Chapter

5

THE DEFINITION AND CLASSIFICATION OF EDUCATIONAL PROGRAMMES: THE PRACTICAL IMPLEMENTATION OF ISCED

5.1 Introduction

This chapter covers the conceptual, definitional and classification issues concerning educational programmes. It is organised in three parts. The first part begins with an overview of the International Standard Classification of Education (ISCED-97) which provides the foundation for internationally comparative education statistics and goes on to set out the definitions and classifications that apply to educational programmes within it. The second part then sets out in detail how educational programmes are allocated within each ISCED level, considering the criteria that define the boundaries between educational levels. The final part shows how ISCED-97 is operationalised by detailing how each OECD countries' national educational programmes are in practice mapped to the ISCED-97 classification. These mappings are reviewed on an ongoing basis and so may have been revised since publication of this book; the up to date mappings can be found on the OECD website at www.oecd.org/edu.

5.2 Overview of ISCED-97

ISCED is at the heart of international statistics on education and has been since it was first designed by UNESCO in the early 1970s to serve as 'an instrument suitable for assembling, compiling and presenting statistics of education both within individual countries and internationally'. The first ISCED (hereafter referred to as ISCED-76) became operational from 1976.

The increasing complexity of education systems over the next 20 years, often reflecting more choice between types of programmes and modes of attendance, imposed new difficulties for the international comparability of education statistics and many of these changes could no longer be adequately reflected in data collected under ISCED-76. The case for a revised ISCED was clear. Following a collaborative effort involving UNESCO, OECD and Eurostat, ISCED-97 was adopted as the replacement for ISCED-76 by the UNESCO General Conference in 1997, and the UNESCO ISCED-97 Manual was published in November of that year (UNESCO 1997).

ISCED-97 is designed to provide an *integrated* and *consistent* statistical framework for the collection and reporting of *internationally comparable* education statistics. It is a programme-based taxonomy which seeks to reduce complex national educational structures along certain classification criteria into defined international categories. It thus provides the basis for transforming detailed national education statistics, which were compiled on the basis of national concepts and definitions, into aggregate categories that are deemed to be internationally comparable and that can be meaningfully interpreted.

The coverage of ISCED-97 extends to all organised and sustained learning opportunities for children, youth and adults, including those with special educational needs, irrespective of the institutions or organisations providing them or the form in which they are delivered. This does not mean, of course, that all data collection based on ISCED need necessarily to have that coverage. Indeed, as set out in Chapter 3, the coverage of the OECD education statistics takes a slightly more narrow focus excluding, for instance, solely work-based education and training and learning which is primarily for leisure or recreational purposes.

The educational programme (defined in the next section) is the basic unit of classification in ISCED-97. Each programme should be allocated to a particular level of education on the basis of its educational content, which in practice is determined by applying classification criteria such as typical starting ages, entrance qualifications, and type of qualification awarded. The introduction of these multi-dimensional criteria in ISCED-97 was necessary to capture the complexities of modern education systems and represented a major shift from the uni-dimension ladder system on which ISCED-76 was based.

The allocation of national programmes to ISCED levels on a consistent basis across countries is fundamental to ensuring the meaningfulness of the statistics and indicators that are compiled from the data. For that

reason, to accompany the UNESCO ISCED Manual, OECD published "Classifying educational programmes: Manual for the implementation of ISCED-97 in OECD countries" (OECD, 1999). The guide aimed to provide clear guidance to OECD countries on how to implement the ISCED-97 framework in international data collections and crucially included proposed allocations of national educational programmes to ISCED-97 for OECD countries (see Section 5.5).

ISCED-97 was first integrated into the joint OECD, Eurostat and UNESCO UOE data collection for the school year 1998, the indicators from which were published in the 2000 edition of OECD's *Education at a Glance*.

5.3 Definition and classification of educational programmes

The educational programme is the basic unit of classification within ISCED-97 and as such is the main building block for international statistical comparisons in education. This section first of all provides a definition of an educational programme and then describes the various ways in which such programmes can be classified: by level, field of education, vocational/general orientation, school based or combined school and work-based programmes.

5.3.1 Definition of an educational programme

An **educational programme** is defined as a collection of educational activities which are organised to accomplish a pre-determined objective or the completion of a specified set of educational tasks.

The term *educational activities* has a broader meaning than for instance the terms "course" or "class". Educational activities can be courses (*e.g.* the study of individual subjects) organised into programmes as well as free-standing courses. They can also include a variety of components not normally characterised as courses, for example interludes of work experience in enterprises, research projects, and preparation of dissertations.

Objectives can, for instance, be the preparation for more advanced study, the achievement of a qualification, preparation for an occupation or range of occupations, or simply for an increase in knowledge and understanding.

So, an educational programme could simply be the study of a single subject leading to a recognised qualification or it can be the study of a collection of subjects, along with perhaps a period of work experience, all of which contribute towards the same qualification aim.

When a national programme has programme options or paths of study that differ with respect to one or more of the criteria that are used to classify educational programmes within ISCED (see Section 5.3.2.1), then it should be broken apart and reported as separate programmes under ISCED-97. For example, if it takes four years to train a teacher and seven years to train a medical doctor in a country, then the corresponding activities should be reported as separate programmes under ISCED-97, even though they may be considered as one single type of programme from a national perspective (*e.g.* university education).

5.3.2 Classification of educational programmes by level

In summary, the levels to which programmes are assigned within ISCED-97, are as follows:

ISCED-97 Level	Description
0	Pre-primary level of education
1	Primary level of education
2	Lower-secondary level of education (sub-categories 2A, 2B and 2C *)
3	Upper secondary level of education (sub-categories 3A, 3B and 3C*)
4	Post-secondary, non-tertiary education (sub-categories 4A, 4B and 4C*)
5	First stage of tertiary education : not leading directly to an advanced research qualification (sub-categories 5A and 5B*)
6	Second stage of tertiary education : leading to an advanced research qualification

* Distinguishing between the destinations that the programmes are theoretically designed to prepare students for.

A detailed description of each of these levels is given in Section 5.4.

It is worth noting that in the original ISCED-97 framework approved by UNESCO, Level 4 was divided into two sub-categories only: 4A and 4B. However, in order to maintain a parallel structure to the three-way split of educational and labour market destinations of Level 3, Level 4 was split into three categories in the implementation of ISCED (see also Section 5.4.5).

In ISCED-97, a 'level' of education is broadly defined as the gradations of learning experiences and the competencies built into the design of an educational programme. Broadly speaking, the level is related to the degree of complexity of the content of the programme. This does not, however, imply that levels of education constitute a ladder, where access of prospective participants to each level **necessarily** depends on the successful completion of the previous level, though such progression is more likely between the lower ISCED levels. It also does not preclude the possibility that some participants in educational programmes at a given level – most probably at post-compulsory levels - may have previously successfully completed programmes at a higher level.

In summary, **the level of an educational programme should be determined by its educational content**. It is very difficult, however, to directly assess and compare the content of the educational programmes in an international comparative way. Curricula are far too diverse, multi-faceted, and complex to permit clear judgements that one curriculum for students of given age or grade belongs to a higher level of education than another. The kind of international curricular standards that would be needed to support such judgements simply do not yet exist. The lack of such information on programme equivalence seriously undermines the international comparability of the statistics and indicators that are analysed by level of education and this remains a major challenge for future improvement.

In the absence of such standards, ISCED-97 defines various criteria which describe the characteristics of a programme and its students that should be used as proxies for the content of the programme in allocating national programmes to ISCED levels.

5.3.2.1 Criteria used in allocating programmes to levels

Section 5.4 describes in detail the criteria – main and auxiliary – that should be used in the allocation of programmes to each respective level within ISCED-97. A number of the criteria are specific to individual ISCED levels (*e.g.* the requirement that an ISCED 6 programme should include the submission of a thesis or dissertation) but there are some criteria which are more commonly used and these are described here.

- **Ages of participants**- it is important to distinguish between ***theoretical ages*** and ***typical ages***:
  - ***Theoretical ages*** refer to the ages as ***established by law and regulation*** for the entry and ending of a cycle of education whereas ***typical ages*** refer to the ages that normally correspond to the age at entry and ending of the programme (usually the most common age for entry or ending a programme).
  - ***Starting age:*** the age at the beginning of the first school/academic year of the corresponding level and programme.
  - ***Ending age:*** the age at the beginning of the last school/academic year of the corresponding level and programme.
  - ***Graduation age:*** the age at the end of the last school/academic year of the corresponding level and programme when the degree is obtained. Note that at some levels of education the term "graduation age" may not translate literally and would be equivalent to a "completion age"; it is used here purely as a convention.
  - ***Theoretical ending ages*** are derived by adding the ***theoretical duration of the programme*** (see below) to the theoretical starting age, where the theoretical duration assumes full-time attendance in the regular education system and that no year is repeated.
- **The duration of the programme** - the standard number of years (or days or weeks or months) in which a student can complete the education programme. The duration can be either *theoretical* or *typical*. The ***theoretical duration of the programme*** is that which is set out in law or regulations and may differ from the ***typical or average duration of the programme*** which reflects the time that students take in practice to complete the programme. The *"full-time equivalent duration*" refers to a weighted average of the length of time it takes a full-time student to complete and the length of time it takes part-time students to complete. Tertiary programmes and particularly ISCED 5 programmes use the *"**Cumulative theoretical duration**"* which represents the full-time equivalent duration of the programme from the start of level 5. Thus if a programme requires the completion of another tertiary programmes prior to admission, the cumulative duration includes the duration of the programmes required for entry.
- **Typical entrance qualifications and minimum entrance requirements** - this may be the successful completion of the previous ISCED level or simply any qualification at the previous or current level. Entry qualifications can also be the demonstration of skills/knowledge/competence or experience that is equivalent to a particular qualification or it can be the completion of a particular number of years schooling. *Minimum entry requirement* are those which it is necessary to have to join programme whereas *typical entry requirements* are those which students have in practice.
- **Qualifications awarded** - the type of certifications or diplomas that are awarded upon successful completion of the programme (Section 4.2.3 deals with the definition of successful completion).
- **Type of subsequent education or destination** - the destination for which the programmes have been theoretically designed to prepare students (see Section 5.3.5).
- **Programme orientation** - the degree to which the programme is specifically oriented towards a specific class of occupations or trades and is generally oriented towards an immediate transition into the labour market (see Section 5.3.4).

5.3.2.2 Advice on the application of the criteria

It should be stressed again that ideally programmes should be allocated to levels on the basis of the complexity of the educational content; the use of the programme characteristics listed above should be used only as proxies for this if no other better information is available. In countries where a national qualification framework exists, these too can be used as a reference for the allocation to ISCED levels.

A fundamental aspect of the proxy criteria listed is that they complement, rather than exclude, each other. For example, while some students may be classified to the "primary level of education" on the basis of their *ages (*"Primary education usually begins at age 5, 6 or 7"), that criterion is clearly inappropriate for adults on adult literacy programmes. Here adult literacy programmes are allocated to ISCED 1 if the *content* of the programmes are similar to regular programmes in primary education.

Similarly, neither the *duration* of an educational programme nor its *theoretical and typical starting ages* should be the sole criterion for its level attribution. For example, in Australia, New Zealand, and the United Kingdom, a qualifications framework based on *recognition of competencies* is used to organise the final years of secondary education and/or the first years of the tertiary level of education. The existence of such a competence-based organisational framework means that programmes at the boundary between these educational levels in these countries cannot be solely allocated on the basis of either the typical entry ages of participants or the theoretical duration of the programmes.

In the area of vocational education and training, the Australian National Framework for Recognition of Training includes provisions for the recognition of prior learning, competency-based articulation of courses and credit transfer between them, accreditation of courses, registration of private providers and mutual recognition among States of qualifications obtained by individuals through accredited courses. The National Vocational Qualification (NVQ) in the United Kingdom provides a similar competency-based model. For these types of programmes, multiple classification criteria must be utilised to map them to ISCED-97.

If it is the case that data availability forces transition points in national education systems to be used as the main criteria for allocating educational programmes to a particular ISCED-97 level, these transition points should be consistent with the classification criteria stated above. In any case, if the ISCED-97 framework does not match the data reporting framework in all countries perfectly, countries are advised to apply estimation procedures either to combine or divide national programmes for their reporting under ISCED-97.

Of key importance is that the allocation of programmes to the ISCED categories based simply on national institutional boundaries should be avoided as institutional structures across countries are not comparable in terms of the characteristics of the education they provide (*e.g.* entrance qualifications, theoretical and typical ages of participants and typical programme durations). Similarly, allocating a programme to an ISCED category based simply on the fact that its national name matches the name of the international category must be avoided.

5.3.2.3 Classification of difficult cases

Some educational activities, often those outside the regular education system, cannot be easily mapped to a particular level of education. The first test in these cases is whether they fall within the scope of international education statistics in the first place. For this to be true (see Chapter 3), the activities need to clearly involve organised and sustained communication designed to bring about learning. In the case of non-regular programmes (such as adult or continuing learning programmes in some countries), their content should be equivalent to regular programmes or, alternatively, they should lead to similar or equivalent qualifications.

For such programmes that do fall within scope of the collection, characteristics such as typical entry ages, entry requirements, and programme duration may not be very useful criteria to classify such programmes. This will be the case, for example, as countries move towards a more flexible provision of education, modelled on a life-long learning approach.

As a result, all such educational activities should be classified based on the degree of equivalence of their educational content with regular programmes that can be more easily mapped to ISCED-97. For some programmes, the equivalence of the qualifications or certifications awarded upon successful completion will be the guide to classifying an educational activity. For example, the level of educational content of a distance education programme might be classified based on the type of qualifications that are awarded upon its successful completion.

Programmes organised by the military which meet the coverage criteria can also cause difficulty. Again, military education and training programmes should be mapped to ISCED according to the similarity of the content of these programmes to other educational programmes. For example, if a military college awards an engineering degree that has similar academic content to an engineering degree awarded by a civilian university, then the military qualification should be mapped to the same ISCED level as the civilian qualification. It should be noted, however, that since many countries do not report military qualifications in international data collections, the reporting of military degrees by only some countries may lead to data incomparability.

5.3.3 Field of education of programmes

Programmes are classified into fields of education as defined in the 2-digit classification of fields within ISCED-97. An exception to this is where the single ISCED-97 category 'Teacher training and education science' is split into two separate categories. The classification is also consistent with the fields defined in the *Fields of Education and Training – Manual* (EUROSTAT, 1999) which disaggregates the ISCED field classification to a lower level.

