

Chapter

4

DEFINITIONS AND CLASSIFICATIONS
OF OECD INTERNATIONAL
EDUCATION STATISTICS

4.1 Introduction

This chapter sets out the definitions and classifications that are used in the collection of OECD international education statistics, taking in turn:

- 4.2 Students and Graduates
- 4.3 Educational Personnel
- 4.4 School Organisation and the Curriculum
- 4.5 Educational Institutions and
- 4.6 Educational Expenditure.

The definition and classification of educational programmes is covered in Chapter 5 alongside guidance on the implementation of ISCED-97.

Within each section, the key definitions are enclosed in shaded boxes in order to distinguish them from the rest of the text which discusses issues of interpretation and practical implementation. Whilst much has been done over the years to improve the clarity of these definitions, this work is by no means complete and where areas of ambiguity still remain, these are discussed in the text.

4.2 Students and graduates

4.2.1 Students and student enrolments

A *student* is defined as any individual participating in the educational programmes within the scope of the data collection as defined in Chapter 3. The term “student” therefore applies to pupils and students alike.

Enrolment or *registration* is the act of officially enlisting on a programme of study. A student may enrol on more than one programme.

There are two statistics to measure the activity of students:

- **Number of students enrolled:** refers to the number of individuals (head count) who are enrolled within the reference period,
- **Number of registrations (or enrolments):** refers to the count of enrolments within the reference period.

The two measures are the same if every individual is only enrolled in one programme during the reference period but they differ if some students are enrolled in multiple programmes. Both measures are important.

The **number of students enrolled** is used to calculate participation rates within the population at large and to profile the student body whilst the **number of registrations** is used in assessing total educational activity, resource allocation and operational efficiency.

The **number of students enrolled** should reflect the number of students enrolled at the beginning of the school/academic year, preferably the end or near end of the first month of the school/academic year. However, because of the definitions used in national data collection systems, countries use different criteria in reporting students enrolled. For example, some countries report the number of students enrolled on a given date in the pertaining level and/or education programme; others have reported the average number of students enrolled during the (calendar) year; and yet others have reported the total number of students enrolled during the (calendar) year (thus potentially double-counting multiple entrants and re-entrants). Annex 2 provides some details of country practice.

Care must be taken to avoid double counting in the counts of students enrolled. For instance, if a student enrolls in multiple fields of education as part of their programme of study, they should be *pro-rated* between the fields of education according to the percentage of instruction devoted to each field.

For example, if a programme consists of 70 per cent of instruction in “Biology” and 30 in “Chemistry” and there are 100 full-time students attending this programme, then 70 full-time students should be reported under the category “Biology” and 30 full-time students under the category “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.

A similar approach should be followed when students enrol on multiple types of programmes (*e.g.* programmes with different orientations or destinations).

Some double counting may, however, be unavoidable such as a student who enrolls in more than one institution in the same reference period. This is likely to be difficult to identify and eliminate. The scale of such double counting is, however, likely to be relatively insignificant but where it exists, it should be noted.

4.2.2 Entrant status of student

Students can be either *entrants* or *continuing students*. Entrants can be either *new entrants* or *re-entrants*.

An entrant is a student who is enrolled on a programme during the current reference period but who was not enrolled on that programme in the previous reference year.

Whether an entrant is new or not *at a particular level* is determined by whether or not the student has previously been active at that level of education in the country reporting the data. The following definition is therefore used:

New entrant to a level of education is a student who, during the course of the current reporting period, enters any programme leading to a recognised qualification at this level of education *for the first time*. This is irrespective of whether the student enters the programme at the beginning or at an advanced stage of the programme (*e.g.* by virtue of credits gained for work experience or courses taken at another level).

Operationally, a new entrant to a level of education is an enrollee who has never previously been included in the corresponding count of students for that level of education.

Clearly, any new entrant to a particular level of education is also a new entrant to a programme, and a new entrant to a field of education¹ at that level. However, new entrants to a programme or field of education at a given level of education are not necessarily new entrants to that level.

A *foreign student* who is enrolling for the first time in the country for which the data are being collected should be counted as a new entrant, regardless of their previous education in other countries. The reason for this is one of practicality in that in practice countries are less likely to know about the previous education of foreign students. This should be reviewed as student mobility policies develop and the underpinning data collections do likewise.

Re-entrant to a level of education: is a student who returns to a level of education following a period of absence of at least one year from studying at that same level. Thus, a re-entrant will not have been enrolled at that level in the previous reference year, but will have been enrolled at that level in some year prior to that.

Re-entrants can be further sub-classified into entrants who previously obtained a certification at that level (and who are referred to as *returnees to a second programme*) and those who did not obtain a certification at that level (who are referred to as *returnees to a first programme*).

Continuing student: is a student who is enrolled on a programme during the current reporting year and who was also enrolled at that level during the previous reference year.

For each level of education, the sum of *New Entrants*, *Re-entrants* and *Continuing students* should equal the total *numbers of students enrolled* at that level.

4.2.3 Graduates

A *graduate* from a programme is a student who has *successfully completed* all requirements of that educational programme.

Successful completion must be distinguished from simple completion of a programme which is achieved solely through fulfilling attendance requirements. *Successful completion* should open up educational and labour-market opportunities that unsuccessful completion would not otherwise do. It marks something more than simply attending a programme until its end, with automatic progression between years of the programme.

As graduation requirements vary from country to country, it is not sensible to categorically state the features of graduation. However, *successful completion* should involve the demonstration by the student of the expected skills and knowledge of someone at the level of education of the programme completed by either:

- Passing a final, curriculum based examination or series of examinations; **or**
- Accumulating the specified number of study credits throughout the programme; **or**
- Where there are no formal examinations, through a formal assessment of the skills/knowledge acquired by the student during the programme.

In all cases, a successful outcome should result in *certification* which is recognised within the educational system and the labour market.

A condition of a *successful completion* of a programme is that students should have met all of the pre-set requirements for programme completion and graduates should be counted in the year in which all of the pre-set requirements are finally met. So, for example, a student who completed the final year of an upper secondary programme prior to the reference year, but passed the final examination during the reference year is counted as an upper secondary graduate in the year in which all requirements were completed.

Students who left without meeting all of the pre-set requirements but later successfully complete a recognised “equivalency” examination based on knowledge learned outside of the education system, should not be counted as graduates from the programme.

The rationale for this is that the graduate numbers are measuring the output of educational institutions and counting of such cases would clearly be an inflation of this, distorting for example completion and drop out rates for educational programmes. However, when measuring educational attainment of individuals within the general population, it is legitimate to include the achievement of such qualifications.

For example, taking and passing the General Educational Development (GED) test in Canada or the United States is not counted as an ISCED 3 graduation unless the student has also successfully completed the final year of high school. But holders of the GED are counted as having attained ISCED 3 in measures of educational attainment of the population.

Successful completion of a level: Successful completion of a programme within an ISCED level equates to the successful completion of that level in all cases **except** ISCED 3.

Due to the wide variability in the duration and content of ISCED 3 programmes within and between countries, an additional condition is placed on courses considered to be of insufficient duration. The criteria for level 3 completion is thus:

- the successful completion of a 3A or 3B programme (designed to provide access to ISCED 5); **or**
- the successful completion of a 3C programme with a cumulative theoretical duration that is similar (no more than 1 year FTE shorter) than that of 3A/3B programmes. This additional requirement is to ensure that the content of the 3C programme is of a sufficiently high level.

4.2.4 Counts of graduates

The *flow of graduates* within the reference period records the number of students who have graduated in the reference period. A graduate is counted in the year in which all the requirements of the programme are completed. For example, a student who completed the final year of an upper secondary programme prior to the reference year but passed the final examination during the reference year should be counted as a graduate in the reference year.

Graduates in the reference period can be either *first-time graduates* or *repeat graduates*.

A *first-time graduate* is one who graduates for the first time at a given level – or in the case of ISCED 5, sub-level 5a or 5b- in the reference period.

This distinction allows the aggregation of an *un-duplicated count of graduates* for each level (*i.e.* the sum of first-time graduates at a particular level in a given year) which avoids double-counting of individuals within the same level over time. This is particularly important for the calculation of graduation rates. The sum of first-time graduates and repeat graduates in any year gives the total number of graduations for that year.

It follows from this definition that a student can be a first-time graduate at more than one level (or sub-level of ISCED 5) over time *e.g.* a first-time graduate at ISCED 5a can become a first time graduate at ISCED 6 in subsequent years.

In contrast to the flow of graduates in a given reference year, the *stock of graduates*, reports the number of graduates in the general population at a point in time and is often part of an analysis of the *educational attainment* of the population. Such analyses that appear in *Education at a Glance* focus on *the highest level of education completed* by members of the adult population. Thus an individual who has successfully completed an ISCED 2 programme and nothing more, will be recorded as having an education level of ISCED 2 (see Chapter 7 for relevant indicators).

4.2.5 Repeater

A *Repeater* is defined as a student who enrolls in the same grade or year of study of the same educational programme for a second or further time.

Repeaters must be distinguished from students who enrol in second and further educational programmes at the same level after having completed an earlier programme at that level. A repeater is one who repeats predominantly the same subject matter within the programme.

4.2.6 Grade of students

Students at the primary and secondary level of education are classified by the grade in which they are enrolled.

A *grade* is a stage of education within which a group of students (class or classes), usually of a similar age, study approximately the same curriculum.

First grade usually corresponds to the first year of ISCED 1. 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 taking subjects in more than one grade should be allocated to the grade where they spend the greatest amount of their time. Students not classifiable by grade (*e.g.* adults in adult education) should be allocated to the category “Grade unknown”.

4.2.7 Age of students

Students’ age: in counts of student enrolments, entrants and graduates, the common reference point for students’ age for most countries is 31 December of the school year to which the student enrolment/graduation data relate. Some agreed exceptions exist, however, for the reasons discussed.

Thus, for instance, in a country whose school year runs from September 2003 to August 2004, a student born on 31 December 1995 will be reported as aged 8, whereas a student born on 1 January 1996 will be reported as aged 7. The choice of 31 December for most countries is mainly to coincide with the age-reference of the population data that are used in the calculation of participation rates.

Where the available data on enrolment or graduates for a country refer to the age of students at some date other than 31 December, data providers should re-distribute total enrolment data across ages on the basis of estimation. 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 students enrolled.

For example, where a country records students in a school census on 30 September according to their ages on 30 September, data on enrolment classified by age should be adjusted so that total enrolment on 30 September is reported according to the estimated age of students on 31 December. This is achieved by assuming that one quarter of any given age-group enrolled on 30 September attains a higher age within the following three months.

The choice of a common reference date, such as 31 December, across all countries can however be problematic when the school years being reported vary greatly between countries. This particularly applies in Australia, New Zealand and Korea where the school year begins early in the year and so a reference date of 31 December would record students’ ages at the end of the school year. This is in contrast to most other countries where the 31 December 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 31 December 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. Annex 2 details the reference dates that countries currently use in reporting their age data.

Students not classifiable by age should be allocated to the category “Age unknown”.

‘Theoretical’ and ‘Typical’ ages as they relate to entry and graduation from programmes are defined in section 5.3.2.1.

4.2.8 National status of students

Students are either national students or non-national students.

For a given country reporting data, a **non-national student** (or **foreign student**), is a student who is enrolled on a programme in one of its institutions but who does not have the *citizenship* of that country.

Normally *citizenship* corresponds to the nationality of the passport which the student holds or would hold. (Note from Section 3.4.6 that the institutional coverage for a given country excludes campuses of its domestic institutions which are located abroad).

If countries are unable to provide data or estimates for non-nationals on the basis of the passport held they should substitute data according to an alternative related concept (for example, the country of residence, the non-national mother tongue, or non-national parentage when this is possible) and document this accordingly.

In distinguishing between students from EU-countries and students from non-EU countries, the membership of the EU should correspond to the membership as it was in the year to which the data relate and not the membership at the time of reporting the data. If the membership changed during the reference period, the data collection should stipulate whether the membership that applies is that at the start or the end of the reference period. The current membership of the EU is: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom.

Non-national (or foreign) students can be either resident or non-resident.

The key criterion for distinguishing between the two categories of foreign student – which is relevant mainly for tertiary level students – is whether or not the student moved to the country solely for the purpose of pursuing their education. Thus:

A **resident foreign student** is a foreign student who is in the country as a result of a prior migration by themselves or their parents (*e.g.* children or parents of families with work visas or permits or with diplomatic appointments, refugees, immigrants with permanent residence status, etc.) and who subsequently enrolls in an educational programme.

A **non-resident foreign student** is one who has come to the country expressly for the purpose of pursuing their education. The terms “resident” and “non-resident” here are intended merely to convey this distinction; it is not intended that the distinction necessarily be made on the basis of some form of “official” residence status in the country.

In practice, distinguishing between “resident” and “non-resident” foreign students can be done in a number of ways. For example:

- a “non-resident” foreign student could be a student who holds a *student* visa or permit;
- a “non-resident” foreign student could be a foreign student who has completed his secondary education in another country.
- a “non-resident” foreign student will normally be one who had a foreign country of domicile in the year prior to entering the education system of a country.

In cases where a student has more than one residence authorisation, the classification selected should be the primary or first immigration document.

For example, if a person came to the country on a work permit and was subsequently granted a study authorisation, the student should be classified as a *non-national resident* student.

A distance learning student who is a resident national in country A and enrolls with an institution in country B should be reported as a non-resident foreign student by country B. As stated in Section 3.4.5, students in foreign campuses of institutions should be reported by the country in which the campus is located. Thus, the foreign/national status of these students should be determined in relation to the country in which the campus is located and who reports the data.

Note, however, that considerable work needs to be carried out in defining and collecting data on foreign students to properly measure student mobility and the internationalisation of tertiary education. OECD is tackling this through developmental work within the Technical Group.

4.2.9 Full time, Part time and Full-time equivalents of students

Full time and part-time students

Students should be classified between full-time and part-time on the basis of *study load of the student* within the reference period. The full-time/part-time distinction is therefore an attribute of the student's study pattern rather than an attribute of the organisation of the educational programme.

Ideally the *study load* should be measured in terms of the *academic value or progress* which the study represents *e.g.* student X's study load in the reference year equates to one unit of progress towards a qualification whereas student Y's study equates to 2 units of progress. Such an approach requires an integrated framework of qualifications/study which incorporates relative academic values for each educational programme. If countries do not have such systems/data (and few typically do) student study load should instead be measured in terms of the *time/resource commitment* of the student. For study that is predominantly class-room based, an adequate proxy for this would be *time in classroom*.

The definition of a full-time and of a part-time student therefore depends on which measure is being used for student study load as follows:

Academic value/progress: a *Full-time student* is one whose study within the reference period represents an academic value (*e.g.* number of study units towards a qualification) that would typically be achieved with a *full-time commitment of time* by the student **and** if they would normally be expected to be in the programme for the entire school year. A full-time commitment of time equates to 75% or more of the typical school week as it applies locally at that level of education. Otherwise the student should be recorded as *part-time*.

So for example, if a qualification is made up of 4 units and it would normally take a full-time commitment of time (75% or more of the typical school week) to complete 1 unit in the reference year, then a full-time student is one whose study is planned to complete at least 1 unit in the reference year. Any student whose study is planned to result in the completion of less than 1 unit should be recorded as part-time.

Time commitment: a *Full-time student* is one whose commitment of study time (both institution and non-institution based) represents 75% or more of the school week, as it applies locally at that level of education **and** if they would normally be expected to be in the programme for the entire school year. If the time commitment is less than 75% of the school week or the student is expected to be in the programme for less than the full school year, then the student should be recorded as *part-time*. For example, if the school week is typically 30 hours and the student attends the institution for 15 hours and is expected to engage in a further 10 hours study outside the institution (*e.g.* at home), then the student should be recorded as a full-time student.

Time in classroom (for study that is predominantly classroom based): a *Full-time student* is one who attends school for at least 75 per cent of the school week as it applies locally for that level of education **and** if they would normally be expected to be in the programme for the entire school year. Otherwise, they should be considered *part-time*. *Pre-primary* level is a special case, since this level sometimes involves large non-educational components which can lead to large variations in the daily/weekly duration of these programmes. So, students enrolled in *pre-primary* programmes should be considered full-time if they attend school for at least 75 per cent of the school week as locally defined for the *primary* level of education and are expected to attend school for the whole reference period.

Note, however, that in practice, the national data available to countries tends to dictate which of these methods countries use to categorise students as full-time or part-time and these tend to vary by level of education. For pre-primary, primary and secondary levels, 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 teaching hours and credit accumulation. In some countries, however, the distinction between full and part-time is made on the basis of the characteristics of the underlying programme rather than of the study pattern of the student. For this reason, some countries report no part-time students at all at certain ISCED levels, most notably at the tertiary level.

Additional advice

An important consequence of each of these three 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. See examples below.

If a wholly classroom based programme involves the attendance at classes for less than 75% of the school week all students on this programme are part-time regardless of how many of the classroom sessions they attend.

If a student is enrolled on more than one programme, or type (orientation, destination) of programme or multiple fields of study, their study load should be summed over all programmes in order to determine their full-time/part-time status. The numbers of full-time/part-time students resulting from this summation should be pro-rated across programme types and fields of education as explained in Section 4.2.1.

For students in combined school and work-based programmes, both the school and the work-based components should be considered in determining the students' full/part time status.

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.

Examples

The practical application of these definitions can be illustrated by considering examples of 'non-standard' study patterns which students can follow. The comparison in each case is with a student on the same or similar programme whose 'standard' study pattern involves the completion of the programme through full-time classroom attendance:

- **Type 1:** a study pattern that aims to complete the **same curriculum** in the **same length of study** but requires **less teaching hours** than the 'standard' full-time student. Examples of this are evening courses or distance learning. Here the 'non-standard' student should be regarded as a **full-time** student because the academic load taken is the same as a conventional full-time student.
- **Type 2:** a study pattern that aims to complete **the same curriculum** but over **a longer length of study** and using the same number of teaching hours in total but proportionately **less teaching hours**

each year. This is “classic” part-time study which is common in some countries. Here the ‘non-standard’ student should be recorded as a **part-time** student.

- **Type 3:** a study pattern that aims to complete only **part of the curriculum** over a (proportionately) **shorter length of study** and with (proportionately) **less teaching hours** each year and in total. This includes short courses or modular courses. Here, the non-standard student should be recorded as a **part-time** student.

Reduction of head-count data to full-time equivalents of students

The conversion of headcounts to full-time equivalents (FTE) aims to standardise a student’s actual study load during the reference period against the normal study load 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 is calculated over the whole reference period.

The availability of individual study load data differs between countries, so the following advice is given to cover these different situations:

- **Where data and norms on individual student study load 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. Given the definitions of full-time and part-time stated in the previous section, it is of course possible for a full-time student to have an FTE of less than 1.
- **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. All countries should use this assumption at the pre-primary level. The estimation of FTE for part-time should then be estimated on the best available data which reflects the rules described above. 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.

To ensure valid international comparisons, countries are asked to document the criteria used to establish full-time participation and the methods used for the reduction to full-time equivalents.

Alignment of student data coverage with personnel and finance data

For certain indicators it is necessary to combine student data with data on educational expenditure and educational personnel (*e.g.* expenditure per student and ratio of students to staff). Because of limitations in national data, the coverage of the data reported by countries for these different parts of the data collection may not be the same. Student numbers (full-time, part-time and full-time equivalents) are therefore collected on three bases: one that seeks to match the desired coverage as defined in Chapter 3 and the other two which align student numbers to expenditure and personnel data respectively.

4.3 Educational Personnel

4.3.1 Coverage

The coverage of the term ‘*Education personnel*’ is broad in that 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).
- 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 (i.e. at least 90 per cent of the time) 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.

In short, ‘*Educational personnel*’ comprises all those employed in *educational* institutions (as defined in Section 4.5) covering both *instructional* and *non-instructional institutions*.

So as well as staff in instructional educational institutions (e.g. schools, colleges and universities), staff employed by national, regional and local levels of government who administer the education system are included, as are staff in entities providing support or ancillary services. There are, however, certain exclusions, so the coverage:

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. See Section 4.2.9.

4.3.2 Classification of educational personnel by function

The classification of educational personnel used is intended to serve as a framework to classify school and other education system personnel for all levels of education (ISCED 0 to 6). The classification is based on the **primary or major** functions performed by staff and organises them into four main functional categories; three of the four main functions contain sub-functions with specialised types of personnel. In summary, the classification is:

I. Instructional Personnel

- A. Classroom Teachers (ISCED 0-4); Academic Staff (ISCED 5-6)
- B. Teacher Aides (ISCED 0-4); Teaching / Research Assistants (ISCED 5-6)

II. Professional Support for Students

- A. Pedagogical Support (ISCED 0-4); Academic Support (ISCED 5-6)
- B. Health and Social Support (ISCED 0-6)

III. Management/Quality Control/Administration

- A. School Level Management (ISCED 0-6)
- B. Higher Level Management (ISCED 0-6)
- C. School Level Administrative Personnel (ISCED 0-6)
- D. Higher Level Administrative Personnel (ISCED 0-6)

IV. Maintenance and Operations Personnel (ISCED 0-6)

Fuller definitions of each of these categories are as follows:

I. Instructional Personnel

This category includes two sub-categories. The first (A) is: *Classroom Teachers* at ISCED 0-4 and *Academic Staff* at ISCED 5-6; the second (B) is *Teacher Aides* at ISCED 0-4 and *Teaching / Research Assistants* at ISCED 5-6.

• I.A(i) Classroom Teachers (ISCED 0-4):

A **classroom teacher** is defined as a person whose professional activity involves the planning, organising and conducting of group activities whereby students' knowledge, skills and attitudes develop as stipulated by educational programmes.

- this staff sub-category **includes** professional personnel whose primary or major activity involves direct student instruction; special education teachers in whichever setting they teach; and 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 (**Note:** In Network C's collection of data on Teachers and the Curriculum, which in part collects data on teachers' working time, special education teachers in special education institutions and teachers who work with small groups or on a one-to-one basis with students are excluded. This is because the working patterns of such teachers are likely to differ from mainstream classroom teachers and hence distort the indicators on working time that are derived from the collection.)
- this category **excludes** educational staff who have some teaching duties but whose primary function is not teaching (*e.g.* it is managerial or administrative). (However, see "School level management with

teaching responsibilities” below.) Also, this category does not include student teachers, teachers’ aides, or paraprofessionals.

- **I.A(ii) Academic Staff (ISCED 5-6)**

- This staff sub-category *includes* personnel whose primary or major assignment is instruction or research and so covers 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. The category *includes* 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.
- This category *excludes* teaching or research assistants.

- **I.B(i) Teacher Aides (ISCED 0-4)**

- This staff sub-category *includes* non-professional personnel who support teachers in providing instruction to students such as 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.

- **I.B(ii) Teaching / Research Assistants (ISCED 5-6)**

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

II. Professional Support for Students

This category covers two sub-categories. The first (A) is Pedagogical Support at ISCED 0-4 and Academic Support at ISCED 5-6; the second (B) is Health and Social Support at ISCED 0-6.

- **II.A(i) Pedagogical Support (ISCED 0-4)**

- This staff sub-category *includes* professional staff who provide services to students to support their instructional program such as guidance counsellors, librarians, educational media specialists, and attendance officers. In many cases these personnel would have originally licensed as teachers but then moved into other professional positions in education systems.

- **II.A(ii) Academic Support (ISCED 5-6)**

- This staff sub-category *includes* all personnel whose primary responsibility is to support the academic program of students and covers the same categories of staff included under *Pedagogical Support (ISCED 0-4)*, as well as other professional support staff employed in tertiary education institutions.

- **II.B(i) Health and Social Support**

- This category *includes* all personnel employed in education systems who provide health and social support services to students such as: health professionals such as doctors, dentists, ophthalmologists, optometrists, hygienists, nurses, and diagnosticians; psychiatrists and psychologists; speech pathologists and audiologists; occupational therapists; and social workers.

III. Management / Quality Control / Administration

This category comprises four sub-categories. These are (A) School Level Management, (B) Higher Level Management, (C) School Level Administrative Personnel and (D) Higher Level Administrative Personnel at all ISCED levels.

- **ISCED 0-4, School Level Management** covers professional personnel whose primary or major responsibility is for school management/administration. It **includes** principals, assistant principals, headmasters, assistant headmasters, and other management staff with similar responsibilities. It does not include receptionists, secretaries, clerks, and other staff who support the administrative activities of the school.
- **ISCED 5-6, School Level Management** this staff sub-category covers personnel whose primary or major responsibility is the management of the institution, or a recognised department or subdivision of the institution. This category typically **includes** personnel with the following titles or their equivalents, **if their primary activity is administrative**: president, vice president, dean, director, chancellor, rector, associate dean, assistant dean, executive officer or department head.
- **ISCED 0-4, Higher Level Management** covers personnel whose primary or major responsibility is quality control and the management of the education system at levels higher than that of the school. 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.
- **ISCED 5-6, Higher Level Management** covers personnel with similar functions described above for ISCED 0-4. It also **includes** other management positions that are specific to the tertiary education sector.
- **ISCED 0-4, School Level Administrative Personnel** covers all personnel who support the administration and management of the school. This staff category **includes** receptionists, secretaries, typists and word processors, bookkeepers and clerks, photocopying assistants, etc.
- **ISCED 5-6, School 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.
- **All ISCED levels, Higher Level Administrative Personnel** covers who support the administrative / management functions of the education system at levels higher than that of the school. 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**”.

IV. Maintenance and Operations Personnel

- At *all ISCED levels*, *Maintenance and Operations Personnel* includes personnel who support the maintenance and operation of schools, 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. It also includes bus drivers and other vehicle operators, construction workers, gardeners and groundskeepers, bus monitors and crossing guards, cooks/food carers, custodians, food servers, dormitory supervisors, and security guards.

4.3.3 Age of educational personnel

As is the case for students (see Section 4.2.7):

Age of educational personnel should be classified by their age as at 31 December of the school year for which the data are being reported.

Thus, for instance, in a country whose school year runs from September 2003 to August 2004, a teacher born on 31 December 1975 will be reported as aged 28, whereas a teacher born on 1 January 1976 will be reported as aged 27.

Where the available data on educational personnel for a country refer to the ages at some date other than 31 December, data providers are advised to re-distribute educational personnel numbers across ages on the basis of estimation similar to that described for student data in Section 4.2.7. The strict comparability of the reference dates for the ages of personnel is, however, likely to be less of an issue than it is for the student data where the calculation of participation rates are more sensitive to reporting differences.

Educational personnel not classifiable by age should be allocated to the category “Age unknown”.

4.3.4 Employment status (Full-time/Part time/Full time equivalents) of educational personnel

The classification of educational personnel between “full-time” and “part-time” should be done on the basis of *working time*. Full-time employment in each country will be defined differently but will usually be based on a number of “normal or statutory working hours” (as opposed to actual or total working time or teaching time) which is expected of a full-time employee (see section 4.3.7 for definitions of working time).

The definitions of full-time and part-time educational personnel in the OECD education statistics are stated relative to these national norms for each category of educational staff as follows:

Full-time educational personnel: an employee who is employed for at least 90 per cent of the normal or statutory number of hours of work for a full-time employee over a complete school year.

Part-time educational personnel: an employee who is employed for less than 90 per cent of the normal or statutory number of hours of work for a full-time employee over a complete school year

Note that the 90 per cent cut-off point for educational personnel is different from the 75 per cent cut-off point for students.

If actual data on working hours are not available, countries reporting data should provide estimates of the full-time/part-time status. They are also advised to use whatever proxy or correlated information can be obtained to ensure the reliability of estimates. Data on teaching remuneration, for instance, can be used to generate such estimates.

Full-time equivalents of educational personnel: The metric for the measurement of full-time equivalents should be full-time employment, *i.e.* a full-time employee equals one FTE. The measure on which the FTE calculation should be based should be the “normal or statutory working hours” and not, for instance, the “total or actual working hours” or “total or actual teaching hours”. The full-time equivalence of part-time educational personnel is therefore determined by calculating the ratio of hours worked by part-time personnel over the statutory hours worked by full-time employees during the school year.

For example, if a country reports 1 000 full-time teachers participating in a programme and 200 part-time teachers with a work load of 50 per cent, the number of full-time equivalents would be 1 100 *i.e.* 1 000 FTEs representing the full-time teachers and 100 FTEs representing the part-time teachers.

Note also that, given the definition of FT and PT, not all staff recorded as FT in the statistics will have an FTE of 1.0. For example employees who work 90% of the normal or statutory working hours of a full-time employee should be recorded as FT but their FTE should be 0.9.

FTEs should be recorded in person-years and represent the working load over the entire year. If countries choose instead to calculate FTEs on a specific date, then seasonal variations in personnel should be accounted for.

Full-time teachers who receive additional contracts/remuneration to perform additional teaching tasks should be counted only once, as a full-time teacher, but with a full-time equivalence factor greater than one.

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

If working hour data are not available, estimates can be based on other information (*e.g.* salary).

4.3.5 Classification of teachers involved in multi-educational programmes

The classification of teachers whose work is divided for example between different types of institutions (public/private), different levels of education, different functions, between vocational and general programmes or between teaching and administration, is problematic. The guidance that countries should follow in these circumstances differs depending on whether the reported data are *headcounts* or *full-time equivalents* and is as follows.

- **Headcounts:** firstly, the total numbers of teachers should be accurately split into those who are full-time and those who are part-time by aggregating their statutory working hours over all of their activities. The FT and PT numbers should then be pro-rated between education levels, educational 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 teachers who work exclusively in public and private institutions respectively can be used to pro-rate the numbers who share their time between the two.
 - So, for example, if 100 teachers are teaching both ISCED 2 and ISCED 3, and their working hours are such that this equates to 60 FT and 40 PT 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, student numbers can be used as the basis for pro-rating though this will introduce circularity in the calculation of staff to student ratios.

- **Full-time equivalents:** In contrast, where reporting full-time equivalents, data on teachers should be apportioned to the different levels, educational programmes, types of institutions, and functions based on the proportion of their 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 variable (full-time / part-time) is reported accurately, while the numbers reported by level, educational programme, type of institution, and function will be subject to some error (though not necessarily bias). The alternative (*i.e.*, reporting full-time teachers as multiple part-time teachers in the different aspects), would destroy the employment variable and also bias the overall count of individuals employed in education.

4.3.6 Orientation of educational programme of teaching staff

Teaching staff can be involved in the instruction of students on programmes with different orientation, *i.e.* general, pre-vocational or vocational (see Section 5.3.4 for definitions of these programme types). In classifying teachers by the orientation of the educational programme, the criterion that should be used is the programmes being followed by the students and not the specific subjects that the teacher teaches.

Where teaching staff are engaged in more than one type of programme and they are not separately identifiable as either teachers of general programmes or of vocational-technical programmes, then they should be allocated according to the rules set out in the previous section.

4.3.7 Teachers' working time, teaching time and non-teaching time

Teachers' working time is defined as the number of hours per year that a full-time teacher is expected to work according to the formal policy of that country. This should, *exclude* overtime, non-specified preparation time, and days that the school is closed for public holidays and festivities.

The countries formal policy can refer:

- only the time directly associated with teaching (and other curricular activities for students such as assignments and tests, but excluding annual examinations)
- or to time directly associated with teaching and to hours devoted to other activities related to teaching, such as lesson preparation, counselling students, correcting assignments and tests, professional development, meetings with parents, staff meetings and general school tasks

Where there is no national policy specifically defining teachers' working time but teachers are under the jurisdiction of other labour regulations (such as regulations for public employees), the working time of the relevant part of the labour force is reported instead.

Working time in school is defined as the working time teachers are supposed to be at school, including both teaching time and non-teaching time.

Teachers' working time can be divided into *teaching time* and *non-teaching time*.

Teaching time is defined as the number of hours per year that a full-time teacher teaches a group or class of students according to the formal policy in that country.

Teaching time is calculated as the *net contact time for instruction*, *i.e.* excluding both time allocated for breaks of ten minutes or more and days that the school is closed for holidays. To have a comparable measure

of teaching time, teaching periods must be transformed into 60-minute periods (e.g. a 45-minute lesson = 0.75 hour).

So, the formula used to calculate *hours of teaching time per year* is:

Number of teaching days per year * Number of hours a teacher teaches per day

Where *Number of teaching days per year* is calculated as:

$[\text{Number of teaching days per week} * \text{number of teaching weeks per year}] - [\text{number of days that the school is closed for holidays}]$

and *Number of hours a teacher teaches per day* converts teaching periods into 60-minute periods and excludes breaks of ten minutes or more duration.

An exception to the use of this formula is the calculation of teaching time at the pre-primary and primary level, where short breaks are to be *included* if the classroom teacher is responsible for the class during these breaks.

In cases where no specified compulsory teaching time is defined but a minimum or maximum limit is provided, the respondent should estimate the *typical* teacher's teaching time.

Non-teaching time refers to the number of hours (60 minutes) a full-time teacher spends per year according to the formal policy on:

- *Teaching-related tasks*, such as lesson preparation, correction of assignments and tests, supervision activities, meetings on student reporting, annual exams, meetings with parents;
- *General school tasks*, such as providing student support, cultural activities, meetings, supervision of students during breaks and administrative tasks; and
- *Professional development activities*, such as observational visits to other schools, attending internal or external conferences, workshops or training.

Some of these activities may take place inside or outside of the school, depending on the formal policy in that country.

4.3.8 Teachers' salaries: Gross statutory salary, adjustments to base salary and additional bonuses

The **annual gross statutory salary** is the sum of wages according to existing salary scales *including* bonuses that constitute a regular part of the annual base salary, like a thirteenth month or holiday bonus.

For example in Spain, the "trienios" (a small salary supplement added to the salary of teachers after every three-year period of service) and the "sexenios" (a salary supplements added after each six-year period and related to the in-service training) are included in the annual gross statutory salary figures.

It is the gross salary from the *employee's* point of view, since it *includes* the part of social security contributions and pension scheme contributions that are paid by the *employees* (even if deducted automatically from the employees gross salary by the employer). However, the *employers'* premium for social security and pension is excluded. For example a teacher in the United Kingdom receives a monthly gross salary from which some 6 per cent is automatically deducted for the employees' contribution towards the national health insurance scheme. Separately, the employer pays an employers' contribution towards the scheme. So in the reported data the gross salary reported should be the salary before the 6 per cent is deducted and should exclude the employers' contribution.

The *starting salaries* refer to the average scheduled gross salary per year for a full-time teacher with the minimum training necessary to be fully qualified at the beginning of his or her teaching career.

Salaries after 15 years' experience refer to the scheduled annual salary of a full-time classroom teacher with the minimum training necessary to be fully qualified and with 15 years' experience.

The *maximum salaries* reported refer to the scheduled maximum annual salary (top of the salary scale) of a full-time classroom teacher with the minimum training to be fully qualified for his or her job.

Additional bonuses to base salary are additional payments that teachers may acquire in addition to the amount received on the basis of educational qualification and experience (salary scale).

In the Network C collection of data, the *maximum* additional bonus is collected. These bonuses may be awarded for teaching in remote areas, for participating in school improvement projects or special activities, for teachers with Management responsibilities in addition to teaching duties (*e.g.* serving as a head of department or co-ordinator of teachers in a particular class/grade) or for excellence in teaching performance. It follows that the maximum bonuses may not be available to all teachers in their particular locations/circumstances.

4.3.9 Teacher qualifications

Minimum level of qualification/training required to teach at a given ISCED level is defined as the typical duration and type of training required for entry to the profession. It does not include eventual, further requirements to become a licensed teacher in the public school system such as probation years.

Typical level of qualification/training is defined as the level of qualification and training teachers typically have at a given ISCED level. There are always deviations: teachers may be overqualified or under qualified for the level where they teach. This is particularly the case in times of policy change (*e.g.* when the level of training requirement is raised or lowered).

Maximum qualification/training is defined as the highest level of qualification recognised from the point of view of compensation.

A fully qualified teacher is one who has fulfilled all the training requirements for teaching (a certain subject) and meets all other administrative requirements (*e.g.* probation period) according to the formal policy in a country.

4.4 School organisation and curriculum

4.4.1 Instruction time

Intended instruction time is defined as the amount of time a student *ought* to receive instruction from a classroom teacher. This is measured in the number of class sessions per year.

A class session is the length of time each lesson runs for during a normal day. Some classes run for double (or more) periods but the class periods refer to the basic unit of time used to break up the teaching day.

For countries that have no formal policy on instruction time, the number of hours should be estimated from survey data.

Intended instruction time **includes**:

- Compulsory and non-compulsory parts of the curriculum
- Out-of school activities which are formal parts of the programme

But **excludes**

- Hours lost when schools are closed for festivities, such as national holidays,
- Non-compulsory time outside the school day.
- Homework, individual tutoring or private study taken before or after school.

4.4.2 Curriculum

Intended (or prescribed) curriculum is defined as the study areas and their time commitments, which can be prescribed at a school, local or national level.

The intended curriculum is embodied in textbooks, curriculum guides, the content of examinations, and in policies, regulations and other official statements generated to direct the educational system. The *intended curriculum* comprises both compulsory and non-compulsory parts of the curriculum.

The *national curriculum* is usually set out in a document describing the common goals, objectives and quality and/or content criteria of a national school system. This document may take the form of standards (defined objectives and achievement criteria at given levels of education and in specific subjects of study areas) without actual time allocation or mention of subjects. It may also resemble a timetable (specified number of periods for each subject and in each grade by program). It may also indicate the extent to which decisions on curriculum content and final time allocation can be made on the local or school level.

The *compulsory curriculum* is defined as the amount and allocation of instruction time that has to be provided in ALMOST EVERY public school and must be attended by ALMOST ALL public sector students.

The compulsory curriculum is often specified in the national curriculum, which may describe the common core elements (goals, study areas, skills and skill levels, core content) to be included in all curricula within the country. However, subjects within the compulsory curriculum may vary according to the degree of flexibility **within** study areas and **across** study areas.

- *Compulsory core curriculum* is defined as the set of subjects or groups of subjects (study areas) that are common to all students such as mathematics, science, social studies, mother tongue and, in some cases, a foreign language, which can be considered core study areas. Even if all core study areas must be studied by all students, choices may be made **within** the study area, for example there may be a choice between an integrated science subject or separate science subjects like biology or physics, or between foreign languages (*e.g.* French, or Italian, etc.). In some countries, local school systems or schools are to establish the subjects within the timeframe and compulsory study areas defined at the national level. In others, subjects and the time to be allocated to them are defined at the national level. However, in most countries some provision is made to define a common core curriculum.
- *Compulsory flexible curriculum* is defined as the part of the compulsory curriculum where there is flexibility in time spent on a subject and/or a choice can be made **between** study areas. For example, a school may be able to choose between offering religious education, or more science, or art, but to offer one of these is considered compulsory within the compulsory time framework. Alternatively, a student may have choices between study areas within the flexible part of the compulsory curriculum. The compulsory flexible curriculum is part of the compulsory time frame for instruction from the point of view of the student.

The *non-compulsory curriculum* is defined as the average instruction time students are entitled to above the compulsory hours of teaching. These subjects often vary from school to school or from region to region, and may take the form of “non-compulsory elective” subjects.

4.4.3 Classes and class size

A *class* is a group of students who receive tuition together.

Class size is simply the number of students in the group who receive tuition together. In general, the calculation of *average class size* is simply the total number of students divided by the total number of classes.

Note, however, that in some countries, a ‘*class*’ or ‘*division*’ can refer to a group of students enrolled together but who follow different strands of a programme. Here students are grouped together based on the highest number of common courses which they are pursuing- perhaps the compulsory part of the curriculum. Thus, a ‘class’ or ‘division’ is the pedagogical grouping into which students are registered. Regardless of the level of study, a student is usually registered in only one division. The class/division divides into ‘*groups*’ for specific modules of the programme. See *Chapter 7* for how these should be handled in the calculation of *average class size*.

4.5 Educational institutions

4.5.1 Basic definition

Although educational institutions are no longer a unit of statistics for the purpose of the regular international data collections on education (data on the number of educational institutions is no longer collected), the definition of educational institutions is crucial particularly in defining the coverage of educational expenditure. Moreover, despite the fact that, in the context of lifelong learning, educational institutions may lose their primary position, they remain important because of the major role they play especially in formal education.

Educational institutions are defined as entities that provide instructional services to individuals or education-related services to individuals and other educational institutions.

In the context of this definition, there remains ambiguity surrounding the definition of institutions as separately identifiable statistical units. In particular, the issue of whether an institution with several campuses should be regarded as a single or multiple institution, still needs to be properly addressed. Further complications arise where campuses are located in another country and in the area of distance learning, particularly where the courses are internet based. Further work is needed in this area.

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

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.

4.5.2 Instructional and Non-Instructional Educational Institutions

Instructional educational institutions are those that provide *educational programmes* for students that fall within the scope of education statistics defined in Chapter 3.

In this document the generic term “*school*” is often used to refer to instructional institutions at the primary, secondary, and post-secondary non-tertiary levels, and “*universities*” to those at the tertiary level. Instructional institutions are those where students will typically enrol in order to study educational programmes.

Non-instructional educational institutions are educational institutions that provide education-related administrative, advisory or professional services for individuals or other educational institutions.

