

Capital expenditure **EXCLUDE** expenditure on debt servicing (e.g. interest payments, repayments of the principal). This means that neither interest payments nor repayments of the principal should be counted as part of capital or current spending.

#### 3.7.3.3.3. ADJUSTMENTS FOR CHANGES IN FUND BALANCES

In table FIN2-NATURE adjustments for changes in fund balances are reported in rows A41, X41, W41, Y41 and Z41 (a reduction is entered as a negative amount).

The total funds received by educational institutions from all sources may not be precisely equal to total expenditure in the reference period. This is because the institutions have either added to or reduced their fund balances during the period in question.

An increase or reduction in fund balances cannot be attributed to current of capital expenditure. They would distort the distribution by expenditure category. Therefore special rows are provided to record adjustments for changes in fund balances. These rows account for potential differences in funds reported in FIN1-SOURCE and expenditure by educational institutions reported in FIN2-NATURE.

#### 3.7.3.3.4. EXPENDITURE ON ANCILLARY SERVICES

In table FIN2-NATURE, if for a certain type of service provider (public and private, public, all private, government dependent private, private independent) expenditure on ancillary services is contained under current or capital expenditure, it should be reported separately as well in rows A30, X30, W30, Y30, and Z30.

Note that the **expenditure on ancillary services** shown in row A30 of table FIN2-NATURE should correspond to row N5b of table FIN1-SOURCE.

#### 3.7.3.3.5. EXPENDITURE ON R&D ACTIVITIES

In table FIN2-NATURE, if for a certain type of service provider (public and private, public, all private, government dependent private, private independent) expenditure on R&D activities is contained under current or capital expenditure, it should be reported separately as well in rows A40, X40, W40, Y40, and Z40. Note that the **expenditure on R&D activities** shown in row A40 of table FIN2-NATURE should correspond to row N5c of table FIN1-SOURCE.

#### 3.7.3.3.6. TOTAL CURRENT AND CAPITAL EXPENDITURE

Total current plus capital expenditure ( $X14 + X15$ ) is reported in row X20. Similarly, the totals in sections A, W, Y and Z are reported in rows A20, W20, Y20 and Z20

The tables FIN1-SOURCE and FIN2-NATURE relate to each other as follows:

Row FIN1-SOURCE N1 equals row X20 + X41 of FIN2-NATURE;

Row FIN1-SOURCE N2 equals row Y20 + Y41 of FIN2-NATURE;

Row FIN1-SOURCE N3 equals row Z20 + Z41 of FIN2-NATURE;

Row FIN1-SOURCE N4 equals row W20 + W41 of FIN2-NATURE;

Row FIN1-SOURCE N5 equals row A20+A41 of FIN2-NATURE.

### 3.7.4. DEFINITION OF EXPENDITURE ON RESEARCH AND DEVELOPMENT

Expenditure on R&D is defined according to the OECD Frascati Manual.

Tables FIN1-SOURCE and FIN2-NATURE

**INCLUDE** all expenditure on research performed at universities and other institutions of tertiary education, regardless of whether the research is financed from general institutional funds, through separate grants, or from contracts from public or private sponsors.

**EXCLUDE** expenditure on independent, organisationally separate, government research institutions in cases where the connection between universities and research institutions is purely administrative.

#### Remark:

**General university budgets:** Where R&D expenditure is embedded within general university budgets, problems can arise in the separation of expenditure on R&D from total expenditure. This embedded expenditure includes, for example, spending on the compensation of teaching staff who work part of their time on R&D. These elements need to be identified and staff costs need to be broken down for education and R&D activities. The OECD Frascati Manual suggests standard practices for the separation.