In summary, the classification distinguishes the following fields:

- **Education**
  - Teacher training (Category 141)
  - Education science (142)
- **Humanities and Arts**
  - Arts (21)
  - Humanities (22)
- **Social sciences, business and law**
  - Social and behavioural science (31)
  - Journalism and information (32)
  - Business and administration (34)
  - Law (38)
- **Science**
  - Life sciences (42)
  - Physical sciences (44)

- Mathematics and statistics (46)
- Computing (48)

• **Engineering, manufacturing and construction**

- Engineering and engineering trades (52)
- Manufacturing and processing (54)
- Architecture and building (58)

• **Agriculture**

- Agriculture, forestry and fishery (62)
- Veterinary (64)

• **Health and welfare**

- Health (72)
- Social services (76)

• **Services**

- Personal services (81)
- Transport services (84)
- Environmental protection (85)
- Security services (86)

This classification applies to all levels of education. Students not classifiable by field of education should be allocated to the category "Field of education unknown". Annex 5 provides details of the coverage of each of the two digit fields.

5.3.4 *Programme orientation*

Programmes at ISCED levels 2, 3 and 4 are sub-divided into three categories of *programme orientation* based on the degree to which a programme is specifically oriented towards a particular class of occupations or trades and leads to a labour-market relevant qualification:

- **Type I** (general): Covers education which is more general and is not designed explicitly to prepare participants for a specific class of occupations or trades or for entry into further vocational or technical education programmes. Less than 25 per cent of the programme content is vocational or technical.
- **Type II** (pre-vocational or pre-technical): Covers education that is mainly designed to introduce 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. For a programme to be considered as pre-vocational or pre-technical education, it should comprise at least 25 per cent of vocational or technical content.
- **Type III** (vocational or technical): Covers education that prepares participants for direct entry, without further training, into specific occupations. Successful completion of such programmes leads to a labour-market relevant vocational qualification.

5.3.5 Programme destination

Programmes at ISCED levels 2, 3, 4 and 5 are sub-divided according to the destination for which the programmes have been designed to prepare students. The destinations distinguished vary for each of the ISCED levels and can be further study on a programme at a higher level, further study on a programme at the same level or entry into the labour market. Section 5.4 fully details the breakdowns for each ISCED level but the following table represents a broad summary:

ISCED level	Sub-division	Destination
2	2A	ISCED 3A or 3B programme
	2B	ISCED 3C programme
	2C	Labour Market
3	3A	ISCED 5A programme
	3B	ISCED 5B programme
	3C	Another ISCED 3 programme or an ISCED 4 programme or the labour market
4	4A	ISCED 5A programme
	4B	ISCED 5B programme
	4C	Other ISCED 4 programme or the labour market
5	5A	High skills profession or advanced research programme
	5B	Particular occupation

5.3.6 School-based and combined school- and work-based vocational and technical programmes

Although ISCED-97 itself does not make such a distinction, vocational and technical programmes can be either "school-based programmes" or "combined school- and work-based programmes". (***Note***: as stated in Chapter 3, solely work-based programmes are excluded from the coverage of the statistics.)The distinction between the two is based on the amount of training that is provided in-school as opposed to training at the workplace. The following definition is used for this distinction:

- In *school-based programmes* instruction takes place (either partly or exclusively) in educational institutions. These include special training centres for vocational education run by public or private authorities or enterprise-based special training centres if these qualify as educational institutions. These programmes can have an on-the-job training component, *i.e.* a component of some practical experience at the workplace. As a guide, programmes should be classified as **school-based** if at least 75 per cent of the curriculum is presented in the school environment (covering the whole educational programme, including distance education, where this is part of the programme).
- In *combined school- and work-based programmes* instruction is shared between school and the workplace, although instruction may take place primarily at the workplace. As a guide, programmes are classified as **combined school- and work-based** if less than 75 per cent of the curriculum is presented in the school environment or through distance education. These programmes include:
  - apprenticeship programmes organised in conjunction with educational authorities or educational institutions that involve concurrent school-based and work-based training; and
  - programmes organised in conjunction with educational authorities or educational institutions that involve alternating intervals of attendance at educational institutions and participation in work-based training (programmes of training in alternation, sometimes referred to as "sandwich" programmes).

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

5.4 Detailed description of ISCED levels and application of the classification criteria

As stated in Section 5.3.2, there exist several main and auxiliary criteria that act as proxy measures for educational content, which can help point to the level of education that any given educational programme should be classified into. These criteria are outlined in Table 5.1 for each ISCED-97 level and are discussed in detail for the specific ISCED levels presented in the remainder of this Chapter.

5.4.1 ISCED 0 – Pre-primary level of education

Definitions and classification criteria

Pre-primary education (ISCED 0) is defined as the initial stage of **organised instruction**, designed primarily to introduce very young children to a school-type environment, that is, to provide a bridge between the home and a school-based atmosphere.

Boundary between education and child care. Some countries internally define pre-primary or early childhood education more broadly than others. Thus, the comparability of international statistics on pre-primary education depends on each country's willingness to report data for this level according to a standard international definition, even if that definition diverges from the one that the country uses in compiling its own national statistics. The distinction between programmes that would fall into ISCED 0 and programmes that would be outside of the scope of ISCED-97 rests primarily on the educational properties of the programme. As the educational properties are difficult to assess directly, several proxy measures should be used to determine whether or not a programme should be classified at this level. ISCED 0 programmes should be centre or school-based, be designed to meet the educational and developmental needs of children at least 3 years of age, and have staff that are adequately trained (*i.e.* qualified) to provide an educational programme for the children.

Centre-based. For a programme to be considered as pre-primary education, it must be school-based or centre-based. These terms are used to distinguish activities in organised educational settings from services provided in households or family settings, which would generally not be included at this level. These centres may come under the jurisdiction of a public or private school or other education service provider.

Age range. Programmes at this level are typically designed for children at least 3 years old and not older than 6. Most OECD countries consider the *typical starting age* of pre-primary education to be three years or older and do not include children younger than three in their own national statistics on pre-primary education. In some cases, however, programmes that are considered "educational" by the country concerned serve children as young as two or two-and-a-half. An educational programme cannot be considered as belonging to level 0 if it is primarily designed to serve children aged two years or less.

The upper age limit depends in each case on the typical age for entry into primary education, typically age 6 or 7.

Staff qualifications and educational content in the curriculum. As it is very difficult to specify precisely where child-care ends and education begins for children at very young ages, it is necessary to rely on proxy criteria. The requirement of pedagogical qualifications for the teaching staff can be a good proxy criterion to distinguish an educational programme from a non-educational programme. It serves to distinguish pre-primary education from child-care for which para-medical or no qualifications are required. In countries where the government does not closely regulate pre-primary education (*e.g.* there

Table 5.1
Description of ISCED-97 levels, classification criteria, and sub-categories

0 Pre-Primary Level of Education	Main criteria	Auxiliary criteria	Sub-categories
Initial stage of organised instruction, designed primarily to introduce very young children to a school-type environment.	Should be centre or school-based, be designed to meet the educational and developmental needs of children at least 3 years of age, and have staff that are adequately trained (i.e., qualified) to provide an educational programme for the children.	Pedagogical qualifications for the teaching staff; implementation of a curriculum with educational elements.	

1 Primary Level of Education	Main criteria	Auxiliary criteria	Sub-categories
Normally designed to give students a sound basic education in reading, writing and mathematics.	Beginning of systematic studies characteristic of primary education, e.g. reading, writing and mathematics. Entry into the nationally designated primary institutions or programmes. The commencement of reading activities alone is not a sufficient criteria for classification of an educational programmes at ISCED 1.	In countries where the age of compulsory attendance (or at least the age at which virtually all students begin their education) comes after the beginning of systematic study in the subjects noted, the first year of compulsory attendance should be used to determine the boundary between ISCED 0 and ISCED 1.	

2 Lower Secondary Level of Education	Main criteria	Auxiliary criteria	Destination for which the programmes have been designed to prepare students		Programme orientation	
The lower secondary level of education generally continues the basic programmes of the primary level, although teaching is typically more subject-focused, often employing more specialised teachers who conduct classes in their field of specialisation.	Programmes at the start of level 2 should correspond to the point where programmes are beginning to be organised in a more subject-oriented pattern, using more specialised teachers conducting classes in their field of specialisation.	If there is no clear breakpoint for this organisational change, however, then countries should artificially split national programmes into ISCED 1 and 2 at the end of 6 years of primary education.	**A**	Programmes designed to prepare students for direct access to level 3 in a sequence which would ultimately lead to tertiary education, that is, entrance to ISCED 3A or 3B.	**1**	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 per cent of the programme content is vocational or technical.
	If this organisational transition point does not correspond to a natural split in the boundaries between national educational programmes, then programmes should be split at the point where national programmes begin to reflect this organisational change.	In countries with no system break between lower secondary and upper secondary education, and where lower secondary education lasts for more than 3 years, only the first 3 years following primary education should be counted as lower secondary education.	**B**	Programmes designed to prepare students for direct access to programmes at level 3C.	**2**	Education mainly designed as an introduction to the world of work and as preparation for further vocational or technical education. Does not lead to a labour-market relevant qualification. Content is at least 25 per cent vocational or technical.
			C	Programmes primarily designed for direct access to the labour market at the end of this level (sometimes referred to as 'terminal' programmes).	**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.

3 Upper Secondary Level of Education	Main criteria	Modular programmes	Destination for which the programmes have been designed to prepare students		Programme orientation	
The final stage of secondary education in most OECD countries. Instruction is often more organised along subject-matter lines than at ISCED level 2 and teachers typically need to have a higher level, or more subject-specific, qualification that at ISCED 2	National boundaries between lower secondary and upper secondary education should be the dominant factor for splitting levels 2 and 3.	An educational qualification is earned in a modular programme by combing blocks of courses, or modules, into a programme meeting specific curricular requirements.	**A**	ISCED 3A: programmes at level 3 designed to provide direct access to ISCED 5A.	**1**	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 per cent of the programme content is vocational or technical.
	Admission into educational programmes usually require the completion of ISCED 2 for admission, or a combination of basic education and life experience that demonstrates the ability to handle ISCED 3 subject matter.	A single module, however, may not have a specific educational or labour market destination or a particular programme orientation.	**B**	ISCED 3B: programmes at level 3 designed to provide direct access to ISCED 5B.	**2**	Education mainly designed as an introduction to the world of work and as preparation for further vocational or technical education. Does not lead to a labour-market relevant qualification. Content is at least 25 per cent vocational or technical.
There are substantial differences in the typical duration of ISCED 3 programmes both across and between countries, typically ranging from 2 to 5 years of schooling.		Modular programmes should be classified at level "3" only, without reference to the educational or labour market destination of the programme.	**C**	ISCED 3C: programmes at level 3 not designed to lead directly to ISCED 5A or 5B. Therefore, these programmes lead directly to labour market, ISCED 4 programmes or other ISCED 3 programmes.	**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.

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Post-Secondary Non-Tertiary	Main criteria	Types of programmes can fit into level 4		Destination for which the programmes have been designed to prepare students		Programme orientation
These programmes straddle the boundary between upper secondary and post-secondary education from an international point of view, even though they might clearly be considered as upper secondary or post-secondary programmes in a national context.	Students entering ISCED 4 programmes will typically have completed ISCED 3. As described above, successful completion of any programme at level 3A or 3B counts as a level 3 completion.	The first type are short vocational programmes where either the content is not considered "tertiary" in many OECD countries or the programme didn't meet the duration requirement for ISCED 5B--at least 2 years FTE since the start of level 5.	**A**	Programmes at level 4, designed to provide direct access to ISCED 5A.	**1**	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 per cent of the programme content is vocational or technical.
They are often not significantly more advanced than programmes at ISCED 3 but they serve to broaden the knowledge of participants who have already completed a programme at level 3. The students are typically older than those in ISCED 3 programmes.	Programme duration: ISCED4 programmes typically have a full-time equivalent duration of between 6 months and 2 years.	These programmes are often designed for students who have completed level 3, although a formal ISCED level 3 qualification may not be required for entry.	**B**	Programmes at level 4, designed to provide direct access to ISCED 5B.	**2**	Education mainly designed as an introduction to the world of work and as preparation for further vocational or technical education. Does not lead to a labour-market relevant qualification. Content is at least 25 per cent vocational or technical.
		The second type of programmes are nationally considered as upper secondary programmes, even though entrants to these programmes will have typically already completed another upper secondary programme (i.e., second-cycle programmes).	**C**	Programmes at level 4 not designed to lead directly to ISCED 5A or 5B. These programmes lead directly to labour market or other ISCED 4 programmes.	**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.

5

First Stage of Tertiary Education	Classification criteria for level and sub-categories (5A and 5B)			Cumulative theoretical duration at tertiary		Position in the national degree and qualifications structure
ISCED 5 programmes have an educational content more advanced than those offered at levels 3 and 4.	Entry to these programmes normally requires the successful completion of ISCED level 3A or 3B or a similar qualification at ISCED level 4A or 4B.		**A**		**1**	
ISCED 5A programmes that are largely theoretically based and are intended to provide sufficient qualifications for gaining entry into advanced research programmes and professions with high skills requirements.	The minimum cumulative theoretical duration (at tertiary level) is of three years (FTE). The factury must have advanced research credentials. Completion of a research project or thesis may be involved.	The programmes provide the level of education required for entry into a profession with high skills requirements or an advanced research programme.	**B**	Duration categories: Medium: 3 to less than 5 years; Long: 5 to 6 years; Very long: More than 6 years.	**2**	Categories: Intermediate; First; Second; Third and further.
ISCED 5B programmes that are generally more practical/technical/occupationally specific than ISCED 5A programmes.	Programmes are more practically oriented and occupationally specific than programmes at ISCED 5A and they do not prepare students for direct access to advanced research programmes. They have a minimum of two years' full-time equivalent duration.	The programme content is typically designed to prepare students to enter a particular occupation.	**C**	Duration categories: Short: 2 to less than 3 years; 3 to less than 5 years; Long: 5 to 6 Years; Very long: More than 6 years.	**3**	Categories: Intermediate; First; Second; Third and further.

6

Second Stage of Tertiary Education (leading to an Advanced Research Qualification)		
This level is reserved for tertiary programmes that lead to the award of an advanced research qualification. The programmes are devoted to advanced study and original research.	The level requires the submission of a thesis or dissertation of publishable quality that is the product of original research and represents a significant contribution to knowledge. It is not solely based on course-work.	It prepares recipients for faculty posts in institutions offering ISCED 5A programmes, as well as research posts in government and industry.

are no qualification requirements for staff), this criteria cannot be, however, the sole factor determining whether or not a programme has sufficient educational content to be classified at ISCED 0.