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 central agencies responsible for the remuneration of staff or pension payments); 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 including institutions that provide educational support and materials as well as operation and maintenance services for buildings. These may be part of general-purpose units of public authorities. An example of an institution providing educational support is the Greek textbook publishing organisation (OEDB), which prints and distributes textbooks for students. The OEDB is an agency overseen by the Ministry of Education, but not formally part of it.
- ***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 should be included in the data collection. In that sense, general-purpose units of public authorities should be treated as educational institutions to the extent that they provide services to schools or students.
- Institutions administering student loan or scholarship programmes: examples are the Swedish CSN and the German *BAFÖG Ämter*.
- ***Entities performing curriculum development, testing, educational research and educational policy analysis***: Examples are the Australian Council for Educational Research (ACER), the Greek National Education Council (ESYP) and Pedagogical Institute, responsible for policy advice and textbook writing, the Czech Institute for Information on Education (UIV) and the Dutch Centre for Higher Education Policy Studies (CHEPS).

Some entities which perform these services and functions may well be part of larger public or private entities which provide other services or provide the same services to bodies other than educational institutions. In all cases it is only those services and functions performed by these entities for students or educational institutions which are within scope of the education statistics.

4.5.3 Public/Private/Government-Dependent Private Institutions

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

Classifying between public and private institutions

The classification between *public* and *private* is made according to whether a public agency or a private entity has the ultimate control over the institution. *Ultimate control* is decided with reference to who has the power to determine the general policies and activities of the institution and to appoint the officers managing the school. Ultimate 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. So,

An institution is classified as *public* if ultimate control rests with (1) a public education authority or agency or, (2) a governing body (Council, Committee etc.), most of whose members are appointed by a public authority or elected by public franchise.

An institution is classified as *private* if ultimate control rests with a non-governmental organisation (e.g. a Church, Trade Union or business enterprise), or if its Governing Board consists mostly of members not selected by a public agency.

Discussion

In classifying educational institutions as either public or private, only the school-based component of combined school- and work-based programmes should be 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 should be 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 should be reported under the “public” heading.

The extent to which an institution receives its funding from public or private sources does not determine the classification between a public and a private institution. 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.

Likewise, 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.

Privately managed but publicly funded schools may be subject to some regulation or control by public authorities, but these institutions should nevertheless be 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 all of which 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.

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.

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. 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. 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.

Classifying between government-dependent private and independent private institutions

The terms “*government dependent*” and “*independent*” refer only to the degree to which a private institution is dependent on funding from government sources; they do not refer to the degree of government direction or regulation.

A **government-dependent private institution** is a private institution that *either* receives 50 per cent or more 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 a private institution that receives less than 50 per cent of its core from government agencies *and* whose teaching personnel are not paid by a government agency.

“Core funding” refers to the funds that support the basic or core 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 should **not** be 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 should be 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 should depend 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 should be considered government-dependent, even if it happens that some individual schools in the class receive less than a majority share of core funds.

4.6 Educational Expenditure

This section provides specific and detailed definitions and concepts used in the compilation of international statistics on educational finance.

Section 4.6.1 **Coverage of educational expenditure** defines ‘educational expenditure’ for the purposes of this manual and states the framework within which the international education finance data are

collected. The goods and services provided by educational institutions which are covered by the statistics are defined, as is the coverage of expenditures which take place outside of educational institutions.

Section 4.6.2, **Sources of funds and types of transactions**, describes the sources and flows of educational expenditure, examining levels of government involved, the transfers between them and types of transaction involved. This section provides definitions of public and private expenditures as well as the transfer payments to be included: public transfers to the private sector, including financial aid to students, and intergovernmental transfers.

Finally, Section 4.6.3, **Resource categories for expenditure of educational institutions**, describes the breakdown categories for resources used in educational institutions: capital and current expenditure, compensation of personnel, and expenditure on ancillary services.

4.6.1 The Framework for educational expenditure

IDEALLY, international comparisons of educational expenditure should be defined in terms of the educational goods and services which are purchased in relation to the educational programmes within the scope of the data collection which is stated in Chapter 3.

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 **goods and services** provided or purchased (both instructional and non-instructional);
- The **location/provider** from which these goods and services are purchased/provided (*i.e.* inside or outside educational institutions); and
- The **source of funds** that finance the provision or purchase of these goods and services (public, private sources).

Figure 1

illustrates the framework around these three dimensions:

| | Spending on educational institutions (<i>e.g.</i> , schools, universities, educational administration and student welfare services) | Spending on education outside educational institutions (<i>e.g.</i> , private purchases of educational goods and services, including private tutoring) |
|---|---|--|
| Spending on educational core services | <i>e.g.</i> , public spending on instructional services in educational institutions | <i>e.g.</i> , subsidised private spending on books |
| | <i>e.g.</i> , subsidised private spending on instructional services in institutions | <i>e.g.</i> , private spending on books and other school materials or private tutoring |
| | <i>e.g.</i> , private spending on tuition fees | |
| Spending on research and development | <i>e.g.</i> , public spending on university research | |
| | <i>e.g.</i> , funds from private industry for research and development in educational institutions | |
| Spending on educational services other than instruction | <i>e.g.</i> , public spending on ancillary services such as meals, transport to schools, or housing on the campus | <i>e.g.</i> , subsidised private spending on student living costs or reduced prices for transport |
| | <i>e.g.</i> , private spending on fees for ancillary services | <i>e.g.</i> , private spending on student living costs or transport |

Public sources of funds
 Private sources funds
 Private funds publicly subsidised
 Expenditure not within scope of data collection

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

- The first row, labelled “*spending on educational core services*”, includes all expenditure that is directly related to instruction and education. This should cover all expenditure on teachers, school buildings, teaching materials, books, tuition outside schools, and administration of schools.
- The second row, labelled “*spending on 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 the tertiary sector as recognised by the Frascati Manual.
- The third row labelled “*spending on educational services other than 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 different **service providers**. Service providers are separated into “educational institutions” and “other- outside of educational institutions.”

- The first column, “*spending on educational institutions*”, covers expenditure on educational institutions. Educational institutions include teaching institutions (schools, colleges and universities) and non-teaching institutions, such as ministries, local authorities and student unions directly involved in providing and supporting education. (See Section 4.5 for full definition).
- The second column, “*spending on education outside of educational institutions*”, covers expenditure on educational services purchased outside educational institutions, *e.g.* books, computers, external tuition, etc. It also covers expenditure on non-instructional goods and services such as student living costs and costs of student transport provided outside of 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 the light shading
- Households and other private entities are indicated by the darker shading
- Private expenditure on education that is subsidised by public funds is indicated by the textured shading.

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

4.6.2 The coverage of educational expenditure

Summary of coverage

Thus *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 one or two 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 stated in Chapter 3
- **Private, non-subsidised expenditure on student living costs outside of educational institutions**

Note: This is the definition of the coverage of the collection as a whole. For the calculation of specific indicators, the coverage can be a subset of this. See Chapter 7 for details.

Accounting principles

In keeping with the system used by many countries to record government expenditures and revenues, the OECD educational expenditure data are compiled on a cash accounting rather than an accrual accounting basis. That is to say that expenditure (both capital and recurrent) 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 subsequent “Difficult cases” section) in situations where there is 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.

Details of coverage

This coverage is now discussed in more detail by considering first the coverage of *goods and services* provided by educational institutions and then those purchased from outside educational institutions.

4.6.2.1 Coverage of Goods and services provided by educational institutions

As section 4.5 states, *educational institutions* are chiefly defined as those providing goods and services to students and other educational institutions. However, if an entry is classified as an educational institution, this does not imply that all of its expenditure should be included. Many entities serve only partially as educational institutions.

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 should be excluded, *e.g.* child care services.

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

INCLUDED:

- *Educational 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;
- *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;

EXCLUDED:

- Child care or day care provided by schools and other instructional institutions which are otherwise not in scope of the coverage stated in Chapter 3;
- Expenditure on educational activities outside the scope of the data collection as stated in Chapter 3 (*e.g.* leisure courses)
- Teaching hospitals' expenditure as it relates to patient care and other non-education related general expenditure; and
- Debt servicing (*i.e.* payments of interest or repayments of the principal);
- Depreciation of capital assets and capital charges

Difficult cases

The following categories of goods and services provided by educational institutions have posed particular problems for international comparability in the past and further clarification is therefore given here.

• *Expenditures on research and development (R&D)*

All expenditure on research performed at universities and other institutions of tertiary education is **included**, 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).

In general the coverage of R&D expenditure at the tertiary level should be consistent with the coverage of data reported as Higher Education R&D (HERD) in the OECD/DSTI data collection which follows Frascati Manual (OECD, 2003b) (See Annex 3).

• *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 the cost 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 hospitals that it is directly and specifically related to the teaching of medical students and expenditure on R&D at teaching hospitals to the extent that it is included in the OECD/DSTI data collection on R&D are **included** (see Annex 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, as such provision is outside the coverage of education stated in Chapter 3.

- **Free or subsidised transport for students**

The classification of some public expenditure is ambiguous, since it may be classified either as an expenditure on ancillary services or as public subsidies to students in-kind. This applies especially to free or subsidised transport for students to travel to school or for students' use more generally.

Free or subsidised transport can be provided to students in the form of *special school buses* organised to bring the students to the school **or** through *free/subsidised tickets* for (local) transport companies which can either be for the students' general use or for the main purpose of funding the students' transport to school.

- *Special school bus service*- Free or subsidised transportation of students provided through a special school bus service should be 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 should be classified as expenditure on an ancillary service. If, however, the purpose of the expenditure is to fund the general use of the transport system by the student, then the expenditure should be 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 (see subsequent section on "Public subsidies to households")

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

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

Expenditure on these programmes should be limited to expenditure on training *per se* (e.g. salaries and other compensation of instructors and other personnel, and costs of instructional materials and equipment). It should not include 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 DEM 10 billion, of which DEM 6 billion is the estimated cost of training and DEM 4 billion is the cost of apprentices' salaries, social security contributions, and other compensation, only DEM 6 billion should be included in rows E3 and E3a. DEM 4 billion should not be considered part of educational expenditure.

- **Measurement of expenditure for contributions to retirement 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.

Note that the amount currently being paid in pensions to former employees who have already retired is **not** the desired measure of retirement expenditure, though these may form the basis for estimates.

Depending on the types of retirement schemes in operation in a country, estimates will need to be provided. 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 contributions to the pension fund.

In a *completely unfunded* retirement system, there are no ongoing 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 contributions must be estimated or imputed- as if a funded system was in operation.

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. (Note: the intention here is not to compensate for any under-funding of pensions, but rather to impute the contributions equivalent to that which would be required to fund the expected pensions.)

The System of National Accounts 1993 (SNA93) as well as the European System of Accounts (ESA95) for EU countries gives some guidance on the reporting of imputed social contributions such as for retirement benefits and this guidance should be followed where possible. See Annex 4 for relevant extract from SNA93. In essence, the method used to estimate the imputed social contributions for education should be similar to the method used to estimate the total amount of these contributions for all activities in order to be as consistent as possible with the calculation of GDP and Total Public Expenditure

A reasonable estimate of the imputed costs may, for example, be obtained by estimating a contribution rate and applying that to the gross salaries of educational personnel whose retirement costs need to be estimated. This estimated contribution rate could, for instance, be based on the contribution rates that apply in other similar occupational groups. For example, in Germany the imputed contributions for teachers who are civil servants and who are covered by an unfunded system are derived by applying a contribution rate based on that which applies to other teachers/educational personnel who are not civil servants. The estimated contribution rate is multiplied by the total value of gross salaries paid to civil servants by educational institutions to give an estimate of the employer pension contributions.

4.6.2.2 Coverage of expenditure outside educational institutions

The coverage of student or household expenditure related to education that occurs outside institutions is as follows:

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.

These are now discussed in more detail.

Student and household expenditure on educational goods and services purchased outside institutions includes:

- Expenditure on educational goods which are *required* for participation in the programmes and which are therefore imposed on the student either directly or indirectly by the educational institution. Examples are school uniforms, books requested for instruction, athletic or other equipment, material for arts lessons.
- Expenditure on educational goods which though *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 should be restricted to tuition intended to support the participation in programmes that fall under the scope of the data collection. Expenditure on tuition that is not related to programmes in scope of the data collection should not be included. Purchases from commercial enterprises operated or sponsored by educational institution (*e.g.* university bookstores) should be regarded as expenditure outside educational institutions.

Expenditure on educational goods and services purchased outside institutions will typically 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.

Expenditure on student living costs outside educational institutions are included if they are subsidised through financial aid to students by public or private entities. The rationale for including these subsidies is that in most OECD 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 student and household expenditure for living costs which are paid to educational institutions (*e.g.* for student accommodation) is included in private expenditure regardless of whether it is subsidised or not. The following sections discuss the reporting of student scholarships, grants and loans in more detail.

4.6.3 Sources of educational expenditure and types of transactions

Sources of funds for educational expenditure are classified as either:

- Public (governmental) sources
- Private (non-governmental) sources
- International agencies and other foreign sources

These sources can be either initial or final payers of funds depending on what type of transaction is involved.

Three *types of financial transactions* are distinguished in the data:

- Direct expenditure on educational institutions;
- Transfers to students or households and to other private entities; and
- Households' expenditure on education outside educational institutions.

The *initial source of funds* is the original source of the funds before transfers have taken place whilst the *final source of funds* is after transfers have taken place.

Each source of funds is now described in more detail.

Public (government) sources of expenditure

Summary definition

Public expenditure refers to spending of public authorities at all levels. Expenditure that is not directly related to education (*e.g.* culture, sports, youth activities, etc.) is not included unless these services/activities are provided as ancillary services by educational institutions. 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).

Public expenditure on education *includes* expenditure by all levels of government, both education-specific authorities as well as other government agencies. Thus, central government expenditure includes not only the expenditure of national education ministries, but also all expenditure on education by other central government ministries and authorities. Similarly, educational expenditure by regional and local governments includes not only the expenditure of the regional or local agencies with primary responsibility for operation of schools (*e.g.* provincial ministries of education; or local education authorities) but also the expenditure of other regional and local bodies that contribute to the financing of education.

Public expenditure is classified by the following three *levels of government*:

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

For EU countries the NUTS99 classification (EUROSTAT, 2003) is used to determine the level of government. Any government entities in a Country that are not normally classified as central, regional, or local should be assigned to the most appropriate level, based on the scope of their responsibilities.

For example, a separate national social security agency that spends funds on education (*e.g.* pensions for teachers) should be considered part of central government. An association of local governments should be considered part of local government.

The classification of governments by level is clear in most cases, but there are some ambiguities. If a country only has two levels of government, the lower level should usually be designated local, not regional. If there are four or more levels, the second level should usually be designated regional and the third, local. If a city (such as the national capital) has dual status as both regional and local government, its expenditure should be classified as local, unless the national classification clearly regards the level as regional.

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.

Types of transaction for government expenditure

There are three main *types of transaction for public expenditure* on education:

- Direct public expenditure on educational institutions,
- Intergovernmental transfers for education, and;
- Public transfers or other payments (from governments) to private entities (households or other private entities).

Direct public expenditure on educational institutions

Direct expenditure on educational institutions by government may take either of two forms:

Purchases by a government body 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 body 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.

Note: Direct expenditure by a government body does not include tuition payments received from students (or their families) enrolled in public schools under that body’s jurisdiction, even if the tuition payments flow, in the first instance, to the government body rather than to the institution in question. Such tuition payments are reported as payments by students or households to public educational institutions.

Intergovernmental transfers of funds

Intergovernmental transfers are transfers of funds **specifically designated for education** from one level of government to another.

General-purpose intergovernmental transfers **should not be included** (*e.g.* revenue sharing grants, general fiscal equalisation grants, or distributions of shared taxes from a national government to provinces, states, or *Länder*), even where such transfers provide the funds that regional or local authorities draw on to finance education.

Central government transfers to local governments may be “passed through” regional governments for the regional governments to disburse 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 are classified as central government transfers to local rather than to regional governments.

Government transfers of funds to private entities

Government transfer to private entities fall into two distinct categories:

- **Public subsidies to households** (e.g. financial aid to students in the form of scholarships and loans to students for tuitions fees or living costs)
- **Public subsidies to other private entities** (e.g. government transfers and certain other payments to private entities such as commercial companies and non-profit organisations)

Public subsidies to households

Public subsidies to households fall into two broad categories which together represent public *financial aid to students*:

- Scholarships and other grants
- Student loans

Government scholarships and loans are 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 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 should be included in intergovernmental transfers from central to regional governments.

Also, central government scholarships, grants and loans to households should be reported as expenditure by central government regardless of whether the funds are paid directly to the student or to an educational institution on behalf of the student.

Scholarships and other grants

Government scholarships and other government grants to students and households **include** the following items:

- Scholarships and grants;
- Special public subsidies in cash and kind that are contingent on the student status; and
- Family allowances or child allowances that are contingent upon student status.

Note, however, that any tax benefits to students or their families, such as tax credits, tax reductions or other special tax provisions are **excluded** from public subsidies to households. It may be desirable in the future to include such benefits an internationally comparative methodology for doing so would need to be established.

Scholarships and grants - covers public scholarships and all kinds of similar public grants, such as fellowships, awards and bursaries for students.

Special public subsidies in cash and kind - covers all those transfers to households that are subsidies for specific spending by students. Whether provided in cash or in kind, such as reduced-price travel on public transport systems, it is the total value of the subsidies that should be reported. Subsidies to be included are only those where entitlement is contingent upon the recipient being a student and **include** those for:

- Transport;
- Medical expenses;
- Books and supplies;
- Social and recreational purposes;
- Study abroad; and
- Other special subsidies.

Family allowances or child allowances contingent upon student status - only those allowances that are contingent upon the recipient being a student are **included**. Allowances that are independent of the educational status of a child should be **excluded**.

For example, if a country provides family allowances for all children aged under 19 regardless of educational status and provides additional allowances for young people aged 19-25 who are enrolled an educational institution, the allowances for young people 19-25 should be included in scholarships and other grants, but the allowances for those aged under 19 should not be counted.

Note: These scholarships and grants can be separately categorised as either those that are attributable to educational institutions (*i.e.* grants for payment of tuition and other fees) or those that are not. This distinction is important in determining expenditure by households on educational institutions net of subsidies. Loans received by students will not be netted out from household expenditure since they are interpreted as delayed private payments which, occur when loans are repaid.

Student loans

Government loans to students 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 should represent 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.

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 (see below).

The rationale for measuring government loans to students on a gross rather than net basis is that this (along with the expenditure on scholarships and grants) provides an appropriate measure of the financial aid provided to current participants in education in the current year. A net calculation of loan expenditure would be more appropriate for other purposes (*e.g.* for assessing the shares of public and private expenditure on education) but further work is needed to establish an internationally agreed method for doing this. (See Chapter 7 for how student loans are treated in such indicators).

Public transfers and payments to other private entities

Government transfers and payments (mainly subsidies) to other private entities (commercial companies and non-profit organisations) include:

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

- subsidies to private companies (or labour organisations and associations) for the provision of training at the workplace as part of combined school and work-based programmes, including apprenticeship programmes; and
- the cost to government of supporting loans paid to students by private financial institutions (*e.g.* interest subsidies, the cost of guaranteeing the loans, the cost of default payments).

Note: ‘Other private entities’ are expressly not educational institutions. (See section 4.5). For example, non-profit organisations that provide student housing or student meals are most likely to be classified as non-instructional educational institutions and transfers to them consequently should be recorded as direct expenditure on government-dependent or independent private educational institutions not as transfers to other private entities.

Private (non-government) sources of expenditure

Summary definition

Private expenditure refers to expenditure funded by private sources, *i.e.*, households and other private entities. “Households” means students and their families. “Other private entities” include private business firms and non-profit organisations, including religious organisations, charitable organisations, and business and labour associations. Private expenditure comprises school fees; materials such as textbooks and teaching equipment; transport to school (if organised by the school); meals (if provided by the school); boarding fees; and expenditure by employers on initial vocational training.

Classifications of Private Expenditure

Private expenditure on education includes expenditure by the following two groups:

- *Private expenditure by households* – *i.e.* students and their families
- *Private expenditure by other private entities*– *i.e.* private businesses and non-profit organisations, including religious organisations, charitable organisations, business and labour associations.

Private expenditures: Household Expenditure

Household expenditure *includes* two types of transaction:

- Payments to educational institutions
- Payments on educational goods and services purchased outside educational institutions

Household payments to educational institutions

This includes:

- Fees for educational goods and services – *including* tuition fees, registration fees, laboratory fees, and charges for teaching materials such as books and materials
- Fees for ancillary services- *including* household payments for lodging, meals, health services, and other welfare services provided to students by the educational institutions.

Note: 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 reported figures should reflect the reduced amounts actually paid by these students.

Note: however, that scholarships and other financial aid to students *from governments or other private entities* should **not** be netted out, even if such aid is administered by, or passed through, the institutions.

Household payments for tuition fees for enrolments at public institutions paid to regional or local governments rather than directly to the institutions (*e.g.* a student attending a municipally operated upper secondary school may be required to pay a fee to the municipality) should nevertheless be reported under student/household payments to public educational institutions.

Household payments on educational goods and services purchased outside educational institutions

Educational *goods* purchased outside institutions should include books not supplied by educational institutions, school supplies, paper, school uniforms, athletic equipment, calculators and computers.

Educational *services* purchased outside institutions will mainly consist of private expenditure on private tutoring outside school.

A fuller discussion of these goods and services is covered in Section 4.6.2.2.

Private expenditure of other private entities

Expenditure by other private entities is of two types:

- Direct payments to educational institutions and
- Financial aid to students or households.

Direct expenditure on educational institutions by other private entities

Expenditure by other private entities on educational institutions **includes:**

- Contributions or subsidies to vocational and technical schools from 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 combined school- and work-based educational programmes.

Financial aid to students or households provided by other private entities

This **includes:**

- Scholarships provided by businesses and religious or other non-profit organisations
- Student loans from banks and other private lenders. As with public student loans, loans are reported as gross amounts, without the subtraction of payments of interest or repayments of the principal by the borrowers. Thus the student loan expenditure here should represent the total value of loans paid by banks and private lenders to students during the reference year.

Government subsidies of these private loans (in the form of interest subsidies or payments for defaulters) are recorded as public subsidies to other private entities.

Note: It is in fact arguable whether the unsubsidised value of these private loans should be included given the exclusion from the coverage of non-subsidised private expenditure on living costs. This is an area that clearly requires further consideration.

Funds from international agencies and other foreign sources

Expenditure by international organisations is of two types:

- International funds 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.

4.6.4 Resource categories for expenditure on educational institutions

Within educational institutions, expenditure is broadly categorised as either current or capital expenditure:

Current expenditure- expenditure on goods and services consumed within the current year, which needs to be made recurrently 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- 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.

Capital expenditure represents the value of educational capital assets acquired or created during the year in question *i.e.* the amount of capital formation regardless of whether outlays were financed from current revenues or by borrowing. In other words, capital outlays should 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 2004, the full 10 million Euros should be reported as capital expenditure for 2004, 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, 2003 to 2004, 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 2003 and 2004 data.

Debt servicing expenditure ((1) payments of interests on the amounts borrowed for educational purposes and (2) repayments of the principal) is **excluded** from the coverage of the expenditure data.

Current expenditure is broken down into the following categories:

- Expenditure on compensation of personnel
- Current expenditure other than compensation of personnel

Expenditure on compensation of personnel

Expenditure on compensation of personnel **includes**:

- Salaries
- Expenditure on retirement
- Other non-salary compensation (fringe benefits).

Salaries - are 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. Additional bonuses to basic salary (*e.g.* arising from the experience, age or other circumstances of the personnel) should be included.

Expenditure for retirement (pension schemes) - covers actual or imputed expenditure by employers or third parties to finance retirement benefits for current educational personnel. This expenditure *excludes* pension contributions made by the employees themselves, whether deducted automatically from their gross salaries or otherwise. (See section on “Difficult cases” earlier in Section 4.6 for a fuller definition and guidance on how these amounts should be measured).

Expenditure on other non-salary compensation - covers 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.

Expenditure on compensation of personnel is also categorised by *type of personnel* distinguishing:

- Teaching staff
- Non-teaching staff

The definitions and coverage of these categories is as set out in Section 4.3.

Note: however that compensation of teaching staff should include appropriate portions of the compensation of non-teaching staff who have some teaching responsibilities (defined as in Section 4.3 as those who spend at least 0.25 FTE of their working time teaching).

For example, if the headteachers 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, one quarter of headteachers’ compensation should be included in compensation of teachers. The remaining three quarters should be included in compensation of other educational, administrative and professional personnel.

Current expenditure other than compensation of personnel

The following expenditure is included under this heading:

Expenditure on contracted and purchased services : expenditure on services obtained from outside providers, as opposed to services produced by the education authorities or educational institutions themselves using their own personnel.

Examples are:

- Services obtained under contracts such as maintenance of school buildings
- Ancillary services, such as preparation of meals for students
- Rents paid for school buildings and other facilities

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: For example, the property taxes that educational institutions may be required to pay.

Note: that **financial aid to students is not included here unless** it is provided by the institution's own funds in the form of a reduction in tuition fees or waiver of fees **and** it exceeds household payments to the institution. This is because household expenditure payments to educational institutions are themselves calculated as net of institutional subsidies.

Notes

1. see Chapter 5 for a description of the different fields of education.

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READERS' GUIDE

Abbreviations used in this report:

| | |
|----------|---|
| ACER | Australian Council of Educational Research |
| CERI | Centre for Educational Research and Innovation |
| CET | Continuing education and training |
| DeSeCo | Sub-group focussing on the definition and selection of competencies |
| DSTI | Directorate for Science, Technology and Industry |
| EAG | Education at a Glance |
| ELSAC | Employment, Labour and Social Affairs Committee |
| EU | European Union |
| Eurostat | Statistical Office of the European Union |
| FT | Full-time |
| FTE | Full-time equivalents |
| GDP | Gross Domestic Product |
| GED | General Educational Development |
| GERD | Gross domestic expenditure on R&D |
| GNERD | Gross national expenditure on R&D |
| GUF | General university funds |
| HERD | Higher Education R&D |
| IEA | International Association for the Evaluation of Educational Achievement |
| ILO | International Labour Office |
| INES | OECD Education Indicators Programme |
| IRR | Internal Rates of Return |
| ISCED | International Standard Classification of Education |
| ISUSS | International Survey of Upper Secondary Schools |
| NEAC | National Education Attainment Categories |
| NGO | Non Governmental Organisation |
| NPI | Non-profit Institution |
| NPSH | Non-profit Institutions Serving Households |
| NUTS | The Nomenclature of Territorial Units for Statistics |
| NVQ | National Vocational Qualification |
| OECD | Organisation for Economic Co-operation and Development |
| PISA | Programme of International Student Assessment |
| PPP | Purchasing Power Parity |
| PT | Part-time |
| R&D | Research and Development |
| SMG | Strategic Management Group |
| SNA | System of National Accounts |
| UNESCO | United Nations Educational, Scientific and Cultural Organisation |
| UOE | UNESCO/OECD/Eurostat data collection |
| VAT | Value Added Tax |

Annex

1

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Over the years many people have contributed to the development of the concepts, definitions and classifications that appear in this publication. The following people have been particularly helpful in drawing this publication together. The OECD wishes to thank them all for their valuable efforts.

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Annex

2

REFERENCE DATES IN OECD COUNTRIES' DATA SUBMISSIONS

Table X.2

Data collection period and reference dates for ages reported by OECD countries in the 2003 data collection¹

| OECD COUNTRIES | Data collection period | Reference date for student ages | Exceptions |
|-----------------|------------------------|---------------------------------|---|
| Australia | August/02 | June/02 | |
| | March/02 | June/02 | Tertiary levels only |
| Austria | October/01 | December/01 | |
| | November/01 | December/01 | ISCED levels 5A and 6 only |
| Belgium | October/01 | January/02 | |
| | February/02 | January/02 | Tertiary levels only |
| Canada | June/01 | September/01 | |
| Czech Republic | September/01 | January/02 | |
| | October/01 | January/02 | |
| Denmark | June/02 | January/02 | |
| Finland | December/01 | December/01 | Universities, apprenticeship training, Kindergarten |
| | September/01 | December/01 | Other student data |
| France | | January/02 | |
| Germany | October/01 | December/01 | |
| Greece | January/02 | December/01 | |
| Hungary | October/01 | December/01 | |
| Iceland | October/01 | December/01 | |
| Ireland | October/01 | December/01 | |
| | February/02 | December/01 | ISCED level 6 only |
| Italy | October/01 | December/01 | |
| | July/02 | December/01 | Tertiary levels only |
| Japan | May/01 | | |
| Korea | April/02 | September/01 | |
| Luxembourg | | April/02 | |
| Mexico | October/01 | September/01 | |
| Netherlands | October/01 | December/01 | |
| | December/01 | December/01 | ISCED levels 1 and 6 (primary and advanced tertiary) only |
| Norway | October 2001 | | |
| New Zealand | July/02 | July/02 | |
| Poland | | August/01 | |
| Portugal | | February/02 | |
| Spain | | September/01 | |
| Slovak Republic | September/01 | December/01 | |
| | October/01 | December/01 | ISCED levels 5A and 6 only |
| Sweden | Autumn-01 | December 31/01 | |
| Switzerland | | September/01 | |
| Turkey | October/01 | September/01 | |
| | November/01 | November/01 | ISCED levels 2 and 3 (secondary and upper secondary) only Tertiary levels only |
| United Kingdom | Various | August/01 | |
| United States | December/02 | October/01 | |

1. The intended reference periods in the 2003 data collection were: Financial year 2001 for finance data, calendar year 2002 for graduate data and 2001/2002 school/academic year for remaining data.

Source: OECD.

Table X.3
Typical graduation ages in upper secondary education

| | Programme orientation | | Educational/labour market destination | | | |
|-----------------|-----------------------|---|---------------------------------------|---------------------|--|---------------------------------------|
| | General programmes | Pre-vocational or vocational programmes | ISCED 3A programmes | ISCED 3B programmes | ISCED 3C short programmes ¹ | ISCED 3C long programmes ¹ |
| OECD COUNTRIES | | | | | | |
| Australia | m | m | 17 | m | m | m |
| Austria | 18 | 18 | 18 | 18 | 18 | a |
| Belgium | 18 | 18 | 18 | a | 18 | 18 |
| Czech Republic | 18 | 18 | 18 | 18 | 17 | a |
| Denmark | 19-20 | 19-20 | 19-20 | a | a | 19-20 |
| Finland | 19 | 19 | 19 | a | a | a |
| France | 18-19 | 17-20 | 18-19 | 19-20 | 17-20 | 18-21 |
| Germany | 19 | 19 | 19 | 19 | a | a |
| Greece | 17-18 | 17-18 | 17-18 | a | a | 17-18 |
| Hungary | 18-19 | 18-19 | 18-19 | a | 18-19 | 19-20 |
| Iceland | 20 | 20 | 20 | 19 | 18 | 20 |
| Ireland | 17-18 | 17-18 | 17-18 | a | a | 17-18 |
| Italy | 19 | 19 | 19 | 19 | 17 | a |
| Japan | 18 | 18 | 18 | 18 | 16 | 18 |
| Korea | 17-18 | 17-18 | 17-18 | a | a | 17-18 |
| Luxembourg | 19 | 17-19 | 17-19 | 19 | n | 17-19 |
| Mexico | 18 | 18 | 18 | a | a | 18 |
| Netherlands | 17-18 | 18-20 | 17-18 | a | 18-19 | 18-20 |
| New Zealand | m | a | 18 | 17 | 17 | 17 |
| Norway | 18-19 | 18-19 | 18-19 | a | m | 16-18 |
| Poland | 19 | 20 | 19-20 | a | 18 | a |
| Slovak Republic | 18 | 16-18 | 18 | a | 17 | 16 |
| Spain | 17 | 17 | 17 | a | 17 | 17 |
| Sweden | 19 | 19 | 19 | 19 | a | 19 |
| Switzerland | 18-20 | 18-20 | 18-20 | 18-20 | 17-19 | 17-19 |
| Turkey | 16 | 16 | 16 | a | a | m |
| United States | 18 | a | 18 | a | a | a |

1. Duration categories for ISCED 3C - Short: more than one year shorter than ISCED 3A/3B programmes; Long: of similar duration to ISCED 3A or 3B programmes.

Source: OECD.

a = not applicable; m = missing

Table X.4
Typical graduation ages in post-secondary non-tertiary education

| | | Educational/labour market destination | | |
|----------------|-----------------|---------------------------------------|---------------------|---------------------|
| | | ISCED 4A programmes | ISCED 4B programmes | ISCED 4C programmes |
| OECD COUNTRIES | Austria | 19 | 20 | 20 |
| | Belgium | 19 | a | 19-21 |
| | Czech Republic | 20 | a | 20 |
| | Denmark | 21-22 | a | 21-22 |
| | Finland | a | a | 25-29 |
| | France | 18-21 | a | 19-21 |
| | Germany | 22 | 22 | a |
| | Hungary | a | a | 19-22 |
| | Iceland | a | a | 21 |
| | Ireland | a | a | 19 |
| | Italy | a | a | 20 |
| | Korea | a | a | a |
| | Luxembourg | a | a | 20-25 |
| | Mexico | a | a | a |
| | Netherlands | a | a | 18-20 |
| | New Zealand | 18 | 18 | 18 |
| | Norway | 20-25 | a | 20-25 |
| | Poland | a | a | 21 |
| | Slovak Republic | 20-21 | a | a |
| | Spain | 18 | 18 | a |
| Sweden | m | m | 19-20 | |
| Switzerland | 19-21 | 21-23 | a | |
| Turkey | a | a | a | |
| United States | a | a | 20 | |

1. OECD estimate.

Source: OECD.

a = not applicable; m = missing

Table X.5
Typical graduation ages in tertiary education

| OECD COUNTRIES | Tertiary-type B (ISCED 5B) | All programmes | Tertiary-type A (ISCED 5A) | | | Advanced research programmes (ISCED 6) |
|-----------------|-------------------------------|----------------|----------------------------|--------------|-------------------|---|
| | | | 3 to less than 5 years | 5 to 6 years | More than 6 years | |
| Australia | m | a | 20-21 | 22-23 | 24 | 25-29 |
| Austria | m | a | 22 | 23 | a | 25 |
| Belgium | m | a | m | m | m | 25-29 |
| Czech Republic | 22 | a | 22 | 24 | a | 26 |
| Denmark | 21-25 | a | 22-24 | 25-26 | 27-30 | 30 |
| Finland | 21-22 | a | 25-29 | 25-29 | 30-34 | 29 |
| France | 20-21 | a | 21-22 | 23-24 | 25 | 25-26 |
| Germany | 21 | a | 25 | 26 | a | 28 |
| Greece | 20-21 | a | 21-22 | 22-24 | a | 24-28 |
| Hungary | 20-22 | a | 22-24 | 23-26 | 26-27 | 30-34 |
| Iceland | 22-24 | a | 23 | 25 | 27 | 29 |
| Ireland | 20 | a | 21 | 23 | 24 | 27 |
| Italy | 22-23 | a | 22 | 23-25 | 25-27 | 27-29 |
| Japan | 20 | a | 22 | 24 | a | 27 |
| Korea | m | a | m | m | m | 26 |
| Mexico | 20 | 20-26 | 22 | 24 | 25 | 26 |
| Netherlands | m | a | m | m | m | 25 |
| New Zealand | 20 | 21 | m | m | m | 28 |
| Norway | m | a | m | m | m | 29 |
| Poland | m | 24 | m | m | m | m |
| Slovak Republic | 20-21 | a | m | m | m | 27 |
| Spain | 19 | 20-22 | m | m | m | 25-27 |
| Sweden | 22-23 | a | 23-25 | 25-26 | a | 27-29 |
| Switzerland | 23-29 | a | 23-26 | 23-26 | 28 | 29 |
| Turkey | m | m | m | m | m | 28-29 |
| United Kingdom | 20 | a | 21 | 23 | 24 | 24 |
| United States | 20 | 22 | 22 | a | a | 27 |

Note: Where tertiary-type A data are available by duration of programme, the graduation rate for all programmes is the sum of the graduation rates by duration of programme.

Source: OECD.

a = not applicable; m = missing

Annex

3

EXCERPT FROM
THE FRASCATI MANUAL

Institutional Classification

Higher education sector

Coverage

This sector is composed of:

All universities, colleges of technology, and other institutes of post-secondary education, whatever their source of finance or legal status. It also includes all research institutes, experimental stations and clinics operating **under the direct control of or administered by or associated with** higher education establishments.

This sector is not a SNA sector. It has been separately identified by the OECD (and by UNESCO) because of the important role played by universities and similar institutions in the performance of R&D.

The above definition describes the general coverage of the sector. However, it is difficult to provide clear guidelines which ensure internationally comparable reporting of data because it is not backed by SNA. As it is based on mixed criteria, it is particularly susceptible to varying interpretation resulting from national policy preoccupations and definitions of the sector.

The core of the sector in all countries is made up of universities and colleges of technology. Where treatment does vary, it does so with respect to other institutes of post-secondary education and above all to several types of institutes that are linked to universities and colleges. The main borderline problems are considered below:

- post-secondary education;
- university hospitals and clinics;
- borderline research institutions.

Post-secondary education

The sector includes all establishments whose **primary activity** is to provide post-secondary (third level) education regardless of their legal status. They may be corporations, quasi-corporations belonging to a government unit, market NPIs or NPIs controlled and mainly financed by government or by NPSHs. As noted above, the core is made up of universities and colleges of technology. The number of units in the sector has grown as new universities and specialised post-secondary educational institutions have been set up and secondary level units, some of which may supply education services at both secondary and post-secondary level, have been upgraded. If such units supply post-secondary education as a primary activity, they are always part of the higher education sector. If their primary activity is the provision of secondary level education or in-house training they should be allocated by sector in line with the other general rules (market or non-market production, sector of control and institutional funding, etc.). If, however, their post-secondary activities can be identified separately, they may be judged under the “associated” rule (see below).

University hospitals and clinics

Inclusion of university hospitals and clinics in the higher education sector is justified both because they are post-secondary educational institutions (teaching hospitals) and because they are research units “associated with” higher education institutions (*e.g.* advanced medical care in clinics at universities).

Academic medical research is traditionally funded from many sources: out of the institutions’ general “block grant” (GUF); from the institution’s “own funds”; directly or indirectly (via a medical research council, for instance) from government funds or from private funds.

Where all or nearly all activities in the hospital/medical institution have a teaching/training component, the entire institution should be included as part of the higher education sector. If, on the other hand, only a few of the clinics/departments within a hospital/medical institution have a higher education component, **only** these teaching/ training clinics/departments should be classified as part of the higher education sector. All other non-teaching/training clinics/departments should, as a general rule, be included in the appropriate sector (corporations, quasi-corporations belonging to a government unit, and market NPIs in the business enterprise sector; NPIs controlled and mainly financed by government in the government sector, NPIs controlled and mainly financed by NPSHs in the PNP sector). Care must be taken to avoid double-counting of R&D activities between the various sectors concerned.

Borderline research institutions

Traditionally universities have been major centres of research, and when countries have wished to expand their R&D in specific fields, they have frequently been considered appropriate locations for setting up new institutes and units. Most such institutions are principally government-financed and may even be mission-oriented research units; others are financed by private non-profit sector funds and latterly by the business enterprise sector.

A particular case arises when special funds are used to set up and finance mainly basic research managed by agencies which not only pay grants to universities proper, but also have their “own” research institutes, which may or may not be situated on university campuses.

One factor which determines the classification of such research institutions is the purpose for which the research is being carried out. If it is predominantly to serve government’s needs, countries may decide to classify the institution as part of the government sector. This is the case of “mission-oriented” R&D institutions financed from the budget of their sponsoring ministry or department. Alternatively, if the R&D is basic in nature and adds to the general body of knowledge in a country, then some Member countries may have opted to classify the institutions as part of the higher education sector, regardless of its teaching/training activities.

A higher education unit may have “links” with other research institutions not directly concerned with teaching or other non-R&D functions. One example might be the mobility of personnel between the higher education units and the research institution concerned (or *vice versa*), and another the sharing of equipment facilities between institutions classified in different sectors.

Furthermore, in some countries, such borderline institutions may have a private legal status and carry out contract research for other sectors, or may be government financed research institutions. It is difficult to decide, in such cases, whether the links between the units are strong enough to justify including the “external” unit in the higher education sector.

A more recent development concerns the “science parks” situated at or near universities and colleges which host a range of manufacturing, service, and R&D institutions. It is recommended that, for science parks and other borderline institutions, physical location and use of common resources with the higher education sector should not be used as a classification criterion for the institutions associated with them, except when individuals, such as postgraduate students or fellows financed by direct grants or their own resources, perform R&D using higher education facilities are not actually on the university payroll.

Units administered by post-secondary teaching units (including teaching hospitals) as defined above, which are not primarily market producers of R&D, should be included in the higher education sector. The same applies if they are mainly financed from university block grants. If they are primarily market producers

of R&D, they should be included in the business enterprise sector despite any links with higher education units; this is particularly relevant for science parks.

In the case of science parks also, any units controlled and mainly financed by government should be included in the government sector, while those controlled and mainly financed by the private non-profit sector should be included in the private non-profit sector.