Formal implementation of a curriculum with educational elements is also a useful criterion to distinguish a programme that meets the educational content requirements of ISCED 0, from programmes with little or no educational content.

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

Programmes that combine education and child care. In some countries, institutions providing pre-primary education also provide extended day or evening child-care. In the interest of international comparability, a country whose institutions provide these extended day or evening services should attempt to exclude the cost of such services from any reported expenditure statistics relating to ISCED 0. Personnel data should also be pro-rated. This does not preclude, however, the collection of participation, personnel, of finance data on early childhood programmes that fall outside of the boundary of ISCED 0.

Examples

Long Day Care Centre (Australia). Pre-school programmes will be classified at 0. Pre-school education meets all the main and subsidiary criteria. However, programmes at formal Long Day Care centres are a "grey area" because the programmes generally have some educational content, are centre based, many of the children fall into the appropriate age range (though a large proportion do not), and some staff have teaching qualifications.

The Australians will exclude children enrolled in Long Day Care centre programmes from ISCED 0. This is because they only partially meet the ISCED 97 criteria in that:

- Many children attending are aged under 3 years
- Only a minority of staff have teaching qualifications
- The educational properties of programmes at child-care centres seem insufficient.

Day care in private homes (Denmark). In Denmark, young children can attend programmes that are offered either in educational institutions or private homes. The "day-care" offered in private homes is paid by the public authorities and controlled by them. As these programmes are not centre-based, however, they do not meet the criteria to be classified at ISCED 0.

5.4.2 ISCED 1 – Primary level of education

Definitions and classification criteria

Primary education usually begins at age 5, 6, or 7 and generally lasts for 4 (*e.g.* Germany) to 6 years (the mode of the OECD countries being six years). Programmes at the primary level generally require no previous formal education, although it is becoming increasingly common for children to have attended a pre-primary programme before entering primary education.

Level of educational content. Programmes at ISCED 1 are normally designed to give students a sound basic education in reading, writing and mathematics along with an elementary understanding of other subjects such as history, geography, natural science, social science, arts and music. The commencement of reading activities alone is not a sufficient criterion for classification of an educational programmes at ISCED 1.

Boundary between ISCED 0 and ISCED 1. The boundary between pre-primary and primary education is typically the beginning of systematic studies characteristic of primary education, *e.g.* reading, writing and mathematics. It is common, however, for children to begin learning basic literacy and numeracy skills at the pre-primary level.

An additional proxy criterion for classification at ISCED 1 level is entry into the nationally designated primary institutions or programmes. In countries where primary education starts at an early age (*e.g.* 4 or 4 and 1/2), young children should be classified at ISCED 1 only if the school day duration, qualifications of staff, and content level of the programme are similar to those where children of age 6 are enrolled.

Although the start of compulsory education is also laid out as a subsidiary criterion for the boundary between ISCED 0 and 1, this criterion is not particularly useful in many OECD countries where the start of compulsory schooling is often not related to either the beginning of systematic studies or the typical age of entry of children. In countries where the age of compulsory attendance (or at least the age at which virtually all students begin their education) comes after the beginning of systematic study in the subjects noted above, the first year of compulsory attendance should be used to determine the boundary between ISCED 0 and ISCED 1. This latter criterion is imposed to emphasise that the start of ISCED 1 should reflect the point at which the start of systematic studies in the above subjects starts for all students, not just a select few.

In most countries, ISCED 1 will correspond to nationally designated primary education. In countries where "basic education" covers the entire compulsory schooling period (*i.e.* where there is no system break between primary and lower secondary education) and where in such cases "basic education" lasts for more than 6 years, only the first 6 years following pre-primary education should be counted as primary education.

Special needs education. Organised instruction for children with special needs should also be included at this level if the content of the instruction is broadly similar to that of other ISCED 1 programmes.

Adult literacy programmes. Literacy or basic skills programmes within or outside the school system which are similar in content to programmes in primary education for those considered too old to enter elementary schools are also included at this level because they require no previous formal education.

Examples of international variability in the length of primary programmes in OECD countries

- 4 years: Austria, Germany and Hungary
- 5 years: Czech Republic, France and Italy
- 6 years: Belgium, Denmark, Finland, Greece, Japan, Mexico, Poland and Spain
- 7 years: Iceland
- 8 years: Australia
- Varying duration → report first 6 years as ISCED 1: Canada, Switzerland and the United States
- 9 to 10 years of basic education → report first 6 years as ISCED 1: Denmark, Norway and Sweden.

Examples of countries with national variability in the length of primary programmes

Elementary / primary schools (Canada and the United States): Primary and secondary education form a continuum, with the duration of elementary or primary school primarily based on institutional

characteristics that can differ by province / state or locality (ranging from 3 grades to as many as 8). In these countries, the elementary-secondary continuum will be split at the end of grade 6 to report at ISCED 1 level, so that the grades contained in each level facilitate cross-country comparability. This method of reporting program data will ensure that, in a national context, comparable programs are allocated at each level (the content level is indeed broadly similar at a particular grade across states / provinces).

Primarschule, école primaire, scuola elementare (Switzerland). The entry age to primary education is either 6 years (4 cantons), 6 1/2 years (2 cantons) or 7 years (17 cantons). Cantons leave the decision of starting schooling ages to the communes (local authorities). Since the length of the primary and lower secondary levels combined is a uniform 9 years, the differences in starting ages translate into different starting ages throughout the whole school careers of students. Primary education lasts between 4 and 6 years (depending on cantons). Reforms under way will reduce the fraction of students in four years programmes. For comparability purposes, the first 6 years of primary / lower secondary education should be allocated to ISCED level 1.

Examples of programmes for individuals outside of the typical age of primary schooling

Adult basic academic upgrading (Canada). Less than one year programme to upgrade basic skills. Results in a Certificate of Achievement.

Enseñanzas Iniciales de Educación Básica para personas en edad adulta (Spain). Adult education programme at the primary level.

Svenska för vuxna invandrare (Sweden). This one-year programme teaches Swedish to adult immigrants. Its content is thus different from typical primary education, and it is thus not reported in the UOE data collection.

5.4.3 ISCED 2 — Lower secondary level of education

Definitions and classification criteria

The lower secondary level of education generally pursues the basic programmes of the primary level, although teaching is typically more subject-focused, often employing more specialised teachers who conduct classes in their field of specialisation. Lower secondary education may be either "terminal" (*i.e.* preparing students for direct entry into working life) and / or "preparatory" (*i.e.* preparing students for upper secondary education).

This level can range from 2 to 6 years of schooling (the mode of OECD countries is 3 years).

Entry requirements. Entry to an ISCED 2 programme typically requires the completion of primary education or its equivalent; that is, a demonstrable ability to handle ISCED 2 content through a combination of basic education and life experience.

Duration of ISCED 2. Entry to ISCED 2 is typically after 6 years of primary education, and the end of this level is typically after 9 years of schooling since the beginning of primary education. In many OECD countries, the end of lower secondary education is a major educational - and in some cases labour market - transition point. For this reason, the end of ISCED 2 should generally conform to the end of lower secondary or "basic" education.

Boundary between ISCED 1 and ISCED 2. The boundary between ISCED 1 and ISCED 2 coincides with the transition point in national educational structures where the way in which instruction is organised begins to change. Programmes at the start of level 2 should correspond to the point where programmes are beginning to be organised in a more subject-oriented pattern, using more specialised teachers conducting classes in their field of specialisation. If this organisational transition point does not correspond to a natural split in the

boundaries between national educational programmes, then countries should split their programmes for international reporting at the point where national programmes begin to reflect this organisational change. If there is no clear break-point for this organisational change, however, then countries should artificially split national programmes into ISCED 1 and 2 at the end of 6 years of primary education.

Sub-categories at this level

Type of subsequent education or destination. ISCED level 2 programmes are sub-classified according to the destination for which the programmes have been designed to prepare students:

- *ISCED 2A*: programmes designed to prepare students for direct access to level 3 in a sequence which would ultimately prepare students to attend tertiary education, that is, entrance to ISCED 3A or 3B;
- *ISCED 2B*: programmes designed to prepare students for direct access to programmes at level 3C;
- *ISCED 2C*: programmes primarily designed for direct access to the labour market at the end of this level (sometimes referred to as 'terminal' programmes).

Programme orientation[1]. Programmes at level 2 can also be subdivided into three categories based on the degree to which a programme is specifically oriented towards a specific class of occupations or trades and leads to a labour-market relevant qualification:

- *Type 1* (general): Covers education which is not designed explicitly to prepare participants for a specific class of occupations or trades or for entry into further vocational or technical education programmes. Less than 25 per cent of the programme content is vocational or technical.
- *Type 2* (pre-vocational or pre-technical): Covers education that is mainly designed to introduce 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. For a programme to be considered as pre-vocational or pre-technical education, it should comprise at least 25 per cent of vocational or technical content.
- *Type 3* (vocational or technical): Covers education that prepares participants for direct entry, without further training, into specific occupations. Successful completion of such programmes leads to a labour-market relevant vocational qualification.

In some cases the first few months or first year of a Type 3 programme have Type 2 elements. For the purpose of mapping to ISCED-97, however, only whole programmes that meet the above criteria for Type 2 should be classified in that category.

Specific classification issues

Use of type 2 (pre-vocational) for special education programmes Countries should attempt to classify and report programmes to students with special educational needs as type 2 (prevocational) if the programmes meet the classifying criteria of prevocational programmes. That is, education that is mainly designed to introduce special needs participants to the world of work and prepare them for entry into further vocational or technical education programmes should be classified this way. If a country has such a programme for special needs students but cannot separate it from data reported as type 1 (general) or type 3 (vocational), this should be documented in the ISCED mapping of the corresponding programme.

Boundary between ISCED 2 and ISCED 3. National boundaries between lower secondary and upper secondary education should be the dominant factor to split levels 2 and 3. As a result, the completion of lower secondary education can occur after 8, 9, or 10 years of schooling and at ages 15, 16, or even 17. For countries that have two major transition points in or around these grade and age spans (*e.g.* the United

Kingdom at ages 14 and 16), the allocation of these will be decided on a case by case basis in consultation with the Secretariat. In countries with no system break between lower secondary and upper secondary education, and where lower secondary education lasts for more than 3 years, only the first 3 years following primary education should be counted as lower secondary education.

Bridging programmes. Short programmes that follow completion of ISCED 2, but have a level of content similar to programmes at level 2, should be also categorised at level 2. For example, in Denmark, Finland, and Switzerland there is a 10th year which follows the end of lower secondary that students can use to change streams, that is, to prepare entry into a different type of programme at level 3 than they have been prepared for at level 2. These programmes will be classified at level 2.

Special needs and adult education. This level includes special needs education programmes and all adult education which are similar in content to the education given at this level, *e.g.* the education which gives to adults the basic skills necessary for further learning.

Examples

ISCED2A

Type 1 (general)

Canada and the United States will apportion their elementary-secondary programmes in a manner that will result in grades 7 through 9 being reported in this category.

Secondary school: 1st stage (Australia). The first stage of secondary school lasts for 3 or 4 years, depending on the length of primary school in the state concerned, and ends with the award of the Year 10 Certificate. Students follow a general school programme, offering the opportunity for further academic progression.

Lower secondary schools, access to general (Germany). Programme (grades 5 to 10) following the 4 years of primary school that is marked by the start of subject presentation. Successful completion leads to *Realschulabschluß* (*Gymnasium, Integrierte Gesamtschule; Freie Waldorfschule*). Successful graduates are entitled to enter studies at upper secondary general schools that qualify for ISCED 3A programmes.

***Almen voksenuddannelse** (AVU) (**General adult education 9th-10th grade**)* (Denmark). Certificates correspond to certificates for single courses in grades 9 and 10 in basic school.

Lower secondary evening schools (Germany). Programme (of 1 to 2 years of duration) especially intended for adults with no or lower level ISCED 2 qualification (*e.g. Hauptschulabschluß*) who want to obtain a higher qualification at lower secondary level (mostly *Realschulabschluß*).

Schuljahr, Vorkurs, préapprentissage, corsi preparatori (Switzerland). These programmes last one year, are general in content and prepare students mainly for vocational education in the dual system (by "upgrading" the skills of students coming from lower secondary programmes with basic demands, for instance). However the specific vocational content is too low to warrant their classification as type 2. This group of programmes is nationally considered to be part of the lower secondary or the upper secondary level according to institutional affiliation.

Type 2 (pre-vocational or pre-technical)

Berufsvorbereitungsjahr (Germany). One year pre-vocational programme designed for students with 9 or 10 years of general education who did not obtain a contract in the Dual System. It prepares students for vocational training (ISCED 3B).

Muvészeti általános iskola (Hungary). Lower secondary education with additional music, dance, or sports teaching in preparation for higher studies in these areas. (National Core Curriculum Key Stage Grade 8).

Type 3 (vocational or technical)

Deeltijds kunstonderwijs - middelbare graad (Part-time artistic education - middle degree) (Flemish Community of Belgium). Part-time artistic education focuses on the 4 traditional expression forms: image, dance, music and spoken word. The programmes are being offered on a part-time basis (evenings, Wednesday afternoons, week ends). These courses do not belong to compulsory education. In general, specific certificates, complementary to lower secondary education are granted.

Enseignement technique (dans l'enseignement secondaire traditionnel de type 2) (French Community of Belgium). This 2- to 3-years programme is intended for the school-age population having successfully completed the first 2-years cycle of secondary schooling. It aims at enabling entry into working life, although it also provides an opportunity for further educational and training.

ISCED2B

Type 1 (general)

Felzárkóztató általános iskolai programok (Hungary). Remedial program for drop-outs and poor learners to provide a second chance for further education. Typically attended by late maturers and low achievers. Provides entry to ISCED 3C programmes.

Type 2 (pre-vocational or pre-technical)

Basic Education and Basic Employment Skills (Stream 2100) (Australia). Courses classified to Stream 2100 provide remedial education or involve preparatory activities to enable participation in subsequent education or social settings. They aim at achieving basic skills and standards and their completion can lead to entry into more advanced Vocational Education and Training (VET) courses and can also assist in gaining employment. For example, one Stream 2100 course, equivalent to about one year full time, is designed to provide Aboriginal adults with the skills necessary to manage further vocational study or raise their prospects towards base grade employment.

Brobygning (Bridge-building) (Denmark). This bridging course is a new type of programme, introduced to facilitate the transition from basic school to the vocational training system for those who have not quite decided their type of further education.

Classe préparatoire à l'apprentissage (France). This programme is designed for students who want to take an apprenticeship programme in the future. It helps them decide which field of training (*i.e.* trade or occupation) to aim for. The CPA is a one year programme at ISCED 2. The theoretical starting age is 14. Approximately 80 per cents of instruction take place in an educational institution (usually a school) and 20 per cent in a business enterprise.

Voorbereidend beroepsonderwijs (Netherlands). Pre-vocational education (VBO) lasts 4 years. In content – general and vocational courses – it is designed as basic training leading to further vocational training. The VBO is aimed at young people aged 12 to 16.

Curso Geral de Dança (Portugal). Dance Studies -Elemental Level.

Type 3 (vocational or technical)

Secundair onderwijs voor sociale promotie - LSBL en LSTL (Flemish Community of Belgium). Social advancement secondary education: lower secondary vocational and technical courses. Any individual over the minimum school-leaving age may attend a part-time course for adults. Secondary education for social

advancement is divided into 2 cycles: the lower and the higher secondary levels. The lower level includes lower secondary vocational courses (LSBS: '*lagere secundaire beroepsleergangen*') and lower secondary technical courses (LSTL: '*lagere secundaire technische leergangen*').

ISCED2C

Type 1 (general)

Zvláštní škola – 3. stupen (Czech Republic). Remedial school – 3rd stage. Programme for children with learning problems (including those that are socially handicapped). Results in a school leaving certificate (vysvedcení).

Type 2 (pre-vocational or pre-technical)

Szakiskola alapfokú iskolai végzettség nélküli szakmákra (Hungary). NVQL (National Vocational Qualification List) training in programs requiring less than 10 years of completed general education.

Youth reach (Ireland). Results in a basic skills training certificate.

Type 3 (vocational or technical)

Buitengewoon secundair onderwijs - opleidingsvorm 1 en 2 (Flemish Community of Belgium). Special secondary education - training form 1 and 2. This programme is for students with a physical or mental handicap who cannot enter the normal streams of education and training. It is tailored to their abilities and prepares them for integration into a protected environment and work situation.

Short vocational school NVQL (National Vocational Qualification List) (Hungary). Training in 2-years programmes that do not require completed basic education for entry.

Lower Secondary Job Training (Mexico). The typical duration of these programmes is 4 years, although there are also shorter programmes. Students in this programme are commonly adults. The programme is oriented to train persons (15 years and over) to introduce them to the world of work.

5.4.4 ISCED 3 – Upper secondary level of education

Definitions and classification criteria

ISCED 3 corresponds to the final stage of secondary education in most OECD countries. Instruction is often more organised along subject-matter lines than at ISCED 2 level and teachers typically need to have a higher level, or more subject-specific, qualifications than at ISCED 2. The entrance age to this level is typically 15 or 16 years. There are substantial differences in the typical duration of ISCED 3 programmes both between and within countries, typically ranging from 2 to 5 years of schooling. ISCED 3 may either be "terminal" (*i.e.* preparing students for direct entry into working life) and/or "preparatory" (*i.e.* preparing students for tertiary education).

Entry requirements. Admission into ISCED 3 educational programmes usually requires the completion of ISCED 2 for admission (typically 8 or 9 years of full-time education since the beginning of level 1). Alternatively, a combination of basic education and life experience that demonstrates the ability to handle ISCED 3 subject matter is sometimes sufficient.

Sub-categories at this level

Type of subsequent education or destination. ISCED level 3 programmes are sub-classified according to the destination for which the programmes have been designed to prepare students:

- *ISCED 3A*: programmes at level 3 designed to provide direct access to ISCED 5A;
- *ISCED 3B*: programmes at level 3 designed to provide direct access to ISCED 5C;

- *ISCED 3C*: programmes at level 3 designed to prepare students for direct entry into the labour market, although they also provide access to ISCED 4 programmes or other ISCED 3 programmes. Upper secondary apprenticeship programmes would fall into this category unless the programme was primarily designed to prepare students to enter ISCED 5.

Direct access should not be interpreted as either a strict legal definition of the destination of programmes (which might be far from the reality) or by looking at the actual destination of students (which might be strongly influenced by the current labour market situation). Programmes should be mapped to A, B, and C according to the orientation of **the design of the curriculum**, that is, the type of level 5 programmes (A or B) or direct labour market entry that the curriculum prepares students for. For example, in France, the *baccalauréat technologique* is designed to prepare students to enter 5B programmes (primarily the *enseignement en institut universitaire de technologie* (IUT) and not 5A (university) programmes, even though all students holding the *baccalauréat technologique* are legally entitled to enter universities. Therefore, the *baccalauréat technologique* would be classified at level 3B.

Some programmes offered at this level provide access to multiple educational and labour market destinations. Programmes *primarily* designed to provide access (as defined above) to 5A (even if most students go to 5B or the labour market) should be classified as 3A. Similarly, programmes primarily designed to provide access to 5B should be classified as 3B; and programmes that are primarily designed for either direct labour force entry or to prepare students to enter another programme at level 3 or a programme at level 4 should be classified as 3C.

Can ISCED 3C programmes provide access to ISCED 5? It was not originally intended in the ISCED revision that ISCED 3C would include programmes that have been designed to provide access to ISCED 5. According to ISCED-97, ISCED 3C programmes are designed to prepare students for direct access to the labour market or access to either ISCED 4 or other programmes at ISCED 3. This distinction does not fully capture the degree of openness of the education system in many countries, however. In several Nordic countries, for example, there are ISCED level 3 programmes that have been primarily designed to prepare students for direct labour market entry, although they also serve as minimum entry requirements for ISCED 5B programmes. Programmes should be mapped to ISCED 3C if they are primarily designed to equip students with the skills needed for direct transition into the labour market. If, however, a programme is designed both to prepare students for further study at ISCED 5B and for students to directly enter the labour market, it should be classified at ISCED 3B.

Programme orientation. Programmes at level 3 can also be subdivided into three categories based on the degree to which they are specifically oriented towards a specific class of occupations or trades and lead to a labour-market relevant qualification:

- *Type 1* (general): Covers education that is not designed explicitly to prepare participants for a specific class of occupations or trades or for entry into further vocational or technical education programmes. Less than 25 per cent of the programme content is vocational or technical.
- *Type 2* (pre-vocational or pre-technical): Covers education that is mainly designed to introduce participants to the world of work and 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. For a programme to be considered as pre-vocational or pre-technical education, at least 25 per cents of its content have to be vocational or technical.
- *Type 3* (vocational or technical): Covers education that prepares participants for direct entry, without further training, into specific occupations. Successful completion of such programmes leads to a labour-market relevant vocational qualification.

In some cases the first few months or first year of a Type 3 programme has Type 2 elements. For the purpose mapping to ISCED-97, however, only whole programmes that meet the above criteria for Type 2 should be classified in that category.

Specific classification issues

Modular Programmes. An educational qualification is earned in a modular programme by combining blocks of courses, or modules, into a programme meeting specific curricular requirements. A single module, however, may not have a specific educational or labour market destination or a particular programme orientation. Educational and labour market options are determined, at least in part, by how an individual combines different modules into a coherent programme. For example, in Denmark it is possible for students to combine different modules at level 3 into a programme that could meet the criteria of 3A, 3B, or 3C. The students themselves, however, may never be enrolled in programme with a particular destination per se, since the way modules are combined is what determines further educational or labour market access. This issue is similar to the situation encountered in many secondary institutions in Canada and the United States, where the educational and labour market access of students is determined by course or credit selection rather than a formal programme selection.

Modular programmes should not be classified as ISCED 3A, 3B or 3C simply because there is not enough information regarding what a particular student is doing at a particular point in time. For the purpose of reporting enrolment, programmes of this type should be classified at level "3" only, without reference to the educational or labour market destination of the programme. Countries with modular systems at level 3 should however make every attempt to report graduates and educational attainment according to the educational or labour market destination that completion of a particular series of modules (or courses) prepares a student for.

Successful completion of level 3 As widely acknowledged, difficulty in interpreting what is meant by level 3 completion under the old ISCED has led to many problems in the comparability of education data on both graduates and the educational attainment of the population. Due to the wide variability in the duration and content level of ISCED 3 programmes within and between countries, ISCED-97 has specified a requirement for level 3 programmes that are considered to be of insufficient duration. The criteria for level 3 "completion" in ISCED-97 requires either the successful completion of a 3A or 3B programme (designed to provide access to level 5) or the successful completion of a 3C programme with a cumulative theoretical duration of 3 years (FTE).

Examination of the preliminary results of the mapping of national programmes in OECD countries to ISCED 3 (3C in particular) makes it clear that the above duration requirement for 3C programmes does little to decrease the heterogeneity of ISCED 3 qualifications. In fact, this distinction may lead to even more comparability problems. For example, while both ISCED 3A and 3C programmes in Ireland have 2 years cumulative duration at ISCED 3, in the United Kingdom the cumulative duration (at ISCED 3) of an ISCED 3A completion is 4 years, while the cumulative duration of an ISCED 3C completion would be 2 years. In Iceland, a student can complete an ISCED 3C programme of 1, 2, 3 or 4 years, while an ISCED 3A programme takes 4 years. A strict application of the duration requirement would lead to the exclusion of ISCED 3C completers in both Ireland and the United Kingdom, even though students completing ISCED 3C programmes in Ireland might have completed a similar number of years of education as ISCED 3A completers. In Iceland, completers of 3 years programmes would be counted as ISCED 3 completions, even though they have completed one year of schooling less than their ISCED 3A counterparts.

The high stakes of having some 3C programmes classified as ISCED 3 completions has also led to the desire in several countries to "upgrade" the implicit duration of programmes classified at ISCED 3C so that completion of these qualifications meets the 3 years duration requirement. For example, the United Kingdom argues that 5 GCSEs [General Certificate of Secondary Education], at grades A-C, are at a sufficiently higher level of educational content than fewer GCSEs at these grade levels and that they should be classified at a higher level. If the UK upgrades a large proportion of its GCSEs and similar qualifications, then other countries will have an incentive to do so. Even though there is merit to the UK argument that there is a difference in the level of curricular coverage of students who attempt and pass 5 GCSE's at grades A-C and those who pass fewer GCSE at this level, the logical outcome is that the label "level 3 completion" becomes as diluted as it was under the old ISCED.

In order to tackle that issue, the UOE data collection allows for 2 types of reporting of ISCED 3C programmes.

- *Option 1.* In addition to collecting data on first-time ISCED 3 graduates (unduplicated) in the UOE, data on first-time ISCED 3A or 3B (unduplicated) graduates is also collected. Comparisons of graduates usually focus primarily on first time ISCED3A or 3B graduates although the number of ISCED 3C graduates could be discussed separately as well (assuming that total graduates minus first-time ISCED3A or 3B graduates roughly equals ISCED 3C graduates). It can, then, be admitted that ISCED 3C is a wide mix of different programmes in different countries, leading directly to the labour market or to further vocational programmes at levels 3 and 4, while others are simply the first 2 years of the 4 or 5 years that have been designated as upper secondary (ISCED 3).
- *Option 2.* The duration breakdown for ISCED 3C programmes has been revised in the UOE data collection. The distinction between ISCED 3C programmes of less than 3 years and 3C programmes of 3 years or more has been dropped. This distinction is replaced, instead, by a distinction that separates ISCED 3C programmes into those of a similar length (in cumulative years at ISCED 3), at the national level, as ISCED 3A and 3B programmes from those that are significantly shorter (*e.g.* more than 1 year). Cumulative duration is used as a means to roughly assess the similarity in the level of educational content between ISCED 3A/B and ISCED 3C programmes. The decision can then be made of whether ISCED 3 completion should be defined as successful completion of an ISCED 3A or 3B programmes or 3C programme that is no more than 1 year (FTE) duration shorter. The change will allow controlling for the wide variability in the number of years being mapped to ISCED level 3, as well as for national differences in the lengths of ISCED 3A/B and ISCED 3C programmes.

Special needs and adult education. This level includes special needs education programmes and all adult education which are similar in content to the education given at this level.

Examples

ISCED 3 (No classification by destination or programme orientation)

Both Canada and the United States will apportion their elementary-secondary programmes in a manner that will result in grade 10 to the end of secondary schooling (Grade 12 in the United States and most Canadian provinces and Grade 13 in Ontario) being reported at this category. As most of these programmes are modular in nature, that is, students combine different course offerings in order to prepare for entry into higher education or a specific trade, enrolments will be reported as ISCED3 -- all. To the extent to which student transcripts or records can be evaluated to determine the type of subsequent education or destination and programme orientation of graduates, these sub-categories should be estimated when reporting graduate data.

ISCED 3A

Type 1 (general)

Upper secondary schools, general (Germany). Three years upper secondary general programme, comprising grades 11 to 13, which leads to the *Abitur (Hochschulreife)*. It is attended by students holding the *Realschulabschluß (Gymnasium, Integrierte Gesamtschule; Freie Waldorfschule)*. Successful graduates of this programme are entitled to enter ISCED 5A programmes.

Eniaio Lykeio (Greece). This has three grades. The first grade is an orientation year and includes general knowledge subjects. The second grade includes three directions: theoretical, science and technology. In the third grade, the directions are still in effect, but the technology direction has two courses: the technology and production course and the information science and services course.

Type 2 (pre-vocational or pre-technical)

Szakközépiskola nappali képzés 9-12. évfolyam (Hungary). Upper level secondary education with pre-vocational elements, designed to prepare students for the Maturity Examination.

Leaving Certificate Vocational Programme (Ireland). This programme prepares students for the employment-targeted *Leaving Certificate* and combines general and vocational subjects. It is one of three streams leading up to the *Leaving Certificate*. Participants must learn a living European language and take three compulsory modules: familiarity with the workplace, vocational preparation and work experience.

Type 3 (vocational or technical)

Höhere berufsbildende Schulen (Austria). Secondary Technical and Vocational Colleges offer general education, technical theory and practical training (in the workshop, laboratory, kitchen or enterprise). The training is designed to give students the abilities and qualifications they need to take up skilled posts directly or to enter university. In most cases, their curriculum includes compulsory summer placements in an enterprise. The first year of training generally corresponds to the final year of compulsory education.

Gewoon secundair onderwijs - 2de graad en 1ste en 2de leerjaar van de 3de graad TSO (Flemish Community of Belgium). Regular secondary education - 2nd stage and 1st and 2nd years of the 3rd stage TSO. TSO (technical secondary education) essentially concentrates on general and technical / theoretical subjects. This programme consists in practical courses. Young people emerging from TSO can join the labour market or pursue their studies in higher education.