In the case of classic associated “research institutes”, it is not possible to give more definite instructions; further detailed discussion will be found in the supplement to the 1980 Frascati Manual (OECD, 1989).

It is recommended that R&D expenditure and personnel of all institutes at the borderline with the higher education sector be reported separately.

Measurement of expenditures devoted to R&D

Introduction

Expenditures on R&D may be spent within the statistical unit (intramural) or outside it (extramural). The full procedures for measuring these expenditures are:

- a) to identify the intramural expenditure on R&D performed by each statistical unit;
- b) to identify the sources of funds for these intramural R&D expenditures as reported by the performer;
- c) to identify the extramural R&D expenditures of each statistical unit;
- d) to aggregate the data, by sectors of performance and sources of funds, in order to derive significant national totals. Other classifications and distributions are then compiled within this framework.

Nevertheless, it is the first two stages which are essential and which generally suffice for stage *d*). R&D expenditure data should be compiled on the basis of performers reports of intramural expenditures. The collection of extramural expenditures is, however, also desirable as a supplementary source.

Intramural expenditures

Definition

Intramural expenditures are all expenditures for R&D performed within a statistical unit or sector of the economy, whatever the source of funds.

Expenditures made outside the statistical unit or sector but in support of intramural R&D (*e.g.* purchase of supplies for R&D) are included. Both current and capital expenditures are included.

Current expenditures

Current expenditures are composed of labour costs and other current costs.

Labour costs of R&D personnel

These comprise annual wages and salaries and all associated costs or fringe benefits such as bonus payments, holiday pay, contributions to pension funds and other social security payments, payroll taxes, etc. The labour costs of persons providing indirect services and which are not included in the personnel data (such as security and maintenance personnel or the staff of central libraries, computer departments, or head offices) should be excluded and included in other current costs.

Labour costs are almost always the largest component of current expenditure. Member countries may find it useful to collect or otherwise secure labour costs by personnel element (*e.g.* researchers, technicians and equivalent staff, other supporting staff, etc.). These extra classifications will be particularly helpful in the construction of cost indices for R&D expenditures.

Labour costs of postgraduate students engaged in R&D

Calculation of the salary element for postgraduate students poses a problem in most countries. Only those postgraduate students who are on universities' payrolls (as research assistants, for instance), and/or in receipt of external funds for R&D (such as research scholarships) should be included in the statistics. Very often, the monies they receive are lower than the "market value" of their work. Frequently, such students supplement their low R&D income with monies from non-R&D activities or from personal resources. The measure of R&D labour costs should, at least in theory, include these personal funds.

There may be a temptation to inflate R&D labour costs to take account of the difference between the "market value" mentioned above and the amounts actually spent in order to derive a "true" value of their R&D activities. This is, however, a questionable approach.

Only the actual "salaries"/stipends and similar expenditures associated with postgraduate students should be reported in the R&D statistics and accordingly no inflated values should be derived.

Other current costs

These comprise non-capital purchases of materials, supplies and equipment to support R&D performed by the statistical unit in a given year. Examples are: water and fuel (including gas and electricity); books, journals, reference materials, subscriptions to libraries, scientific societies and so on; imputed or actual cost of small prototypes or models made outside the research organisation; materials for laboratories (chemicals, animals, etc.). Administrative and other overhead costs (such as interest charges and office, post and telecommunications, and insurance costs) should also be included, pro-rated if necessary to allow for non-R&D activities within the same statistical unit. All expenditures on indirect services should be included here, whether carried out within the organisation concerned or hired or purchased from outside suppliers. Examples of such services are security; storage; use, repair and maintenance of buildings and equipment; computer services; and printing of R&D reports.

Indirectly paid current costs

R&D activities may incur costs that are often not paid by the sector itself but are borne by institutions classified in other sectors of the economy, usually the government sector. Two examples are discussed in the following sections.

Rents for research facilities

In many countries, responsibility for "housing" public institutions (including universities, etc.) is undertaken by a central agency which is most likely to be included in the government sector in R&D surveys and whose accounts would not reflect the functional breakdown between R&D and "other" activities. This may apply to the administration of ongoing accommodation and temporary arrangements concerning premises and equipment. This is particularly relevant for the higher education sector.

In some cases, such facilities are available to institutions free of charge, or are not accounted for in the institutions' books. If a realistic cost of R&D is to be assessed, all fees/rents, etc., associated with R&D should be included in expenditure data. Where the fee or rent is charged to a unit within a sector, this is easily done. If, however, there is no such charge, it might still be desirable, for reasons of international comparability, to include a notional amount which represents an actual payment known to have been made between agencies in different sectors. This might be, for example, an estimated "market value", to be included in "other current costs". Care must be taken to avoid "double-counting" of costs between the suppliers and the recipients of these services.

Provided actual payments are made (even if not necessarily revealed by the R&D surveys), an adjustment – to account, for instance, for the estimated market value of the facilities concerned – should be made by the national authorities in their data series. It should be classified as “other current cost” in the receiving sector and should be subtracted, as appropriate, from the accounts of the other donating sectors concerned. If no actual provisions and/or payments exist, no such adjustments should be made.

Social security costs and pensions for R&D personnel

Labour costs of R&D personnel “comprise annual wages and salaries and all associated costs or fringe benefits such as bonus payments, holiday pay, contributions to pension funds and other social security payments, payroll taxes, etc.”.

While there is no ambiguity as to whether pension and other social security payments should be included in R&D cost data, the problem is that identification of such funds is extremely difficult in a sector such as higher education, where R&D is not readily identifiable as a separate area of activity. This problem is compounded by the complexity of national health, social security, retirement, and other systems.

Where there is an actual provision for social security and/or pensions for R&D personnel, such amounts should be included in R&D labour costs. These provisions need not necessarily be visible in the bookkeeping accounts of cost to the sector concerned but may often involve transactions within or between sectors. Care should be taken to avoid double-counting of such expenditure.

Value Added Tax (VAT)

Data on R&D expenditure on both a provider and funder basis should be at factor cost. This means excluding VAT and similar sales taxes from the measured cost of the R&D and specifically of R&D financed by government. Not only will this aid in making valid international comparisons, but it will also assist countries’ internal analyses, for example when looking at the opportunity cost of funds devoted to R&D or when deriving ratios using national income and government expenditure statistics, which generally exclude VAT.

In the case of the business enterprise sector, this should present very few problems since separate recording of VAT input costs is part of standard accounting procedures and is reclaimable if offset against any VAT charged on outputs. In the case of the government sector, VAT on input costs may generally be reclaimable, and therefore separately identifiable.

More difficulties may arise in the higher education and private non-profit sectors where VAT included in goods and services purchased as part of an R&D project may not be reclaimable and will therefore be regarded by the respondents as a legitimate part of their expenditures. Countries should make every effort to exclude VAT from expenditure figures for these sectors, making an adjustment centrally if necessary. It is recommended, therefore, that the figures returned to the OECD should be exclusive of VAT.

Exclusion of depreciation

All depreciation provisions for building, plant, and equipment, whether real or imputed, should be excluded from the measurement of intramural expenditures. This approach is proposed for three reasons:

- a) If depreciation (an allowance to finance the replacement of existing assets) were included in current expenditures, then the addition of capital expenditures would result in double-counting.
- b) The actual sums set aside for depreciation are useless for purposes of international comparison because of differences in tax laws.

c) In the government sector, no provision is normally made for depreciation of fixed assets. Consequently, even within a country, comparisons between sectors cannot be made unless depreciation provisions are excluded, and aggregates for a national series cannot be compiled unless the sector totals are put on a comparable basis.

Capital expenditures

Capital expenditures are the annual gross expenditures on fixed assets used in the R&D programmes of statistical units. They should be reported in full for the period when they took place and should not be registered as an element of depreciation.

They are composed of expenditures on:

- land and buildings;
- instruments and equipment.

Land and buildings

This comprises land acquired for R&D (*e.g.* testing grounds, sites for laboratories and pilot plants) and buildings constructed or purchased, including major improvements, modifications, and repairs.

The R&D share of the costs for new buildings is often difficult to quantify and many countries ignore this element of R&D expenditure (in the higher education sector), or at best estimate it, based on scheduled use.

Purchase of new research equipment is often included in the cost of new buildings, without being separately identifiable. This can result, in some years, in an underestimation of the “instruments and equipment” component in total capital R&D expenditures.

Countries should maintain a consistent methodology with regard to these costs.

Instruments and equipment

This comprises major instruments and equipment acquired for use in the performance of R&D.

Conventions for distinguishing between current and capital items

In measuring actual capital expenditure, small tools and instruments and minor improvements to existing buildings will normally be excluded, as in most accounting systems these items are usually carried on current expenditure accounts. The boundary between “minor” and “major” items varies slightly among countries according to taxation practices and among different firms and organisations in the same country according to accounting practices. But these differences are rarely significant, and it is neither necessary nor practical to insist on any rigid standard for this purpose. Thus, national conventions will govern allocations to current or to capital expenditures. Nevertheless, in those countries where expenditures on very expensive prototypes (*e.g.* aircraft) or equipment with a limited life (*e.g.* launching rockets) are considered current expenditures, such conventions should always be made explicit.

Identifying the R&D content of capital expenditures

Occasionally, the R&D term of a fixed asset may be known at the time of acquisition. In this case, only a portion of the cost should be attributed to R&D capital expenditures. Similarly, when a fixed asset will be used for more than one activity and neither the R&D nor the non-R&D activities predominate (*e.g.* computers and associated facilities; laboratories used for R&D, testing, and quality control), the costs should be prorated between R&D and other activities. In the first case, the R&D share could be based on R&D term compared to the expected life of the asset. In the second case, the proportion could be based on numbers of R&D personnel using the facility, compared to total personnel, or on administrative

calculations already made (*e.g.* the R&D budget may be charged a certain portion of the capital cost; a certain proportion of time or floor space may be assigned to R&D).

Sale of R&D capital goods

The sale or transfer of fixed assets originally acquired for R&D creates a problem. The disposal of such assets could be considered as a disinvestment in R&D. However, no adjustment to recorded capital expenditures should be made. The statistical unit's capital R&D expenditures should not be reduced accordingly, either currently or retrospectively (for the years in which the capital costs were recorded). Current revisions can cause anomalies such as negative intramural R&D expenditures. Retrospective revisions are difficult and confusing.

Libraries

Another case worthy of attention is that of libraries. Even though payments for the current purchase of books, periodicals, and annuals should be assigned to "other current costs", expenditure for the purchase of complete libraries, large collections of books, periodicals, specimens, etc., should be included in the data reported to UNESCO under expenditure on major equipment", especially when made at the time of equipping a new institution.

Each country should adopt the UNESCO approach in reporting data to the OECD. If this is not possible, a consistent methodology should be maintained with regard to the classification of the above costs, thus making it possible to observe changes in the pattern of such expenditure.

Sources of funds

Methods of measurement

R&D is an activity where there are significant transfers of resources between units, organisations, and sectors. Every effort should be made to trace the flow of R&D funds. These transfers may be measured in two ways:

- **Performer-based** reporting of the sums which one unit, organisation, or sector has received from another unit, organisation, or sector for the performance of intramural R&D.
- **Source-based** reporting of extramural expenditures which are the sums a unit, an organisation, or a sector reports having paid to another unit, organisation, or sector for the performance of R&D.

The first of these approaches is strongly recommended.

Criteria for identifying flows of R&D funds

For such a flow of funds to be correctly identified, two criteria must be fulfilled:

- there must be a direct transfer of resources;
- this transfer must be both intended and used for the performance of R&D.

Direct transfer

Such transfers may take the form of contracts, grants, or donations and may take the form of money or of other resources (*e.g.* staff or equipment lent to the performer). When there is a significant non-monetary transfer, the current value has to be estimated since all transfers must be expressed in financial terms.

Resources may be transferred in a number of ways, not all of which may be considered direct.

Contracts or grants paid for the performance of current or future R&D are clearly identifiable as a transfer of funds. Transfer of funds from the government to other sectors is particularly important to the users of R&D data.

Two categories of such government funds may be identified:

- a) those which are specifically for the procurement of R&D, *i.e.* the results of the R&D belong to the recipient of the output or product of the R&D, who is not necessarily the funder of the R&D;
- b) those which are provided to the performers of R&D in the form of grants or subsidies, with the results of the R&D becoming the property of the R&D performers.

It is recommended that, if possible, both categories of transfer of government R&D funds be identified in the R&D data of the business enterprise sector. If possible, a similar breakdown should be made for government funds going to the higher education sector.

In theory, when a government allows a firm or university to use, free of charge, facilities such as a wind-tunnel, observatory or launching site while carrying out R&D, the value of the service (an imputed rental) should be identified as a transfer. In practice the beneficiary would not normally be able to make such an estimate, and the donor might not be able to do so either.

In some cases, a firm's R&D project may be financed by loans from a financial institution, an affiliated company, or a government. Loans which are to be repaid are not to be considered transfers; loans which may be forgiven are to be considered transfers (by convention).

There are also a variety of other government incentives for R&D in the business enterprise sector. Examples are the remission of income taxes for industrial R&D, the payment by a government, on demand and after audit, of a certain portion of some or all of a firm's R&D expenditures, bonuses added to R&D contracts to encourage a firm in its own R&D, remission of taxes and tariffs on R&D equipment, and the reimbursement of part of a firm's costs if it hires more R&D staff. For the present, even where these transfers can be separately identified, they should not be counted as direct support for R&D. The statistical units should therefore report gross expenditures as incurred, even when their actual costs may be reduced because of remissions, rebates, or post-performance grants.

Transfer both intended and used for R&D

In many R&D transfers this criterion can be taken for granted. There are instances, however, where its application can clarify the situation (particularly where there is a difference between the performer's and the funder's report):

- a) In one case, a unit gives funds to another in return for equipment or services needed for its own R&D. If the provision of this equipment or these services does not require the second unit to carry out R&D, it cannot report that it performed R&D funded by the first unit. For example, a government laboratory buys standard equipment or uses an outside computer to perform calculations required for an R&D project. The equipment supplier or the computer service firm carry out no R&D themselves and would report no R&D funded by the government. These expenditures should be considered by the government laboratory, for R&D statistics, to be intramural capital and intramural other current costs, respectively.
- b) In a second case, there are transfers of funds which are loosely described by the source as "development contracts" for "prototypes", but no R&D is performed by the funder and very little by the recipient. For example, the government places a contract with an industrial firm to "develop" a "prototype" civil aircraft for a specific use (*e.g.* treatment of oil slicks). The aircraft is largely constructed by the

performer using existing materials and existing technology, and R&D is only needed to meet the new specifications. Only this portion of the contract should be reported by the performer as R&D financed by the government sector, even though the funder's accounts may suggest at first sight that the entire contract was for R&D.

- c) In a third case, one unit receives money from another and uses it for R&D although the funds were not paid out for that purpose. For example, a research institute may finance some of its work through receipts from royalties and profits from the sales of goods and services. Although these funds are received from other units and other sectors, they should not be considered as transfers for R&D but as coming from the "retained receipts" of the performing unit itself, as the purchasers of the institute's goods and services did not intend to transfer funds for R&D.

Identifying the sources of flows of R&D funds

Performers are usually asked to distribute their intramural expenditures between funds of the performing unit (own funds), funds from other units in the same sector or subsector, and from other sectors and subsectors. They can usually do so relatively easily, but there are one or two problem areas.

Influence of the type of the statistical unit

The amount of transferred funds reported will be affected by the type of statistical unit on which the data are based. This particularly concerns flows between organisations within the same sector. For instance, government departments may well charge one another for the performance of R&D, but this will usually be considered as intramural to the government sector. Similarly, a business enterprise may, for accounting reasons, charge for the R&D done by one of its establishments for another, but consider the work to be intramural as far as the enterprise is concerned. The decision on where to draw the boundary is an arbitrary one, and the important point again is to comment fully in any published tables.

Subcontracting and intermediaries

Further problems arise when money passes through several organisations. This can occur when R&D is subcontracted, as is sometimes the case in the business enterprise sector. The performer should indicate, so far as possible, the original source of the funds for R&D. In some countries, intermediary non-performing organisations play an important role in the financing of R&D by distributing among performers grants received from several different sources but not "earmarked" for specific purposes. Well-known examples are the Stifterverband für die Deutsche Wissenschaft and the Deutsche Forschungsgemeinschaft in Germany. In such cases it is acceptable to regard these organisations as the source, although it is preferable to attempt to trace the funds to their original sources.

Public general university funds (GUF)

Probably the largest single area of disagreement about sources of funds occurs with public general university funds (GUF). Universities usually draw on three types of funds to finance their R&D activities:

- a) R&D contracts and earmarked grants received from government and other outside sources. These should be credited to their original source.
- b) Income from endowments, shareholdings, and property, plus receipts from the sale of non-R&D services such as fees from individual students, subscriptions to journals, and sales of serum or agricultural produce. These retained receipts are clearly the universities' "own funds". In the case of private universities, these may be a major source of funds for R&D.
- c) The general grant they receive from the Ministry of Education or from the corresponding provincial or local authorities in support of their overall research/teaching activities. This case gives rise to a conflict

between the principle of tracing the original source and that of using the performer's report and also to some disagreement about how the criterion concerning the intentions of the funder should be applied. In the first approach one argues that, as government is the original source and has intended at least part of the funds concerned to be devoted to R&D, the R&D content of these public general university funds should be credited to government as a source of funds. Using the second approach, one argues that it is within universities that the decisions are taken to commit money to R&D out of a pool which contains both "own funds" as narrowly defined in *b)* and public general university funds; therefore, the sums concerned should be credited to higher education as a source of funds. While no recommendation can be made for national practice, government-financed GUF should be credited to the public sector as a source of funds for the purposes of international comparisons. For clarity, publicly financed GERD is divided into two sub-categories:

- direct government funds;
- GUF.

In line with the findings of a study by a group of experts, the following procedures should be adopted:

- a)* GUF should be separately reported and any adjustments to the R&D costs series should take account of real or imputed social security and pensions provisions, which should be credited to GUF as a source of funds;
- b)* monies from the higher education "block grant" should be classified as GUF, and other monies generated by the sector should be considered as "own funds";
- c)* adjustments related to "other current costs" to account for real or imputed payments of rents, etc., should be debited to direct government funds.

Extramural expenditures

Data on the extramural R&D expenditures of statistical units are a useful supplement to the information collected on intramural expenditures. These extramural expenditure data are essential for providing statistics on R&D performed abroad but financed by domestic institutions. They may also be helpful to those analysing the flows of funds reported by performers, particularly if there are gaps in the survey coverage.

The concept of "techno-globalism" is a rapidly evolving one in the context of the increasingly world-wide organisation of R&D. As the focus of R&D data is necessarily on the individual country, it is very difficult to track international flows of R&D funds. In the future, more use should be made of analysis of extramural R&D funds to address this problem. The internationalisation of R&D activities mainly affects the business enterprise sector, and it is therefore recommended that analysis of business enterprise extramural R&D expenditure be done according to the institutional subclassification described in the sector "Abroad", with the following subclassification system:

- subsidiary or associated company;
- joint ventures;
- other business enterprise company located abroad;
- foreign government;
- EC;
- international organisations;
- other.

National totals

Gross domestic expenditure on R&D (GERD)

GERD is total intramural expenditure on R&D performed on the national territory during a given period.

It includes R&D performed within a country and funded from abroad but excludes payments made abroad for R&D. GERD is constructed by adding together the intramural expenditures of the four performing sectors. It is often displayed as a matrix of performing and funding sectors. The GERD and GERD matrix are fundamental to the international comparison of R&D expenditures. They also provide the accounting system within which the institutional classifications and functional distributions may be applied.

It would be useful to have separate tables for defence and civil GERD, in order to map how trends in these areas affect the level and structure of total GERD. This is particularly true for those countries with significant defence R&D programmes.

Gross national expenditure on R&D (GNERD)

The GNERD is an optional supplementary aggregate which comprises total expenditure on R&D financed by institutions of a country during a given period. It includes R&D performed abroad but financed by national institutions or residents; it excludes R&D performed within a country but funded from abroad. It is constructed by adding the domestically financed intramural expenditures of each performing sector and the R&D performed abroad but financed by domestic funding sectors.

To allow the identification of R&D activities of international organisations, the “Abroad” sector should have as a subcategory “International Organisations” as recommended in the institutional subclassification.

Annex

4

EXCERPT FROM
SYSTEM OF
NATIONAL ACCOUNTS 1993

Imputed social contributions (D.612)

An entry is needed in the secondary distribution of income account for the imputed social contributions payable by employees when employers operate unfunded social insurance schemes. For convenience, the discussion of the corresponding item in chapter VII, paragraphs 7.45 to 7.47 is repeated here.

Some employers provide social benefits themselves directly to their employees, former employees or dependants out of their own resources without involving an insurance enterprise or autonomous pension fund, and without creating a special fund or segregated reserve for the purpose. In this situation, existing employees may be considered as being protected against various specified needs, or circumstances, even though no payments are being made to cover them. Remuneration should therefore be imputed for such employees equal in value to the amount of social contributions that would be needed to secure the de facto entitlements to the social benefits they accumulate. These amounts depend not only on the levels of the benefits currently payable but also on the ways in which employers' liabilities under such schemes are likely to evolve in the future as a result of factors such as expected changes in the numbers, age distribution and life expectancies of their present and previous employees. Thus, the values that should be imputed for the contribution ought, in principle, to be based on the same kind of actuarial considerations that determine the levels of premiums charged by insurance enterprises.

In practice, however, it may be difficult to decide how large such imputed contributions should be. The enterprise may make estimates itself, perhaps on the basis of the contributions paid into similar funded schemes, in order to calculate its likely liabilities in the future, and such estimates may be used when available. Otherwise, the only practical alternative may be to use the unfunded social benefits payable by the enterprise during the same accounting period as an estimate of the imputed remuneration that would be needed to cover the imputed contributions. While there are obviously many reasons why the value of the imputed contributions that would be needed may diverge from the unfunded social benefits actually paid in the same period, such as the changing composition and age structure of the enterprise's labour force, the benefits actually paid in the current period may nevertheless provide the best available estimates of the contributions and associated imputed remuneration.

The two steps involved may be summarised as follows;

- (a) Employers are recorded, in the generation of income account, as paying to their existing employees as a component of their compensation an amount, described as imputed social contributions, equal in value to the estimated social contributions that would be needed to provide for the unfunded social benefits to which they become entitled;
- (b) Employees are recorded, in the secondary distribution of income account, as paying back to their employers the same amount of imputed social contributions (as current transfers) as if they were paying them to a separate social insurance scheme.

Annex

5

BROAD GROUPS AND FIELDS OF EDUCATION

This Annex lists the constituent parts of the fields of education listed in Section 5.3.3. The fields of education in the original ISCED were modified to eliminate overlapping, and increased to include new fields. Thus, there are now 25 fields of education as compared to 21 in the original version. Another innovation is the establishment of broad groups composed of fields of education having similarities. One such example is the broad group Health and Welfare comprising educational programmes in medicine, medical services, nursing, dental services and social services.

General programmes

01 Basic programmes

Basic general programmes pre-primary, elementary, primary, secondary, etc.

08 Literacy and numeracy

Simple and functional literacy, numeracy.

09 Personal development

Enhancing personal skills, *e.g.* behavioural capacities, mental skills, personal organizational capacities, life orientation programmes.

Education

14 Teacher training and education science

Teacher training for pre-school, kindergarten, elementary school, vocational, practical, non-vocational subject, adult education, teacher trainers and for handicapped children. General and specialized teacher training programmes.

Education science: curriculum development in non-vocational and vocational subjects. Educational assessment, testing and measurement, educational research, other education science.

Humanities and Arts

21 Arts

Fine arts: drawing, painting, sculpture;

Performing arts: music, drama, dance, circus;

Graphic and audio-visual arts: photography, cinematography, music production, radio and TV production, printing and publishing;

Design; Craft skills.

22 Humanities

Religion and theology; Foreign languages and cultures: living or 'dead' languages and their literature, area studies;

Native languages: current or vernacular language and its literature;

Other humanities: interpretation and translation, linguistics, comparative literature, history, archaeology, philosophy, ethics.

Social sciences, business and law

31 Social and behavioural science

Economics, economic history, political science, sociology, demography, anthropology (except physical anthropology), ethnology, futurology, psychology, geography (except physical geography), peace and conflict studies, human rights.

32 Journalism and information

Journalism; library technician and science; technicians in museums and similar repositories;

Documentation techniques;

Archival sciences.

34 Business and administration

Retailing, marketing, sales, public relations, real estate; Finance, banking, insurance, investment analysis;

Accounting, auditing, bookkeeping;

Management, public administration, institutional administration, personnel administration;

Secretarial and office work.

38 Law

Local magistrates, 'notaires', law (general, international, labour, maritime, etc.), jurisprudence, history of law.

Science

42 Life sciences

Biology, botany, bacteriology, toxicology, microbiology, zoology, entomology, ornithology, genetics, biochemistry, biophysics, other allied sciences, excluding clinical and veterinary sciences.

44 Physical sciences

Astronomy and space sciences, physics, other allied subjects, chemistry, other allied subjects, geology, geophysics, mineralogy, physical anthropology, physical geography and other geosciences, meteorology and other atmospheric sciences including climatic research, marine science, vulcanology, palaeoecology.

46 Mathematics and statistics

Mathematics, operations research, numerical analysis, actuarial science, statistics and other allied fields.

48 Computing

Computer sciences: system design, computer programming, data processing, networks, operating systems - software development only (hardware development should be classified with the engineering fields).

Engineering, manufacturing and construction

52 Engineering and engineering trades

Engineering drawing, mechanics, metal work, electricity, electronics, telecommunications, energy and chemical engineering, vehicle maintenance, surveying.

54 Manufacturing and processing

Food and drink processing, textiles, clothes, footwear, leather, materials (wood, paper, plastic, glass, etc.), mining and extraction.

58 Architecture and building

Architecture and town planning: structural architecture, landscape architecture, community planning, cartography;

Building, construction;

Civil engineering.

Agriculture**62 Agriculture, forestry and fishery**

Agriculture, crop and livestock production, agronomy, animal husbandry, horticulture and gardening, forestry and forest product techniques, natural parks, wildlife, fisheries, fishery science and technology.

64 Veterinary

Veterinary medicine, veterinary assisting.

Health and welfare**72 Health**

Medicine: anatomy, epidemiology, cytology, physiology, immunology and immunoematology, pathology, anaesthesiology, paediatrics, obstetrics and gynaecology, internal medicine, surgery, neurology, sychiatry, radiology, ophthalmology;

Medical services: public health services, hygiene, pharmacy, pharmacology, therapeutics, rehabilitation, prosthetics, optometry, nutrition;

Nursing: basic nursing, midwifery;

Dental services: dental assisting, dental hygienist, dental laboratory technician, odontology.

76 Social services

Social care: care of the disabled, child care, youth services, gerontological services;

Social work: counselling, welfare n.e.c.

Services**81 Personal services**

Hotel and catering, travel and tourism, sports and leisure, hairdressing, beauty treatment and other personal services: cleaning, laundry, dry-cleaning, cosmetic services, domestic science.

84 Transport services

Seamanship, ship's officer, nautical science, air crew, air traffic control, railway operations, road motor vehicle operations, postal service.

85 Environmental protection

Environmental conservation, control and protection, air and water pollution control, labour protection and security.

86 Security services

Protection of property and persons: police work and related law enforcement, criminology, fire-protection and fire fighting, civil security;

Military.

Not known or unspecified

(This category is not part of the classification itself but in data collection '99' is needed for 'fields of education not known or unspecified'.)

Annex

6

ISCED MAPPINGS OF COUNTRIES'
NATIONAL PROGRAMMES
TO ISCED LEVELS

| Diagram legend | |
|---|--|
| Diagram legend | Isced-97 Level NC: Not yet classified |
| General (G)/Type 1 | Programme Orientation Education which is not designed explicitly to prepare participants for a specific class of occupations or trades or for entry into further vocational/technical education programmes. Less than 25 percent of the programme content is vocational or technical. |
| Pre-vocational or pre-technical (P)/Type 2 | Education which is mainly designed explicitly to prepare participants to the world of work and to prepare them for entry into further vocational or technical education programmes. Successful completion of such programmes does not lead to a labour-market relevant vocational or technical qualification. At least 25% of the content has to be vocational or technical. |
| Vocational or technical (V)/Type 3 | Education which prepares participants for direct entry, without further training, into specific occupations. Successful completion of such programmes leads to a labour-market relevant vocational qualification. |
| Short (S) Medium (M) Long (L) Very long (VL) | Cumulative duration at Isced 5 Short 2 to less than 3 years Medium 3 to less than 5 years Long: 5 to 6 years Very long: More than 6 years |
| Intermediate 1st 2nd 3rd and + | Position in the national degree/qualification structure Intermediate degree/qualification First degree/qualification Second degree/qualification Thrid and further degree/qualification |

Reader's guide to the diagrams

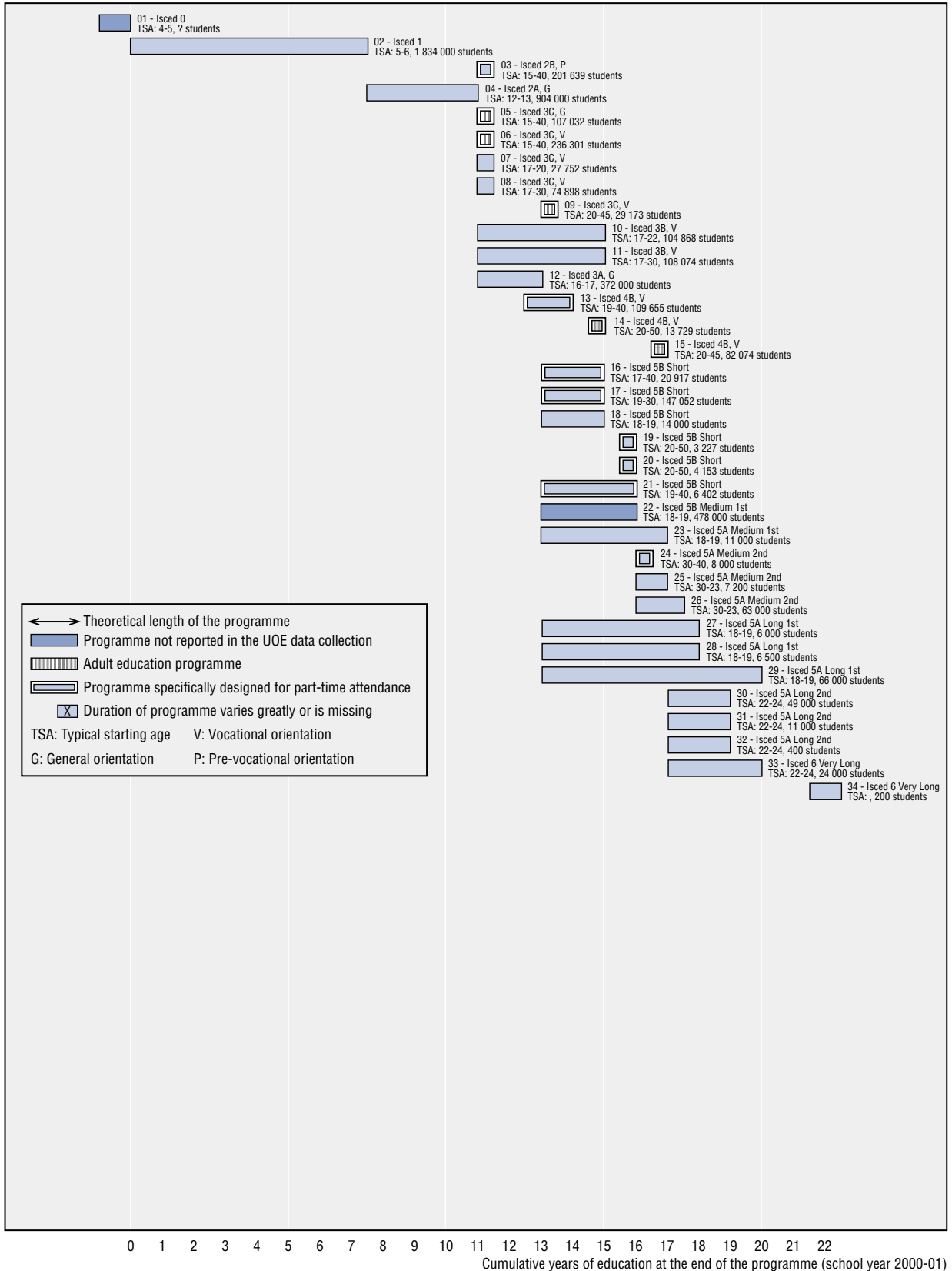
For each country, the diagrams show how national educational programmes are mapped and reported under each level of ISCED-97. Each block in the diagram represents a national programme or group of national programmes, which are reported under a specific ISCED level. The descriptions adjoining the block indicate:

- the numeric reference for the programme (numbered consecutively from ISCED 0 programmes onwards)- they key to which is shown on the facing page
- the ISCED level to which the national programme is mapped (indicating the orientation where necessary: G= general, V= vocational, P= Pre-vocational)
- the typical starting age (TSA) of students taking the programme
- the number of students enrolled on the programme in the 2000/01 school year (? = numbers not known).

The length of the block represents the theoretical duration of the programme as indicated on the scale at the bottom of the diagram. Adult education programmes and programmes not reported in the annual UOE data collection (See Chapter 2) are indicated by different shading of the blocks and programmes designed for part-time attendance have the blocks enclosed in a border.

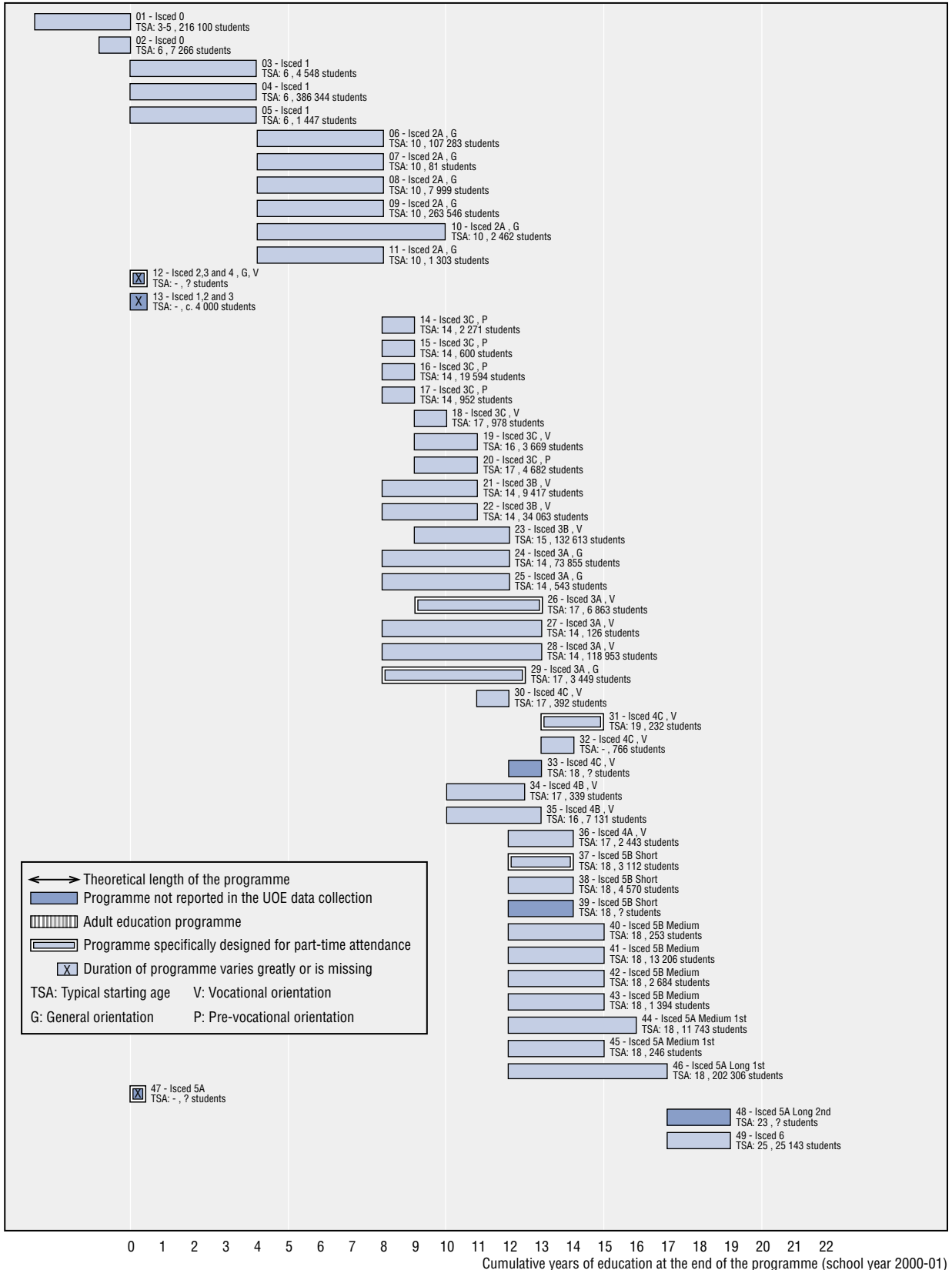
So, for example, for Australia, national programme 06 (Initial Vocational Courses: Operatives) is reported as ISCED 3C and is of vocational orientation. The typical age at which students start the programme is 15-40 years, some 236 301 students were enrolled in the school year 2000/01 and the theoretical duration is 1 year. This programme is for adults and has been designed for part-time attendance.

Australia



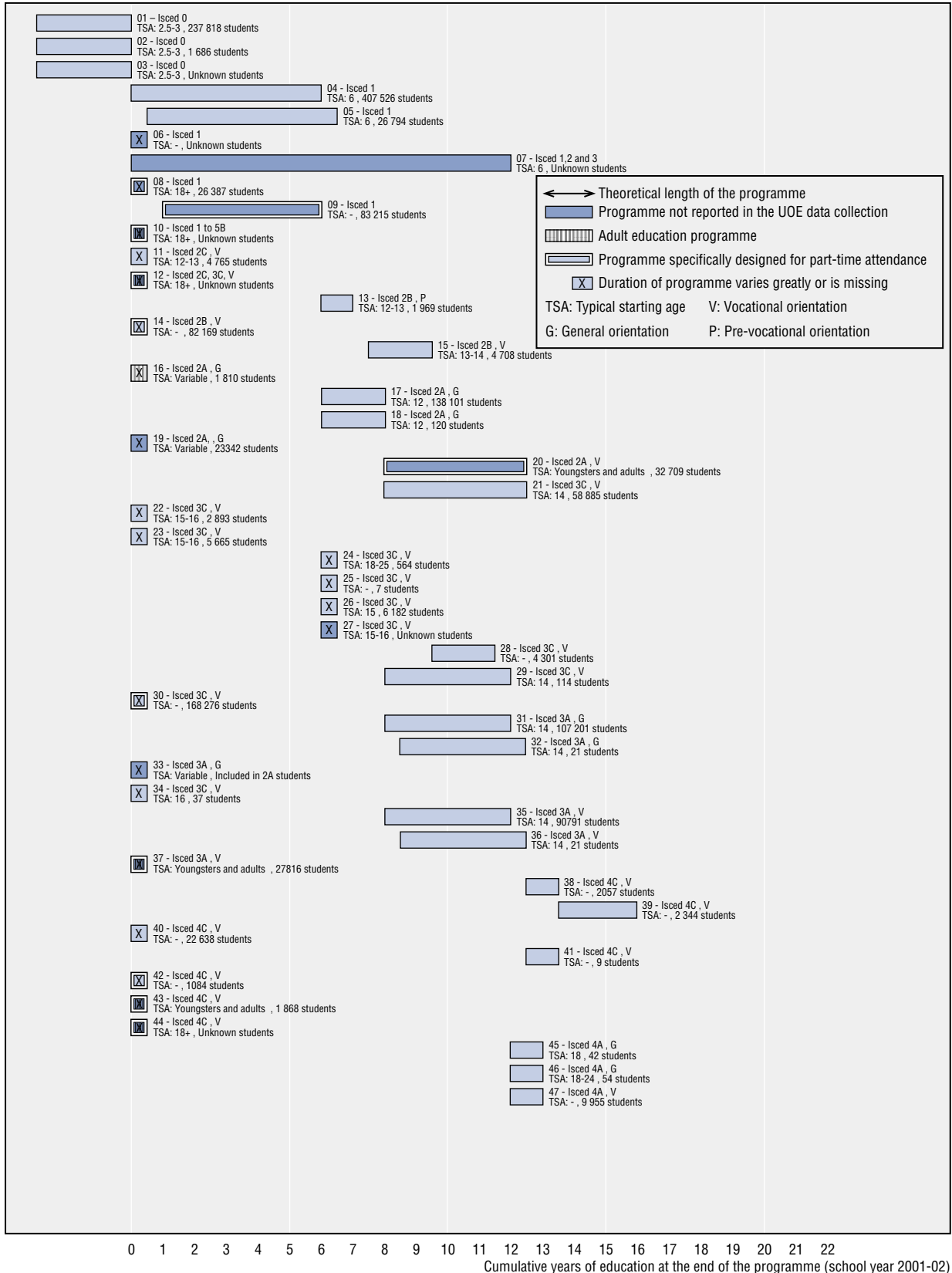
- 01 – Pre-school/Kindergarten
- 02 – Primary school
- 03 – 2100 Entry to Employment or Further Education: Basic Education and Basic Employment Skills (Stream 2100)
- 04 – Secondary school: 1st stage
- 05 – 2200 Entry to Employment or Further Education: Educational Preparation (Stream 2200)
- 06 – 3100 Initial Vocational Courses: Operatives
- 07 – 3211 Initial Vocational Courses: Skilled Courses for Recognised Trades – Partial Exemption to Recognised Trade Courses
- 08 – 3221 Initial Vocational Courses: Other Skilled Courses – Partial Exemption to Other Skills Courses
- 09 – 4100 Courses Subsequent to Initial Vocational Courses: Operative Level
- 10 – 3212 Initial Vocational Courses: Skilled Courses for Recognised Trades – Complete Trade Courses
- 11 – 3222 Initial Vocational Courses: Other Skilled Courses – Complete Other Skills Courses
- 12 – Secondary School: 2nd Stage
- 13 – 3300 Initial Vocational Courses: Trade Technician/Trade Supervisory
- 14 – 4300 Courses Subsequent to Initial Vocational Courses: Trade Technician/Trade Supervisory
- 15 – 4200 Courses Subsequent to Initial Vocational Courses: Skilled Level
- 16 – 3400 Initial Vocational Courses: Paraprofessional – Technician
- 17 – 3500 Initial Vocational Courses: Paraprofessional – Higher Technician
- 18 – Undergraduate Diplomas awarded by Universities
- 19 – 4400 Courses subsequent to Initial Vocational Courses: Paraprofessional/Technician
- 20 – 4500 Courses Subsequent to Initial Vocational Courses: Paraprofessional/Higher Technician
- 21 – 3600 Initial Vocational Courses: Professional
- 22 – Bachelor (Pass)
- 23 – Bachelor -Honours
- 24 – Courses to Qualify Graduates for Further Study (Graduate Certificate)
- 25 – Courses to Qualify Graduates for Further Study (Bachelor's Graduate Entry)
- 26 – Graduate Diplomas
- 27 – Dentistry
- 28 – Veterinary Science
- 29 – Medicine and Surgery
- 30 – Masters Degree done by course work
- 31 – Masters Degree by thesis
- 32 – Doctorate (by Course Work)
- 33 – Doctorates
- 34 – Doctorates

Austria



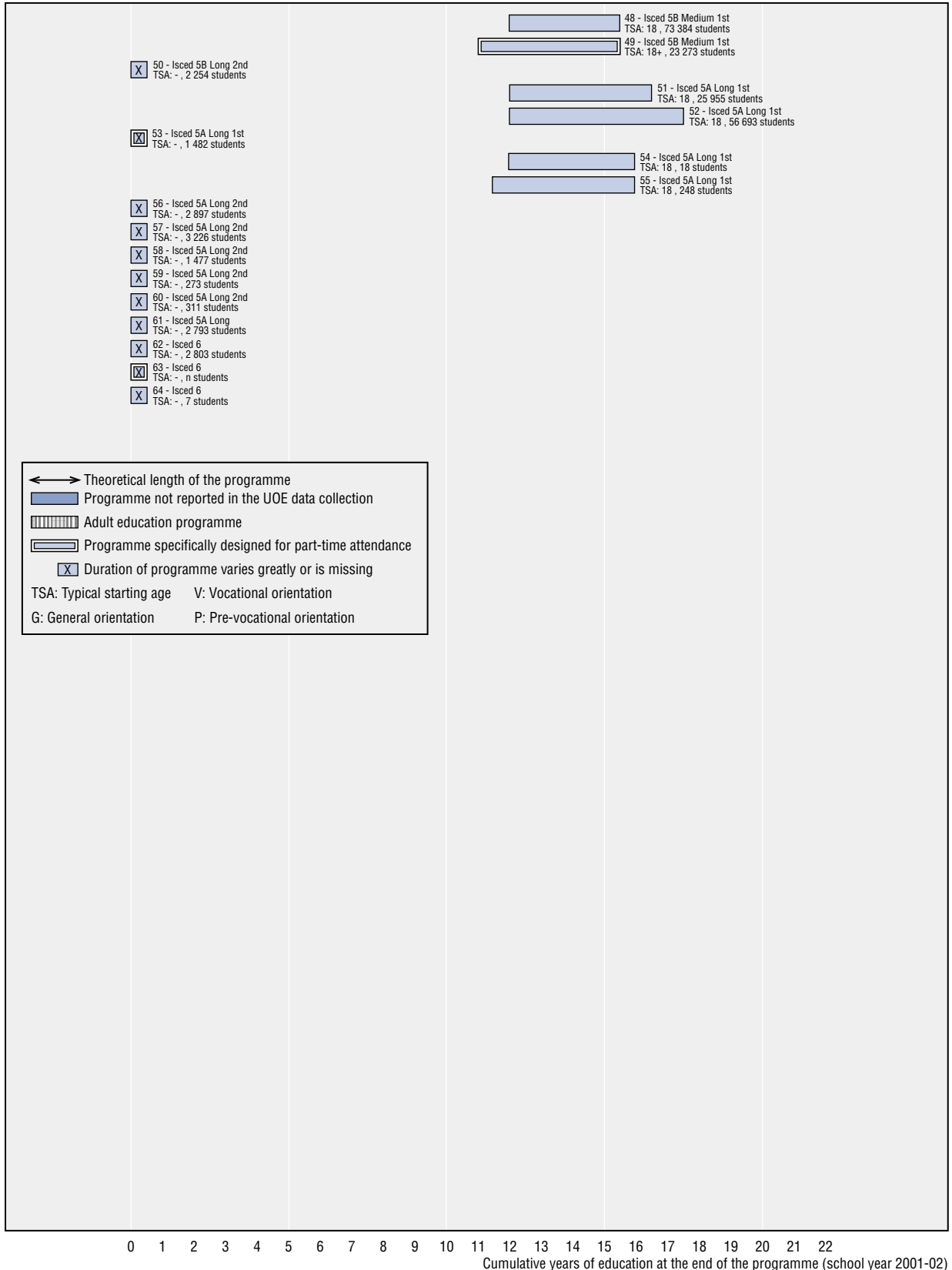
- 01 – Kindergarten
(Kindergartens)
- 02 – Vorschulstufe
(Pre-primary stage (of primary schools))
- 03 - Sonderschule (inkl. Heilstättenschulen), Schulstufen 1-4
(Special school, stages 1-4)
- 04 - Volksschule, 1-4.Schulstufe
(Primary school)
- 05 - Allgemeinbildende Statutschulen, 1.-4. Schulstufe
(General schools of own statutory right, stages 1-4)
- 06 - Allgemeinbildende höhere Schule, Unterstufe (inkl. Übergangsstufe)
(Secondary academic school, stages 5-8)
- 07 - Volksschule, Oberstufe
(Primary school, stages 5-8)
- 08 - Sonderschule (inkl. Heilstättenschulen), Schulstufen 5-8
(Special school, stages 5-8)
- 09 - Hauptschule
(Main general secondary school)
- 10 – Realschule
(Realschule (programme similar to main general secondary school plus two additional years of education))
- 11 - Allgemeinbildende Statutschulen, 5.-8. Schulstufe
(General schools of own statutory right, stages 4-8)
- 12 – Externistenprogramme
(Programmes outside the regular school system, leading to certificates of the regular system)
- 13 - Internationale Schulen
(International schools)
- 14 - Haushaltungs-, Hauswirtschaftsschulen
(One-year and two-year home-economic schools)
- 15 - Land- und forstwirtschaftliche mittlere Schulen (1jährig, schulpflichteretzend)
(Pre-vocational schools for agriculture and forestry)
- 16 - Polytechnische Schule
(Pre-vocational year)
- 17 - Sonderschule (inkl. Heilstättenschulen), 9. Schulstufe
(Special school, stage 9)
- 18 – Pflegehilflehrgänge
(Courses for the training of auxiliary nurses)
- 19 - Schulen zur Ausbildung von Leibesezierern und Sportlehrern
(Courses for the training of sports instructors)
- 20 - Berufsbildende Statut-Schulen (soweit nicht anders zugeordnet)
(Private schools of own statutory right (as not allocated otherwise))
- 21 - Land- und forstwirtschaftliche mittlere Schulen (weiterführend)
(Vocational schools for agriculture and forestry)
- 22 - Mittlere berufsbildende Schulen
(Secondary technical and vocational schools))
- 23 - Lehre (Duale Ausbildung)
(Apprenticeship)
- 24 - Allgemeinbildende höhere Schulen, Oberstufe
(Secondary academic school)
- 25 - Allgemeinbildende Statutschulen, 9. Schulstufe und höher
(General schools of own statutory right, stages 9 and higher)
- 26 - Höhere berufsbildende Schulen für Berufstätige
(Secondary technical and vocational colleges for adults)
- 27 - Allgemeinbildende höhere Schulen mit Berufsausbildung
(Secondary academic schools with vocational training)
- 28 - Höhere berufsbildende Schulen
(Secondary technical and vocational colleges)
- 29 - Allgemeinbildende höhere Schule für Berufstätige
(Secondary academic schools for adults)
- 30 – Speziallehrgänge
(Specialised courses)
- 31 - Sonderpädagogische Lehrgänge
(Special needs courses)
- 32 - Sonderausbildungen im gehobenen Dienst für Gesundheits- und Krankenpflege
(Courses in the field of nursing)
- 33 - Universitätslehrgänge (Maturaniveau, kürzer als 2 Jahre)
(University courses (short duration, for upper secondary graduates))
- 34 - Schulen für den medizinisch-technischen Fachdienst
(Secondary schools for medical services)
- 35 - Schulen für Gesundheits- und Krankenpflege
(Secondary schools for nursing)
- 36 – Aufbaulehrgänge
(Add-on courses)
- 37 - Meister- und Werkmeisterausbildung, Bauhandwerkerschulen
(Master craftsmen and foremen courses, courses for building workers)
- 38 - Kollegs
(Post-secondary courses in TVE (Technical and Vocational Education))
- 39 - Universitätslehrgänge (Maturaniveau, mindestens 2jährig)
(University courses (for upper secondary graduates))
- 40 - Kurzstudium
(Short vocationally oriented studies at universities and universities of the arts)
- 41 - Akademien der Lehrerbildung
(Post-secondary colleges for teacher training)
- 42 - Akademien des Gesundheitswesens
(Post-secondary colleges for medical services)
- 43 - Akademien für Sozialarbeit
(Post-secondary colleges for social work)
- 44 – Fachhochschulstudium
(Fachhochschulstudium (university education))
- 45 – Bakkalaureatstudium
(Bachelor-degree studies)
- 46 - Diplomstudium und Studium nach alter Studienvorschrift an Universitäten und Universitäten der Künste
(Studies at universities and universities of arts)
- 47 – Privatuniversitäten
(Private universities)
- 48 - Universitätslehrgänge (postgradual)
(University courses (at post-graduate level))
- 49 - Doktoratstudium (Zweitabschluß)
(Doctorate)

Belgium (Flemish Community)



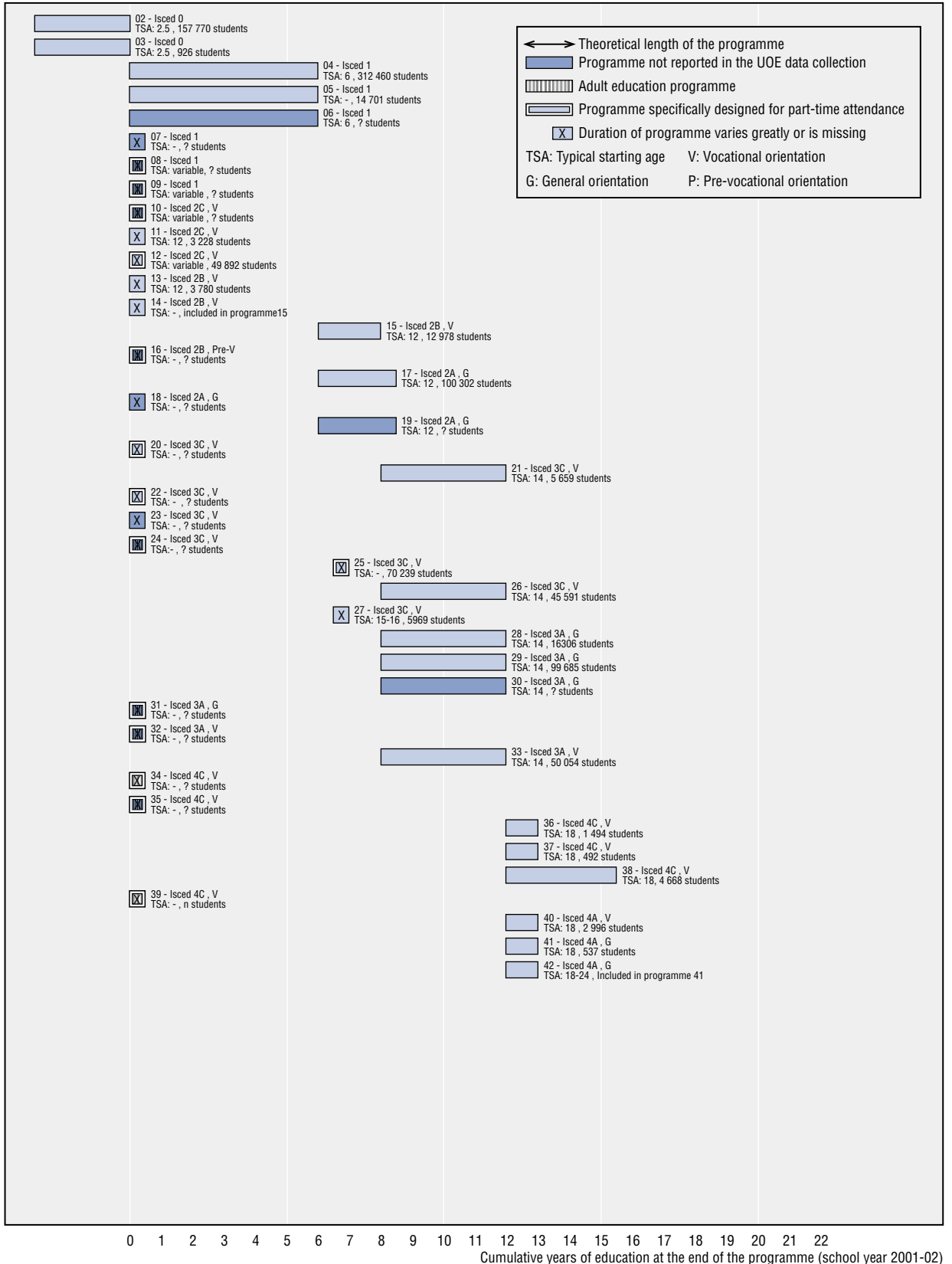
- 01 - Gewoon kleuteronderwijs
(Regular nursery education)
- 02 - Buitengewoon kleuteronderwijs
(Special nursery education)
- 03 - Europese en internationale scholen
(European and international schools)
- 04 - Gewoon lager onderwijs
(Regular primary education)
- 05 - Buitengewoon lager onderwijs
(Special primary education)
- 06 - Huisonderwijs
(Home education)
- 07 - Europese en internationale scholen
(European and international schools)
- 08 - Basiseducatie
(Adult basic education)
- 09 - Deeltijds kunstonderwijs – lagere graad
(Part-time artistic education – lower degree)
- 10 - VDAB-beroepsopleidingen
(Vocational training focused on the labour market (organised by the Flemish Employment and Vocational Training Agency - VDAB))
- 11 - Buitengewoon secundair onderwijs – opleidingsvorm 1 en 2
(Special secondary education – training form 1 and 2)
- 12 - Sociaal-cultureel vormingswerk
(Social and cultural training)
- 13 - Buitengewoon secundair onderwijs – opleidingsvorm 3 – 1ste leerjaar
(Special secondary education – training form 3 – 1st year)
- 14 - Secundair onderwijs voor sociale promotie – LSBL en LSTL
(Social advancement secondary education: lower secondary vocational courses and lower secondary technical courses)
- 15 - Buitengewoon secundair onderwijs – opleidingsvorm 3 – 2de en 3de leerjaar
(Special secondary education – training form 3 – 2nd and 3rd year)
- 16 - Onthaalklas voor anderstalige nieuwkomers
(Reception class for immigrant school entrants)
- 17 - Gewoon secundair onderwijs – 1ste graad
(Regular secondary education – 1st stage)
- 18 - Buitengewoon secundair onderwijs – opleidingsvorm 4 – 1ste graad
(Special secondary education – training form 4 – 1st stage)
- 19 - Begeleid individueel studeren
(Supervised individual study (distance learning))
- 20 - Deeltijds kunstonderwijs – middelbare graad
(Part-time artistic education – middle degree)
- 21 - Gewoon secundair onderwijs – 2de graad en 1ste en 2de leerjaar van de 3de graad BSO
(Regular secondary education – 2nd stage and 1st and 2nd year of the 3rd stage BSO)
- 22 - Modulair secundair onderwijs
(Modular secondary education)
- 23 - Deeltijds beroepssecundair onderwijs 15-18-jarigen
(Part-time vocational secondary education for 15 to 18-years-olds)
- 24 - Deeltijds beroepssecundair onderwijs 18-25-jarigen
(Part-time vocational secondary education for 18 to 25-years-olds)
- 25 - Deeltijds zeevisserij-onderwijs
(Part-time offshore fishing secondary education)
- 26 - Vorming in de leertijd georganiseerd door het VIZO
(Apprenticeship training courses organised by 'VIZO' (Flemish Institute for the Self-Employed))
- 27 - Vormingsprogramma's voor de vervulling van de deeltijdse leerplicht
(Training programmes for compulsory education organised by recognized centres)
- 28 - Buitengewoon secundair onderwijs – opleidingsvorm 3 – 4de tot 6de leerjaar
(Special secondary education – training form 3 – 4th till 6th year)
- 29 - Buitengewoon secundair onderwijs – opleidingsvorm 4 – 2de graad en 1ste en 2de leerjaar van de 3de graad BSO
(Special secondary education – training form 4 – 2nd stage and 1st and 2nd year of the 3rd stage BSO)
- 30 - Secundair onderwijs voor sociale promotie – HSBL en HSTL
(Social advancement secondary education: upper secondary vocational courses and upper secondary technical courses)
- 31 - Gewoon secundair onderwijs – 2de graad en 1ste en 2de leerjaar van de 3de graad ASO
(Regular secondary education – 2nd stage and 1st and 2nd year of the 3rd stage ASO (ASO= general secondary education))
- 32 - Buitengewoon secundair onderwijs – opleidingsvorm 4 – 2de graad en 1ste en 2de leerjaar van de 3de graad ASO
(Special secondary education – training form 4 – 2nd stage and 1st and 2nd year of the 3rd stage ASO)
- 33 - Begeleid individueel studeren
(Supervised individual study (distance learning))
- 34 - Koninklijke School voor Onderofficieren
(Royal Academy for non-commissioned officers)
- 35 - Gewoon secundair onderwijs – 2de graad en 1ste en 2de leerjaar van de 3de graad TSO en KSO
(Regular secondary education – 2nd stage and 1st and 2nd year of the 3rd stage TSO (TSO= technical secondary education) and KSO (KSO= Artistic secondary education))
- 36 - Buitengewoon secundair onderwijs – opleidingsvorm 4 – 2de graad en 1ste en 2de leerjaar van de 3de graad TSO en KSO
(Special secondary education – training form 4 – 2nd stage and 1st and 2nd year of the 3rd stage TSO and KSO)
- 37 - Deeltijds kunstonderwijs – hogere graad
(Part-time artistic education – higher degree)
- 38 - Gewoon secundair onderwijs – 3de leerjaar van de 3de graad TSO, KSO and BSO (Regular secondary education – 3rd year of the 3rd stage TSO, KSO and BSO (BSO not giving access to higher education; TSO= technical secondary education; KSO=artistic secondary education; BSO=vocational secondary education))
- 39 - Gewoon secundair onderwijs – 4de graad BSO
(Regular secondary education – 4th stage BSO)
- 40 - Ondernemersopleiding georganiseerd door het VIZO
(Entrepreneurial training courses organised by 'VIZO' (VIZO=Flemish Institute for the Self-Employed))
- 41 - Buitengewoon secundair onderwijs – opleidingsvorm 4 – 3de leerjaar van de 3de graad TSO, KSO en BSO
(Special secondary education – training form 4 – 3rd year of the 3rd stage BSO, TSO and KSO)
- 42 - Secundair onderwijs voor sociale promotie – ASBL
(Social advancement secondary education: additional secondary vocational courses)
- 43 - Deeltijds kunstonderwijs – specialisatiegraad
(Part-time artistic education – specialisation degree)
- 44 - Landbouwoopleidingen
(Agricultural training)
- 45 - Gewoon secundair onderwijs – 3de leerjaar van de 3de graad ASO
(Regular secondary education – 3rd year of the 3rd stage ASO)
- 46 - Voorbereidende Divisie van de Koninklijke Militaire School
(Introductory/preparatory year for students at the Royal Military Academy)
- 47 - Gewoon secundair onderwijs – 3de leerjaar van de 3de graad BSO
(Regular secondary education – 3rd year of the 3rd stage BSO giving access to tertiary education)

Belgium (Flemish Community) (Continued)



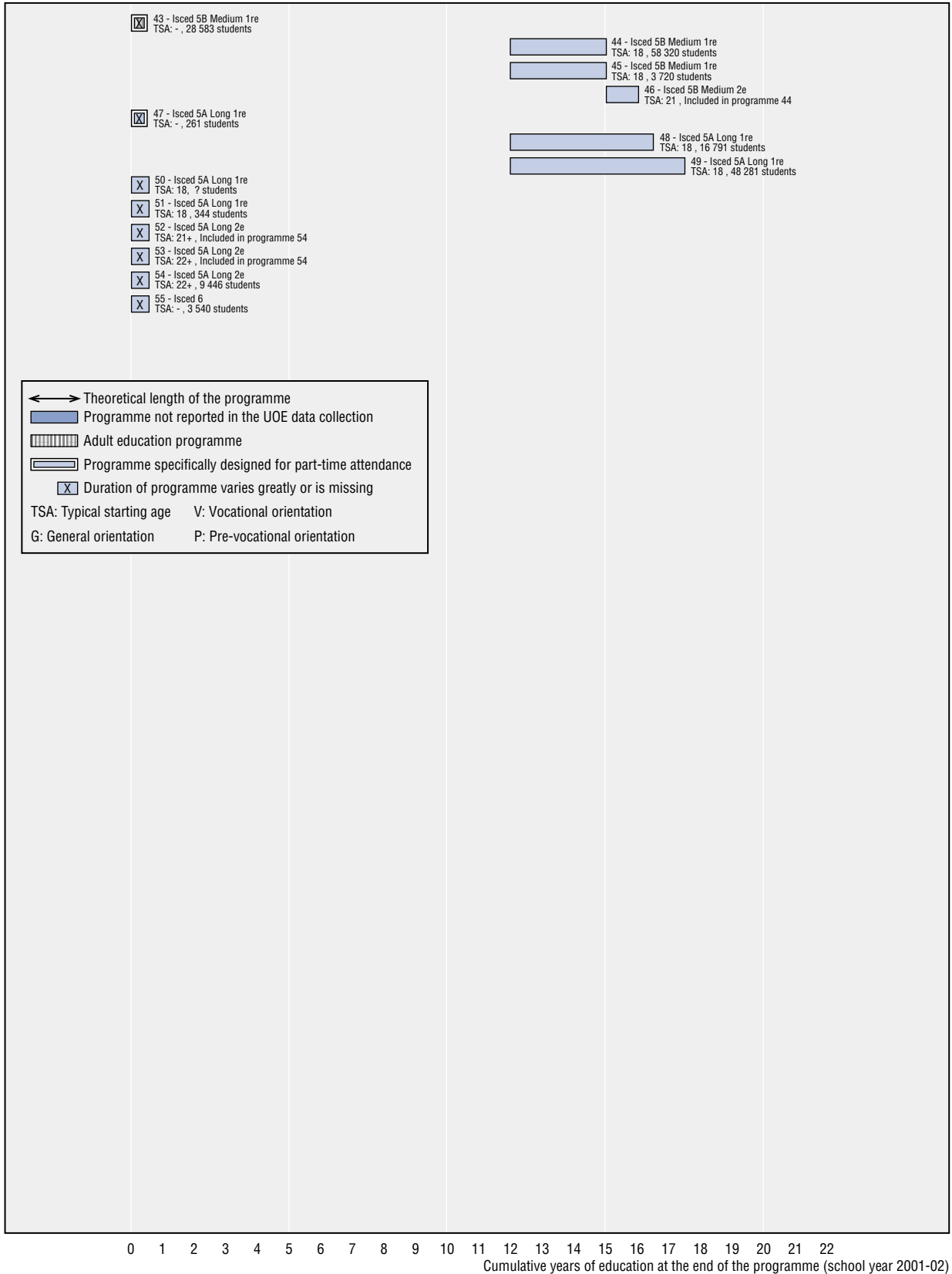
- 48 - Hogescholenonderwijs van 1 cyclus
(1-cycle higher education provided by colleges of higher education)
- 49 - Hoger onderwijs voor sociale promotie
(Social advancement higher education)
- 50 - Voortgezette opleidingen volgend op hogescholenonderwijs van 1 cyclus
(Advanced studies after 1-cycle higher education provided by colleges of higher education)
- 51 - Hogescholenonderwijs van 2 cycli
(2-cycle higher education provided by colleges of higher education)
- 52 - Basisopleidingen aan de universiteiten
(Basic academic education, 2 cycles)
- 53 - Basisopleidingen aan de Open Universiteit
(Basic academic education, Open University)
- 54 - Basisopleidingen aan de Universitaire Faculteit voor Protestantse Godsgeleerdheid
(Basic academic education, Protestant Theological Faculty)
- 55 - Koninklijke Militaire School
(Royal Military Academy)
- 56 - Gediplomeerde in de aanvullende studies
(Academic degree in the supplementary studies)
- 57 - Gediplomeerde in de gespecialiseerde studies
(Academic degree in the specialist studies)
- 58 - Academische lerarenopleiding
(Academic teacher training)
- 59 - Voortgezette opleidingen aan het Instituut voor Tropische Geneeskunde
(Advanced studies at the Institute for Tropical Science)
- 60 - Voortgezette opleidingen volgend op hogescholenonderwijs van 2 cycli
(Advanced studies after 2-cycle higher education provided by 'hogescholen')
- 61 - Doctoraatsopleiding
(Doctoral training)
- 62 - Doctoraat
(Doctorate)
- 63 - Doctoraat aan het Instituut voor Tropische Geneeskunde
(Doctorate at the Institute for Tropical Science)
- 64 - Doctoraat aan de Universitaire Faculteit voor Protestantse Godsgeleerdheid
(Doctorate)

Belgium (French Community)



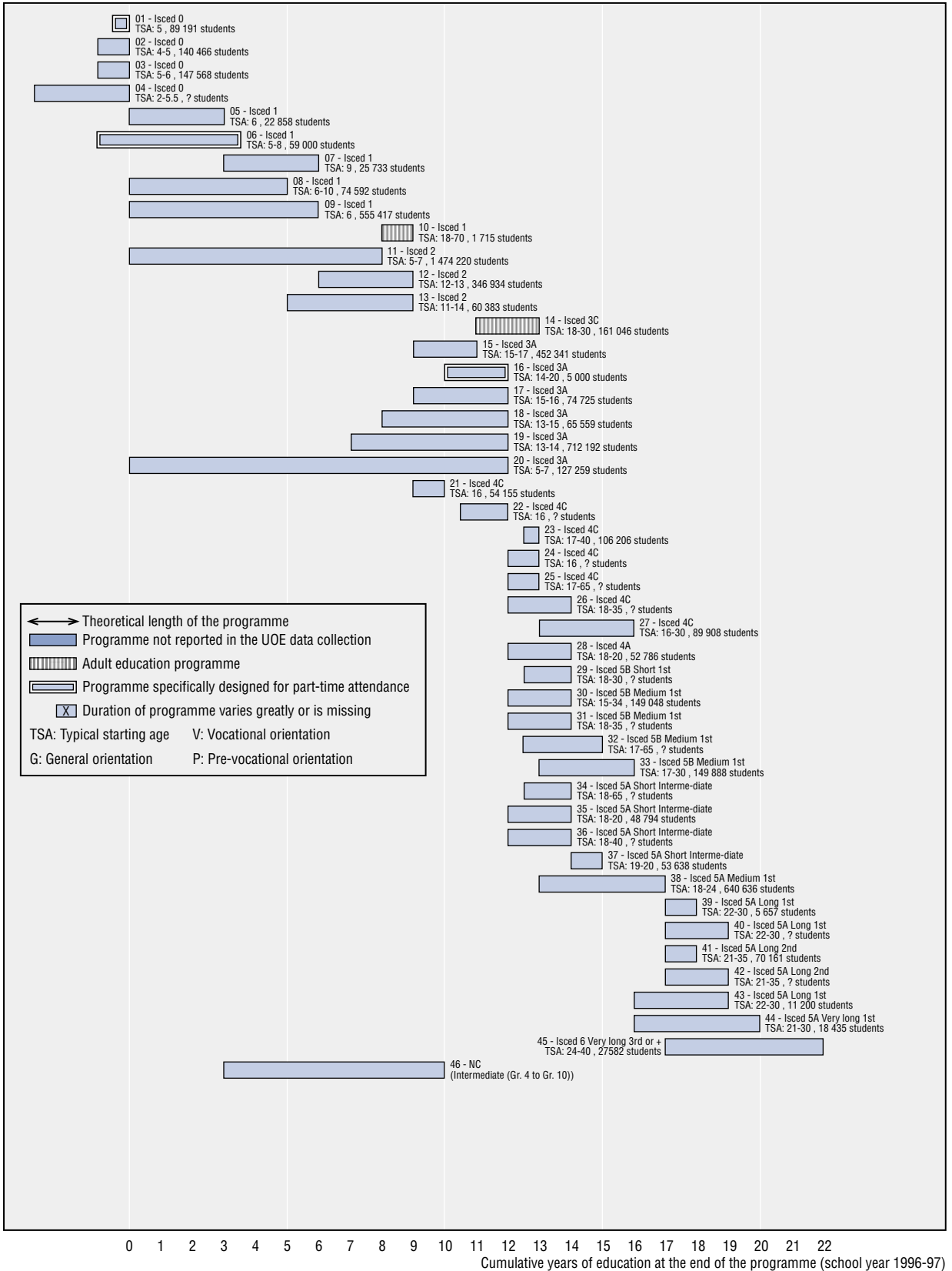
- 02 - Enseignement maternel ordinaire
(regular pre-primary education)
- 03 - Enseignement maternel spécial
(special pre-primary education)
- 04 - Enseignement primaire ordinaire
(regular primary education)
- 05 - Enseignement primaire spécial
(special primary education)
- 06 - Enseignement à domicile
(home education)
- 07 - Enseignement à distance
(distance learning)
- 08 - Alphabétisation des adultes
(adult basic education)
- 09 - Filière préparatoire de l'enseignement artistique à horaire réduit
(part-time artistic education)
- 10 - Formation du FOREM et IBFFP; éducation des adultes - programmes non organisés par un Ministère
(Vocational training focused on the labour market)
- 11 - Enseignement spécial de forme 1 ou 2
(Special secondary education)
- 12 - Enseignement de promotion sociale secondaire inférieur
- 13 - Enseignement spécial de Forme 3 : 1re Phase
(Special secondary education)
- 14 - 1re année primo-arrivants
- 15 - 1re accueil et 2e prof (1er degré différencié) de l'enseignement ordinaire ou spécial de forme 4
- 16 - Filière de formation de l'enseignement artistique à horaire réduit
- 17 - 1er degré commun de l'enseignement ordinaire ou spécial de forme 4
- 18 - Enseignement à distance
(Distance learning)
- 19 - Enseignement à domicile
(home education)
- 20 - Filière de qualification de l'enseignement artistique à horaire réduit
- 21 - Enseignement spécial de forme 3 Phase 2 et 3
(Special secondary education form 3)
- 22 - Apprentissage des classes moyennes
- 23 - Formation du FOREM et de l'IBFFP
- 24 - Formation continue des adultes
- 25 - Enseignement de promotion sociale : secondaire supérieur
- 26 - 2e et 3e degrés (hors 7e année) de l'enseignement professionnel secondaire ordinaire ou spécial de forme 4
- 27 - Enseignement secondaire en alternance
- 28 - 2e et 3e degrés de l'enseignement secondaire technique ou artistique de transition ordinaire ou spécial de forme 4
- 29 - 2e et 3e degrés de l'enseignement général secondaire ordinaire ou spécial de forme 4
- 30 - Enseignement à domicile
(home education)
- 31 - Enseignement à distance
(Learning distance)
- 32 - Filière de transition de l'enseignement artistique à horaire réduit
- 33 - 2e et 3e années de l'enseignement secondaire technique ou artistique de qualification (hors 7e année) ordinaire ou spécial de Forme 4
- 34 - Formation des chefs d'entreprises
- 35 - Formation professionnelle des personnes travaillant dans l'agriculture
- 36 - La 7e année de l'enseignement professionnel secondaire (7P/a)
- 37 - La 7e année de l'enseignement technique de qualification secondaire
- 38 - Le 4e degré professionnel complémentaire (y compris année préparatoire)
- 39 - professionnel complémentaire de promotion sociale
- 40 - 7e année de l'enseignement professionnel secondaire (7P/b et 7P/c, donnant accès au CESS)
- 41 - 7e année préparatoire à l'enseignement supérieur
- 42 - Division préparatoire à l'Ecole Royale Militaire

Belgium (French Community) (Continued)



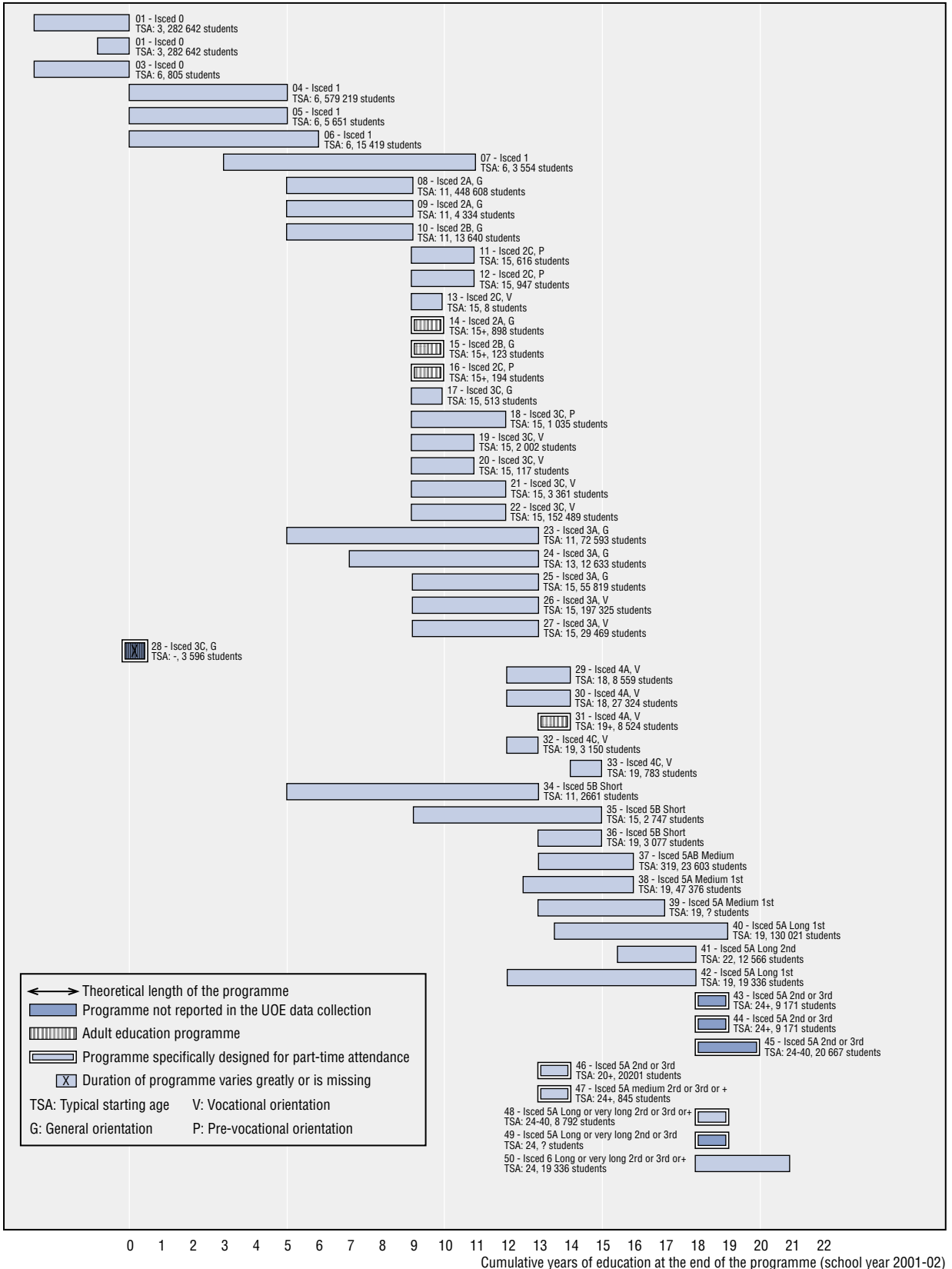
- 43 - Enseignement supérieur de promotion sociale de type court
- 44 - Enseignement supérieur de type court
- 45 - Enseignement artistique supérieur (musique et arts plastiques)
- 46 - Enseignement supérieur de type court complémentaire
- 47 - Enseignement supérieur de promotion sociale de type long
- 48 - Enseignement supérieur de type long
- 49 - Enseignement universitaire (1er et 2e cycle)
- 50 - Enseignement artistique supérieur de type long
- 51 - Ecole Royale Militaire
- 52 - Agrégation de l'enseignement secondaire supérieur
- 53 - Enseignement supérieur de type long : année complémentaire
- 54 - Enseignement universitaire : année complémentaire et 3e cycle
- 55 - Enseignement universitaire : doctorat et Agrégation de l'enseignement supérieur

Canada



- 01 - Preschool
- 02 - indergarten/Jr. K.
- 03 - Kindergarten
- 04 - Pre-kindergarten/Nursery
- 05 - Primary (3 years)
- 06 - Primary (Kinder. to Gr. 3)
- 07 - Elementary (3 years)
- 08 - Grades 1 to 5
- 09 - Primary (6 years)
- 10 - Adult basic academic upgrading(< 1 year)
- 11 - Elementary (8 years)
- 12 - Secondary – 1st stage/Jr. H.S.
- 13 - Grades 6 to 9
- 14 - Adult basic academic upgrading
- 15 - Secondary 2nd stage
- 16 - Independent study and mature student programme
- 17 - Secondary – Sr. H.S.
- 18 - Secondary (4 years)
- 19 - Secondary (5 years)
- 20 - Elementary/Secondary (12 years)
- 21 - Vocational training – other short AFP (1 year)
- 22 - Vocational training (1.5 year)
- 23 - Vocational certificate programme (< 1 year)
- 24 - Vocational training AVS (1 year)
- 25 - Trade/vocational certificate (1 year)
- 26 - Occupational/technology programme
- 27 - Apprenticeship
- 28 - University transfer/Quebec
- 29 - Vocational Diploma (18 months)
- 30 - College diploma programme (2-3 years)
- 31 - Occupational/technology programme
- 32 - Vocational Diploma (27 months)
- 33 - College diploma programme (3-4 years)
- 34 - Academic certificate programme (1-2 years)
- 35 - University transfer
- 36 - University Diploma Programme
- 37 - University Certificate (1 year)
- 38 - Bachelor's degree (3-5)
- 39 - Post-graduate certificate programme (1 year)
- 40 - Post-graduate certificate programme (2 years)
- 41 - Master's (1-2 years)
- 42 - Master's (2-3 years)
- 43 - First Professional degree (1-2 years)
- 44 - First Professional Degree (3-5 years)
- 45 - (Doctorate)