Istituto tecnico (Italy). Certain technical colleges train young people for technical and administrative work at intermediate level in agriculture, industry, commerce and tourism. At the end of 5 years' training, students take an examination to obtain the certificate of upper secondary education for their chosen field, which enables them to embark up a career or go on to university.

Berufsmaturität, maturité professionnelle, maturità professionale (Switzerland). The programme combines an apprenticeship of 3 or 4 years duration with additional schooling in general subjects. It gives unconditional access to the newly created "*Fachhochschulen*", classified at level 5A.

General National Vocational Qualification Advanced Level (United Kingdom). These programmes are essentially aimed at young people aged 16 to 19 in full-time education (in secondary education establishments and colleges), but they also offer part-time training for adults. They are more or less equivalent to GCE [General Certificate of Education] at grade A or a level 3 NVQ [National Vocational Qualification]. The key skills include communication, mathematics and computer skills and the development of 'employability'. The objective is to develop knowledge, skills and understanding in general vocational fields such as

commerce, the manufacturing industry, retailing and distribution. These programmes can lead to a job or to post-secondary and higher education. They usually last one full time year.

ISCED 3A or C (Depending on the particular programme), Type 3 (vocational or technical)

Secondary Vocational Schools (Czech Republic). These technical/vocational programmes combine school and work-based elements, although the majority of instruction is given in schools. The schools prepare students for direct entry into an occupation. They also offer, however, a longer study for 4 years ending with the matriculation exam enabling the graduate to enter university (these will be classified at 3A). These professional schools specialise mostly in engineering and technical areas, and more recently in management as well. They also provide general education, including mother tongue, history, mathematics and sciences. Study at secondary vocational schools is completed with an apprentice exam and will be classified at ISCED 3C, Type 3. Graduates of four-years curricula take both apprentice exam and matriculation final exam and will be classified at ISCED 3A, Type 3.

ISCED 3B

Type 2 (pre-vocational or pre-technical)

Felnottek szakközépiskolája 9-12 (Hungary). Upper level part-time, secondary education programme preparing students for the Maturity Examination. This programme has pre-vocational elements.

Listnám á framhaldsskólastigi (Iceland). Fine and applied arts programme at the upper secondary level. Designed to provide access to fine arts programmes at ISCED5B.

Type 3 (vocational or technical)

Skilled Courses for Recognised Trades (Australia). Complete Trade Courses (Stream 3212) that provide initial education and training for entry into a specific trade. Such vocations require a high degree of skill, usually in a wide range of related activities, performed with minimal direction and supervision. In contrast with operatives, persons in such vocations are competent to carry out a broad range of related tasks. The skill level for such vocations is below that required of a para-professional within the same industry. These courses can lead to more advanced technician and supervisory courses, though only a minority of graduates currently proceed to further studies.

Lehre (Duale Ausbildung) (Austria). In this 3-year programme, learning takes place alternatively in the workplace and in a vocational education school (dual system). The apprentices are expected to attend a vocational school for further general education, study of the theoretical technical aspects of an occupation, and practical training. They are employed and paid by the enterprise. Education in part-time vocational schools takes place throughout the school year, in one- or two-day periods. Apprenticeship training is open to all young people who have completed their 9 years of compulsory schooling.

Bac professionnel (France). This programme prepares for a vocational "*baccalauréat*." It takes place mainly in an educational / training institution, but includes training periods in an enterprise and aims at helping participants to enter working life. It is also possible to earn the *Bac professionnel* by apprenticeship, with instructional time shared between an education / training institutions and an enterprise. The professional *baccalauréat* allows for immediate entry into the labour force. A minority of graduates pursues to higher studies however, mainly to earn the *Brevet de Technicien Supérieur* (BTS) at ISCED 5B.

Dual System (Germany). Special form of apprenticeship which comprising education and training both at a vocational school and in an enterprise. Students must have completed ISCED 2. Graduates qualify for entry into *Fachschulen* (5B) or into the labour market.

ISCED 3C Programmes with a cumulative duration similar to ISCED 3A and 3B Programmes

Type 1 (general)

Allgemeinbildende Schule, école de culture générale (Switzerland). General education programmes of two years duration preparing students for vocational education at ISCED level 3B or 4A. The majority of the students will enter programmes at ISCED level 4A. The typical starting age is 15.

Type 2 (pre-vocational or pre-technical)

Leaving Certificate Applied (Ireland). This 2-years programme is intended to meet the needs of those students who are not adequately catered for by other Leaving Certificate programmes or who chose not to opt for such programmes. It includes theoretical and practical vocational modules. It does not provide direct access to tertiary education. This new programme was set up in 1995.

Type 3 (vocational or technical)

Stream 3 100 (Australia). Stream 3 100 courses provide initial education and training for entry to vocations requiring a level and range of skills less than is normally required for a trade. Stream 3100 courses would generally require minimal educational qualifications for entry, would be of short duration, and would emphasise a single activity that can be performed upon completion of the course. Included, for example, would be courses for plant and machine operators, and cleaners. Operatives are personnel who, after training, are able to perform a limited range of skilled operations. Entrance requirements, while variable, might typically involve entrants having completers of lower secondary education.

Opleidingen in de leertijd georganiseerd door het VIZO (Flemish Community of Belgium). In this programme a youngster can enter into a contract of apprenticeship with an employer-instructor from the age of 15 or 16. He or she has an opportunity to learn a trade while taking part in the everyday activity of a workplace for four days a week. The apprentice spends the fifth day in a VIZO training centre where he or she takes an additional vocational, general and social course. The courses are heavily geared to the practical aspects of work.

Střední odborná škola, studium bez maturitou (Czech Republic). Secondary technical school without the *maturita* examination. This 3-years programme provides both general education and practical vocational apprenticeship training. Students do not have access to higher education unless they take the *maturita* examination, which can be accomplished after taking a 2-years ISCED 4A programme.

Erhvervsfaglige uddannelser (Denmark). Primarily vocational youth programme, includes training for carpenters, blacksmiths, electricians, etc. There are 86 different courses in trade and technical fields, and more than 2 specialities. Most courses last between 3 and 4 years.

Szakiskolai szakképzo évfolyamok és programok (Hungary). One to two years vocational programmes preparing for National Vocational Qualification List (NVQL) examinations. Entry requirement: the completion of Grade 10 and/or the Basic Secondary Examination (an ISCED 3C, general programmes). The typical starting ages are 16 and 17 and the cumulative years of schooling at ISCED 3 would be 3-4 years.

ISCED 3C Programmes with a cumulative duration (more than one year) shorter than ISCED 3A and 3B Programmes

Type 1 (general)

Entry to Employment or Further Education: Educational Preparation, Stream 2 200 (Australia). A one-half year course designed to provide remedial education or teach other preparatory activities to enable participation in subsequent education or social settings. The typical starting age is 15 or older.

Polytechnische Schule, pre-vocational year (Austria). One year programme in the last year of compulsory education; introduces into broad occupational fields. It is often followed by apprenticeship (ISCED 3B). The typical starting age is 14.

Általános iskola, szakiskola általánosan képzo 9-10. évfolyamai (Hungary). Basic education program of the vocational school. Grade 9-10 general subject courses preparing students for entrance to NVQL programmes with an entrance requirement of 10 years of general education. The typical starting age is between 14 and 15.

Type 2 (pre-vocational or pre-technical)

General National Vocational Qualification Foundation Level (United Kingdom). These programmes are essentially targeted at 16-19-years-olds in full-time education (secondary education establishments and colleges, although they also offer part-time training for adults. They are more or less equivalent to four GCSE [General Certificate of Secondary Education] D to G passes or a level 1 NVQ [National Vocational Qualification]. The key skills include communication, mathematics and computer skills and the development of 'employability'. The aim is to develop information, skills and understanding in general vocational fields such as commerce, the manufacturing industry, retailing and distribution. These programmes may lead to employment or to post-secondary or higher education or training. They are full-time for a year, and there are no specific admission conditions.

Type 3 (vocational or technical)

Gewoon secundair onderwijs - 2de graad en 1ste en 2de leerjaar van de 3de graad BSO (Flemish Community of Belgium) Regular secondary education - 2nd stage and 1st and 2nd year of the 3rd stage *Beroepssecundair onderwijs* (BSO). BSO is a vocational secondary education programme based on practical work. It gives young people specific skills at the same time as a general education. Students who wish to gain access to higher education can take an additional third year at third degree level (ISCED 4A).

Enseignement de second cycle professionnel du second degré (sous statut scolaire) (France). This 2-years programme prepares for an intermediate vocational *diploma (Brevet d'études professionnelles* / BEP) leading to a job or to further vocational education and training (at ISCED 3A or 3B). It is mainly provided in education / training institutions, but includes training periods in an enterprise. The typical starting ages are between 15 and 17.

Formazione professionale regionale (Italy). This 2-years programme, which comes after the end of compulsory education, offers a basic qualification and trains skilled workers in various sectors of the economy. Each region is in charge of setting the objectives and designing the programme. The typical starting ages are between 14 and 18.

5.4.5 ISCED 4 – Post-secondary non-tertiary

Definitions and classification criteria

Level 4 was introduced in ISCED-97 to cover programmes that straddle the boundary between upper secondary and post-secondary education from an international point of view, even though they might clearly be considered as upper secondary or post-secondary programmes in a national context. According to ISCED-97, level 4 programmes cannot, considering their content, be regarded as tertiary programmes. They are often not **significantly** more advanced than programmes at ISCED 3 but they serve to broaden the knowledge of participants who have already completed a programme at level 3. The students are typically older than those in ISCED 3 programmes.

Programme duration: ISCED 4 programmes typically have a full-time equivalent duration of between 6 months and 2 years.

Entry requirements. The typical entry requirement for ISCED 4 programmes is successful completion of ISCED 3. As described above, successful completion of any programme at level 3A or 3B counts as a level 3 completion. If a course requires the completion of and ISCED 3A or 3B course for entry, it would meet the minimum entry requirements for being classified at ISCED 4. ISCED 3C programmes that have a similar duration and level of educational content to ISCED 3A or 3B programmes also serve as the minimum entry requirements for ISCED 4. In cases where ISCED 3C programmes are of significantly (*e.g.* more than one year) shorter duration than ISCED 3A or 3B programmes, then the criterion of successful completion of ISCED 3 should be interpreted in the context of the cumulative duration of programmes spanning both level 3 and level 4. For example, suppose a 2-years programme under consideration for classification at ISCED 4 has a 2-years ISCED 3C programme as a minimum entry requirement and corresponding ISCED 3A and 3B courses also have 2 years cumulative duration at ISCED level 3. Then the minimum cumulative duration requirement is met (2 years at ISCED 3C + 2 years at ISCED 4 = 4 years cumulative duration). If, however, a 6 months programme under consideration for classification at ISCED 4 has a 2 years ISCED 3C programme as a minimum entry requirement, where comparable ISCED 3A and 3B courses have a cumulative duration of 4 or more years. Then the minimum cumulative duration requirement would not be is met (2 years at ISCED3C + .5 years at ISCED 4 = 2.5 years cumulative duration -less than the comparable ISCED 3A and 3B courses). The programme in the second example would not meet the criteria for being classified at ISCED 4 and should be classified at ISCED 3.

Sub-categories at this level

Type of subsequent education or destination. Level 4 programmes are sub-classified according to the destination for which the programmes have been designed to prepare students.

- *ISCED 4A*: programmes at level 4, designed to provide direct access to ISCED 5A;
- *ISCED 4B*: programmes at level 4, designed to provide direct access to ISCED 5B;
- *ISCED 4C*: programmes at level 4 designed to prepare students for direct entry into the labour market, although they also provide access to other ISCED 4 programmes. Apprenticeships that are designed for students who have already completed an ISCED 3 (Upper secondary programme) would fall into this category unless the programme was primarily designed to prepare students to enter ISCED 5.[2]

Programme orientation. Programmes at level 4 can also be subdivided into three categories based on the vocational emphasis of the programme:

- *Type 1* (general): Education which is not designed explicitly to prepare participants for a specific class of occupations or trades or for entry into further vocational or technical education programmes. Less than 25 per cent of the programme content is vocational or technical.
- *Type 2* (pre-vocational or pre-technical): Education which is mainly designed to introduce 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. For a programme to be considered as pre-vocational or pre-technical education, at least 25 per cent of its content have to be vocational or technical.
- *Type 3* (vocational or technical): 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.

Examples

Several types of programmes can fit into level 4. The first type are short vocational programmes where either the content would not be considered "tertiary" in many OECD countries or the programme does not meet the duration requirement for ISCED 5B (at least 2 years FTE since the start of level 5). These programmes are often designed for students who have completed level 3, although a formal ISCED level 3 qualification may not be required for entry. The second type of programmes are nationally considered as upper secondary programmes, even though entrants to these programmes typically have already completed another upper secondary programme (*i.e.* second-cycle programmes). Examples of these types of programmes:

a) Post-secondary, but not tertiary programmes from an international perspective

ISCED4B, Type 3 (vocational or technical)

Trade Technician / Trade Supervisory (Australia) Programmes classified nationally to Stream 3 300, provide initial education and training in skills at a level higher than trade or trade-equivalent skills (which would be learned in an ISCED level 3 programme). Stream 3 300 courses may include skills needed for supervision, but do not provide the level of breadth of specialisation that is provided through courses for para-professionals. Examples of Stream 3 300 courses are Advanced Certificates in Plumbing and other trades, Advanced Certificates in Laboratory Technology. Most courses require completion of a trade certificate course (ISCED 3), though some programmes allow for entry following completion of Upper Secondary (general).

Schulen für Gesundheits- und Krankenpflege (Austria). Three years programmes consisting of theoretical and practical courses, and leading to a diploma in the following fields: nursing, medical and various related subjects, law, psychology… These programmes are open to students who have successfully completed the tenth year of education (ISCED 3C). Upon completion of these programmes, students have completed one more year of schooling than graduates from ISCED 3A programmes.

ISCED4C, Type 3 (vocational or technical)

Mittlere Speziallehrgänge (Austria). One year specialised courses designed for people who have completed initial vocational education; aim at imparting specialised theoretical and practical knowledge. The minimum entry requirement is an ISCED 3B qualification and the typical entry age is 17.

Trade and vocational certificates (Canada). Trade / Vocational Certificate (1 year), Trade / Vocational Certificate (1-2 years), Vocational Certificate Programme (less than 1 year). These programmes are allocated to this level, as they do not meet the duration criteria associated with level 5B. They range from

"pre-vocational / trade" orientation, to programmes designed for people already in the work world that would like to improve or develop new skills in their occupational areas.

Vocational preparation and training II (PLC) Yr 1 & 2 (Ireland). These courses offer a range of one-year and two-years vocational training programmes directed at upper secondary completers. These programmes lead to the NCVA Level 2 Award.