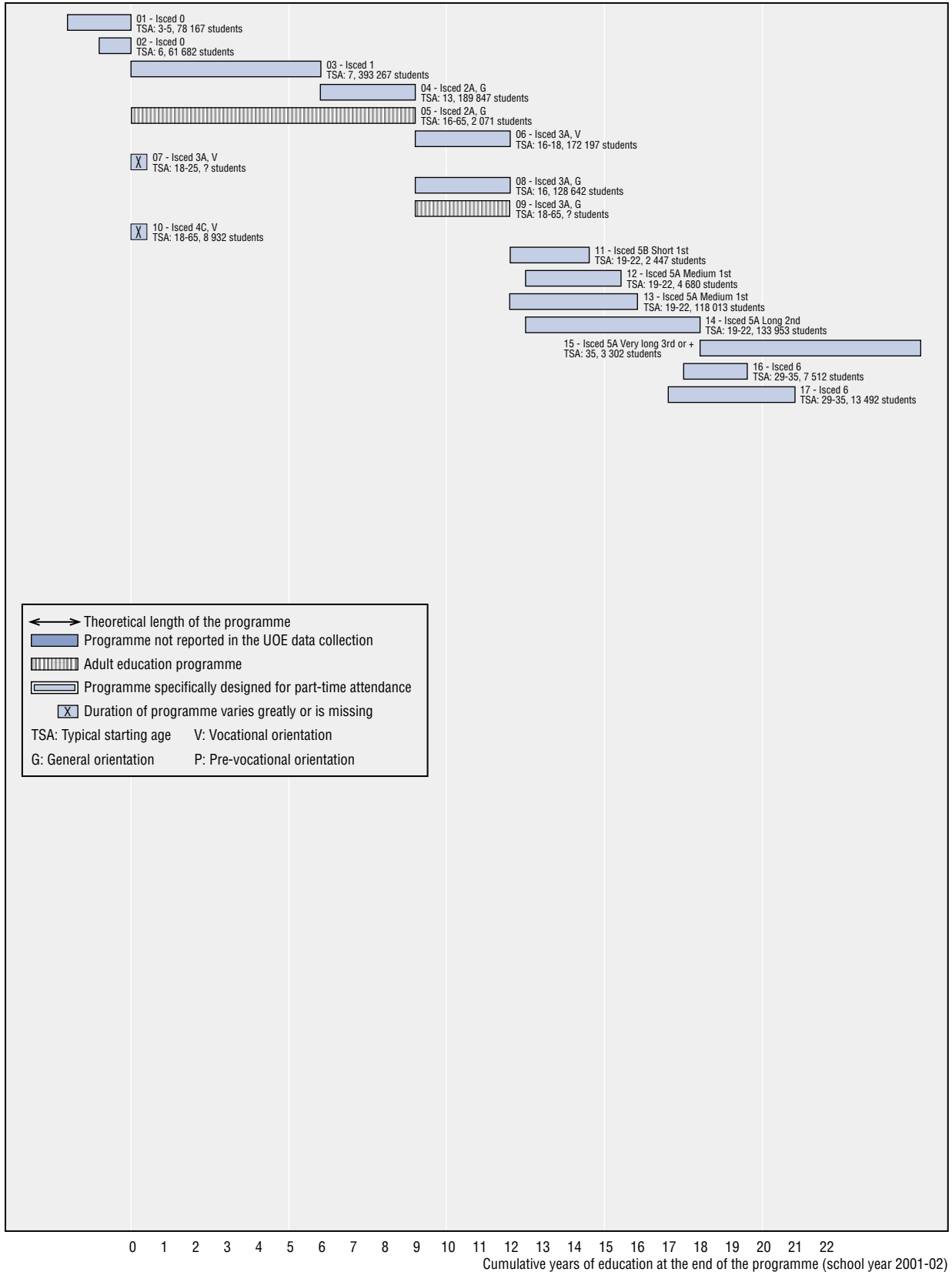
Czech Republic



- 01 - Mateřská škola
(Kindergarten)
- 02 - Přípravné třídy pro děti ze sociokulturně znevýhodněného prostředí
(Preparatory classes for socially disadvantaged children)
- 03 - Přípravná škola
(Auxiliary school – preparatory stage)
- 04 - Základní škola – 1. stupeň
(Basic school – 1st stage)
- 05 - Speciální základní škola – 1. stupeň
(Special basic school – 1st stage)
- 06 - Zvláštní škola – 1. a 2. stupeň
(Remedial school – 1st and 2nd stages)
- 07 - Pomocná škola – nižší, střední, vyšší stupeň a rehabilitační třídy
(Auxiliary school – lower, middle and upper stages)
- 08 - Základní škola – 2. stupeň
(Basic school – 2st stage)
- 09 - Speciální základní škola – 2. stupeň
(Special basic school – 2st stage)
- 10 - Zvláštní škola – 3. stupeň
(Remedial school – 3rd stage)
- 11 - Pracovní stupeň pomocných škol
(Auxiliary school – working stage)
- 12 - Praktická škola 1-2letá
(1-2 year special vocational school)
- 13 - Samostatné třídy odborných učilišť pro přípravu pro výkon jednoduchých profesí
(Vocational school – programmes for simple apprenticeship fields)
- 14 - Kurzy pro doplnění základního vzdělání
(Courses complementary to basic education)
- 15 - Kurzy pro doplnění vzdělání poskytovaného zvláštní školou
(Courses complementary to education at schools for mentally handicapped (remedial schooling programme))
- 16 - Kurzy pro doplnění vzdělání poskytovaného pomocnou školou
(Courses complementary to education at auxiliary school)
- 17 - Integrovaný 1. ročník
(Integrated 1st grade)
- 18 - Praktická škola 3letá
(3year special vocational school)
- 19 - Učiliště – obory se zvláštní úpravou učebních plánů
(Vocational school – programmes with specially modified curriculum)
- 20 - Odborné učiliště – obory se zvláštní úpravou učebních plánů
(Vocational school – programmes with modified curriculum)
- 21 - Střední odborná škola, studium bez maturitní zkoušky
(Secondary technical, courses school without matura exam)
- 22 - Střední odborné učiliště, studium bez maturitní zkoušky
(Secondary vocational school, courses without matura exam)
- 23 - 8leté gymnázium
(Gymnasium – 8 years)
- 24 - 6leté gymnázium
(Gymnasium – 6 years)
- 25 - 4leté gymnázium, lyceum
(Gymnasium, lyceum – 4 years)
- 26 - Střední odborná škola, studium s maturitní zkouškou
(Secondary technical school, courses with matura exam)
- 27 - Střední odborné učiliště, studium s maturitní zkouškou
(Secondary vocational school, courses with matura exam)
- 28 - Studium jednotlivých předmětů
(Study of selected subjects)
- 29 - Nástavbové studium na SOŠ
(Follow-up courses)
- 30 - Nástavbové studium na SOU
(Follow-up courses)
- 31 - Jazyková škola (pomaturitní studium)
(Language schools with certificate of Ministry of education (post-secondary courses))
- 32 - Rekvalifikační kurzy na SOŠ a SOU
(Courses for retraining vocational type)
- 33 - Rekvalifikační kurzy na SOU s výučním listem
(Courses for retraining, vocational type with certificate on apprenticeship)
- 34 - Konzervatoř, 8leté studium
(Conservatoire, 8 years)
- 35 - Konzervatoř, 6leté studium
(Conservatoire, 6 years)
- 36 - Vyšší odborná škola
(Higher technical school)
- 37 - Vyšší odborná škola
(Higher technical school)
- 38 - Bakalářské univerzitní studium
(Bachelor university study)
- 39 - Učitelství pro 1. stupeň základní školy
(teacher training for primary)
- 40 - Magisterské studium
(Master university study)
- 41 - Magisterské navazující studium
(Master university study)
- 42 - Magisterské studium
(Master university study)
- 43 - Další vzdělávání na vysoké škole: získání pedagogické kvalifikace
(Universities: pedagogical education - second qualification)
- 44 - Další vzdělávání na vysoké škole: rozšíření pedagogické kvalifikace
(Universities: extension of pedagogical education - 2nd or 3rd qualification)
- 45 - Další vzdělávání na vysoké škole: jiné formy studia (nepedagogické)
(Universities: non pedagogical education - second qualification)
- 46 - Další vzdělávání na vysoké škole: pro absolventy SŠ
(Universities: the second qualification for graduates of upper secondary schools)
- 47 - Další vzdělávání na vysoké škole: pro bakaláře a absolventy VOS
(Universities: the second qualification for bachelors and graduates of higher technical schools)
- 48 - Další vzdělávání na vysoké škole: pro absolventy magisterských studijních programů
(Universities: the second qualification for masters)
- 49 - Státní rigorózní zkouška
(State rigorous exam)
- 50 - Doktorské studium
(Doctoral university study)

- 01 - Børnehave
(kindergarten)
- 02 - Børnehaveklasse
(pre-school class in primary school)
- 03 - Grundskolen 1.-6. klasse
(primary level 1st-6th grade)
- 04 - Grundskolen 7.-10. Klasse
(lower secondary level 7th-10th grade)
- 05 - Almen voksenuddannelse (AVU)
(general adult education 9th-10th grade)
- 06 - EUD-enkeltfag
(upper secondary, open vocational education)
- 07 - Social- og sundhedsuddannelserne (SOSU)
(social and health service assistant)
- 08 - Landbrugs-, gartner- og skovbrugsuddannelser
(agriculture, horticulture, forestry)
- 09 - Erhvervsfaglige uddannelser (carpenter, blacksmith, electrician)
(carpenter, blacksmith, electrician upper secondary, vocational education)
- 10 - Arbejdsmarkedssuddannelserne (AMU)
(adult vocational training)
- 11 - Håndarbejds- og husholdningsskoler
(home economics and needlework)
- 12 - Folke- og ungdoms Højskoler
(folk-and youth high-school)
- 13 - HF-enkeltfag, studentereksamensfag
(higher preparatory examination, single subject education)
- 14 - Højere teknisk eksamen (HTX), Højere handelseksamen (HHX)
(upper sec. higher technical ex. higher commercial ex.)
- 15 - Højere Forberedelseseksamen (HF)
(HF higher preparatory examination)
- 16 - Gymnasium
(upper secondary school leaving examination)
- 17 - Fri ungdomsuddannelse
(individual organised youth education)
- 18 - Korte videregående uddannelser af mindre end 2 års varighed, herunder teknikere
(technician <2 years)
- 19 - TIF- kurser (værkstedskurser)
(practical admittance courses for programmes at 5B)
- 20 - Adgangskursus til ingeniøruddannelserne Gymnasiale suppleringskurser
(admittance courses for programmes at 5A and 5B)
- 21 - Tertiary ed. Open education
(Tertiary ed. Open education post-secondary, open education)
- 22 - Korte videregående uddannelser af mere end 2 års varighed, herunder teknikere
(tertiary ed. short cycle, including technician >2 years)
- 23 - Mellemlange videregående uddannelser
(tertiary ed., medium cycle)
- 24 - Bachelor
(Bachelor)
- 25 - Lange videregående uddannelser (kandidatuddannelser)
(tertiary ed., long cycle)
- 26 - Lange videregående uddannelser
(tertiary ed., long cycle museum conservator, ex. from academi of music)
- 27 - Doktorgrad
(doctoral programmes)
- 28 - Doktorgrad
(Doctorate)

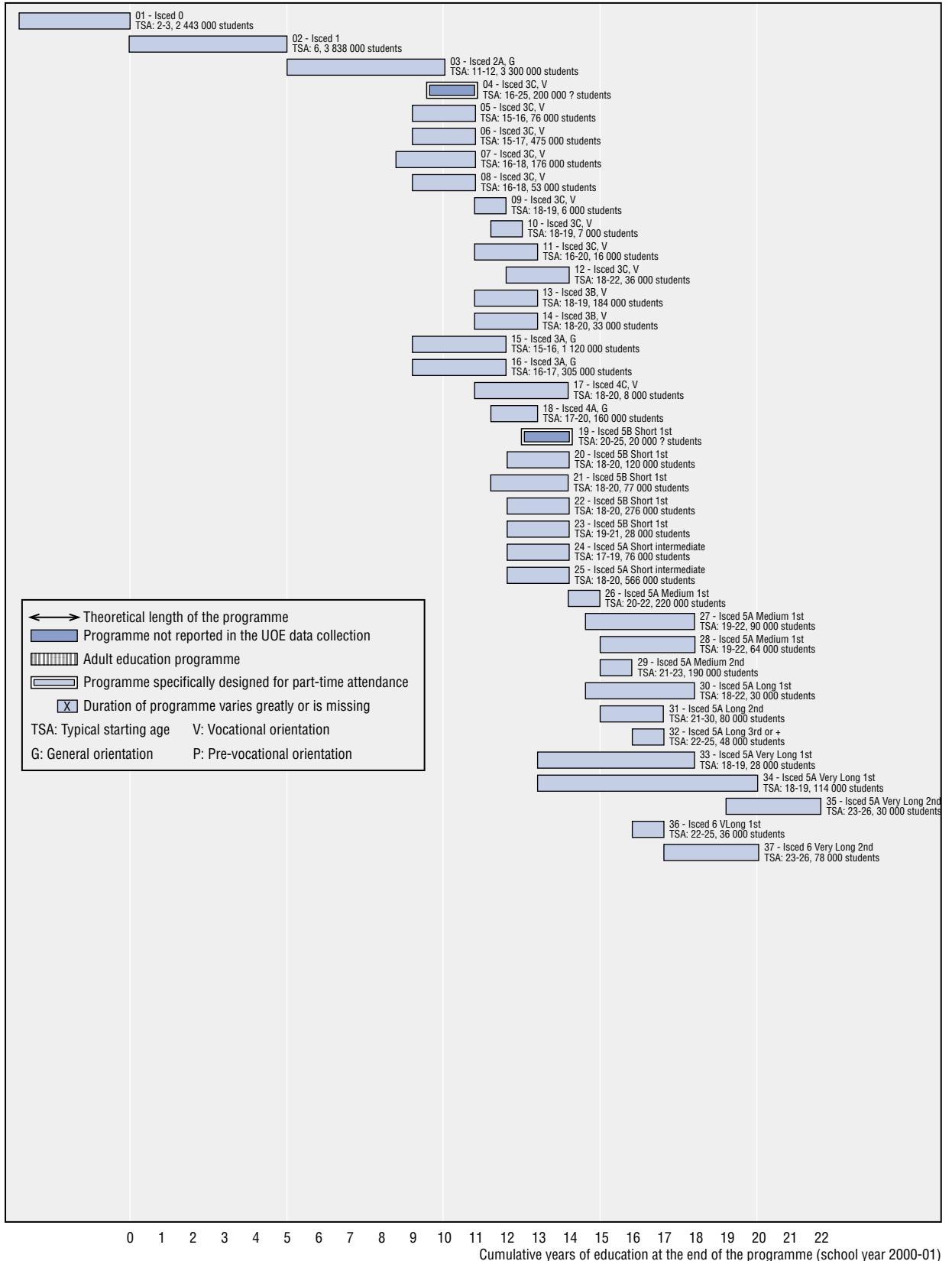
Finland



←→ Theoretical length of the programme
 [Solid Blue] Programme not reported in the UOE data collection
 [Hatched] Adult education programme
 [Double Line] Programme specifically designed for part-time attendance
 [X] Duration of programme varies greatly or is missing
 TSA: Typical starting age V: Vocational orientation
 G: General orientation P: Pre-vocational orientation

- 01 - 3-5-v. lapset päiväkodeissa
(Kindergartens (3 to 5-year-old children), including special education)
- 02 - 6-v. lasten esiopetus
(Pre-primary education for 6-year-old children in kindergartens and comprehensive schools, including special education)
- 03 - Peruskoulun luokat 1-6
(Comprehensive school grades 1-6, including special education)
- 04 - Peruskoulun luokat 7-9 (10)
(Comprehensive school grades 7-9 (10), including special education)
- 05 - Peruskoulun koko oppimäärän suorittamiseen tähtäävä koulutus aikuisopiskelijoille
(Comprehensive school programmes for adults (leading to a leaving certificate from comprehensive school))
- 06 - Ammatillinen perustutkinto
(Upper secondary vocational programmes (including apprenticeship programmes, programmes preparing for skills examinations and special education))
- 07 - Ammattitutkinto
(Upper secondary vocational programmes preparing for further vocational qualifications (including apprenticeship programmes))
- 08 - Lukio, ylioppilastutkinto
(Upper secondary general programmes)
- 09 - Lukion koko oppimäärän suorittamiseen tähtäävä koulutus aikuisopiskelijoille
(Upper secondary general programmes for adults (leading to a matriculation examination))
- 10 - Erikoisammattitutkinto
(Vocational programmes preparing for specialist vocational qualifications (including apprenticeship programmes))
- 11 - Ammatillinen opistoasteen tutkinto
(Vocational college programmes)
- 12 - Alemmat korkeakoulututkinnot, kandidaatin tutkinnot
(Lower university programmes)
- 13 - Ammattikorkeakoulu (AMK)
(Polytechnic programmes)
- 14 - Ylemmät korkeakoulututkinnot, maisterin tutkinnot
(Higher university programmes)
- 15 - Erikoislääkärit, erikoishammaslääkärit, erikoiseläinlääkärit
(Specialists in medicine, dentistry, veterinary)
- 16 - Lisensiaatti
(Doctorate programmes: licentiate)
- 17 - Tohtori
(Doctorate programmes: doctor)

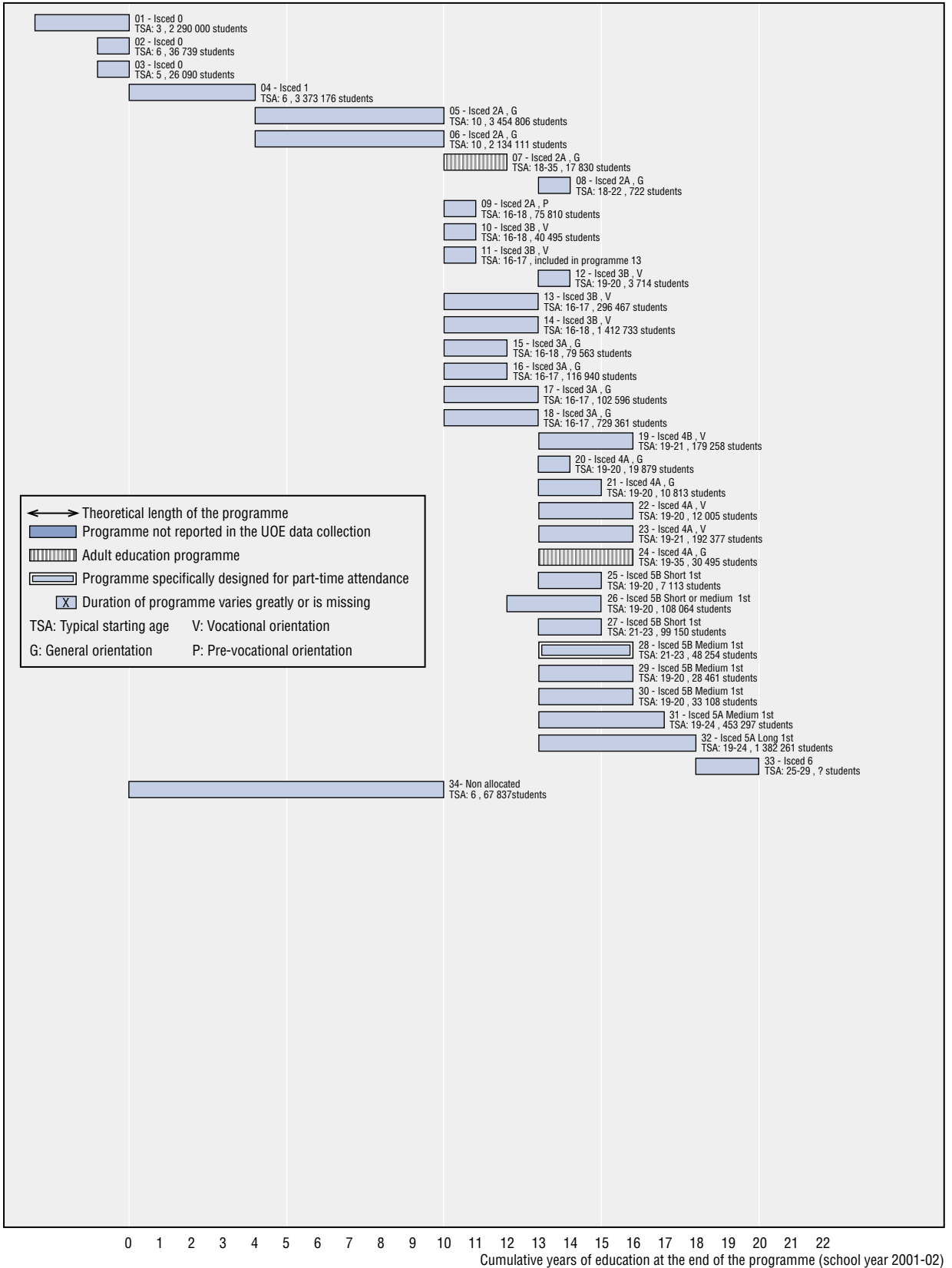
France



←→ Theoretical length of the programme
 [Solid bar] Programme not reported in the UOE data collection
 [Hatched bar] Adult education programme
 [Double-lined bar] Programme specifically designed for part-time attendance
 [X] Duration of programme varies greatly or is missing
 TSA: Typical starting age V: Vocational orientation
 G: General orientation P: Pre-vocational orientation

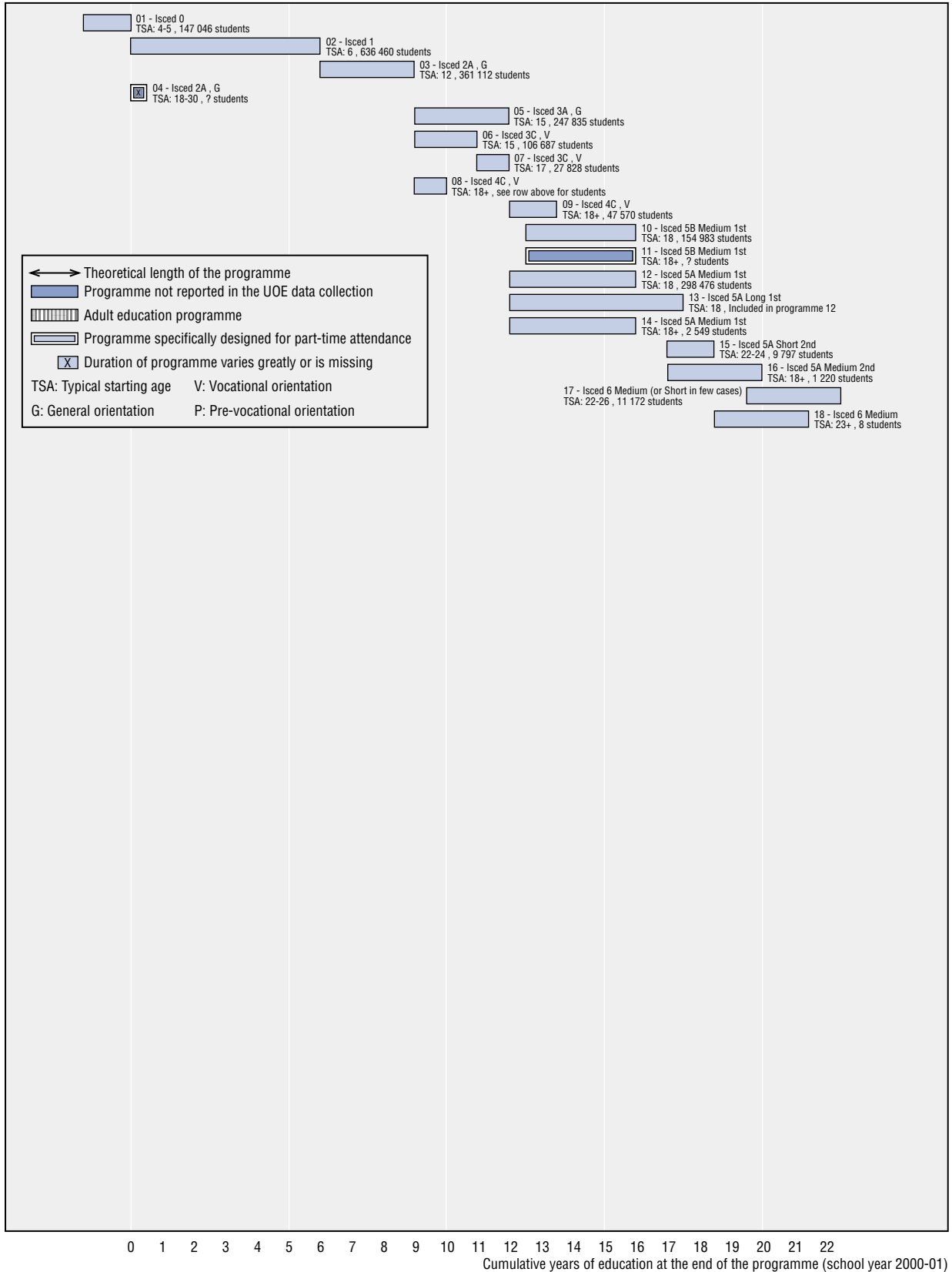
- 01 - Enseignement préélémentaire
(Pre-school education)
- 02 - Enseignement primaire
(Primary education)
- 03 - Enseignement du premier cycle du second degré – Collège
(Secondary education (1st cycle))
- 04 - Enseignement dans le cadre de contrat de qualification (niveau enseignement secondaire)
(Vocational training for young people without qualification (secondary level education))
- 05 - Enseignement de second cycle professionnel du second degré (sous statut scolaire)
(Secondary education (2nd cycle), vocational training (under school statute))
- 06 - Enseignement de second cycle professionnel du second degré (sous statut scolaire)
(Secondary education (2nd cycle), vocational training (under school statute))
- 07 - Enseignement de second cycle professionnel du second degré (en apprentissage)
(Secondary education (2nd cycle), vocational training, (programs combining school and labour market))
- 08 - Enseignement de second cycle professionnel du second degré (en apprentissage)
(Secondary education (2nd cycle), vocational training, (programs combining school and labour market))
- 09 - Enseignement de second cycle professionnel du second degré (sous statut scolaire)
(Secondary education (2nd cycle), vocational training, second level (under school statute))
- 10 - Enseignement de second cycle professionnel du second degré (en apprentissage)
(Secondary education (2nd cycle), vocational training, second level (programs combining school and labour market))
- 11 - Enseignement des écoles sanitaires et sociales (specific schools)
(Schools of health and social (specific schools))
- 12 - Enseignement de second cycle professionnel du second degré (en apprentissage)
(Secondary education (2nd cycle), vocational training, second level (programs combining school and labour market))
- 13 - Enseignement de second cycle professionnel du second degré (sous statut scolaire)
(Secondary education (2nd cycle), vocational training, second level (under school statute))
- 14 - Enseignement de second cycle professionnel du second degré (en apprentissage)
(Secondary education (2nd cycle), vocational training, second level (programs combining school and labour market))
- 15 - Enseignement de second cycle général du second degré
(Secondary education (2nd cycle), general)
- 16 - Enseignement de second cycle technologique du second degré
(Secondary education (2nd cycle), technology)
- 17 - Enseignement des écoles sanitaires et sociales
(Schools of health and social (specific schools))
- 18 - Enseignement pré-universitaire
(Pre-university education)
- 19 - Enseignement dans le cadre de contrat de qualification (niveau enseignement supérieur)
(Vocational training for young people without qualification (level higher education))
- 20 - Enseignement en institut universitaire de technologie (IUT)
(Specific vocational training (university))
- 21 - Enseignement d'écoles supérieures spécialisées (enseignement court, conduisant au niveau bac +2 ou bac +3)
(Courses in specialized higher schools (short teaching, leading to the level bac+2 or bac+3) (specific schools))
- 22 - Enseignement des classes des sections de techniciens supérieurs (sous statut scolaire)
(Courses in the classes of the sections of high-level technicians (under school statute))
- 23 - Enseignement des classes des sections de techniciens supérieurs (en apprentissage)
(Courses in the classes of the sections of high-level technicians (programs combining school and labour market))
- 24 - Enseignement des classes préparatoires aux grandes écoles (CPGE)
(Courses in the preparatory classes at "grandes écoles" (specific general training))
- 25 - Enseignement de premier cycle des études universitaires
(University education, 1st cycle)
- 26 - Enseignement de deuxième cycle des études universitaires
(University education, 2nd cycle, 1st year)
- 27 - Enseignement des écoles d'ingénieur
(Higher engineering school)
- 28 - Enseignement des écoles de commerce
(Higher business school)
- 29 - Enseignement de deuxième cycle des études universitaires
(University education, 2nd cycle, 2nd year)
- 30 - Diverses formations: architecture, études vétérinaires, art, etc.. Ecoles supérieures spécialisées (conduisant au niveau bac +4 ou bac+5)
(Various training: architect, veterinary surgeon, art, etc. Specialized higher schools (leading to the level bac+4 or bac+5))
- 31 - Enseignement en institut universitaire de formation des maîtres (IUFM)
(Teaching in university institute of training of Masters (university department))
- 32 - Enseignement de troisième cycle des études universitaires
(University education, 3rd cycle)
- 33 - Enseignement dans les universités qui comporte la spécialité de formation pharmacie
(Teaching in universities with a pharmacy speciality)
- 34 - Enseignement dans les universités qui comporte la spécialité de formation médecine et odontologie
(Teaching in universities with medicine and odontology specialities)
- 35 - Enseignement de spécialisation des métiers de la santé
(Teaching of health specialization)
- 36 - Enseignement de troisième cycle des études universitaires
(University education, 3rd cycle, doctorate)
- 37 - Enseignement de troisième cycle des études universitaires
(University education, 3rd cycle, 1st year)

Germany



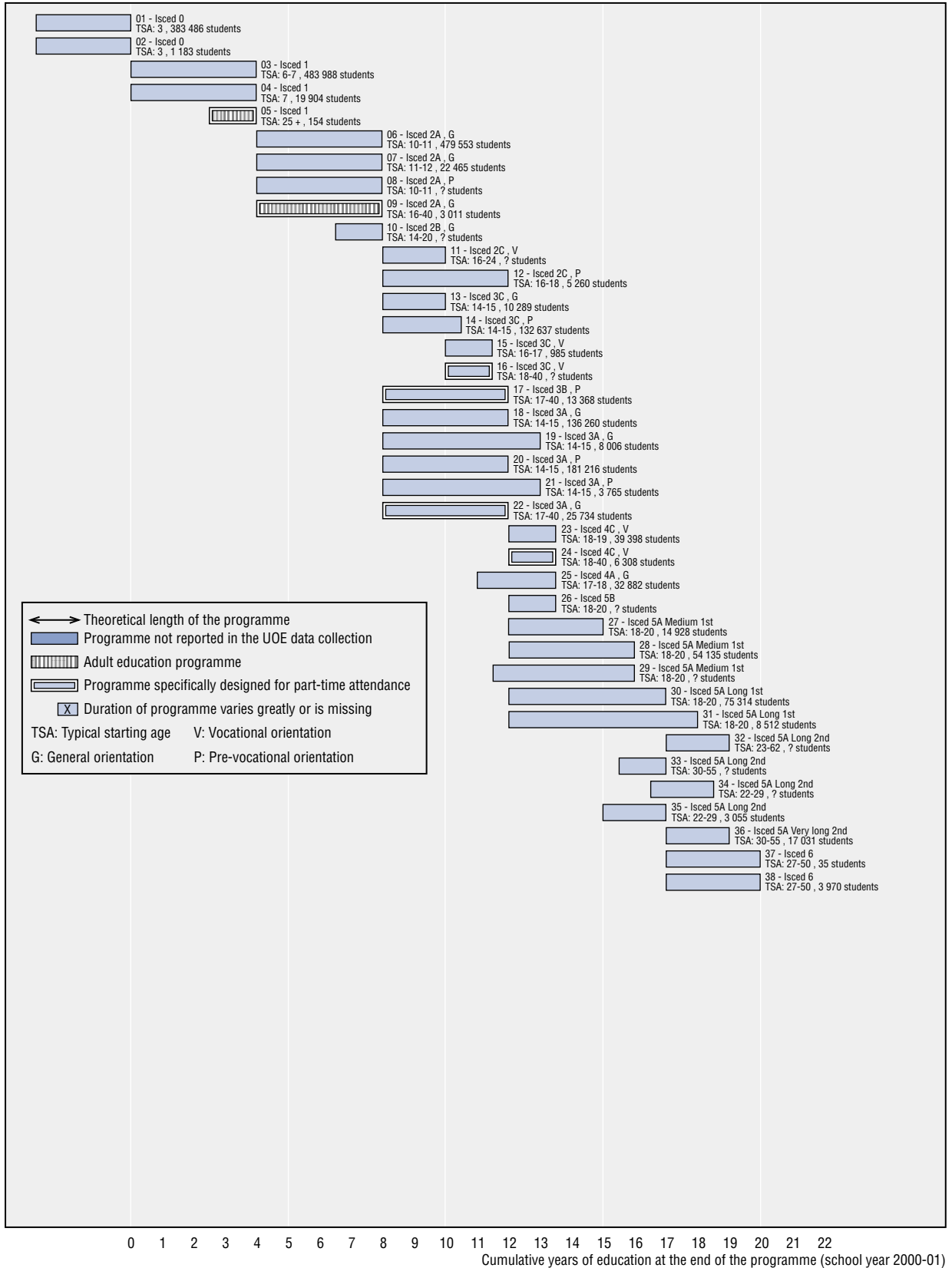
- 01 - Kindergärten
(Kindergarten)
- 02 - Schulkindergärten
(School kindergarten)
- 03 - Vorklassen
(Pre-school classes)
- 04 - Primarbereich
(Primary schools)
- 05 - Sekundarbereich I, ohne Qualifikation für weiterführende allgemeinbildende Bildungsgänge
(Lower secondary schools, no access to general)
- 06 - Sekundarbereich I, mit Qualifikation für weiterführende allgemeinbildende Bildungsgänge
(Lower secondary schools, access to general)
- 07 - Sekundarbereich I, Abendschulen
(Lower secondary schools evening schools)
- 08 - Berufsaufbauschulen
(Vocational extension schools)
- 09 - Berufsvorbereitungsjahr
(Pre-vocational training year)
- 10 - Berufsgrundbildungsjahr
(Basic vocational training year)
- 11 - Berufsfachschulen, die berufliche Grundkenntnisse vermitteln
(Specialised vocational schools: basic vocational knowledge)
- 12 - Schulen des Gesundheitswesens, 1jährig
(Health sector schools, 1 year)
- 13 - Berufsfachschulen, die einen Berufsabschluss vermitteln
(Specialised vocational schools: occupational qualification)
- 14 - Berufsschulen (Duales System) Erstausbildung
(Dual System)
- 15 - Fachoberschulen, 2jährig
(Specialised vocational high schools, 2 years)
- 16 - Berufsfachschulen, die eine Studienberechtigung vermitteln
(Specialised vocational schools: qualification for ISCED 5A)
- 17 - Fachgymnasien
(Fachgymnasien)
- 18 - Allgemeinbildende Programme im Sekundarbereich II
(Upper secondary schools (general))
- 19 - Berufsschulen (Duales System) (Zweitausbildung, beruflich)
(Dual System (second cycle))
- 20 - Fachoberschulen, 1jährig
(Specialised vocational high schools, 1 year)
- 21 - Berufsoberschulen/Technische Oberschulen
(Berufsoberschulen/Technische Oberschulen)
- 22 - Berufsfachschulen, die einen Berufsabschluss vermitteln (Zweitausbildung kombiniert mit Studienberechtigung)
(Specialised vocational schools: occupational qualification (second cycle) combined with qualification for ISCED 5A)
- 23 - Berufsschulen (Duales System) (Zweitausbildung kombiniert mit Studienberechtigung)
(Dual System (second cycle) combined with qualification for ISCED 5A)
- 24 - Sekundarbereich II, Abendschulen
(Upper secondary evening schools)
- 25 - Fachakademien (Bayern)
(Specialised academies (Bavaria))
- 26 - Schulen des Gesundheitswesens, 2+3jährig
(Health sector schools, 2+3 years)
- 27 - Fachschulen, 2jährig
(Trade and technical schools, 2 years)
- 28 - Fachschulen, 3+4jährig
(Trade and technical schools, 3+4 years)
- 29 - Berufsakademien
(Vocational academies)
- 30 - Verwaltungsfachhochschulen
(Colleges of public administration)
- 31 - Fachhochschulen
(Fachhochschulen)
- 32 - Universitäten
(University studies)
- 33 - Promotionsstudium
(Doctoral studies)
- 34 - Students in special education (mostly mentally disadvantaged students) who cannot be allocated to a particular ISCED level.