Formazione professionale (post-maturità) regionale o scolastica (Italy). This programme, which follows on upper secondary education, is a preparation for highly skilled jobs in various sectors of the economy. The courses are mainly practical in content. On completion of this variable-length programme, students may obtain a certificate of attendance or, if they pass an examination, they are awarded a certificate of vocational qualification. This programme is not part of the national educational system. The typical entry ages are between 19 and 21.

Ausbildung für Krankenpflege, formation pour les professions de la santé (Switzerland). Vocational programmes for the health professions which have a minimum entrance age of 18. Not all schools require a completed ISCED level 3 programme as an entrance requirement, and there is a lively national debate on whether the content of these programmes would allow them to be classified as tertiary.

Vocational certificate (United States). Programmes of up to two years duration offered in for-profit, private institutions, community colleges and universities that lead to an occupationally specific vocational certificate. Typical entry ages for the programme are between 18 and 30.

b) Upper secondary, second-cycle programmes

ISCED 4A, Type 1 (general)

TIF-kurser / værkstedskurser (Denmark). Half-year practical admittance courses for programmes at ISCED 5B.

Upper secondary evening schools (Germany). Three-years general programme for adults. Admission requirements include: minimum age 19, completion of vocational training or at least 3 years work experience. Successful graduates of this programme earn the *Abitur (Hochschulreife)* and are entitled to enter ISCED 5A programmes.

Berufsmaturität nach der Lehre, maturité professionnelle après l'apprentissage (Switzerland). Programmes offering the additional general subjects required for the *maturité professionnelle*. They can only be attended by students with a completed three or four-years apprenticeship and last one year, giving a complete duration of four or five years after the beginning of ISCED level 3.

ISCED 4A, Type 3 (vocational or technical)

Gewoon secundair onderwijs - 3de leerjaar van de 3de graad BSO (Flemish Community of Belgium). The 3rd year of the 3rd stage of vocational secondary education. This specialisation year gives access to higher education.

Nástavbové studium (Czech Republic). Extension courses. Students who earned a vocational education in a 3-years programme in order to enter the labour market can re-enter the secondary school once more for a secondary education with *maturita*. Students have, therefore, a higher level of education in the labour market and this qualification also enables them to enter into higher education institutions after passing an entrance examination.

ISCED 4B, Type 3 (vocational or technical)

Berufsschulen/Duales System (Germany). Special form of apprenticeship (second cycle) which comprises education and training both at a vocational school and in an enterprise. Students must have completed an ISCED 3B programme for entry. Graduates qualify for *Fachoberschulen* (4A), *Fachschulen* (5B) or for entry into the labour market.

Berufliche Zweitausbildung auf Sekundarstufe II - Second vocational programmes at upper secondary level (1 year) (Switzerland). Short vocational programmes are offered for holders of the „*maturité gymnasiale*" (mainly in business administration) and the final exam is considered to be equivalent to a vocational education at ISCED level 3B.

ISCED 4C, Type 3 (vocational or technical)

Erikoisammattitutkinto (Finland). Specialist vocational qualification. A demonstration examination which is taken usually after some years of work experience (for example in crafts and technical skills). Participants must have completed ISCED 3 or have equivalent skills.

5.4.6 ISCED 5 – First stage of tertiary education

ISCED 5 programmes have an educational content more advanced than those offered at levels 3 and 4. Entry to these programmes normally requires the successful completion of ISCED level 3A or 3B or a similar qualification at ISCED level 4A or 4B. Programmes at level 5 must have a cumulative theoretical duration of at least 2 years from the beginning of level 5 and do not lead directly to the award of an advanced research qualification (those programmes are at level 6). Programmes are subdivided into 5A, programmes that are largely theoretically based and are intended to provide sufficient qualifications for gaining entry into advanced research programmes and professions with high skills requirements, and into 5B, programmes that are generally more practical/technical/occupationally specific than ISCED 5A programmes.

ISCED 5A

Definitions and classification criteria

The curriculum of programmes at this level has a strong theoretical foundation, emphasising the liberal arts and sciences (history, philosophy, mathematics, etc.) or preparing students for professions with high skills requirements (*e.g.* medicine, dentistry, architecture, etc.). As the organisational structure of tertiary education programmes varies greatly across countries, no single criterion can be used to define boundaries between ISCED 5A and ISCED 5B. The following criteria are the minimum requirements to classify a programme as ISCED 5A, although programmes not satisfying a single criterion should not be automatically excluded.

Programmes at level 5A:

- have a minimum cumulative theoretical duration (at tertiary level) of **three** years,' full-time equivalent, although they are typically 4 or more years. If a programme has 3 years' full-time equivalent duration, it is usually preceded by at least 13 years of previous schooling at the primary and secondary level. For systems in which degrees are awarded by credit accumulation, a comparable amount of time and intensity would be required;
- provide the level of education required for entry into a profession with high skills requirements or an advanced research programme;
- typically require that the faculty have advanced research credentials. This criterion is not meant to draw an institutional boundary, that is, 5A programmes do not have to take place in the same institutions in

which advanced research degrees are awarded (*e.g.* universities). In general, the faculty in 5A programmes should be qualified to teach students at a level that can prepare them to enter an advanced research programme or for entry into a profession with high skills requirements.

- may involve completion of a research project or thesis.

When programmes meeting the above criteria are organised and provide sequential qualifications it is often the case that only the last qualification gives direct access to level 6, although each of the programmes in this sequence should be allocated to level 5A. For example, although many Ph.D. programmes in the United States may require that a student earn a Master's degree prior to entry, the Bachelor's degree would still count as an ISCED 5A qualification.

Sub-categories at this level

Cumulative theoretical duration. ISCED 5A programmes can be sub-classified by their theoretical cumulative duration. For initial programmes at tertiary level, the cumulative theoretical duration is simply the theoretical full-time equivalent duration of those programmes from the beginning of level 5. For programmes that require completion of other tertiary programmes prior to admission (see national degree and qualification structure below), cumulative duration is calculated by adding the minimum entrance requirements of the programme (*i.e.* full-time equivalent years of tertiary education prerequisites) to the full-time equivalent duration of the programme. For degrees or qualifications where the full-time equivalent years of schooling is unknown (*i.e.* courses of study designed explicitly for flexible or part-time study), cumulative duration is calculated based on the duration of more traditional degree or qualification programmes with a similar level of educational content.

Duration categories[3]:

- Short: 2 to and less than 3 years;
- Medium: 3 to less than 5 years;
- Long: 5 to 6 years;
- Very long: More than 6 years.

As "short" programmes would not meet the minimum duration requirement for classification at ISCED 5A, this category is only appropriate for intermediate programmes in the national qualification and degree structure (see below). That is, less than 3 years programmes must be a component or a stage of a longer programme in order to be classified at level 5A. Individuals who complete these intermediate programmes would not be counted as 5A graduates, however.

Theoretical versus typical duration. In some countries the theoretical duration of a programme does not accurately reflect the amount of time that it takes for a typical full time student to complete. This is particularly the case where theoretical duration has a legal basis (*e.g.* it is tied to the amount of time students receive a subsidy) rather than a credit or course hour requirement. In cases where the theoretical duration is thought to be distortionary, that is, reflects a requirement laid out in law but not the reality, the typical duration may be used as a proxy for theoretical duration in assigning a programme to the above duration categories.

National degree and qualification structure. This dimension cross-categorises ISCED 5A and 5B qualifications by their position in the national qualification structure for tertiary education within an individual country. The main reason the national degree and qualification structure is included as a separate dimension is that the timing of these awards mark important educational and labour market transition

points within countries. For example, in Australia, Canada, New Zealand and the United Kingdom students who complete a three years Bachelor's degree have access to a wide range of occupations and opportunities for further education. On the contrary, Austrian or German students only obtain a labour market relevant qualification after completion of a full five-years degree, even though the level of content of the latter programme may be similar to that of a second (Master's) degree programme in many English-speaking counties.

The 'position' of a degree or qualification structure is assigned (intermediate, first, second third, etc.) based on the internal hierarchy of awards within national education systems. For example, a first theoretically-based degree or qualification (cross-classifying 'theoretically-based' type of programme 5A with 'first' in the national degree and qualifications structure) would necessarily meet all of the criteria listed above for a theoretically-based programme and lead to the first important educational or labour market qualification within this type of programme. It is only by combining national degree structure with other tertiary dimensions, such as cumulative theoretical duration and programme orientation, that enough information is available to group degrees and qualifications of similar education content.

Categories:

- Intermediate[4];
- First;
- Second and further.

Bachelor's degrees in many English-speaking countries, the '*Diplom*' in many German-speaking countries, and the '*Licence*' in many French-speaking countries meet the content criteria for the first theoretically-based programmes. Second and higher theoretically based programmes (*e.g. Master's degree* in English-speaking countries and *Maîtrise* in French-speaking countries) would be classified in ISCED 5A separately from advanced research qualifications, which would have their own position in ISCED 6.

Specific classification issues

ISCED 5A intermediate qualifications -- where do they go? ISCED-97 requires ISCED 5A first degrees to have a minimum 3 years full-time equivalent duration. ISCED 5A intermediate was developed explicitly because some countries have shorter programmes in the 5A trajectory, which were not considered long enough to be comparable to the majority of 5A qualifications -- including the *DEUG* in France, *Laurea Breve* in Italy and the *University Transfer Programme* in Canada. Qualifications that are awarded for less than 3 years FTE study at ISCED 5A are, from an international perspective, to be considered intermediate qualifications. No information on the award of intermediate qualifications will be collected in the UOE data collection, and thus, no 2-years awards should be included in the graduate data (*e.g.* the *DEUG* and 2-years *Laurea Breve*, should not be included). In principal, we could collect and report 5A intermediate graduates, although the reporting might get a bit confusing, as most countries do not have intermediate qualifications and, in most cases, the intermediate qualification are often not required for progressing on to earn the 1st 5A degree.

This procedure is, however, not sufficient to classify individuals according to their level of educational attainment. From a Human Capital perspective, individuals who have earned a 5A intermediate qualification are likely to have a higher level of skill than a ISCED3 completers. It would also be quite strange, from the point of view of similar programme content, for them to be placed in either ISCED 5B (even though this might be considered the point at which most are nationally "equivalent") or at ISCED 4. From an educational attainment perspective, there are at least two main options:

1. classification at ISCED3 (reflecting the last completed level of educational attainment in the ISCED framework);
2. specific classification in a category for intermediate 5A qualifications (which could then be combined with either ISCED3, 4, 5B, or 5A, depending on analytical purpose).

The Technical Group concluded that the latter solution be recommended to Network B for the collection of educational attainment data by ISCED-97.

Programmes that span the boundary between ISCED 3 and ISCED 5. Primary teacher education in Switzerland is an example of a programme that spans the boundary of education levels 3 and 5B. This programme requires a lower secondary qualification for entry, has 5 years duration, and awards a qualification that is nationally deemed as equivalent to other qualifications at the ISCED 5B level. For programmes of this type, the enrolment should be apportioned across the two levels and the number of students that would have received an ISCED 3 qualification, had the programme given this option at the midway point, should be estimated for the calculation of graduates.

Post-graduate diplomas. ISCED-97 states that ISCED level 5A programmes are tertiary programmes that are largely theoretically based and are intended to provide sufficient qualifications to gain entry into advanced research programmes and professions with high skills requirements. Post-graduate diplomas are qualifications that are earned in some countries after the successful completion of a 5A programme. The programmes are often geared to broaden or specialise one's knowledge at a particular level (*e.g.* pedagogy, urban planning), although they do not directly lead to an advanced research programme. For example, in Canada, post-graduate certificate programmes are for students who have already completed a Bachelor's degree (1st ISCED5A qualification of medium duration) or higher academic certificate. The content covered in this programme includes 3rd and 4th year undergraduate courses as well as graduate courses. Depending on the institution offering the programme and the subject field being pursued, completion of this programme may involve a research project. Its completion leads to the awarding of a certificate or diploma that is subsequent to a first degree at level 5A. These qualifications should be counted as ISCED 5A if they require a 5A qualification for entry and build on the knowledge gained in the 5A programme. It is not necessary that these programmes lead directly to an advanced research qualification.

Requirements for classification at ISCED 5A, second programmes. The preliminary ISCED-97 country mappings indicate that there is a wide variability in the length of programmes being classified as ISCED 5A (2nd). In Australia for example, the Graduate Certificate (0.5 years FTE), Bachelor's Graduate Entry (1 year FTE), Graduate Diplomas (1.5 years) and Master's degrees (2 years FTE) are all proposed to be classified as ISCED 5A (2nd) programmes. This variability in duration can lead to wide variation in the cumulative duration of programmes at ISCED 5 leading to as second qualification.

In order to improve the comparability of data reported under ISCED-97, the following criteria for classification at ISCED 5A 2nd are introduced:

1. ISCED 5A 2nd programmes require an ISCED 5A first qualification (or equivalent level of educational content) for entry. The programme should be at a significantly higher level of educational content than ISCED 5A first programmes. Programmes that are designed to allow students to earn a qualification in a different field from their first 5A qualification should not be classified as ISCED 5A 2nd programme if the curriculum is broadly similar to the curricular offered in first programmes. For example, if the programme content of graduate certificate in accounting is generally similar to the level of curriculum offered in a 1st 5A course in accounting, then the certificate programme should be mapped to 5A, 1st rather than to 5A 2nd.

2. If a country cannot separately report ISCED 5A (2nd) degrees by cumulative duration, second programmes should be excluded from the UOE data collection on graduates. This second recommendation would also pertain to the collection of data on educational attainment.

Degrees in medicine, dentistry, and veterinary medicine. First degrees in medicine, dentistry, and veterinary medicine should be classified at level 5A, unless they met the research requirements at ISCED level 6. It is unlikely, however, that many first degrees in these fields will meet the advanced research requirements of ISCED 6.

Advanced qualifications (or "specialist" degrees) in these fields should also be classified at level 5A, unless they meet the research requirements at level 6. There is wide variability in the degree to which programmes of this type have a substantial research component. There is apparently also a wide variability in the degree to which qualifications of this type would come under the coverage of the collection of education statistics. In Germany for example, these specialist qualifications would be considered professional qualifications (rather than educational qualifications) and would not be counted in educational statistics, while in France and Switzerland these would be considered as educational qualifications and would be counted. For individual data collections, it will need to be considered whether or not the collection of specialist degrees in these fields can lead to comparable results across countries. In general, however, these qualifications should only be classified at ISCED level 6 if they meet the advanced research guidelines outlined for ISCED 6. In most cases, specialist degrees in these fields would be classified at level 5A.

Research Qualifications at ISCED 5A. ISCED-97 also allows for the separate categorisation of programmes leading to the award of a research qualification at the 5A level. This category is intended for the countries which have a sub-doctoral research qualification, designed explicitly to prepare recipients to conduct original research. These programmes often meet many criteria of an ISCED 6 programme, although they tend to be of shorter duration (5 to 6 years cumulative FTE duration from the start of tertiary) and typically lack the level of independence required of students seeking an advanced research qualification. Examples of 5A research degrees include the *Research Master's degree* in Australia, Ireland, New Zealand, and the United Kingdom. As many long ISCED 5A programmes have a research component even though they are not explicitly designed to prepare participants for research positions, it is likely that 5A research qualifications and long 5A programmes be grouped for analytical purposes.

Examples

a) ISCED5A, Short, Intermediate

University Transfer Programmes (Canada). These are programmes of one or two-years duration offered by non-university institutes under special arrangements with the universities whereby the college offers the first year(s) of a university degree programme. Students who complete the programmes at the colleges can then transfer their credits to university *Bachelor degree* programmes. Although enrolments in these programmes count at ISCED 5A, students who complete these programmes are not counted as ISCED 5A graduates.

b) ISCED5A, Medium, 1st qualification

Programmes in polytechnics (ammattikorkeakoulu) (Finland). Programmes (3.5 to 4.5 years) that prepare for occupations with high skill requirements. These programmes combine theoretical studies (basic and professional studies) with work and practical training. They involve the completion of a large research project or thesis. Students must have completed ISCED 3A prior to entry.

Licence (France). This programme unit, the licence year, follows the 2 years of the *Diplôme d'études universitaires générales (DEUG)*. For the purpose of ISCED classification, the *DEUG* is considered an

intermediate qualification and all three years of the combined programmes are allocated to the licence. Students can also enter the licence year, however, after completing a *Diplôme Universitaire de Technologie* (DUT) at a University Institute of Technology (IUT) or after completing the preparatory course for entry into the *grandes écoles* (CPGE). As the DUT is primarily designed to prepare students for direct labour market entry, and not for transferring to a university, enrolment in DUT programmes are classified at ISCED 5B. The licence is earned in a university.

Hoger beroepsonderwijs (Netherlands). In these four-years higher vocational education (HBO) programmes, teaching is of a more practical nature than in the universities. The most common fields studied are agriculture, teacher education and training, social work and community education, health care and the arts. HBO graduates can be admitted to the *promotie*, the procedure to obtain a *doctoraat* (an ISCED 6 qualification).

Høgre utd. lavere grad (Norway). These are 4-years degree programmes leading to *Candidatus magisterii*, *allmennlærer*, or *siviløkonom*. They can serve as the first part of a longer degree programme or as a more vocationally-aimed independent education.

Diplomatura Universitaria (Spain). Three-years professional training courses leading to the *Diplomado Universitario*, *Arquitecto Técnico* or *Ingeniero Técnico* in a particular field. Holders of these qualifications may enter professional practice or obtain admission to second-stage higher education.

Fachhochschule, haute école spécialisée (Switzerland). This type of programme was officially inaugurated in 1998. It requires a *"Berufsmaturität / maturité professionnelle"* (ISCED 3A vocational education of three or four years duration with a substantially enlarged general education part) for entry, lasts three or four years, and prepares for highly skilled professions such as architecture, engineering, business administration or design. Other fields will follow.

Bachelor's degree programme (United Kingdom). First degree, awarded usually after three years of study (although 5 years is common in medicine and related fields). There are two kinds of bachelor's degrees. The first type is the honours degree, which is at a higher level than the second type and usually comprises the study on one main and one subsidiary subject only. The second type is the ordinary or pass degree, study for which may included several subjects (often three) and which the depth of studies is not carried to the degree of specialisation required for the honours degree. Students usually have to satisfy examiners in a series of annual examinations or by a system of continuous assessment, as well as sit for a final degree examination.

Bachelor's degree programme (United States). Typically a 4-years programme undertaken at colleges or universities. These undergraduate programmes typically require a high school diploma or equivalent for entry. Bachelor's degree recipients can enter the labour force or pursue their education in graduate (Master's or Ph.D.) or first-professional (law, medicine, dentistry) degree programmes.

c) ISCED 5A, Medium or long, 1st qualification

Enseignement des écoles de commerce leading to ***Diplôme d'ingénieur commercial*** (France). There are different types of commercial and business *grandes écoles*. They recruit from the *classes préparatoires aux grandes écoles* (CPGE) or from the universities (*licence*, *maîtrise*). Enrolment in the CPGE should also be classified as ISCED5A.

Corsi di Laurea (Italy). University-level studies generally last from four to six years, depending on the field of study. At the end of the course, successful candidates in the final examination (*esame di laurea*) become holders of the *laurea* diploma and are awarded the title of *dottore* (Dott.).

Daigaku Gakubu (Japan). A university undergraduate programme. The *gakushi* is the first qualification awarded after four years of study in most subjects (six years in medicine, veterinary medicine and dentistry). In addition to study in a specialised field, general education (which includes humanities, social and natural sciences) is compulsory for all students. At the end of each semester, candidates must take an examination in each subject, usually in the form of written tests, and sometimes as research progress reports.

Bachelor's degree programmes (Mexico). The requirement to enter this programme is the successful completion of 12 years of schooling. Bachelor's degrees can be earned in universities, technological institutes, or teacher training schools. The duration depends on the field of education: 4 to 5 years (6 years in some cases, like medicine). Four-years bachelor's degree programmes should be allocated to ISCED 5A medium and 5 to 6 years programmes allocated to ISCED 5A long.

d) ISCED 5A, Medium and Long, 1st and 2nd qualification

University programmes (Czech Republic). The typical length of university programmes has traditionally been 5 years (the first qualification being the Master's). Recently, a shorter Bachelor's programme has been introduced, which is either more practically oriented or serves as a first stage of a five-years university programme. In principle, both the Bachelor's and the Master's degree can be first qualifications, as not all students earn the Bachelor's degree prior to earning the Master's degree. In several programmes like medicine, architecture and veterinary medicine, the length of the programme is 6 years. Studies to train teachers for basic school, 1st stage (primary level) last four years. University study ends with the defence of a thesis and the passing of state exams. University graduates receive the titles of Bachelor, Master or Engineer, while graduates of medical and veterinary faculties receive the title of Doctor.

Lange videregående uddannelser, kandidatuddannelser (Denmark). Long-cycle tertiary education leading to the degree of *candidat*, which is awarded to students who have passed the final examination after studies lasting four-and-a-half to six years, or to a professional title (civil engineer) after five years. In some fields, students may acquire a bachelor of arts' degree after three years of study. The *candidat*is to a first or second degree depending on whether or not an individual student earned a bachelor's degree first.

e) ISCED 5A, Long, 1st qualification

Bachelor's degrees in professional areas (Australia). Undergraduate studies lasting between 5 (veterinary science, dentistry, architecture) and 6 years (medicine and surgery), and leading to a Bachelor's degree.

Fachhochschulen (Germany). Programme (4 or 5 years) at the university level that prepares for occupations requiring the application of scientific findings and methods. Students must at least have completed Fachoberschule (ISCED 3A or 4A) or equivalent. Leads to a first degree, Diplom (FH).

f) ISCED 5A, Long or Very long (depending on particular programme), 1st qualification

Universitäten (Germany). Programme at universities (*i.e.* in academic disciplines) of 5 to 7 years that prepares for occupations which requiring the application of scientific knowledge and methods. Students must have completed ISCED 3A. First degree. Graduates may enter ISCED 6.

g) ISCED 5A, Long and Very Long, 2nd qualification

Master's degree (Australia). Higher degree, obtained after a period of typically two years following upon a bachelor's degree (honours). Following upon a bachelor's degree (pass), entry to a master's degree may be obtained by completing a master's qualifying course of one year. Master's degrees may be obtained by research (usually entered after a period of employment) culminating in the submission of a thesis or by course-work often undertaken in conjunction with professional employment.

Daigakuin Shushi katei (Japan). A university graduate programme leading the *shushi* (master's degree). Completion of the *shushi* degree requires two years of full-time study (at least 6 years cumulative at the tertiary level) after the *gakushi*. It includes 30 credit hours and a substantial amount of research culminating in a thesis.

Master's degree programmes (Mexico). This programme involves advanced research and complete knowledge about specific subjects and fields of study. The duration of the programme is commonly 2 years. The entry requirement is a 4 or 5 years Bachelor's degree programme.

Universität Nachdiplom, troisième cycle, diplôme postgrade or Fachhochschule Nachdiplom, haute école spécialisée diplôme postgrade (Switzerland). After the first degree, universities offer specialisation programmes not leading to a research degree. They generally last one or two years. Some examples are specialisation in urban planning, in health care management or in environmental studies. The *"Fachhochschulen"* also offer programmes for specialisation after the first degree. They typically last one year. Examples include business administration for engineers or specialisation in environmental aspects for chemical engineers. The cumulative duration at ISCED 5 ranges from 4 to 6.5 years, depending on the specific programme.

First-professional degree programmes (United States). Completion of these programmes signifies both completion of the academic requirements for beginning practice in a given profession and a level of professional skill beyond that normally required for a Bachelor's degree. These degree programmes typically require at least two years at ISCED 5A prior to entrance (although most require a 4-years Bachelor's degree) and a cumulative total of between 6 and 8 years of full-time equivalent study at ISCED 5A to be completed. First professional degrees are awarded in dentistry, medicine, optometry, pharmacy, veterinary medicine, law and theological professions.

ISCED 5B

Definitions and classification criteria

ISCED 5B programmes are generally more practically / technically / occupationally specific than ISCED 5A programmes. Qualifications in category 5B are typically shorter than those in 5A and focus on occupationally specific skills geared for direct entry into the labour market, although some theoretical foundations may be covered in the respective programme.

A 5B programme typically meets the following criteria:

- it is more practically oriented and occupationally specific than programmes at ISCED 5A and does not prepare students for direct access to advanced research programmes;
- it has a minimum of **two** years' FTE duration. For systems in which qualifications are awarded by credit accumulation, a comparable amount of time and intensity would be required;
- the programme content is typically designed to prepare students to enter a particular occupation.

Sub-categories at this level

Cumulative theoretical duration. Like ISCED 5A programmes, 5B programmes can be subdivided based on the cumulative theoretical full-time equivalent duration from the beginning of level 5. Calculation of the cumulative theoretical duration is done similarly to 5A programmes (see description above).

Duration categories:

- Very short: Less than 2 years;

- 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.

As "very short" programmes would not meet the minimum duration requirement for classification at ISCED 5B, this category is only appropriate for intermediate programmes in the national qualification and degree structure (see below). That is, less than 2 years programmes must be a component or a stage of a longer programme in order to be classified at level 5. Individuals who complete these intermediate programmes would not be counted as 5B graduates, however. Most ISCED 5B programs would fall into the short and medium categories.

National degree and qualification structure. As with 5A programmes, this dimension cross-categorises 5B qualifications by their position in the national qualification structure for tertiary education within an individual country.

Categories:

- Intermediate;
- First;
- Second and further.

Examples

a) ISCED5B, Short, 1st qualification

3 400 Initial Vocational Courses: Paraprofessional - Technician (Australia). Para-professional / Technician courses classified to Stream 3400 are designed to provide initial education and training to develop the breadth of specialised skills required for employment in para-professional vocations. Common awards are Associate Diploma or Advanced Certificate, and entry requirements usually specify that entrants hold a Certificate in the relevant field. Courses are generally of the order of 2 years FTE duration.

Kollegs (Austria). Two-years, post-secondary courses in technical and vocational education (TVE). This programme is designed to provide the holders of a long type secondary education diploma (ISCED 3A) or a technical and vocational education diploma (especially general education) with vocational qualifications similar to those acquired in secondary technical and vocational college.

Vocational colleges (ammatillinen opisto) (Finland). Advanced vocational programmes (2 to 3 years) leading to the Diplomas or the title of Technician Engineer.

Enseignement en institut universitaire de technologie (IUT) (France). A two-years programme in technology leading to the *Diplôme universitaire de technologie* (DUT). Holders of a DUT may continue in university studies to earn the *licence* (a 1st ISCED 5A qualification), although the programme is primarily designed to prepare students for direct labour market entry. The entry qualification is the *baccalauréat*, complemented by an academic record submitted for assessment by the admissions board.

Enseignement des classes des sections de techniciens supérieur (sous statut scolaire) (France). A two-years programme leading to the *Brevet de technicien supérieur* (BTS). The admission requirement is the *baccalauréat* or the *brevet de technicien* complemented by a satisfactory school record. Holders of a BTS may,

under certain conditions, pursue their studies at university or in higher schools. This qualification is at the same level as the DUT, although it is more specialised and offers fewer opportunities for further studies.

Vocational Associate Degree programmes (Mexico). These programmes are offered in Technological Universities. Graduates from these 2-years programmes are considered qualified technicians.

Ciclos Formativos de Formación Profesional de Grado Superior (Spain). Specific Vocational Training-Advanced Level leading to the qualification *Técnico Superior.* This programme offers structured training through which the skills, abilities and knowledge needed in a specific occupation can be acquired. The qualifications obtained on completion of training are equivalent to those of a skilled technician in that occupation. Admission is based on successful completion of the *bachiller* (ISCED 3A).

Höhere Fach- und Berufsschule, école technique (Switzerland). Programmes lasting at least two years of full-time school. The typical prerequisite is a vocational education of at least three years or an equivalent general education at ISCED level 3. The programmes prepare for a variety of skilled professions such as technician, manager in tourism or the lower echelons of upper business management.

Higher National Diploma (United Kingdom). To be admitted to this programme participants must be at least 18 and have an appropriate national qualification awarded by the BTEC [Board for commercial and technological education] or equivalent or a GCE A level. The aim is to develop skills and provide training that will lead to many vocational activities. The training is designed to meet employers' needs. It is provided by colleges, certain universities and some training centres. It generally leads to the level of senior technician or junior management. The duration is either two years full time or three years part time.

b) ISCED5B, Short and Medium, 1st qualification

2-3 years college; 3-4 years college; Occupational / Technology programmes; Vocational Diploma (27 months) (Canada). These are technical programmes designed to prepare students for direct entry into the labour force and last two, three or four years. These programmes do not provide access to advanced research programmes. The admission requirements for eligibility into these college programmes are completion of high school (ISCED 3), eligibility as a mature student or the completion of a certain level of Adult Upgrading programmes.