Greece



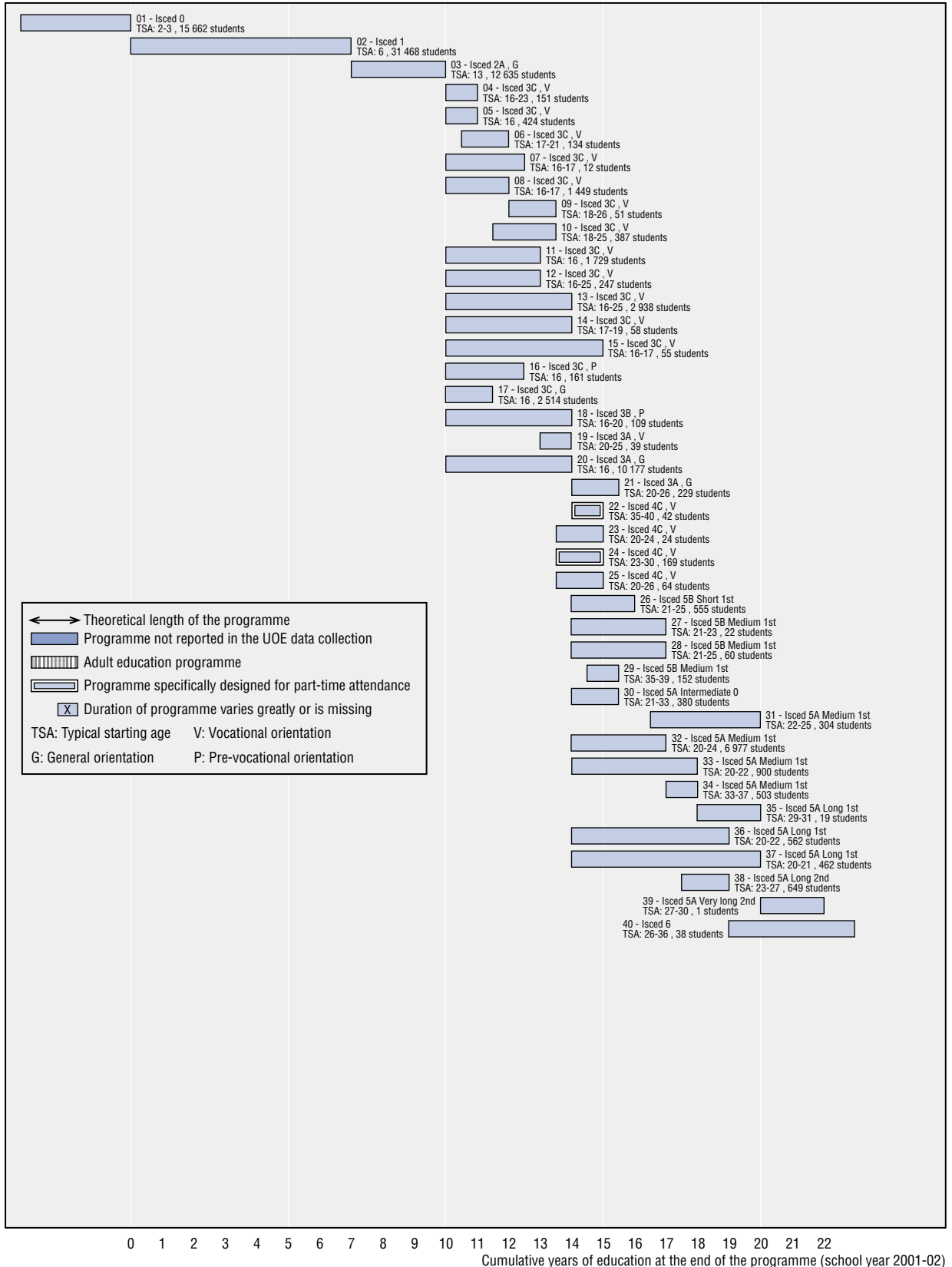
- 01 - Nipiagogeio
(Kindergarten (Pre-primary))
- 02 - Dimotiko Scholeio
(Elementary school (Primary))
- 03 - Gymnasio
(Gymnasium (Lower secondary education))
- 04 - Scholeio Defteris Efkaïrias
(Second Chance School (Lower secondary education))
- 05 - Eniaio Lykeio
(Unified Lyceum (Upper secondary education))
- 06 - Techniko Epangelmatiko Ekpaideftirio (TEE)
(Technical Vocational Institut (Upper secondary education))
- 07 - Techniko Epangelmatiko Ekpaideftirio (TEE)
(Technical Vocational Institute (Upper secondary education))
- 08 - Institutouto Epangelmatikis Katartisis (IEK)
(Institute of vocational training (post secondary education))
- 09 - Institutouto Epangelmatikis Katartisis (IEK)
(Institute of vocational training (post secondary education))
- 10 - Technologiko Ekpaideftiko Idryma (TEI)
(Technological Education Institution (Technological sector))
- 11 - Programmata Spoudon Epilogis
(Extended university programmes)
- 12 - Panepistimio
(University (University Sector))
- 13 - a. Panepistimio b. Polytechneio
(a. University b. Polytechnic School -(Technical University) (both a and b belong to universal sector))
- 14 - Elliniko Anoikto Panepistimio (EAP)
(Greek Open University (University sector))
- 15 - a. Panepistimio b. Polytechneio
(Universal sector (post-graduate studies, Master))
- 16 - Elliniko Anoikto Panepistimio (EAP)
(Greek Open University (University sector))
- 17 - a. Panepistimio b. Polytechneio
(Universal sector (post-graduate studies, Doctorate programme))
- 18 - Elliniko Anoikto Panepistimio (EAP)
(Greek Open University (post-graduate studies, Doctorate programme))

Hungary



- 01 - Óvoda (kindergarten, of which one-year compulsory pre-school education)
- 02 - Gyógypedagógiai óvoda (kindergarten, special education)
- 03 - Általános iskola 1-4 (general school primary level, 1-4 Grades)
- 04 - Gyógypedagógiai általános iskola elokészítő és 1-4 évfolyam (general school primary level, Grades preparatory and 1-4, special education)
- 05 - Dolgozók általános iskolája - évfolyam (adult literacy courses)
- 06 - Általános iskola 5-8, 6 és 8 évfolyamos gimnázium 7-8, ill. 5-8 (general school upper level, Grades 5-8 and Grades 5-8 or 7-8 of the eight-year and six-year general secondary programmes, respectively)
- 07 - Gyógypedagógiai általános iskola 5-8 (general school upper level, special education, 5-8)
- 08 - Művészeti általános iskola (basic – lower secondary – education with art/music pre-vocational programmes)
- 09 - Felnttek általános iskolája 5-8 évfolyam (esti, levelezo, távoktatás) (general school upper level part-time, 5-8)
- 10 - Felzárkóztató általános iskolai programok (second chance programmes for late maturers preparing for next level of education)
- 11 - Szakiskola alapfokú iskolai végzettség nélküli szakmákra (vocational programmes requiring less than 10 years of completed general education)
- 12 - Speciális gyógypedagógiai szakiskola (értelmi fogyatékosok részére)(vocational education for special education children)
- 13 - Általános iskola, szakiskola általánosan képző - évfolyamai (basic education programme of the vocational school)
- 14 - Szakmunkásképző iskola . Törvény szerint (vocational school- according to the Education Act of)
- 15 - Szakiskolai szakképző évfolyamok és programok (vocational programmes preparing for NVQL examinations)
- 16 - Szakiskolai szakképző évfolyamok és programok (esti, levelezo képzés)(vocational programmes preparing for NVQL examinations, part-time)
- 17 - Felnttek szakközépiskolája - . évfolyam (upper vocational secondary part-time programmes, pre-matura course)
- 18 - Gimnázium - . évfolyam (grammar school)
- 19 - Kéttannyelvu gimnázium/szakközépiskola - . évfolyam (bilingual upper secondary school)
- 20 - Szakközépiskola nappali képzés - . évfolyam (secondary vocational school – pre-matura stage)
- 21 - Művészeti szakközépiskola - . évfolyam (upper secondary education with art/music pre-vocational programmes)
- 22 - Felnttek gimnáziuma - . évfolyam (upper secondary part-time programmes)
- 23 - Szakképző évfolyamok és programok érettségire épülő OKJ szakmákban (post-secondary vocational programmes)
- 24 - Szakképző évfolyamok és programok érettségire épülő OKJ szakmákban (esti-levellezo) (post-secondary vocational programmes, part-time)
- 25 - Szakmunkások érettségire felkészítő középiskolája (general secondary programme for vocational school graduates)
- 26 - Akkreditált iskolai rendszeru felsőfokú szakképzés (post-secondary vocational programmes accredited by the Hungarian Higher Education Accreditation Committee)
- 27 - és féléves foiskolai szintu elso alapképzések (college first programmes – 3 years)
- 28 - 8 féléves foiskolai szintu elso alapképzések (college graduate education – 4 years)
- 29 - 8 és 9 féléves egyetemi szintu elso alapképzés (university first programmes – 4 years)
- 30 - 10 féléves egyetemi szintu elso alapképzés (university first programmes – 5 years)
- 31 - 11 és 12 féléves egyetemi szintu elso alapképzés (university first programmes – 6 years)
- 32 - Szakképzés felsőfokú végzettséget igénylo OKJ szakmákra (vocational programmes with an entrance requirement of Level qualification)
- 33 - Foiskolai szakirányú továbbképzés (college post-graduate specialisation programmes)
- 34 - Kiegészítő egyetemi képzés foiskolát végzettek számára (mérnök, közgazdász, agrármérnök, nyelvtanár) (university supplementary programme)
- 35 - Muszaki tanárképzés muszaki foiskolát végzetetteknek (supplementary teacher training programme for engineers)
- 36 - Egyetemi szakirányú továbbképzés (university post-graduate specialisation programme)
- 37 - DLA (művészképzésben megfelel a Ph.D.-nek)(doctoral degree in liberal arts)
- 38 - Ph.D. (doctoral programme)

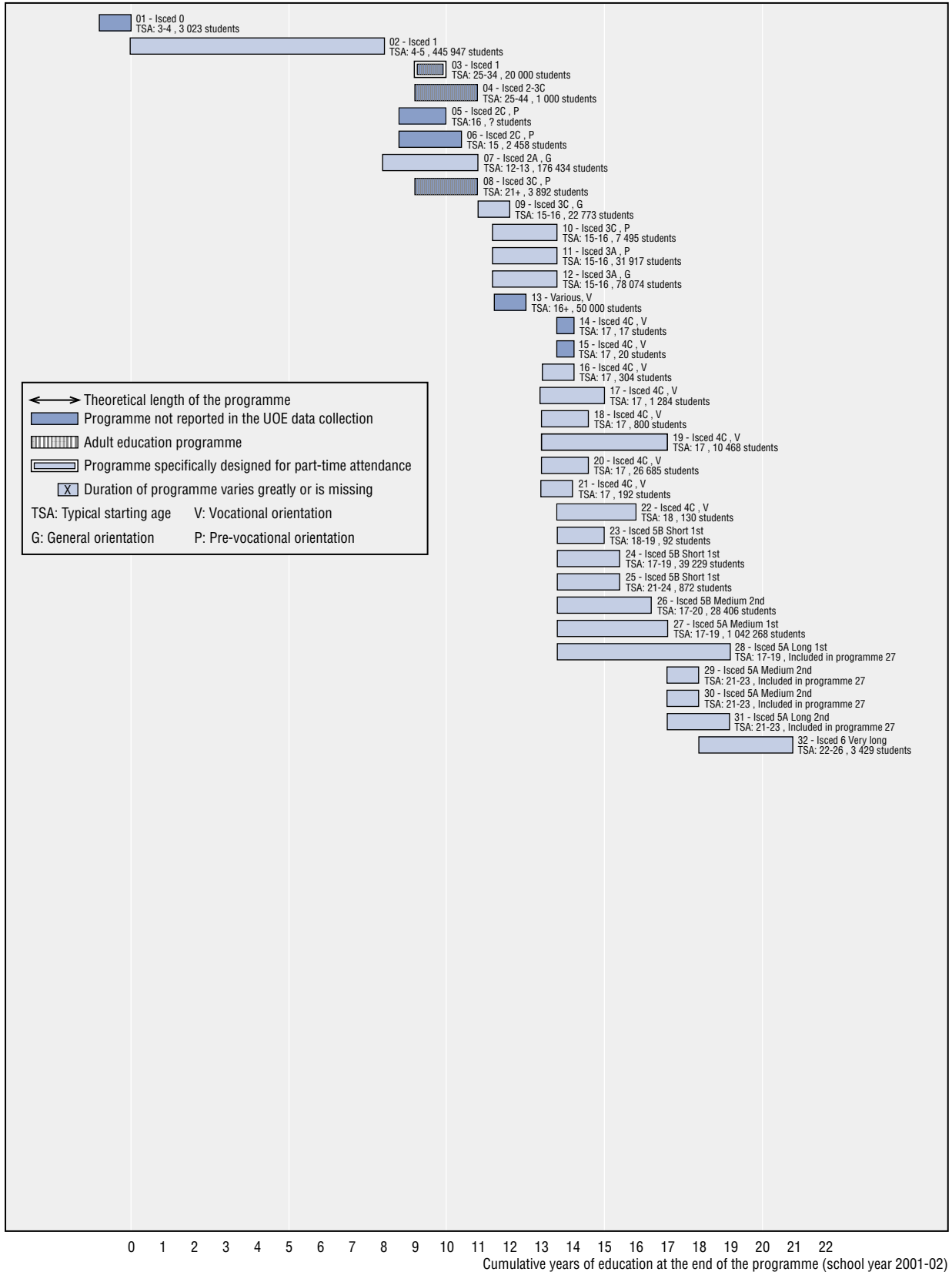
Iceland



←→ Theoretical length of the programme
 [Solid Blue] Programme not reported in the UOE data collection
 [Hatched] Adult education programme
 [Double-lined] Programme specifically designed for part-time attendance
 [X] Duration of programme varies greatly or is missing
 TSA: Typical starting age V: Vocational orientation
 G: General orientation P: Pre-vocational orientation

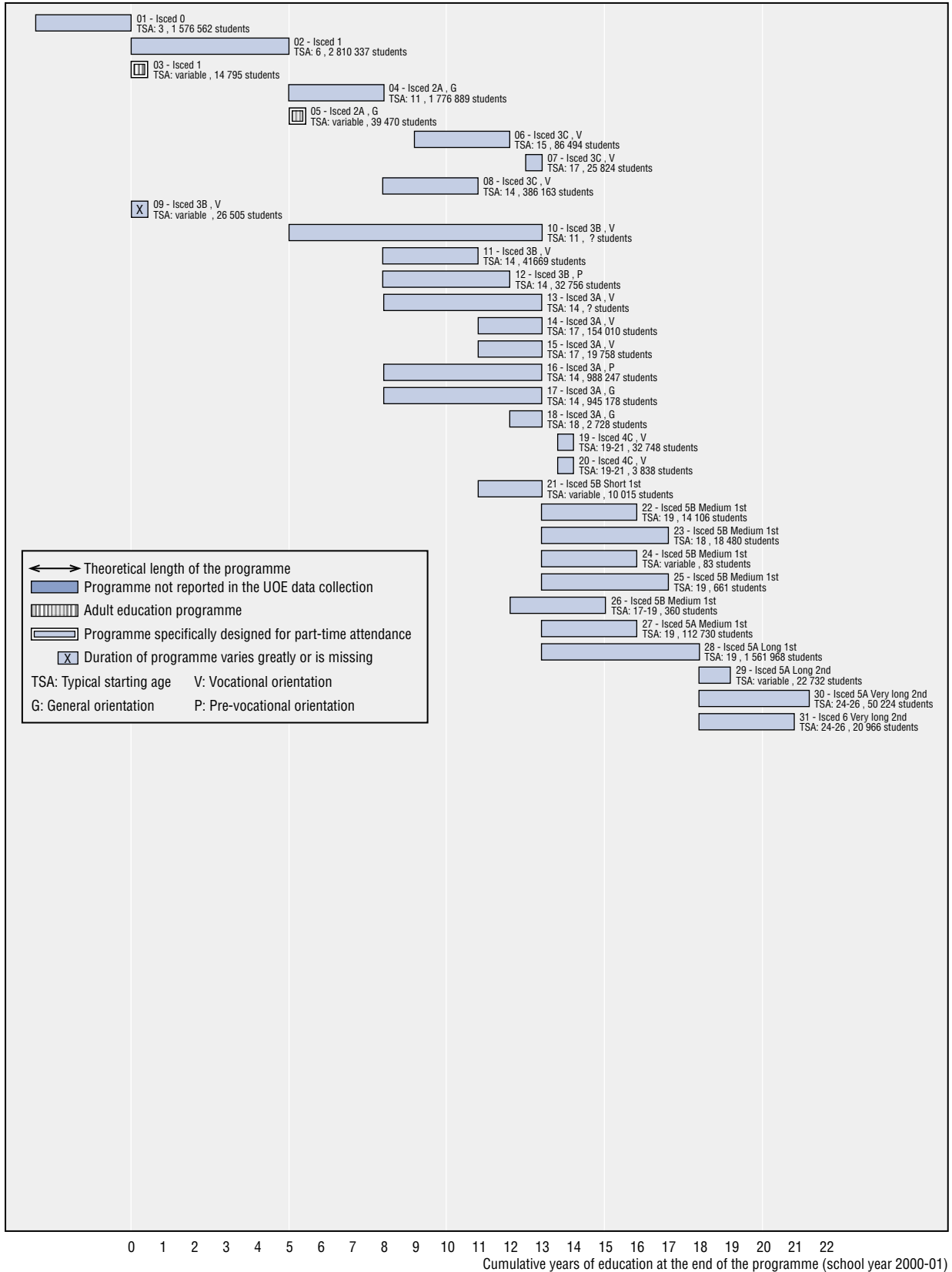
- 01 - Leikskóli
(Pre-primary schools)
- 02 - Grunnskóli I
(Primary schools (1st section compulsory education))
- 03 - Grunnskóli II
(Lower-secondary school (2nd section compulsory education))
- 04 - Skip- og vélstjórn 1. stigi
(Marine captain and engineering programmes, 1st grade)
- 05 - Eins árs verkunarskólinn
(1-year upper secondary level vocational programmes)
- 06 - Skip- og vélstjórn 2. stigi
(Marine captain and engineering programmes, 2nd grade)
- 07 - Lögjafingreini 2ja ára
(Certified indentured trades, 2 years contract time)
- 08 - Tveggja ára verkunarskólinn
(Upper secondary level vocational 2-year programmes)
- 09 - Skip- og vélstjórn 3. stigi
(Marine captain and engineering programmes, 3rd grade)
- 10 - Starfsnámið framhaldssklastigi með almennu forkrá
(Vocational programmes at upper secondary level with a general programme prerequisite)
- 11 - Þrjú ára verkunarskólinn
(Upper secondary level vocational 3-year programmes)
- 12 - Lögjafingreini 3ja ára
(Certified indentured trades, 3-year contract time)
- 13 - Lögjafingreini 4ra ára
(Certified indentured trades, 4-year contract time)
- 14 - Starfsnámið 4 ára framhaldssklastigi
(Vocational 4-year programmes at upper secondary level)
- 15 - Starfsnámið 5 ára framhaldssklastigi
(Vocational 5-year programmes at upper secondary level)
- 16 - Sérdeildir fatlaðir
(Special education programmes for the mentally handicapped)
- 17 - Almenn námsbraut framhaldssklastiga
(General programmes at the start of upper secondary level)
- 18 - Listnámið framhaldssklastigi
(Fine and applied arts at upper secondary level)
- 19 - Fornámi myndlistar framhaldssklastigi
(Preparatory programme for fine and applied arts)
- 20 - Bókunarskólinn til stúdentsprófs, 4 ára
(General programmes leading to matriculation examination at upper secondary level, 4 years)
- 21 - Stúdentsprófið loknu starfsnámi
(Matriculation examination at upper secondary level after completion of vocational programmes)
- 22 - Leiðsgunnámið
(Tourist guide programme)
- 23 - Skip- og vélstjórn 4. stigi
(Marine captain and engineering programmes at post-secondary level, 4th grade)
- 24 - Meistarannámið lögjafingreini
(Trade master's programmes at post-secondary level in a certified indentured trade)
- 25 - Starfsnámið, 1,5 ár framhaldssklastigi
(Vocational programmes at post-secondary level, 1.5 years)
- 26 - Námið 2 ára hálgráðu
(Tertiary programmes 2 years not leading to a university degree)
- 27 - Námið 3 ára hálgráðu
(Tertiary programmes 3 years not leading to a university degree)
- 28 - Listnámið tertiársklastigi, 3ja ára
(Fine and applied arts at tertiary level, 3 years)
- 29 - Námið til kennsluráttinda hálgráðu
(Teacher's qualification programme, no degree)
- 30 - Stuttar hagnámsbrautir hálgráðu
(Short practical programmes at the tertiary level)
- 31 - Háskólanámið tertiársklastigi til fyrstu gráðu
(Tertiary technical programmes, first university degree)
- 32 - Háskólanámið 3ja ára til fyrstu gráðu
(Tertiary programmes 3 years, first university degree)
- 33 - Háskólanámið 4ra ára til fyrstu gráðu
(Tertiary programmes 4 years, first university degree)
- 34 - Háskólanámið, 1 viðbæturárið 3 ára, ekki viðbæturárið
(Tertiary programmes, 1 year in addition to 3-year studies, not leading to a second degree)
- 35 - Háskólanámið, 2 viðbæturárið 4 ára, ekki viðbæturárið
(Tertiary programmes 2 years in addition to 4 years studies, not leading to a second degree)
- 36 - Háskólanámið 5 ára til fyrstu gráðu
(Tertiary programmes, 5 years, first university degree)
- 37 - Háskólanámið 6 ára til fyrstu gráðu
(Tertiary programmes, 6 years, first university degree)
- 38 - Háskólanámið, 1,5-2 viðbæturárið 3-4 ára, tekið viðbæturárið
(Tertiary programmes, 1.5-2 years in addition to 3-4 year studies, leading to a second degree)
- 39 - Háskólanámið, 2 viðbæturárið 5-6 ára, tekið viðbæturárið
(Tertiary programmes, 2 years in addition to 5-6-year studies, leading to a second degree)
- 40 - Doktorsnámið
(Doctoral programme, Ph.D.)

Ireland



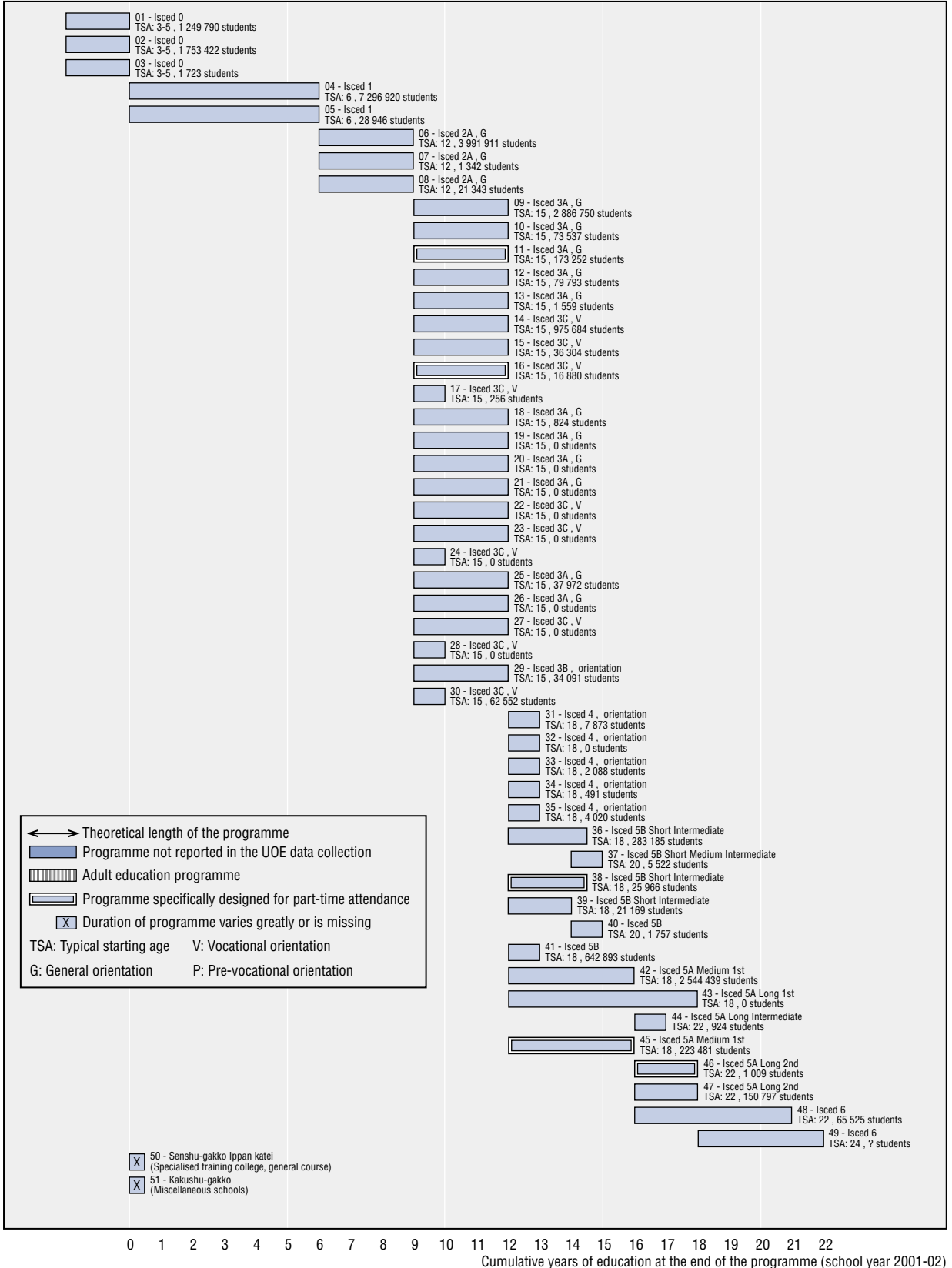
- 01 - Pre-primary education (early start + private)
- 02 - Primary education
- 03 - Adult Literacy Programme
- 04 - Senior Traveller Education Programme
- 05 - BIM Introduction to Aquaculture
- 06 - Youth Reach
- 07 - Junior Certificate (and JCSP)
- 08 - Core VTOS
- 09 - Transition year programme
- 10 - Leaving Certificate Applied
- 11 - Leaving Certificate Vocational Programme
- 12 - Leaving Certificate (established)
- 13 - FAS various
- 14 - BIM Aquaculture Level 2
- 15 - BIM Commercial Fishing Certificate and Seafood Products Cert.
- 16 - CERT Bar Service/ Reception/ Travel agency skills
- 17 - CERT Hospitality skills/ Professional Cookery/ Tourism skills
- 18 - Teagasc Vocational Certificate in Agriculture/ Horticulture/ Forestry/ Equestrian studies
- 19 - Apprenticeship (FAS)
- 20 - Vocational preparation and training II (PLC) Yr. 1 and 2
- 21 - Secretarial/Technical Training Programme
- 22 - Teagasc Advanced Certificate in Agriculture
- 23 - Cadetship (Army, Air Corps and Naval Service Training)
- 24 - Certificate (HETAC, IoT)
- 25 - National Diploma in Police Studies
- 26 - Diploma (HETAC, IoT)
- 27 - Primary Degree Level
- 28 - Primary Degree Level
- 29 - Post-graduate Diploma
- 30 - Master Degree (taught)
- 31 - Master Degree by Research
- 32 - Doctorate (Ph.D.)

Italy



- 01 - Scuola dell'infanzia
(Pre-primary education)
- 02 - Scuola elementare
(Primary school)
- 03 - Corsi di alfabetizzazione culturale 1° ciclo
(Adult literacy school (1st cycle))
- 04 - Scuola Media
(Lower secondary education)
- 05 - Corsi di alfabetizzazione culturale 2° ciclo
(Adult literacy school (2nd cycle))
- 06 - Formazione professionale regionale post-obbligo
(Regional vocational education)
- 07 - Raccordo formazione-istruzione
(Training-education joint)
- 08 - Istituto professionale (I ciclo)
(Vocational institute (1st cycle))
- 09 - Conservatorio musicale
(Music conservatory)
- 10 - Accademia di danza
(Dance studies)
- 11 - Istituto d'Arte (I ciclo)
(Art institute (1st cycle))
- 12 - Liceo artistico
(Art high school)
- 13 - Corsi sperimentali in Istituti professionali e Istituti d'arte
(Experimental vocational and art courses)
- 14 - Istituto professionale (II ciclo)
(Vocational institute (2nd cycle))
- 15 - Istituto d'Arte (II ciclo)
(Art Institute (2nd cycle))
- 16 - Istituto tecnico
(Technical institute)
- 17 - Liceo (classico, scientifico, linguistico), ex istituto magistrale ed, ex scuola magistrale
(Secondary general education)
- 18 - Liceo artistico (anno integrativo)
(Art high school (5th year))
- 19 - Formazione professionale post-diploma regionale
(Regional vocational education)
- 20 - Formazione tecnica superiore
(Higher technical studies)
- 21 - Conservatorio musicale
(Music conservatory)
- 22 - Istituto Superiore di Educazione Fisica
(Sport studies)
- 23 - Accademia di belle arti
(Fine-arts academy)
- 24 - Accademia di arte drammatica
(Dramatic art studies)
- 25 - Istituto Superiore Industrie Artistiche
(Higher artistic studies)
- 26 - Accademia di danza
(Dance studies)
- 27 - Corsi di Diploma universitario
(University education)
- 28 - Corsi di Laurea
(University education)
- 29 - Corsi di perfezionamento
(Post graduate courses)
- 30 - Specializzazione post-laurea
(Professional post graduate courses)
- 31 - Dottorati di ricerca
(Doctorate)

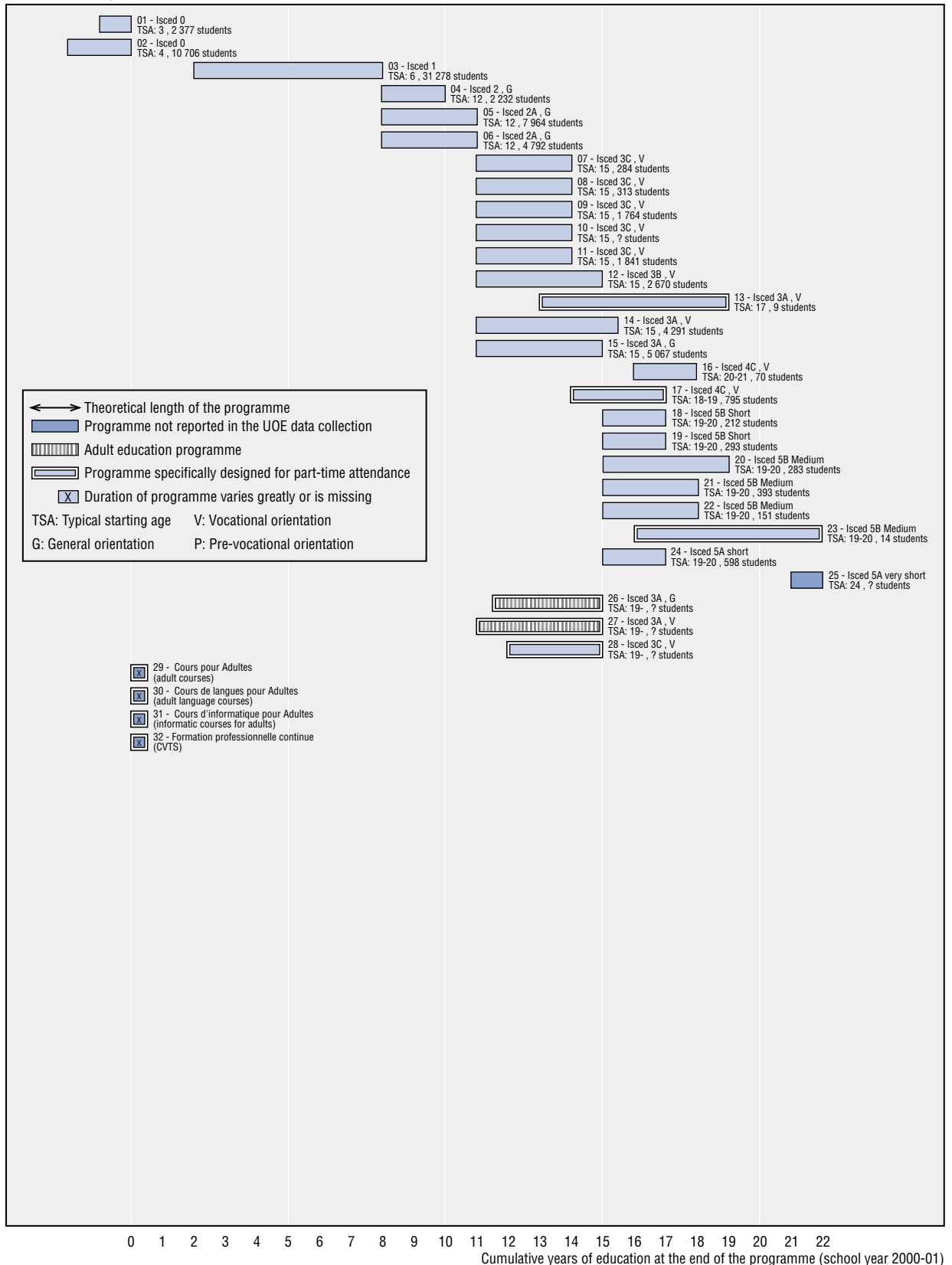
Japan



- 01 - Hoikusho
(Day nursery)
- 02 - Yochien
(Kindergarten)
- 03 - Tokushu-kyoiku-gakko Yochi-bu
(Special education school, kindergarten department)
- 04 - Shogakko
(Elementary school)
- 05 - Tokushu-kyoiku-gakko Shogaku-bu
(Special education school, elementary department)
- 06 - Chugakko
(Lower secondary school)
- 07 - Chuto-kyoiku-gakko (Zenki katei)
(Secondary education school(lower division))
- 08 - Tokushu-kyoiku-gakko Chugaku-bu
(Special education school, lower secondary department)
- 09 - Koto-gakko Zennichisei Honka Futu
(Upper secondary school, full day general course)
- 10 - Koto-gakko Teijisei Honka Futu
(Upper Secondary school, day/evening general course)
- 11 - Koto-gakko Tsushinsei Futu
(Upper Secondary school, correspondence general course)
- 12 - Koto-gakko Zennichisei Honka Futu
(Upper secondary school, full day integrated course (general))
- 13 - Koto-gakko Teijisei Honka Sogo
(Upper secondary school, day/evehning integrated course (general))
- 14 - Koto-gakko Zennichisei Honka Senmon
(Upper secondary school, full day specialized course)
- 15 - Koto-gakko Teijisei Honka Senmon
(Upper secondary school, day/evening specialized course)
- 16 - Koto-gakko Tsushinsei Senmon
(Upper secondary school, correpondence specialized course)
- 17 - Koto-gakko Zennichisei Teijisei Bekka(Futu Sogo Senmon)
(Upper secondary school, day/evening school,short-term course(general integrated specialized))
- 18 - Chuto-kyoiku-gakko (Koki katei) Zennichisei Honka Futu
(Secondary education school(upper division),full day general course)
- 19 - Chuto-kyoiku-gakko (Koki katei) Teijisei Honka Futu
(Secondary education school(upper division) , day/evening general course)
- 20 - Chuto-kyoiku-gakko (Koki katei) Zennichisei Honka Sogo
(Secondary education school(upper division),full day integrated course (general))
- 21 - Chuto-kyoiku-gakko(Koki katei) Teijisei Honka Sogo
(Secondary education school(upper division) , day/evening integrated course(general))
- 22 - Chuto-kyoiku-gakko (Koki katei)Zennichisei Honka Senmon
(Secondary education school(upper division),full day specialized course)
- 23 - Chuto-kyoiku-gakko (Koki katei)Teijisei Honka Senmon
(Secondary education school(Upper division) , day/evening specialized course)
- 24 - Chuto-kyoiku-gakko (Koki katei) Zennichisei Teijisei Bekka(Futu Sogo Senmon)
(secondary education school(Upper division) , full day/day/evening short-term course(general integrated specialized))
- 25 - Tokushu-kyoiku-gakko Koto-bu Honka Fusu
(Special education school, upper secondary department, general course)
- 26 - Tokushu-kyoiku-gakko Koto-bu Honka Sogo
(Special education school, upper secondary department, integrated course (general))
- 27 - Tokushu-kyoiku-gakko Koto-bu Honka Senmon
(Special education school, upper secondary department, Specialized course)
- 28 - Tokushu-kyoiku-gakko Koto-bu Bekka
(Special education school, upper secondary department short-term course)
- 29 - Koto-senmon-gakko Honka
(College of technology, regular course)
- 30 - Sensyu-gakko Koto katei
(Specialized training college, upper secondary course)
- 31 - Koto-gakko Zennichisei Teijisei Senkoka(Futu Sogo Senmon)
(Upper secondary school, full day/day/evening, advanced course(general integrated specialized))
- 32 - Chuto-kyoiku-gakko (Koki katei) Zennichisei Teijisei Senkoka(Futu Sogo Senmon)
(Secondary education school(Upper division) , full day/day/evening, advanced course(general integrated specialized))
- 33 - Tokushu-kyoiku-gakko Koto-bu Senkoka(Futu Sogo Senmon)
(Special education school, upper secondary department, advanced course(general integrated specialized))
- 34 - Tanki-daigaku Bekka
(Junior college, short-term course)
- 35 - Daigaku Gakubu Bekka
(University, short-term course)
- 36 - Tanki-daigaku Honka
(Junior college, regular course)
- 37 - Tanki-daigaku Senkoka
(Junior college, advanced course)
- 38 - Tanki-daigaku Tushinsei
(Junior college, correspondence course)
- 39 - Koto-senmon-gakko Honka
(College of technology, regular course)
- 40 - Koto-senmon-gakko Senkoka
(College of technology, advanced course)
- 41 - Sensyu-gakko Senmonkatei
(Specialised training college, post-secondary course)
- 42 - Daigaku Gakubu
(University, undergraduate)
- 43 - Daigaku Ishigaku Juigaku
(University, undergraduate of medicine, dentistry and veterinary medicine)
- 44 - Daigaku Senkoka
(University, advanced course)
- 45 - Daigaku Tsushinsei katei
(University, undergraduate, correspondence course)
- 46 - Daigakuin Shushi katei Tsushinsei katei
(University, graduate school, Master's course correspondence course)
- 47 - Daigakuin Shushi katei
(University, graduate school, Master's course)
- 48 - Daigakuin Hakushi katei
(University, graduate school, Doctor's course)
- 49 - Daigakuin Hakushi katei Ishigaku Juigaku
(University, graduate school, Doctor's course of medicine, dentistry and veterinary medicine)
- 50 - Senshu-gakko Ippan katei
(Specialised training college, general course)
- 51 - Kakushu-gakko
(Miscellaneous schools)

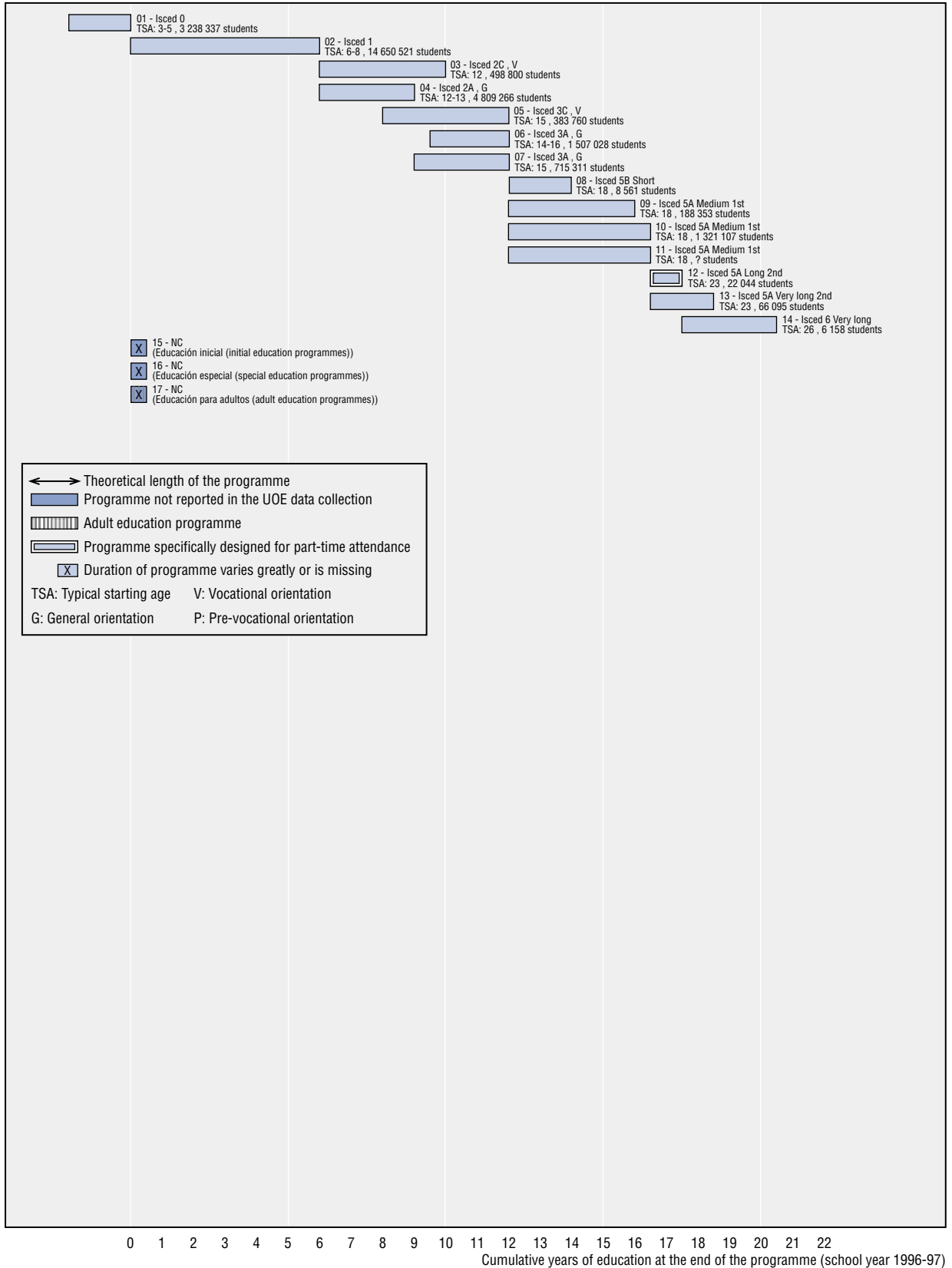
- 01 - (Yuchiwon (kindergarten))
- 02 - (Teuksu-hakgyo(ynchiwon kwajong) (special school, kindergarten course))
- 03 - (Kongmin-hakgyo (civic school))
- 04 - (Chodeung-hakgyo (primary school))
- 05 - (Teuksu-hakgyo(chodeung-hakgyo kwajong) (special school, primary school course))
- 06 - (Kakjong-hakgyo(jung-hakgyo kwajong) (miscellaneous school, middle school course))
- 07 - (Kodeung kongmin hakgyo (civic high school))
- 08 - (Jung-hakgyo (middle school))
- 09 - (Sanupche-busol junghakgyo (middle school attached to industrial firms))
- 10 - (Teukbul hakgeop(junghakgyo) (special evening classes for working youths, middle school))
- 11 - (Teuksu-hakgyo (jung-hakgyo kwajong) (special school, middle school course))
- 12 - (Kodeung kisul-hakgyo (trade high school))
- 13 - (Silupgye kodeung-hakgyo (vocational high school))
- 14 - (Teukbul hakgeop (silupgye kogyo) (special evening classes for working youths, vocational high school))
- 15 - (Sawhaigyoyuksiseol hakgyo (accredited non-formal education facilities schools))
- 16 - (Kakjong-hakgyo(kodeung-hakgyo kwajong) (miscellaneous school, high school course))
- 17 - (Ilbanye kodeung-hakgyo (general high school))
- 18 - (Sanupche-busol kodeung-hakgyo (high school attached to industrial firms))
- 19 - (Bangsongtongsin kodeung-hakgyo (air and correspondence high school))
- 20 - (Teukbul hakgeop(ilbanye kogyo) (special evening classes for working youths, general high school))
- 21 - (Teuksu-hakgyo(kodeung-hakgyo kwajong) (special school, high school course))
- 22 - (Jeonmun daehak (junior college))
- 23 - (Kinung daehak (polytechnic college))
- 24 - (Kakjong-hakgyo (jeonmun daehak kwajong) (miscellaneous school, junior college course))
- 25 - (Kisul daehak (technical college))
- 26 - (Yukkun samsakwan hakgyo (third military academy))
- 27 - (Semu daehak (national college of taxation))
- 28 - (Kakjong-hakgyo (daehak kwajong) (miscellaneous school, undergraduate course))
- 29 - (Sanup daehak (gaebang daehak) (open university, polytechnic university))
- 30 - (Yukkun sakwan hakgyo (military academy))
- 31 - (Geongchal daehak (national college of police))
- 32 - (Gyoyuk daehak (university of education))
- 33 - (Kukkunganho sakwan hakgyo (nursing academy))
- 34 - (Haekun sakwan hakgyo (naval academy))
- 35 - (Kongkun sakwan hakgyo (air force academy))
- 36 - (Kukbang daehakwon (school of national securities))
- 37 - (Teuksu daehakwon (graduate school, special))
- 38 - (Jeonmun daehakwon (graduate school, professional))
- 39 - (Bangsongtongsin daehak [air and correspondence university (open university)])
- 40 - (Daehak(gyo) (university))
- 41 - (Hankuk kwahak kisulwon (Korea advanced institute of science and technology))
- 42 - (Hankuk yeosuljonghap hakgyo (yeosulsa kwajong) (the Korean National University of Arts))
- 43 - (Woikwa deahak,chikwa daehak (university, medical-dentistry))
- 44 - (Hankuk jeongsin munwha yeonku won (seoksa kwajong) (the Academy of Korean Studies, MA course))
- 45 - (Ilbandaehakwon(seoksa kwajong) (graduate school, Master's degree programme, short))
- 46 - (Hankuk kwahak kisulwon (seoksa kwajong) (Korea Advanced Institute of Science and Technology, MA course))
- 47 - (Daehakwon daehak (seoksa kwajong) (university of graduate school))
- 48 - (Hankuk yeosuljonghap hakgyo (jeonmun yeosulsa kwajong) (the Korean National University of Arts, MA course))
- 49 - (Hankuk kwahak kisulwon(baksa kwajong) (Korea Advanced Institute of Science and Technology))
- 50 - (Hankuk jeongsin munwha yeonku won (baksa kwajong) (Academy of Korean Studies, Ph.D.))
- 51 - (Ilban daehakwon (baksa kwajong) (graduate school, Doctorate programme))
- 52 - (Daehakwon daehak(baksa kwajong) (university of graduate school))

Luxembourg



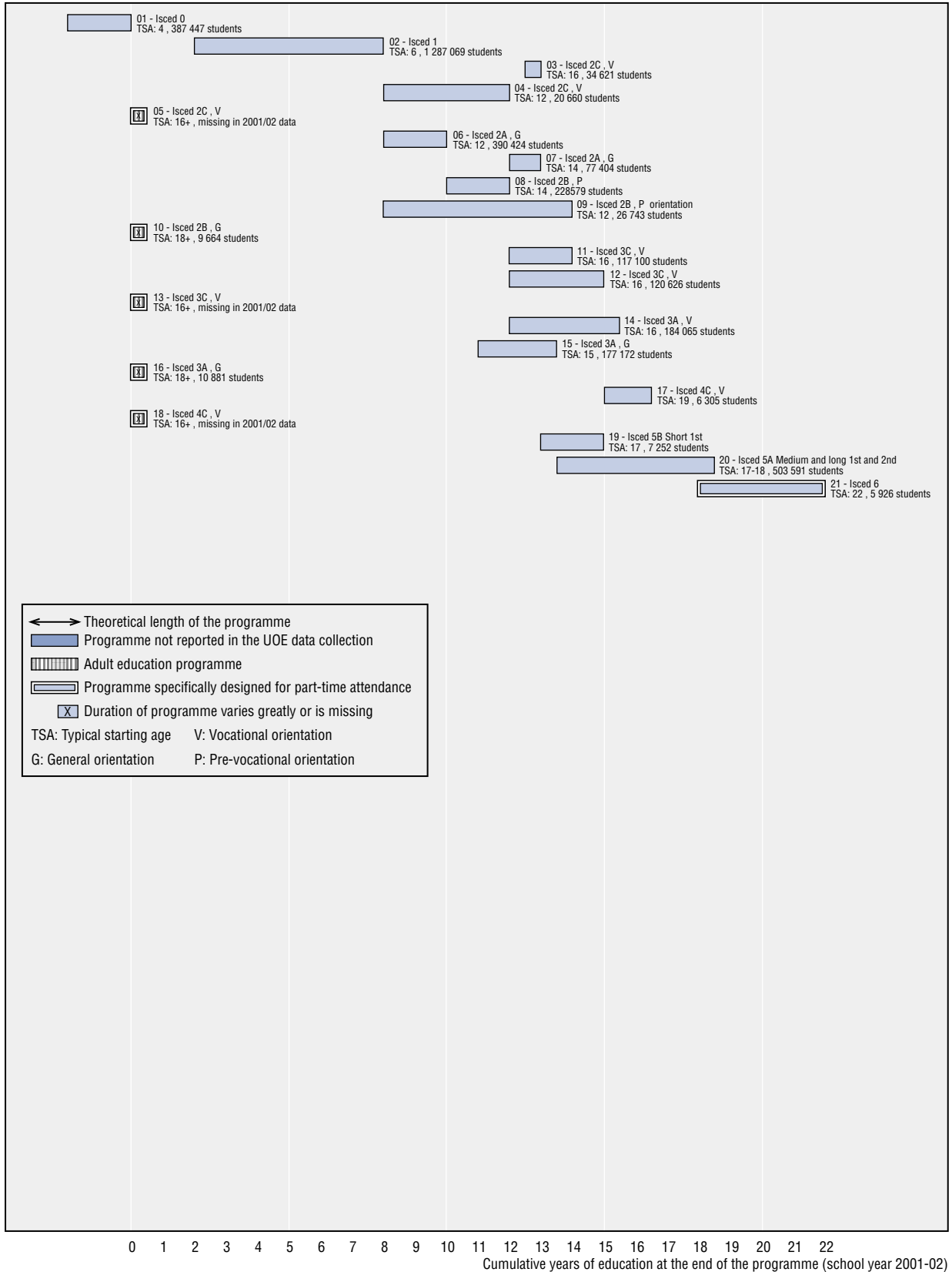
- 01 - Education précoce (early maturity education)
- 02 - Education préscolaire (pre-primary education)
- 03 - Enseignement primaire (primary education)
- 04 - Régime préparatoire de l'EST (preparatory regime of the technical secondary education)
- 05 - Cycle inférieur de l'EST (lower technical secondary education)
- 06 - Cycle inférieur de l'ES (lower general secondary education)
- 07 - Apprentissage à deux degrés CITP (apprenticeship at two degrees: CITP)
- 08 - Régime professionnel: CCM (professional regime CCM)
- 09 - Régime professionnel concomitant (professional regime school & work based)
- 10 - Régime professionnel filière mixte (professional mixed regime)
- 11 - Régime professionnel plein temps (professional regime with full-time school)
- 12 - Régime de la formation de technicien (technical training regime)
- 13 - Formation d'éducateurs (en cours d'emploi) (training of educators, while working)
- 14 - Régime technique (technical regime)
- 15 - Cycles moyen et supérieur de l'enseignement secondaire général (middle and upper general secondary education)
- 16 - Profession de santé: spécialisation
- 17 - Brevet de maîtrise (Master craftsman's diploma)
- 18 - Brevet de technicien supérieur (bts) (higher technician certificate)
- 19 - Cycle court d'études supérieures en gestion ou en informatique (short-term course in higher studies of administration or studies of informatics)
- 20 - Formation à l'ingénieur-industriel (training of industrial engineers)
- 21 - Formation des instituteurs (initial training of primary and pre-primary teachers)
- 22 - Formation d'éducateurs gradués (plein temps) (training of graduated educators, full-time)
- 23 - Formation d'éducateurs gradués (en cours d'emploi) (training of graduated educators, while working)
- 24 - Cours universitaires et cycle (university courses):DPCU
- 25 - Etudes supérieures spécialisées en contentieux communautaires
- 26 - Cycles moyen et supérieur de l'enseignement secondaire général pour adultes (middle and upper general secondary education for adults)
- 27 - Régime technique pour adultes (technical regime for adults)
- 28 - Cours de formation professionnelle préparant au CATP (professional courses to prepare the CATP)
- 29 - Cours pour Adultes (adult courses)
- 30 - Cours de langues pour Adultes (adult language courses)
- 31 - Cours d'informatique pour Adultes (IT courses for adults)
- 32 - Formation professionnelle continue (CVTS)

Mexico



- 01 - Educación preescolar (pre-primary education)
- 02 - Educación primaria (primary education)
- 03 - Capacitación para el trabajo [lower secondary (job training)]
- 04 - Educación secundaria (lower secondary education)
- 05 - Profesional medio [upper secondary (vocational or technical programmes)]
- 06 - Bachillerato general, Bachillerato por cooperación, Bachillerato pedagógico, Bachillerato de arte [upper secondary (high school programme)]
- 07 - Bachillerato tecnológico [upper secondary (combined general and technical programmes)]
- 08 - Licenciatura tecnológica [technological universities programmes (vocational associate's degree programmes)]
- 09 - Educación normal licenciatura [teacher training school programmes (Bachelor's degree programme)]
- 10 - Licenciatura universitaria [university degree programmes (Bachelor's degree programme)]
- 11 - Programas de institutos tecnológicos [technological institutes programmes (Bachelor's degree programme)]
- 12 - Programa de especialización [specialisation degree programme (Master's degree programme(short))]
- 13 - Programa de maestría [Master's degree programme (long)]
- 14 - Programa de doctorado [Doctoral programme – Doctorate (Ph.D. Research)]
- 15 - Educación inicial (initial education programmes)
- 16 - Educación especial (special education programmes)
- 17 - Educación para adultos (adult education programmes)

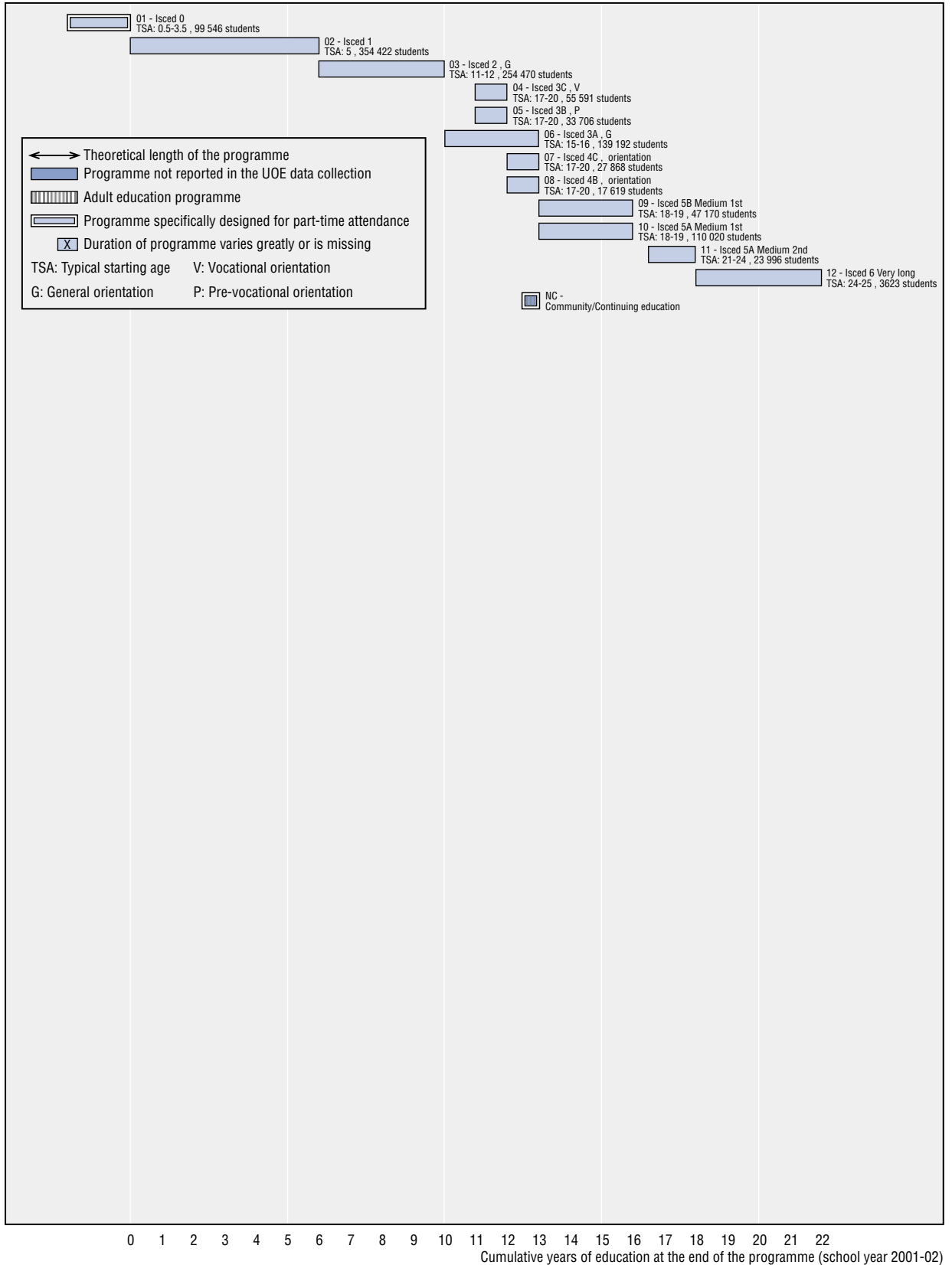
Netherlands



←→ Theoretical length of the programme
 [Solid Blue Bar] Programme not reported in the UOE data collection
 [Hatched Bar] Adult education programme
 [Double-lined Bar] Programme specifically designed for part-time attendance
 [X] Duration of programme varies greatly or is missing
 TSA: Typical starting age V: Vocational orientation
 G: General orientation P: Pre-vocational orientation

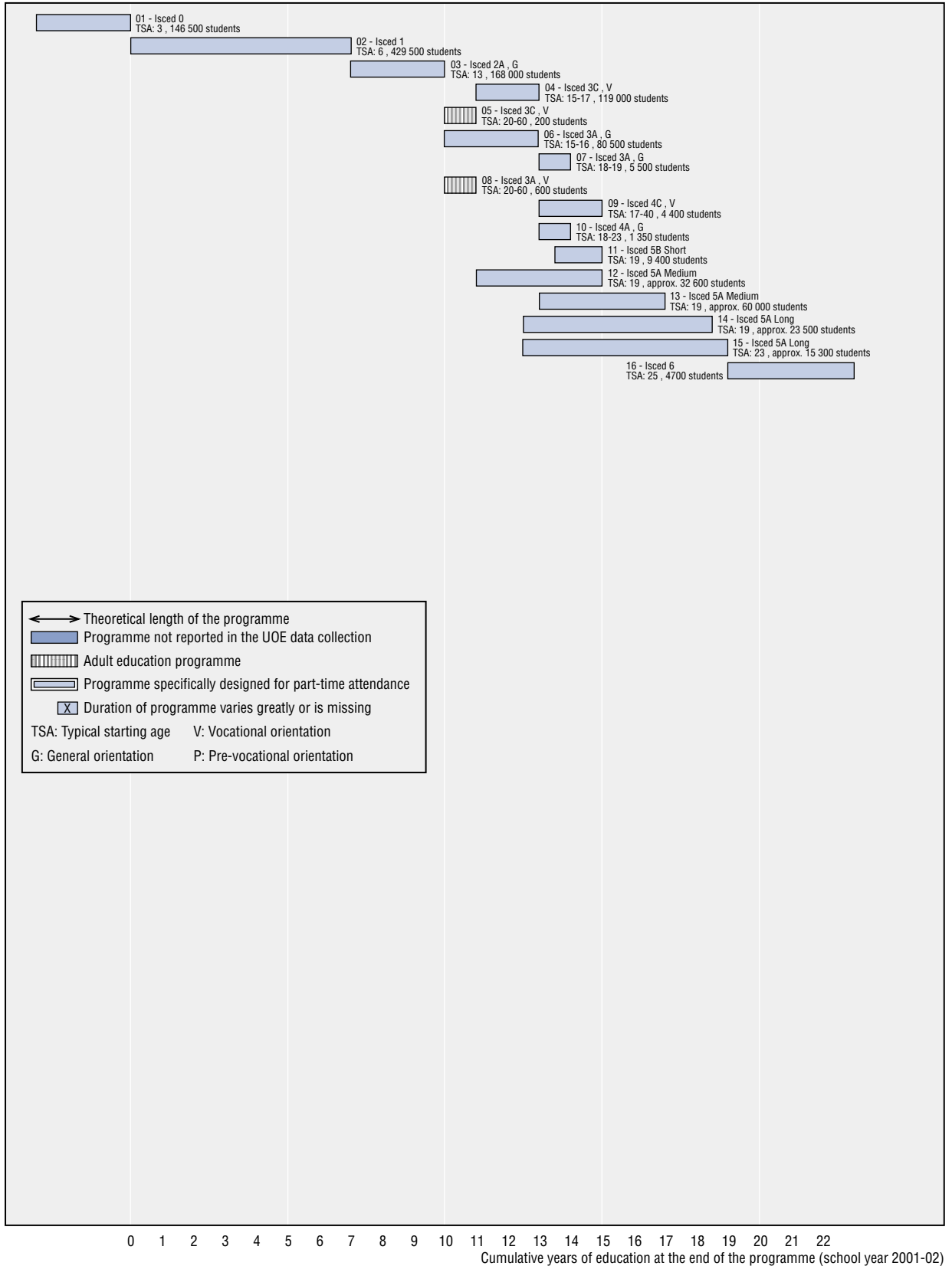
- 01 - Basisonderwijs en speciaal onderwijs ; leerlingen 3-5 jaar oud
(Primary education and primary special needs education; pupils 3-5 years of age)
- 02 - Basisonderwijs en speciaal onderwijs ; leerlingen van 6 jaar en ouder
(Primary education and primary special needs education; pupils 6 years of age and older)
- 03 - WEB-assistentenopleiding
(Vocational education: training to assistant level; (level 1))
- 04 - Praktijkonderwijs
(Practical training)
- 05 - Particulier onderwijs op vbo-niveau
(Non-regular vocational training courses in private institutions on lower secondary level)
- 06 - Klas 1-2 voorbereidend middelbaar beroepsonderwijs (VMBO) AND klas 1-2 algemeen voortgezet onderwijs (AVO)
(Class 1-2 pre-vocational secondary education (programmes with general content) AND class 1-2 general secondary education)
- 07 - Klas 3 algemeen voortgezet onderwijs (AVO)
(Class 3 general secondary education)
- 08 - Klas 3-4 voorbereidend middelbaar beroepsonderwijs (VMBO)
(Class 3-4 pre-vocational secondary education)
- 09 - Speciaal voortgezet onderwijs (SVO) en WEC-voortgezet
(Secondary special needs education)
- 10 - VAVO-MAVO-niveau
(General junior secondary education for adults)
- 11 - WEB-basisberoepsopleiding
(Vocational education, basic vocational training (level 2))
- 12 - WEB-vakopleiding
(Vocational education, professional training (level 3))
- 13 - Particulier onderwijs op mbo-niveau
(Non-regular vocational training courses in private institutions at upper secondary level)
- 14 - WEB-middenkaderopleiding
(Vocational education, middle-management training (level 4))
- 15 - Klas 4-5 HAVO en klas 4-6 VWO
(Class 4-6 senior general secondary education)
- 16 - VAVO-HAVO/VWO-niveau
(General senior secondary education for adults)
- 17 - WEB-specialistenopleiding
(Vocational education, specialist training (level 4))
- 18 - Particulier onderwijs op post-mbo-niveau
(Non-regular vocational training courses in private institutions at post- secondary non-tertiary level)
- 19 - Kort HBO
(higher professional education, short programmes)
- 20 - (Lang) HBO en WO, including Open University
(higher professional education (long programmes) and university education, including Open University qualification programmes)
- 21 - AIO's
(research assistants)

New Zealand



- 01 - Early childhood education
- 02 - Primary
- 03 - Secondary (Year 7 to Year 10)
- 04 - Certificate
- 05 - Certificate
- 06 - Upper Secondary (Year 11 to Year 13)
- 07 - Certificate
- 08 - Certificate
- 09 - Diploma
- 10 - Bachelor's degree
- 11 - Post-graduate
- 12 - Doctorate, Higher Doctorates
- 13 - Community/Continuing education

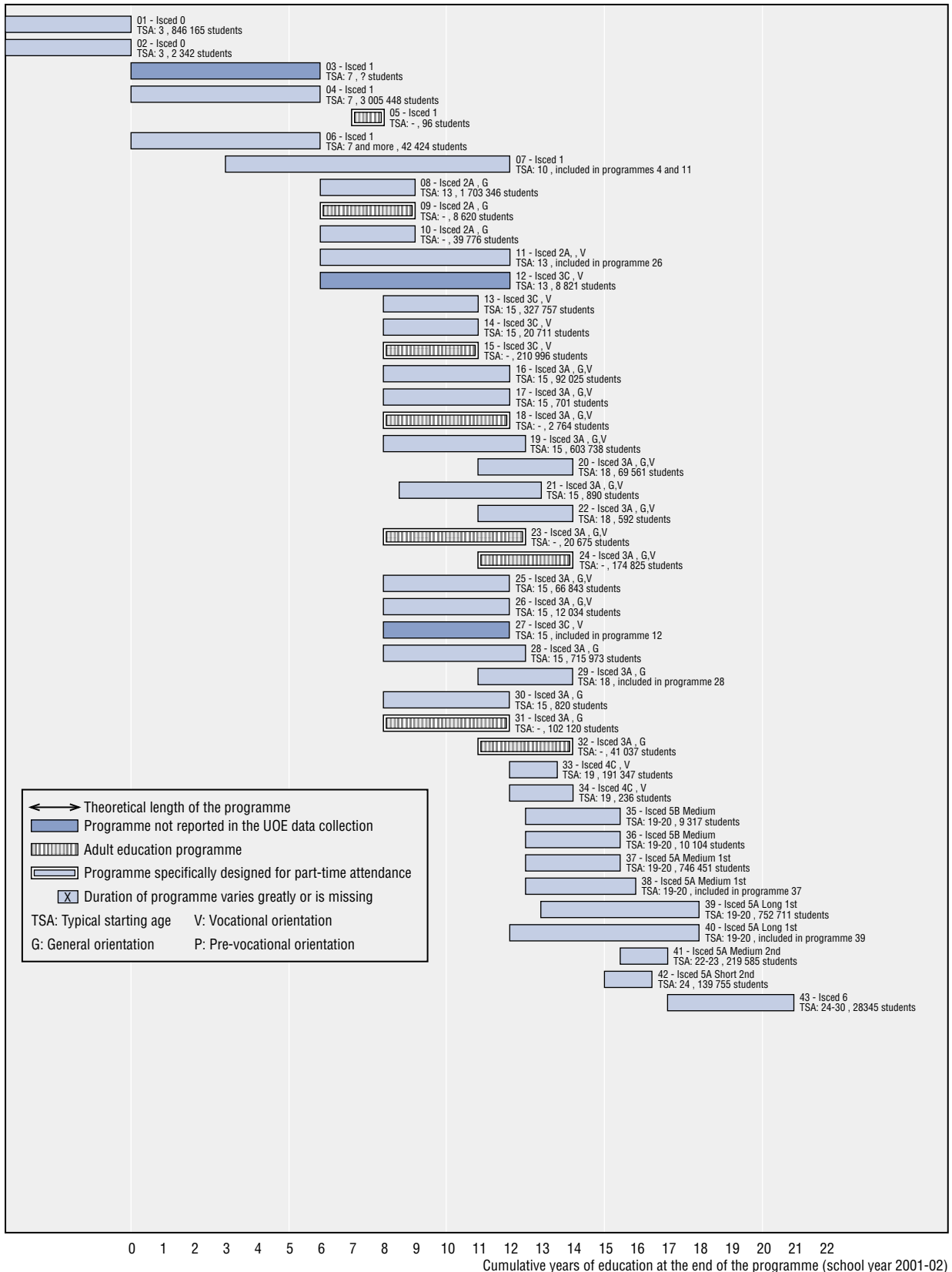
Norway



←→ Theoretical length of the programme
 [Solid Blue] Programme not reported in the UOE data collection
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 [Double-lined] Programme specifically designed for part-time attendance
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 TSA: Typical starting age V: Vocational orientation
 G: General orientation P: Pre-vocational orientation

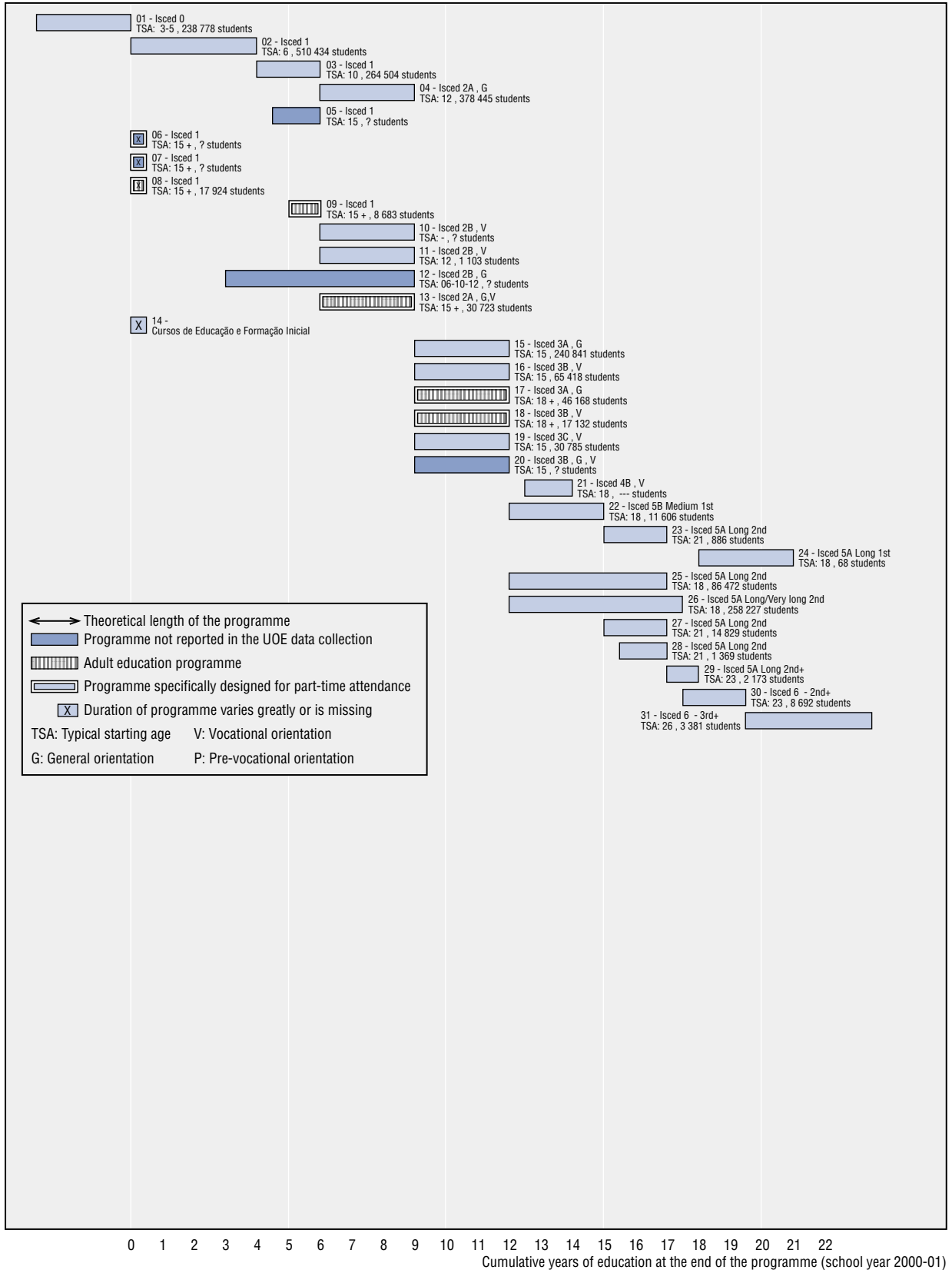
- 01 - Barnehage (kindergartenog Førskole (pre-school)
- 02 - Grunnskole 1.-7. klasse (primary school)
- 03 - Ungdomsskole 8.-10. klasse (lower secondary)
- 04 - Videregående opplæring, yrkesfag (upper secondary vocational)
- 05 - Arbeidsmarkedsopplæring (AMO(labour market courses))
- 06 - Videregående opplæring, Allmennfag (upper secondary, giving access to further education, general)
- 07 - Videregående opplæring, allmennfag (upper secondary, giving access to further education, general)
- 08 - Arbeidsmarkedsopplæring (AMO(labour market courses))
- 09 - Teknisk fagskole (specialist vocational education)
- 10 - Forberedende prøver (preparatory courses)
- 11 - Høgre utd., <3 år, lavere grad (tertiary education, <3 years, 1st degree)
- 12 - Høgre utd., lavere grad (tertiary education, 3 years)
- 13 - Høgre utd., 4 år, lavere grad (tertiary education, 4 years, 1st degree)
- 14 - Høgre utdanning, lang/profesjonsutdanninger (tertiary education long/professional education, 1st degree)
- 15 - Hovedfag/mag.art (tertiary education, second degree)
- 16 - Doktorgrad (Doctorate)

Poland



- 01 - Przedszkole
(pre-school education, (kindergarden))
- 02 - Przedszkole specjalne
(pre-school education, (special kindergarden))
- 03 - Szkoła muzyczna I stopnia
(1st level music school)
- 04 - Szkoła podstawowa dla dzieci i młodzieży
(primary school for children and youth)
- 05 - Szkoła podstawowa dla dorosłych
(primary school for adult)
- 06 - Szkoła podstawowa specjalna dla dzieci i młodzieży
(primary special school for children and youth)
- 07 - Szkoła baletowa
(Ballet school)
- 08 - Gimnazjum dla dzieci i młodzieży
(gymnasium for children and youth)
- 09 - Gimnazjum dla dorosłych
(gymnasium for adults)
- 10 - Gimnazjum specjalne dla dzieci i młodzieży
(special gymnasium for children and youth)
- 11 - Szkoła artystyczna II stopnia
(second level art school)
- 12 - Szkoła artystyczna II stopnia
(second level art school)
- 13 - Szkoła zasadnicza dla młodzieży
(basic vocational school)
- 14 - Szkoła zasadnicza specjalna dla młodzieży
(special basic vocational school)
- 15 - Szkoła zasadnicza dla dorosłych
(basic vocational school for adults)
- 16 - Liceum zawodowe dla młodzieży
(secondary school of vocational education for youth)
- 17 - Liceum zawodowe specjalne dla młodzieży
(special secondary school of vocational education for youth)
- 18 - Liceum zawodowe dla dorosłych
(secondary school of vocational education for adults)
- 19 - Technikum (liceum, szkoła równorzędna) dla młodzieży
(secondary technical (or equivalent) school for youth)
- 20 - Technikum (liceum, szkoła równorzędna) dla młodzieży na podbudowie szkoły zasadniczej
(secondary technical (or equivalent) school for youth)
- 21 - Technikum specjalne (liceum, szkoła równorzędna) dla młodzieży
(special secondary technical (or equivalent) school for youth)
- 22 - Technikum specjalne (liceum, szkoła równorzędna) dla młodzieży na podbudowie szkoły zasadniczej
(special secondary technical (or equivalent) school for youth)
- 23 - Technikum (liceum, szkoła równorzędna) dla dorosłych
(secondary technical (or equivalent) school for adults)
- 24 - Technikum (liceum, szkoła równorzędna) dla dorosłych na podbudowie szkoły zasadniczej
(secondary technical (or equivalent) school for adults)
- 25 - Liceum techniczne dla młodzieży
(technical liceum for youth)
- 26 - Szkoła artystyczna II stopnia
(second level art school)
- 27 - Szkoła artystyczna II stopnia
(second level art school)
- 28 - Liceum ogólnokształcące dla młodzieży
(secondary school of general education for youth)
- 29 - Liceum ogólnokształcące dla młodzieży na podbudowie szkoły zasadniczej
(secondary school of general education for youth)
- 30 - Specjalne liceum ogólnokształcące dla młodzieży
(special secondary school of general education for youth)
- 31 - Liceum ogólnokształcące dla dorosłych
(secondary school of general education for adults)
- 32 - Liceum ogólnokształcące dla dorosłych na podbudowie szkoły zasadniczej
(secondary school of general education for adults)
- 33 - Szkoła policealna
(post-secondary school)
- 34 - Szkoła policealna specjalna
(special post-secondary school)
- 35 - Kolegium nauczycielskie
(teacher training college)
- 36 - Nauczycielskie kolegium języków obcych
(foreign language teacher training college)
- 37 - Wyższe studia zawodowe
(higher education professional studies)
- 38 - Wyższe studia zawodowe
(higher education professional studies)
- 39 - Studia magisterskie
(university studies)
- 40 - Studia medyczne, studia weterynaryjne
(university medical studies, veterinary studies)
- 41 - Studia uzupełniające magisterskie
(post-licentiate master diploma studies)
- 42 - Studia podyplomowe
(post-graduate courses)
- 43 - Studia doktoranckie
(doctoral studies)

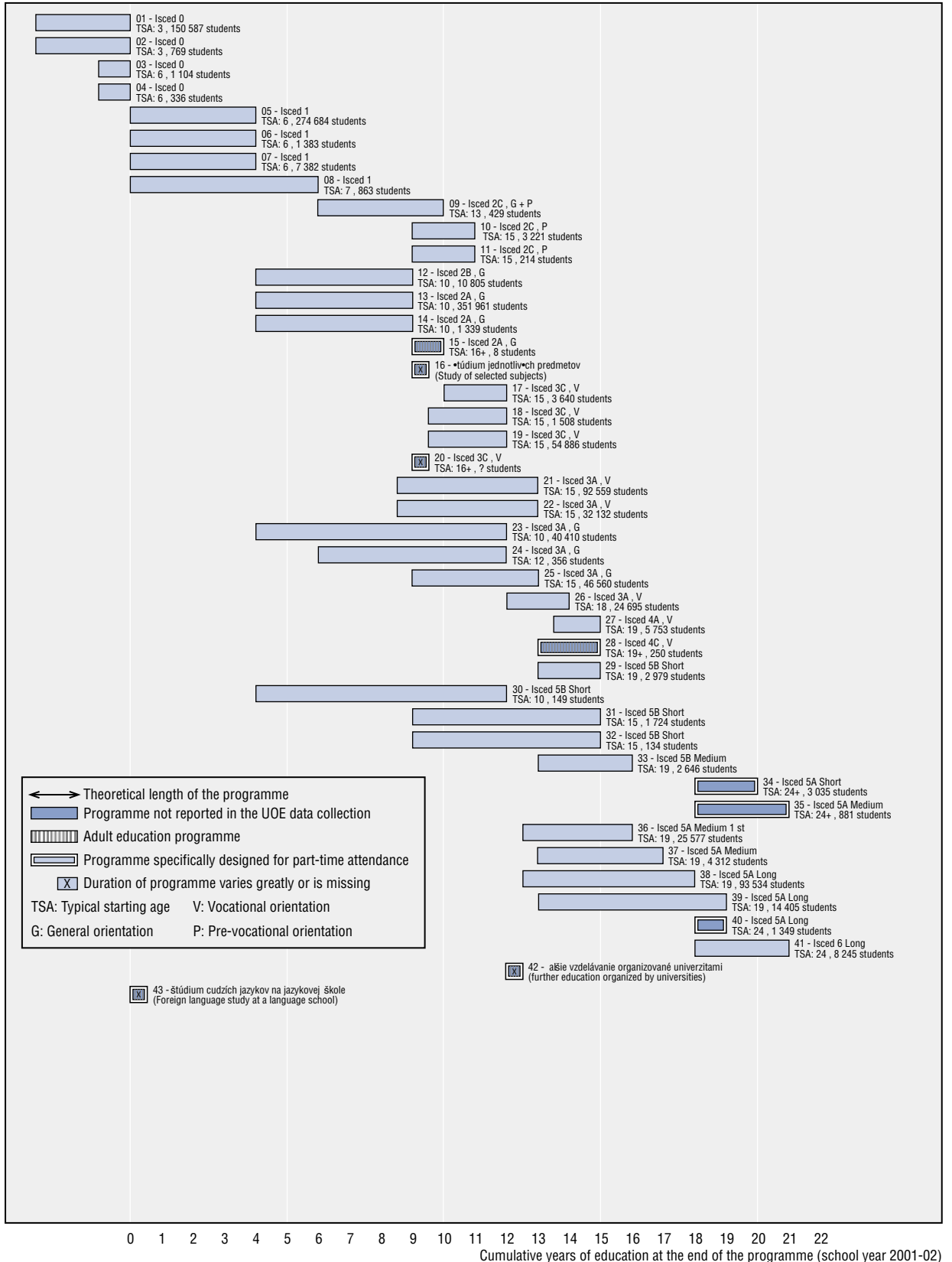
Portugal



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 [Hatched Bar] Adult education programme
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 [X] Duration of programme varies greatly or is missing
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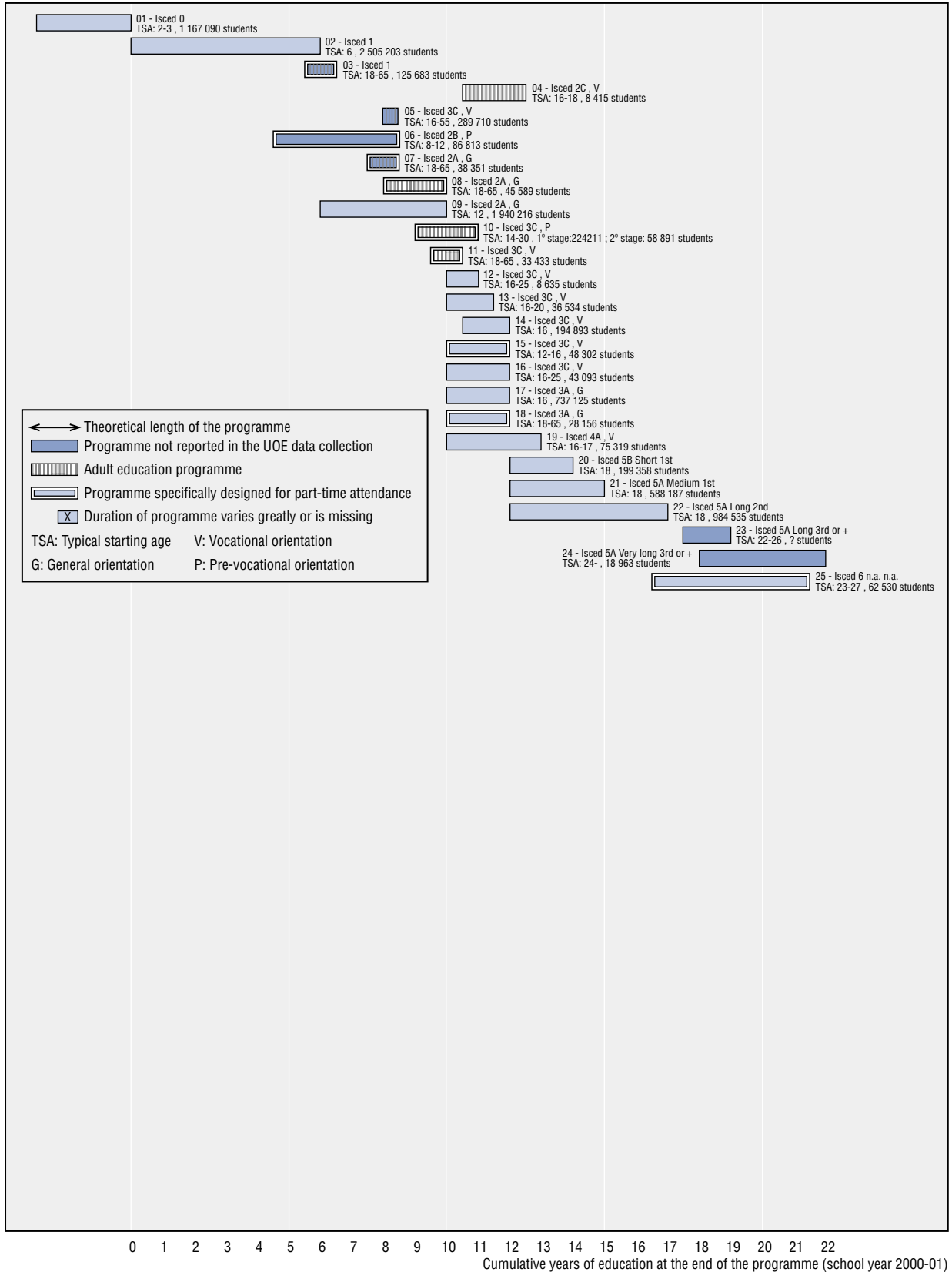
- 01 - Educação Pré-Escolar
(Pre-school education)
- 02 - Ensino Básico do 1º Ciclo
(Primary education 1st cycle)
- 03 - Ensino Básico do 2º Ciclo
(Primary education 2nd cycle)
- 04 - Ensino Básico do 3º Ciclo
(Lower secondary education)
- 05 - Formação Profissional - Pré_aprendizagem
(Pre-vocational training)
- 06 - Educação Extra-Escolar Cursos de Atualização
(Adult education (second chance programme))
- 07 - Educação Extra-Escolar - Cursos de Alfabetização
(Adult education - Basic literacy programme)
- 08 - Ensino Recorrente (1º Ciclo)
(Basic adult education (1st cycle))
- 09 - Ensino Recorrente (2º Ciclo)
(Basic adult education (2nd cycle))
- 10 - Cursos Técnico-Profissionais da Casa Pia -nível I
("Casa Pia" vocational programme– level I)
- 11 - Escolas Profissionais Nível II
(Vocational training schools– level II)
- 12 - Curso Geral do Ensino Artístico
(Artistic lower secondary (Basic artistic studies (music, dance or visual arts)))
- 13 - Ensino Recorrente do 3º Ciclo
(Adult education – lower secondary education)
- 14 - Cursos de Educação e Formação Inicial
(Initial education and training)
- 15 - Cursos Gerais do Ensino Secundário
(Upper secondary general education)
- 16 - Cursos Tecnológicos do Ensino Secundário
(Upper secondary technological education)
- 17 - Curso Geral do Ensino Secundário Recorrente
(Adult education – upper secondary general education)
- 18 - Cursos Tecnológicos do Ensino Secundário Recorrente
(Adult education – upper secondary vocational education)
- 19 - Escolas Profissionais Nível III
(Vocational training schools– level III)
- 20 - Curso Complementar do Ensino Artístico (Música, Dança ou Artes Visuais)
(Upper secondary - Arts studies)
- 21 - Cursos de Especialização Tecnológica
(Post-secondary - Technological specialisation programme)
- 22 - Ensino Superior – Bacharelato
(Tertiary education – first degree)
- 23 - Curso de Estudos Superiores Especializados (CESE)
(Tertiary education – second degree university level by a 2 years higher education programme which is a specialization in the previous studies)
- 24 - Ensino Superior – Preparatórios de Licenciatura
(Tertiary education – Starting programme to second degree university level)
- 25 - Licenciatura bi-etápica
(Tertiary education – second degree university level)
- 26 - Ensino Superior – Licenciatura
(Tertiary education – second degree university level)
- 27 - Ensino Superior – Licenciatura Complementos de formação
(Tertiary education – second degree university level advanced programme)
- 28 - Ensino Superior – Licenciatura - Parte terminal
(Tertiary education – Ending programme of second degree university level)
- 29 - Curso de Especialização Pós -licenciatura (Pós-graduação)
(Tertiary education –Specialized studies "pós-licenciatura")
- 30 - Mestrado
(Tertiary education –first advanced research qualification)
- 31 - Doutoramento
(Tertiary education – second advanced research qualification)

Slovak Republic



- 01 - Materská škola
(Kindergarten)
- 02 - Špeciálna materská škola
(Special kindergarten)
- 03 - Prípravne triedy na základnej škole
(Preparatory classes in basic school)
- 04 - Prípravne triedy v špeciálnych školách
(Preparatory classes in special school)
- 05 - Základná škola - 1.stupeň
(Basic school - 1st stage)
- 06 - Špeciálna základná škola - 1.stupeň
(Special basic school - 1st stage)
- 07 - Špeciálna škola typ A - 1.stupeň
(Special school, Type A 1st stage)
- 08 - Špeciálna škola typ B - nižší a stredný stupeň
(Special school, Type B - lower and middle stage)
- 09 - Špeciálna škola typ B - vyšší a pracovný stupeň
(Special school, Type B - upper and working stage)
- 10 - Učňovské stredisko
(Apprentice centre)
- 11 - Praktická škola
(Practical school)
- 12 - Špeciálna škola typ A - 2.stupeň
(Special school, Type A 2nd stage)
- 13 - Základná škola - 2.stupeň
(Basic school - 2nd stage)
- 14 - Špeciálna základná škola - 2.stupeň
(Special basic school - 2nd stage)
- 15 - Kurzy na doplnenie základného vzdelania
(Courses for complementing basic education)
- 16 - Štúdium jednotlivých predmetov
(Study of selected subjects)
- 17 - Odborné učňovské stredisko
(Vocational school)
- 18 - Stredná odborná škola - štúdium bez maturitnej skúšky
(Specialized secondary school - programme without matura)
- 19 - Stredné odborné učňovské stredisko - štúdium bez maturitnej skúšky
(Vocational secondary school - programme without matura)
- 20 - Rekvalifikačné kurzy
(Retraining courses)
- 21 - Stredná odborná škola - štúdium s maturitou
(Specialized secondary school - programme with matura)
- 22 - Stredné odborné učňovské stredisko - štúdium s maturitou
(Vocational secondary school - programme with matura)
- 23 - 8 ročné gymnázium
(Gymnasium - 8 years)
- 24 - 6 ročné gymnázium
(Gymnasium - 6 years)
- 25 - 4 ročné gymnázium
(Gymnasium - 4 years)
- 26 - nadstavbové štúdium
(Follow-up courses)
- 27 - Pomaturitné kvalifikačné štúdium
(Postsecondary qualification study)
- 28 - doplňujúce pedagogické štúdium
(Supplementary pedagogical study)
- 29 - Pomaturitné špecializačné štúdium
(Postsecondary specialized study)
- 30 - Tanečné konzervatórium - 8 ročné štúdium
(Dance conservatoire - 8 years)
- 31 - Konzervatórium - 6 ročné štúdium
(Conservatoire - 6 years)
- 32 - Stredná odborná škola - 6 ročné štúdium
(Specialized secondary school - 6 years)
- 33 - Vyššie odborné štúdium
(Higher professional studies)
- 34 - doplňujúce pedagogické štúdium
(Supplementary pedagogical study)
- 35 - rozširujúce štúdium na vyučovanie
(Extensive study for teaching)
- 36 - Bakalárske štúdium
(Bachelor university study)
- 37 - 4 ročné magisterské štúdium
(Master university study - 4 years)
- 38 - Magisterské a inžinierske štúdium
(Master and Engineering study)
- 39 - Doktorandské a inžinierske štúdium
(Doctoral and Engineering study)
- 40 - Štátne rigorózne skúšky
(State examina rigorosa)
- 41 - Doktorandské štúdium
(PhD. study)
- 42 - ďalšie vzdelávanie organizované univerzitami
(further education organized by universities)
- 43 - štúdium cudzích jazykov na jazykovej škole
(Foreign language study at a language school)

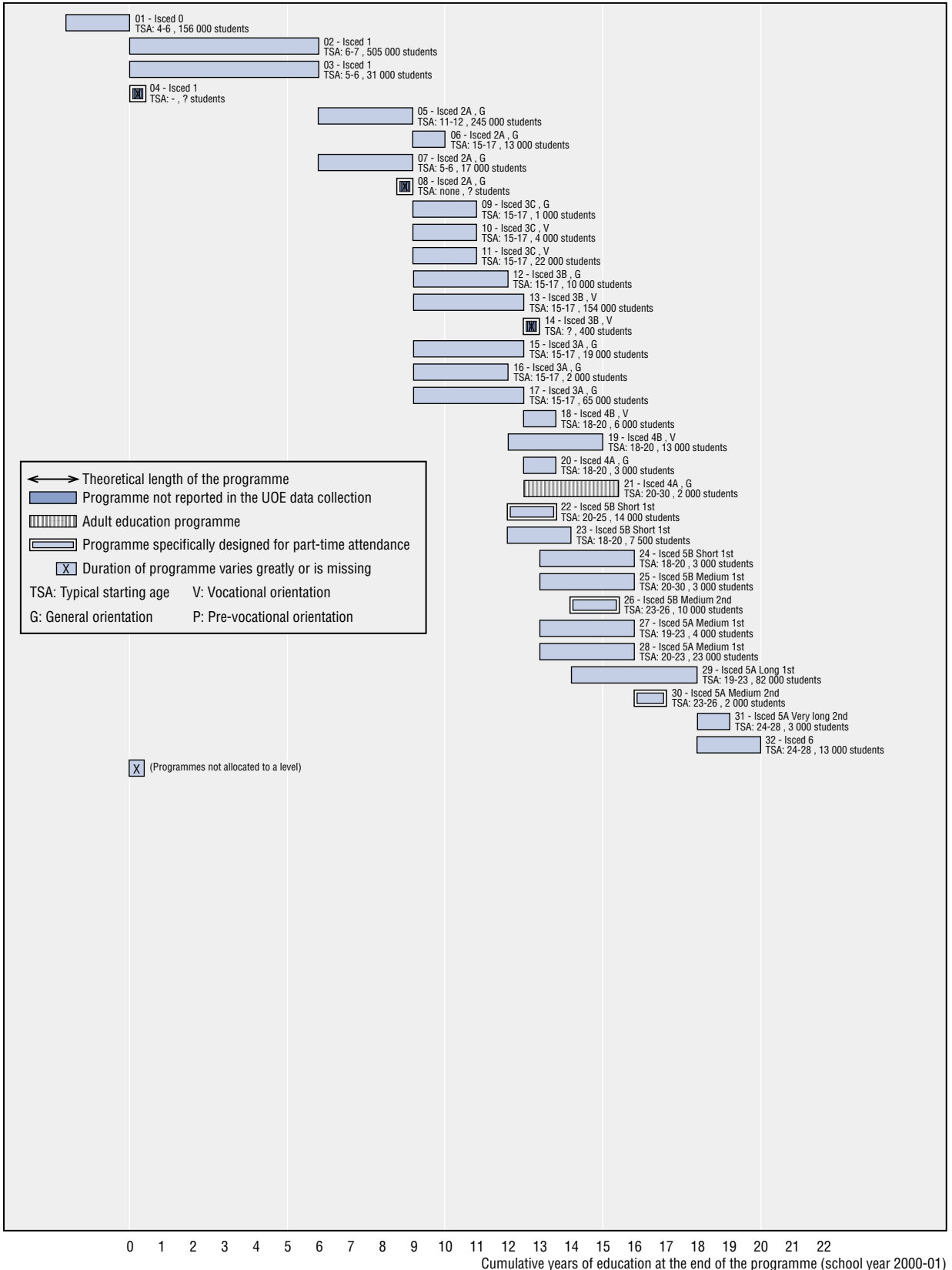
Spain



- 01 - Educación Infantil
(Pre-school education)
- 02 - Educación Primaria
(Primary education)
- 03 - Enseñanzas Iniciales de Educación Básica para personas en edad adulta
(Adult education – primary level)
- 04 - F.P. Aprendizaje de Tareas / Transición a la vida adulta
(Vocational training – special education)
- 05 - Formación ocupacional
(Occupational training)
- 06 - E. de la Danza y la Música-Grado Elemental
(Dance and Music studies – elementary level)
- 07 - Enseñanzas de adultos conducentes al Certificado de Escolaridad y al Graduado Escolar
(Adult education-lower secondary level)
- 08 - Educación Secundaria para Adultos
(Adult lower secondary education)
- 09 - Educación Secundaria Obligatoria
(compulsory-lower secondary education)
- 10 - Escuelas Oficiales de Idiomas
(Language studies at the official school languages)
- 11 - F.P. I para Adultos
(Vocational training – first tier – adult education)
- 12 - Casas de oficio
(Craft trades)
- 13 - Programas de Garantía Social
(Vocational training for young people without qualifications)
- 14 - Ciclos Formativos de Grado Medio
(Vocational training – intermediate level)
- 15 - E. de la Danza y de la Música-Grado Medio
(Dance and Music studies – intermediate level)
- 16 - Escuelas taller
(Workshop training)
- 17 - Bachillerato
(General upper secondary education)
- 18 - Bachillerato (Distancia)
(General upper secondary education (distance learning))
- 19 - Formación Profesional II
(Vocational training – second tier)
- 20 - Ciclos Formativos de Grado Superior
(Specific vocational training – advanced level)
- 21 - Diplomatura Universitaria
(University education – first degree)
- 22 - Licenciatura universitaria
(University education – first and second cycle)
- 23 - Master y Estudios Postgrado de las Universidades
(Post-degree studies of universities)
- 24 - Especialidades Sanitarias
(Post-degree health studies (specialist))
- 25 - Doctorado
(University education – Doctorate)

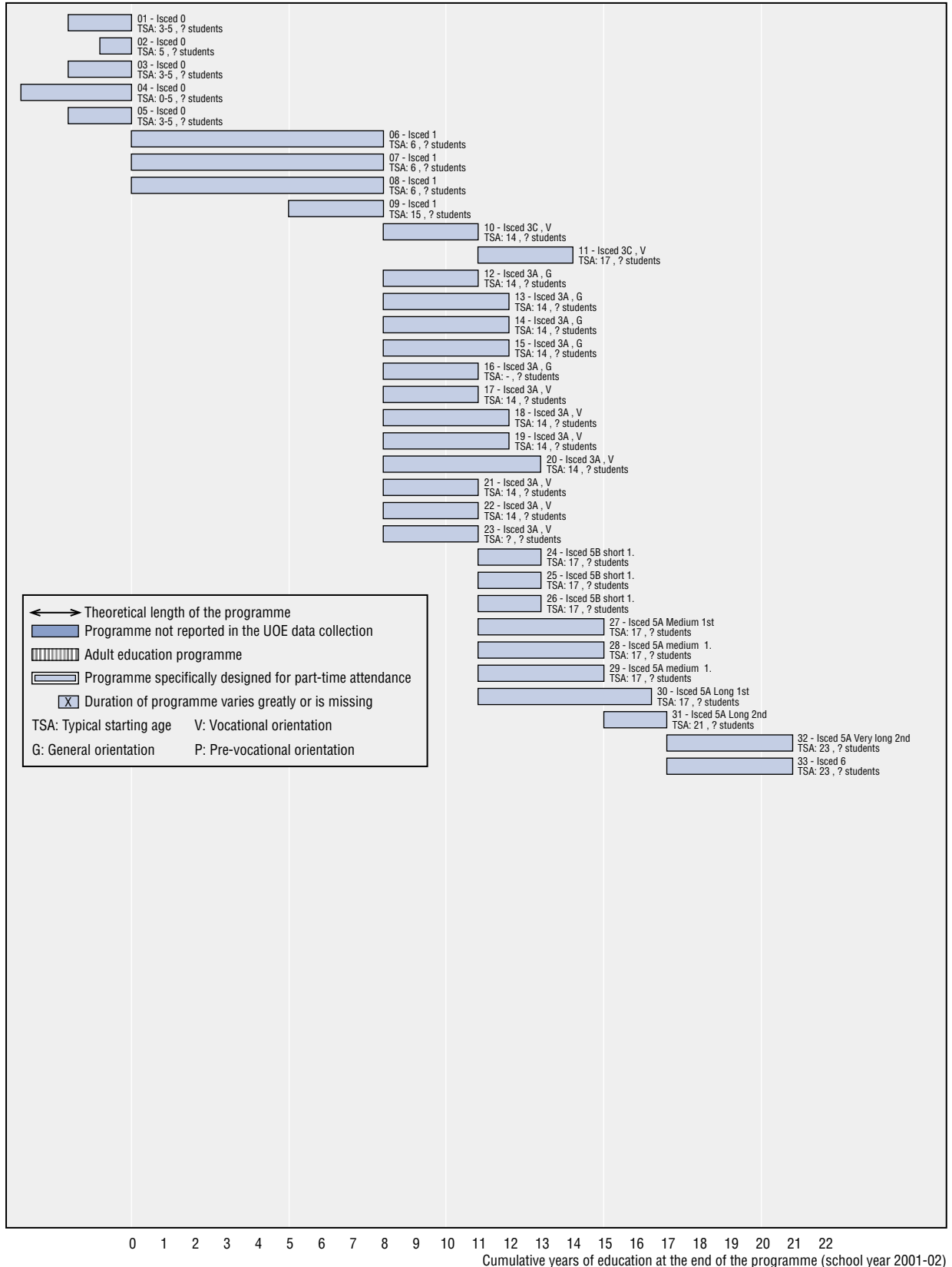
- 01 - Förskola för barn/elever 3 år eller äldre
(Pre-school, for children/pupils 3 years of age or older)
- 02 - Förskoleklass
(Pre-school classes)
- 03 - Grundskolan, skolår 1-6.
(Compulsory school, grades 1-6.)
- 04 - Obligatorisk särskola, skolår 1-6.
(Special school for the intellectually disabled, grades 1-6.)
- 05 - Specialskolan, skolår 1-6
(Special school for pupils with impaired vision, hearing or speech defects, grades 1-6.)
- 06 - Svenska för invandrare
(Swedish for immigrants)
- 07 - Grundläggande vuxenutbildning - läs- och skrivinläring (Komvux)
(Adult education - basic adult education in reading and writing)
- 08 - Grundskolan, skolår 7-9.
(Compulsory school, grades 7-9.)
- 09 - Obligatorisk särskola, skolår 7-10.
(Special school for the intellectually disabled, grades 7-10.)
- 10 - Specialskolan, skolår 7-10
(Special school for pupils with impaired vision, hearing or speech defects, grades 7-10.)
- 11 - Grundläggande vuxenutbildning (Komvux)
(Adult education - basic adult education)
- 12 - Gymnasieskolan - individuella program bestående av grundskolekurser.
(Upper secondary school - individual programme at compulsory school level.)
- 13 - Gymnasiesärskolan - yrkes och verksamhetsträning
(Upper secondary education for pupils with learning disabilities - occupational training within the framework of upper secondary level)
- 14 - Särvox, grundsärskolenivå och träningskolenivå.
(Adult education for people with learning disabilities, compulsory level schooling and training in sensory development, social and practical skills.)
- 15 - Folkhögskolan allmän inr
(Folk high school, general)
- 16 - Gymnasieskolan
(Upper secondary school)
- 17 - Gymnasieskolan - individuella program
(Upper secondary school - individual programme)
- 18 - Arbetsmarknadsutbildning
(Labour market training)
- 19 - Folkhögskolan yrkes
(Folk high school, vocational)
- 20 - Gymnasiesärskolan - nationella och specialutformade program
(Upper secondary education for pupils with learning disabilities - national and specially designed programmes)
- 21 - Gymnasial vuxenutbildning (Komvux)
(Adult education - upper secondary adult education)
- 22 - Statens skola för vuxna - Gymnasial vuxenutbildning
(National state school for adults - upper secondary adult education)
- 23 - Vuxenutbildning - Påbyggnadsutbildningar, tekniskt basår och andra studieförberedande utbildningar (Komvux)
(Adult education - post-secondary training programmes, preparatory for further studies)
- 24 - Statens skola för vuxna - Påbyggnadsutbildningar, tekniskt basår och andra studieförberedande utbildningar
(National state school for adults - post-secondary training programmes, preparatory for further studies)
- 25 - Tekniskt basår
(Technical Foundation Year)
- 26 - Vuxenutbildning - Påbyggnadsutbildningar, övriga (Komvux)
(Adult education - post-secondary training programmes, others)
- 27 - Yrkesteknisk högskoleutbildning, YTH
(Post-secondary vocational training)
- 28 - Kompletterande utbildningar, 1-1,5 år.
(Supplementary education programmes, 1-1.5 years.)
- 29 - Kompletterande utbildningar, 2 år eller längre.
(Supplementary education programmes, 2 years or longer.)
- 30 - Kvalificerad yrkesutbildning
(Advanced Vocational Education)
- 31 - Högskoleutbildning kortare än tre år
(Tertiary education < 3 years)
- 32 - Högskoleutbildning kortare än tre år
(Tertiary education < 3 years)
- 33 - Högskoleutbildning 3 år
(Tertiary education 3 yrs)
- 34 - Högskoleutbildning 3.5-4 år
(Tertiary education 3.5-4 yrs)
- 35 - Högskoleutbildning, magisterexamen med ämnesbredd
(Tertiary education, Master's degree, broad version)
- 36 - Högskoleutbildning 3 år
(Tertiary education 3 yrs)
- 37 - Högskoleutbildning 3.5-4 år
(Tertiary education 3.5-4 yrs)
- 38 - Högskoleutbildning 4.5-5 år
(Tertiary education 4.5-5 yrs)
- 39 - Högskoleutbildning > 5 år
(Tertiary education > 5 yrs)
- 40 - Högskoleutbildning, påbyggnad
(Tertiary education, second degree)
- 41 - Högskoleutbildning, påbyggnad
(Tertiary education, second degree)
- 42 - Forskarutbildning
(Post-graduate education, shorter)
- 43 - Forskarutbildning
(Post-graduate education, longer)

Switzerland



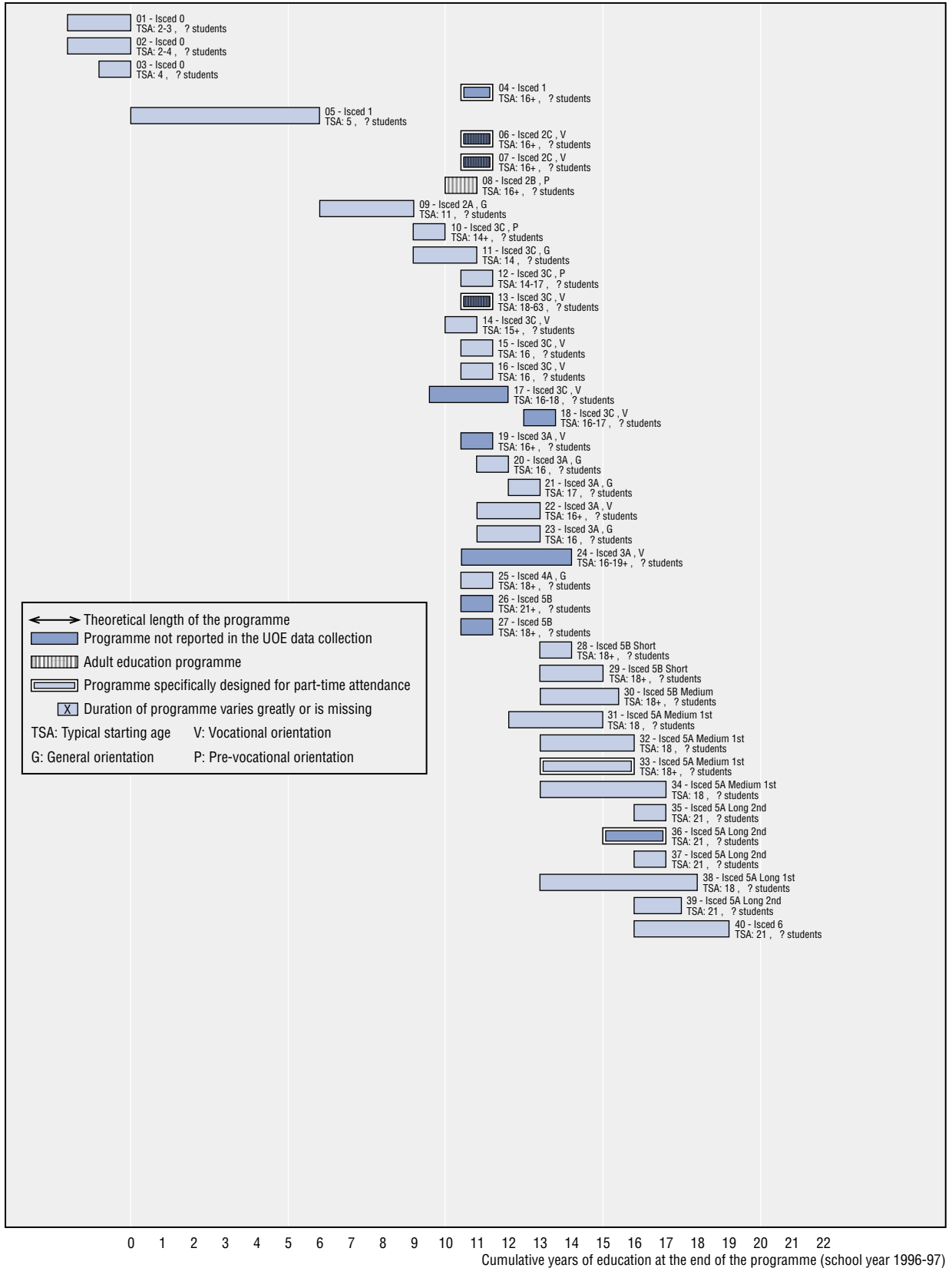
- 01 - Vorschule, préscolarité, prescolarità
(Kindergarten)
- 02 - Primarschule, école primaire, scuola elementare
(primary school)
- 03 - Besonderer Lehrplan, programme d'enseignement spécial, programma scolastico speciale
(special needs education programmes)
- 04 - Alphabetisierungsprogramm
(Programmes for adults in basic literacy skills)
- 05 - Sekundarschule, Realschule, Oberschule, (Pro-)Gymnasium, Cycle d'orientation, Scuola media
(secondary education, first stage)
- 06 - 10. Schuljahr, Vorkurs, préapprentissage, corsi preparatori
(preparatory course for vocational education, 1 year)
- 07 - Besonderer Lehrplan, programme d'enseignement spécial, programma scolastico speciale
(special needs education programmes)
- 08 - Vorbereitung auf Real- und Sekundarschulabschluss
(Programmes for adults to prepare for exams of secondary education, first stage)
- 09 - Allgemeinbildende Schule, école de culture générale, 2 Jahre/années
(general education programmes, short)
- 10 - Anlehre, formation professionnelle élémentaire, formazione empirica
(elementary vocational education, dual system)
- 11 - Berufslehre, Berufsbildung, apprentissage, formation professionnelle, 2 Jahre/années
(vocational education, in school or in the dual system, 2 years)
- 12 - Diplommittelschule, école de degré diplôme, scuola di formazione generale, 3 Jahre/années
(intermediate diploma school – 3 years)
- 13 - Berufslehre, Berufsbildung, apprentissage, formation professionnelle, formazione professionale, 3 und/et 4 Jahre/années
(vocational education, in school and in the dual system, 3 and 4 years)
- 14 - Vorbereitung auf Fähigkeitsprüfung nach Art. 41 BBG
(For adults: preparation for the vocational education exam (Art. 41))
- 15 - Berufsmaturität, maturité professionnelle, maturità professionale, 3 und/et 4 Jahre/années
(vocational baccalaureat, dual system, 3 and 4 years)
- 16 - Primarlehrerseminar I
(teacher training I)
- 17 - Gymnasiale Maturität, maturité gymnasiale, maturità
(school preparing for the university entrance certificate)
- 18 - Berufliche Zweitausbildung auf Sekundarstufe II
(second vocational programmes at upper secondary level (1 year))
- 19 - Ausbildung für Krankenpflege und medizinische Berufe, formation pour les professions de la santé, 3 Jahre/années
(vocational education for health professions, 3 years)
- 20 - Berufsmaturität nach der Lehre, maturité professionnelle après l'apprentissage, 1 Jahr/année
(vocational baccalaureate after obtaining the certificate of vocational education, 1 year)
- 21 - Gymnasiale Maturität für Erwachsene, maturité gymnasiale – programmes pour adultes
(school preparing for the university entrance certificate for adults)
- 22 - Berufsprüfung, examen professionnel
(higher vocational education, stage I)
- 23 - Höhere Fach- und Berufsschule, école technique
(technical school)
- 24 - Primarlehrerseminar II
(teacher training II)
- 25 - Höhere Fachschule, école professionnelle supérieure, scuola professionale superiore
(full-time higher vocational college)
- 26 - Höhere Fachprüfung, examen professionnel supérieur
(higher vocational education, stage II)
- 27 - Pädagogische Hochschule, haute école spécialisée pédagogique
(pedagogical university)
- 28 - Fachhochschule, haute école spécialisée, scuole universitarie professionali
(university of applied science)
- 29 - Hochschulen, hautes écoles; Lizentiat, licence, Diplom
(university diploma)
- 30 - Fachhochschule Nachdiplom, haute école spécialisée diplôme postgrade
(Fachhochschule, post-graduate)
- 31 - Universität Nachdiplom, troisième cycle, diplôme postgrade
(university post-graduate)
- 32 - Doktorat, doctorat
(university doctorate)
- 33 - (Programmes not allocated to a level)

Turkey



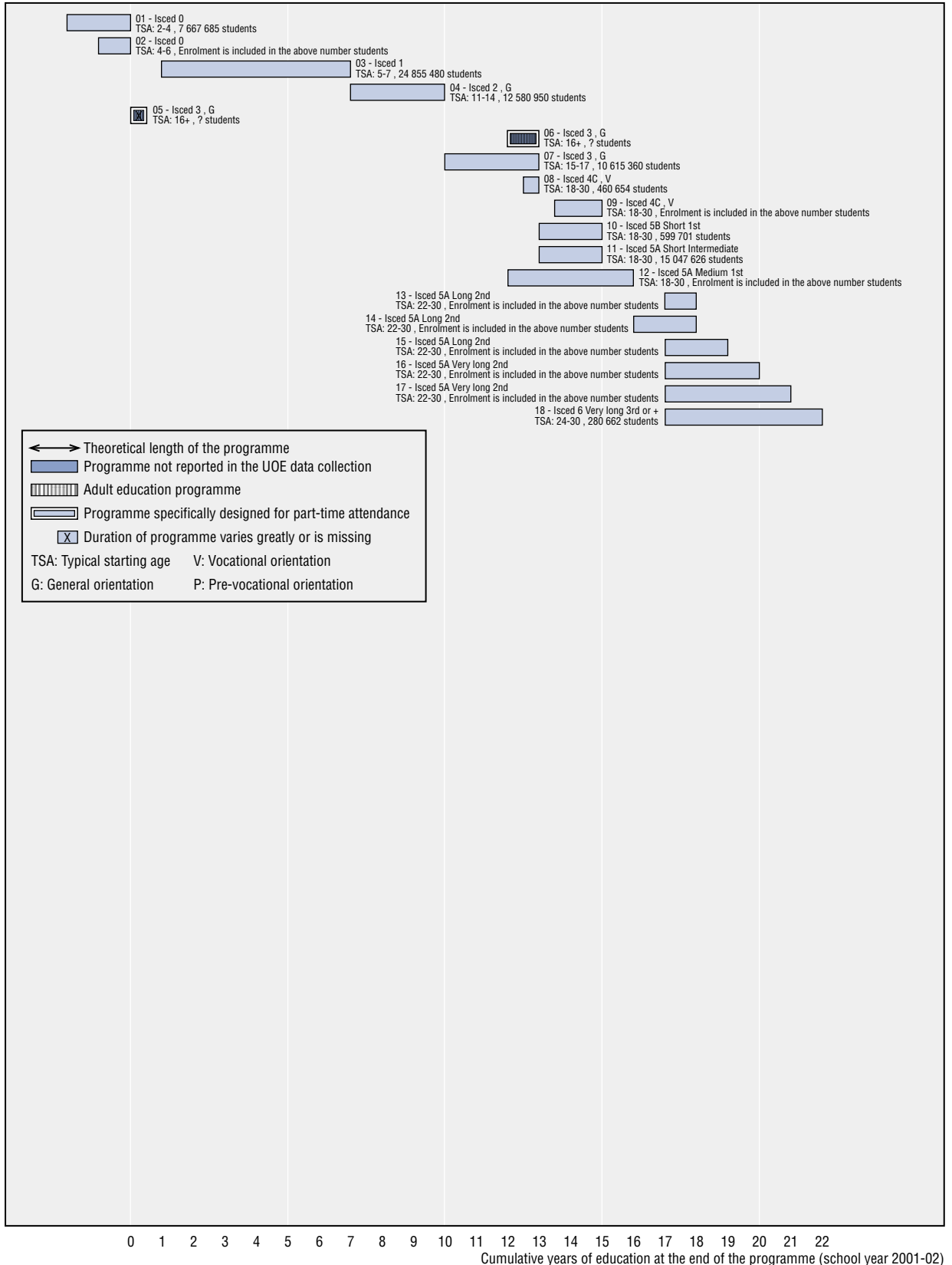
- 01 - Uygulamal ana okulu (practising nursery)
- 02 - Ana s n f (nursery class)
- 03 - Ana okulu (kindergarten)
- 04 - Kre (Early childhood care and education:day nursery)
- 05 - Özel e itim ana s n f ve ana okulu (special education nursery class and kindergarten)
- 06 - İlköğretim (primary education)
- 07 - Özel e itim ilkö retim okullar (special education primary schools)
- 08 - Özel e itim ilkö retim okullar (special education primary schools)
- 09 - Aç k İlkö retim (open primary school)
- 10 - Cıralık Egitimi (apprenticeship training)
- 11 - Cıralık Egitimi (apprenticeship training)
- 12 - Genel ortaö retim okullar (General high schools)
- 13 - Anadolu Liseleri (Anadolu high schools)
- 14 - High school with intensive foreign language teaching
- 15 - Fen liseleri (Science high schools)
- 16 - Aç k genel lise (open high school)
- 17 - Meslek liseleri (Vocational high schools)
- 18 - Anadolu meslek liseleri (Anadolu vocational high schools)
- 19 - Teknik Liseler (Technical high schools)
- 20 - Anadolu Teknik Liseleri (Anadolu technical high schools)
- 21 - itme engelliler için Çok programlı liseler (multi-programmed h.s. For students with hearing disabilities)
- 22 - Ortopedik engelliler için meslek liseleri (Voc. h.s.for students with orthopaedic disabilities)
- 23 - Aç k meslek lisesi (Open vocational high school)
- 24 - Meslek Yüksek Okulları (vocational higher schools)
- 25 - Aç k ö retim fakültesi (open training faculties)
- 26 - itme engelliler entegre yüksek okulu (Integrated higher school for hearing impaired)
- 27 - Fakülteler (faculties)
- 28 - Aç k ö retim fakültesi (open training faculties)
- 29 - itme engelliler entegre yüksek okulu (Integrated higher school for hearing impaired)
- 30 - Faculties-Dentistry, Veterinary, Medicine
- 31 - Postgraduate
- 32 - Tıpta Uzmanlık (specialization in medicine)
- 33 - Doktora (Ph.D.)

United Kingdom



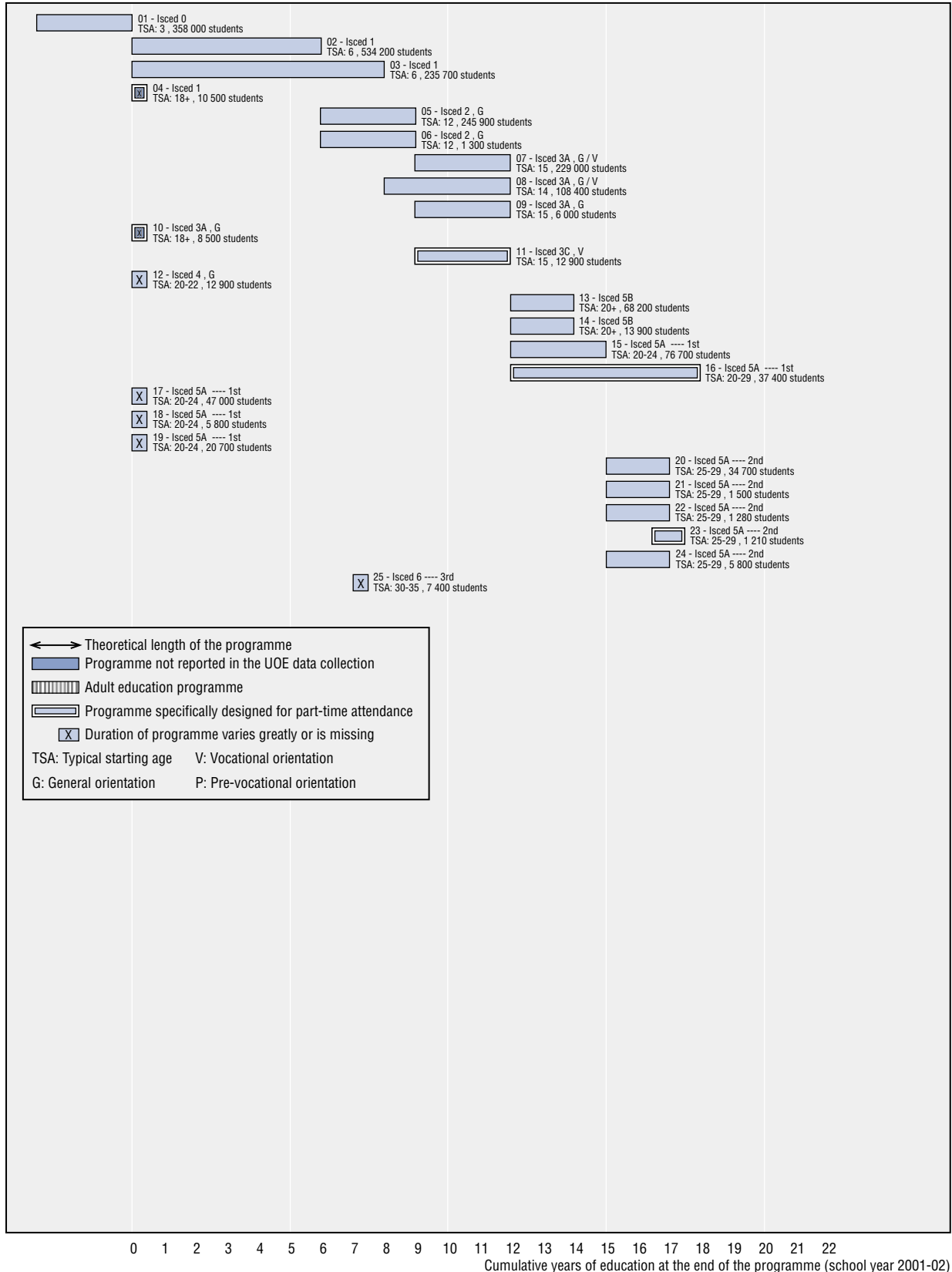
- 01 - Nursery schools and classes
- 02 - Playgroups and day nurseries
- 03 - Reception classes
- 04 - Adult literacy and numeracy
- 05 - Primary school
- 06 - Employer supported off-the-job
- 07 - Employer supported on-the-job training
- 08 - Skillstart (Scotland only)
- 09 - Secondary school (age <14)
- 10 - GNVQ [GSVQ] Foundation Level
- 11 - GCSE courses/SCE standard grades
- 12 - SCOTVEC National Certificate Modules
- 13 - Work-based training for adults
- 14 - GNVQ [GSVQ] Intermediate Level
- 15 - Activities leading to NVQ Level 2 and equivalent
- 16 - Activities leading to NVQ Level 1 and equivalent
- 17 - Traditional apprenticeships
- 18 - Work-based training for young people (including national traineeships)
- 19 - Activities leading to NVQ Level 3 and equivalent
- 20 - SCE Higher Grade
- 21 - Scottish Certificate of Sixth Year Studies
- 22 - GNVQ [GSVQ] Advanced Level
- 23 - GCE Advanced Level
- 24 - Modern Apprenticeships (MAs)
- 25 - HE Access Courses
- 26 - Activities leading to NVQ Level 5 and equivalent
- 27 - Activities leading to NVQ Level 4 and equivalent
- 28 - Higher National Certificate (HNC)
- 29 - Higher National Diploma (HND)
- 30 - Diploma in HE (including nurses training)
- 31 - Bachelor's degree, 2 years (accelerated)
- 32 - Bachelor's degree, 3 years
- 33 - Open University (Bachelor's degree)
- 34 - Bachelor's degree, 4 years
- 35 - Master's degree (taught)
- 36 - Professional post-graduate on-the-job training
- 37 - Post-graduate diplomas and certificates
- 38 - Bachelor's degree, 5+ years
- 39 - Master's degree (by research)
- 40 - Doctorate

United States



- 01 - Preschool or pre-kindergarten
- 02 - Kindergarten
- 03 - Primary education
- 04 - Middle education (grades 7-9)
- 05 - English as a second language
- 06 - GED or H.S. Equivalency Programme
- 07 - Secondary education (grades 10-12)
- 08 - Vocational Certificate (< 1 year)
- 09 - Vocational Certificate (1-2 years)
- 10 - Vocational Associate's Degree Programme
- 11 - Academic Associate's Degree Programme
- 12 - Bachelor's Degree Programme
- 13 - Post-graduate certificate programme (e.g. teaching)
- 14 - Master's degree programme (short)
- 15 - Master's degree programme (long)
- 16 - First Professional Degree Programme
- 17 - 1st Professional Degree Programme – Medical
- 18 - Doctorate (Ph.D. – Research)

Israel



←→ Theoretical length of the programme
 [Blue bar] Programme not reported in the UOE data collection
 [Hatched bar] Adult education programme
 [Double-line bar] Programme specifically designed for part-time attendance
 [X] Duration of programme varies greatly or is missing
 TSA: Typical starting age V: Vocational orientation
 G: General orientation P: Pre-vocational orientation

- 01 - Kindergarten
(Pre-primary)
- 02 - Six-year primary education
(Primary)
- 03 - Eight-year primary education
(Primary)
- 04 - Basic education for adults
(Basic education for adults)
- 05 - Lower Secondary Education
(Lower Secondary)
- 06 - Other Jewish religious lower secondary education
(Lower Secondary)
- 07 - Three-year upper secondary education
(Upper Secondary)
- 08 - Four-year upper secondary education
(Upper Secondary)
- 09 - Other Jewish religious upper secondary education
(Upper Secondary)
- 10 - Secondary Education for Adults
(Upper Secondary Education for adults)
- 11 - Apprenticeship & Industrial Schools
(Upper Secondary)
- 12 - Pre-academic preparatory programs
(Post-secondary non-tertiary)
- 13 - Post-Secondary Education
(Tertiary Non-University)
- 14 - Teacher training colleges - non-academic track
(Tertiary Non-University)
- 15 - Bachelor's Degree from universities
(Tertiary First Degree-University)
- 16 - Bachelor's Degree from the Open University
(Tertiary First Degree-University)
- 17 - Bachelor's Degree from Academic Colleges
(Tertiary First Degree-College)
- 18 - Bachelor's Degree from foreign affiliated universities
(Tertiary First Degree-Foreign universities)
- 19 - Teacher training colleges - Academic track
(Tertiary First Degree-Teacher training college)
- 20 - University's Second Degree
(Tertiary second academic degree)
- 21 - University's Post-Graduate Diploma
(Post-graduate programs)
- 22 - Second Degree from Academic Colleges
(Tertiary second academic degree)
- 23 - Second Degree from the Open University
(Tertiary second academic degree)
- 24 - Second Degree from foreign affiliated universities
(Tertiary second academic degree)
- 25 - Third Degree
(Doctorate programme)

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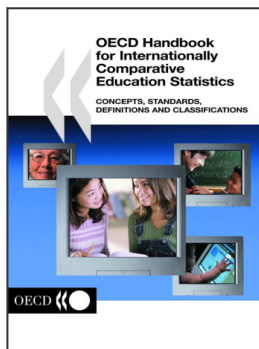
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