Fachschulen - 2 to 4 jährig (Germany). Advanced vocational programmes of 2 to 4 years duration. Attended after completion of the Dual System and several years of work experience to obtain master's / technician's qualifications or to qualify for occupations in the social sector.

c) ISCED5B, Medium, 1st qualification

Bakalárské univerzitní studium (Czech Republic). Three-years university programme leading to the *bakalár* (bachelor's degree). Programmes that do not give direct access to *magistr* or *inzenýr* programmes (Master's) are classified at ISCED 5B, while programmes providing direct access to *magistr* or *inzenýr* programmes are classified at ISCED 5A

Hogescholenonderwijs van 1 cyclus (Flemish Community of Belgium). First-cycle of higher education provided by *hogescholen*. These 3- to 4-years programmes usually last three years and lead to a final diploma that qualifies the holder for immediate employment. Qualifications are awarded in nursing, social work, librarianship, engineering, and teaching.

College of public administration / Verwaltungsfachhochschulen (Germany). Special type of „*Fachhochschulen*" run by the public administration to provide training for medium-level, non-technical

careers within the public sector. Entrants must hold a qualification that would allow them to enter ISCED 5A. Designed for direct entry into civil service.

Schulen des Gesundheitswesens - 3 jährig (Germany). School-based vocational education (3 years) for nurses, midwives, etc. Often, these schools are associated with hospitals where training is provided in theory and practice. Designed for direct labour market entry.

Diploma programmes (New Zealand). Vocationally oriented 2- to 3-years (cumulative) programmes leading to Diplomas and National Diplomas (levels 5,6).

Foreign language teacher training college (Poland). A three-years programme leading to a qualification to teach West European languages (English, German and, to a limited degree, Spanish) at pre-school institutions, primary schools and secondary schools. Requires the secondary school leaving certificate, *matura*, for entry.

d) ISCED5B, Medium, 2nd qualification

Stream 3600 - Initial Vocational Courses - Professional (Australia). Initial Vocational Courses - Professional are classified to Stream 3600 and provide initial education and training at a higher level than para-professional courses, and include courses that lead to employment in vocations comparable to those entered by graduates of Diploma (UG2) courses. Awards are typically Advanced Diploma and entry requirements are usually completion of a Diploma or equivalent course. Courses are commonly of about 2 years FTE duration in addition to the pre-requisites. Examples include Advanced Diplomas in Information Technology or in Rural Management.

5.4.7 ISCED 6 — Second stage of tertiary education (leading to an advanced research qualification)

Definitions and classification criteria

This level is reserved for tertiary programmes that lead directly to the award of an advanced research qualification. The theoretical duration of these programmes is 3 years full-time in most countries (for a cumulative total of at least 7 years FTE at the tertiary level), although the actual enrolment time is typically longer. The programmes are devoted to advanced study and original research.

For a programme to be classified at ISCED 6, it:

- requires, for successful completion, the submission of a thesis or dissertation of publishable quality that is the product of original research and represents a significant contribution to knowledge;
- is not solely based on course-work;
- prepares recipients for faculty positions in institutions offering ISCED 5A programmes, as well as research posts in government and industry.

Although most countries only have a "first" advanced research qualification (*e.g.* the Ph.D. in the United States), some countries do award an "intermediate" advanced research qualification (*e.g.* the *Diplôme d'études approfondies* (DEA) in France) and others award a "second" advanced research qualification (*e.g. Habilitation* in Germany and *doktor nauk* in the Russian Federation). Accounting for these intermediate and second awards in the classification scheme is important to define the boundary around the first advanced research qualifications, although they might be ignored in a data collection.

Programmes leading to intermediate research qualifications should either be counted as 1st stage component of level 6 programmes (where completing this component would not count as a level 6 completion) or as

level 5A programmes. This allocation decision should be based on the degree to which the programme is designed to lead directly to the award of an advanced research qualification. Programmes that are primarily designed to prepare students for direct labour market entry with either basic or intermediate research skills should be classified at ISCED 5A, even if these programmes also allow students to continue toward an advanced research degree.

Examples

a) ISCED 6, Intermediate stage, no qualification

Diplôme d'études approfondies *(DEA)* (France). Qualification awarded after the first year of preparation for research work, which is compulsory to prepare a *doctorat*. Enrolment to the DEA is open to holders of the *maîtrise* after a selection process among holders of this diploma. While enrolments in the DEA year are included at ISCED 6, the DEA does not count as an ISCED 6 completion.

b) ISCED 6, 1st qualification

Doctor's degree or doctorate (Australia). These are degrees obtained after a bachelor's degree (high honours) or a master's degree and they usually last three years' full-time. The study is devoted to the preparation of a thesis based on an original research project, and results in a significant contribution to knowledge or understanding and/or the application of knowledge within the field of study.

Doctorat (France). The *Doctorat* is awarded after three years of study following the DEA (8 years of tertiary) in the humanities, science, economics, law, pharmacy and dentistry after the submission of a thesis based on original research acceptable to the *responsable de l'école doctorale* or the *Conseil Scientifique* of the university. Candidates carry out personal research work constituting an original contribution to the subject.

Promotion (Germany). Doctoral studies programme (2 to 5 years). In most cases students must have successfully completed programmes at universities. A doctoral degree is awarded to successful students on the basis of a thesis and oral examination.

Dottorati di ricerca (Italy). This diploma is the highest academic degree awarded. It is granted after a minimum of three years spent in a university department carrying out a specific research programme under the direction of university professors. Admission to the *Dottorati di ricerca* is restricted and is made by competitive examination among holders of the *laurea*.

Hakushi (Japan). The highest degree, awarded to students who have completed a doctorate course at a postgraduate school or have been recognised as holding equivalent qualifications. The requirement for completion of the doctorate course is more than five years of study at a postgraduate school (in addition to 4 years undergraduate), with 30 or more credits, the submission of a dissertation and success in a final examination. Those who have completed highly qualified research work may be awarded the *hakushi* after three years of study in a postgraduate school.

Doctor of Philosophy *(Ph.D.)* (United States). The Ph.D. is the highest academic degree and requires mastery within a field of knowledge and demonstrated ability to perform scholarly research (three to five years usually beyond the Master's degree--which is 8 to 10 years of tertiary study).

5.5 Country ISCED mappings

From the initial implementation of ISCED-97, it has been crucial that the ISCED mappings of national educational programmes are documented accurately.

In 1999 OECD member countries invested great efforts to establish initial mappings of their national educational programmes to ISCED-97. The mappings were published in *Classifying Educational Programmes:*

Manual for ISCED-97 Implementation in OECD Countries (OECD, Paris 2000). Countries participating in the UIS/OECD World Education Indicators Project provided initial mappings of programmes to ISCED in *Investing in Education: Analysis of the 1999 World Education Indicators* (OECD, 2000b). Countries participating in the EU PHARE project for Central and Eastern European countries have provided initial mappings as a part of their training in the UOE data collection in 1998, which have been published in the Eurostat / European Training Foundation report *Education and indicators in the PHARE countries: 1996/97* (ETF, 1999).

Making the mapping of countries transparent to data providers and users of UOE data proved to be one of the most important steps in implementing ISCED-97. But educational systems and their programmes are not static. Therefore, it is crucial, that ISCED remains a flexible tool to classify programmes, and that changes in educational systems are mirrored in the ISCED mappings of countries, and, equally important, that those changes remain transparent to other countries. The ISCED mappings are therefore kept up to date every year via a questionnaire which is now part of the regular UOE data collection.

The ***ISCED-97 mappings*** of national educational programmes are not limited only to programmes reported in the UOE data collection. Data providers are requested to include also programmes that are considered part of their educational systems from a national perspective, but are not included in the international UOE data collection. The inclusion of these borderline cases is important in achieving transparency in the relationship between the ISCED mappings and the reporting of programmes in the UOE data collection.

The latest version of the country mappings at the time of publication is contained in Annex 6. Subsequent revisions can be found on the OECD website at *www.oecd.org/edu*.

Notes

1. ISCED-97 explicitly uses the terms General, Pre-Vocational, and Vocational to describe the different programme orientations. As these terms have different national applications in OECD countries - differences that have led to much confusion and incomparability of data - they are not used in this document. The definitions underlying these categories, which are more universal than the terms themselves, have been numbered Type 1, 2, and 3 in this Manual, an ordering that corresponds to General, Pre-Vocational, and Vocational in the UNESCO ISCED-97 framework.

2. In the "Levels of Education" framework approved by the UNESCO Executive Board (151 EX/8 Annex II, March 1997), level 4 is divided into two subcategories: 4A and 4B. In order to maintain parallel structure to the educational and labour market destinations at level 3, it is proposed that level 4 be split into 3 categories: 4A, programmes designed to provide direct access to ISCED 5A; 4B, programmes designed to provide direct access to ISCED 5B; and 4C, programmes not designed to lead directly to ISCED 5A or 5B. Programmes at level 4C, then, lead directly to labour market or other ISCED 4 programmes. This proposal will be introduced at the UNESCO ISCED Task Force for approval.

3. These duration categories differ slightly from the categories described in ISCED-97, which are 2 and less than 3 years; 3 and less than 4 years; 4 and less than 5 years; 5 and less than 6 years; 6 years and more. The categories described in this book have been designed to group ISCED 5 programmes with similar levels of educational content and are considered to be the categories that would most likely be employed in a data collection.

4. Although ISCED-97 does not specifically mention "intermediate" qualifications at ISCED 5A, it is introduced in this document as a means of classifying ISCED 5A programmes that do not meet the duration requirements for their completion to be counted as an ISCED 5A graduation. Examples include the University Transfer Programme in Canada and the *Laurea Breve* in Italy.

TABLE OF CONTENTS

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

CONTRIBUTORS TO THIS PUBLICATION

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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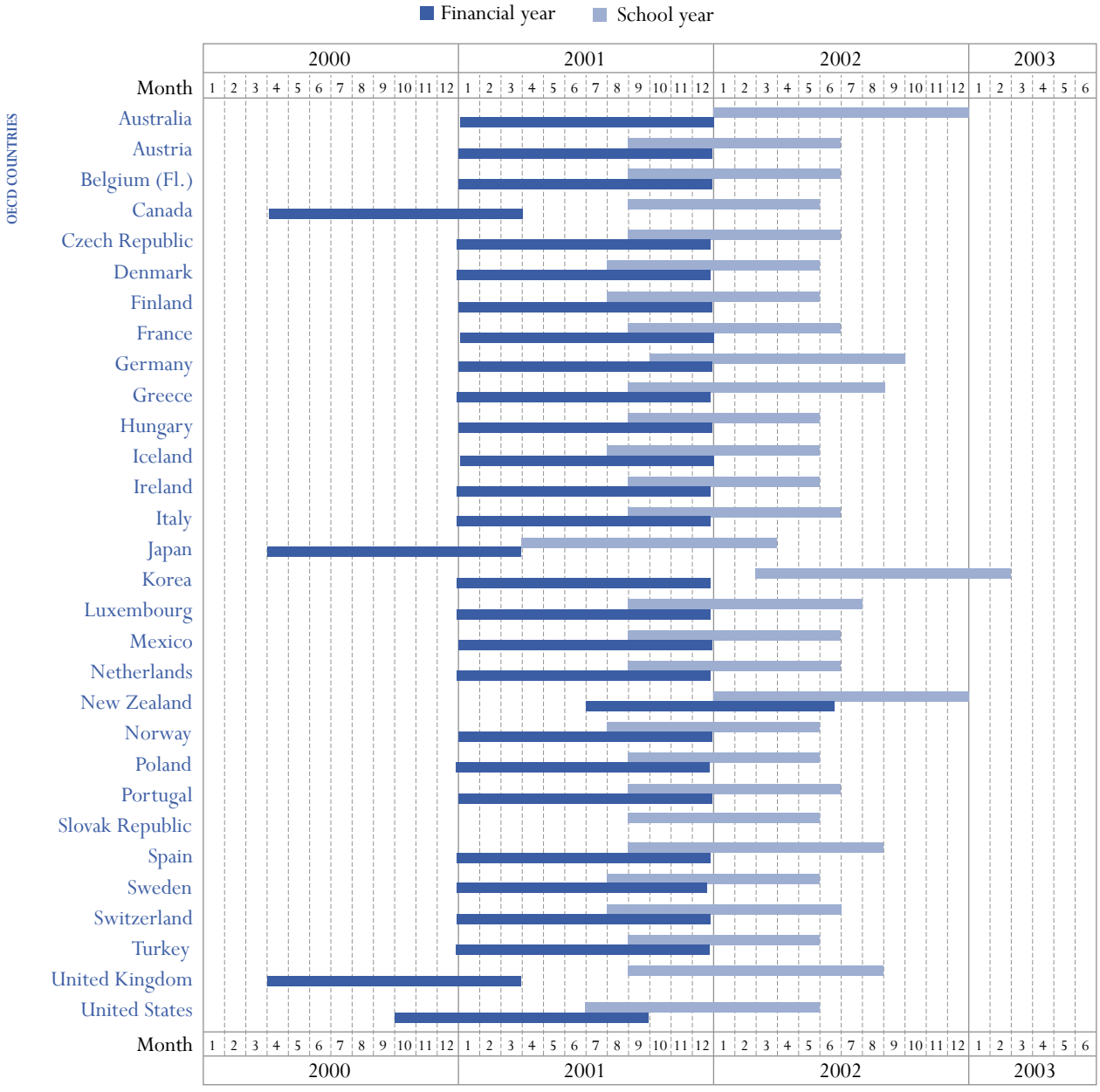
Annex

2

REFERENCE DATES IN OECD COUNTRIES' DATA SUBMISSIONS

Table X.1

School year and financial year used for the calculation of indicators in the 2003 data collection



Source: OECD.

Table X.2
Data collection period and reference dates for ages reported by OECD countries in the 2003 data collection[1]

	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	
		August/01	ISCED levels 2 and 3 (secondary and upper secondary) only
	November/01	November/01	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

OECD COUNTRIES

	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]
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

	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	
OECD COUNTRIES						
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 treads 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 wider 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 immunoaematology, 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
	Programme Orientation
General (G)/Type 1	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.
	Cumulative duration at Isced 5
Short (S)	Short 2 to less than 3 years
Medium (M)	Medium 3 to less than 5 years
Long (L)	Long: 5 to 6 years
Very long (VL)	Very long: More than 6 years
	Position in the national degree/qualification structure
Intermediate	Intermediate degree/qualification
1st	First degree/qualification
2nd	Second degree/qualification
3rd and +	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 20002/01 school year (? = numbers not known).

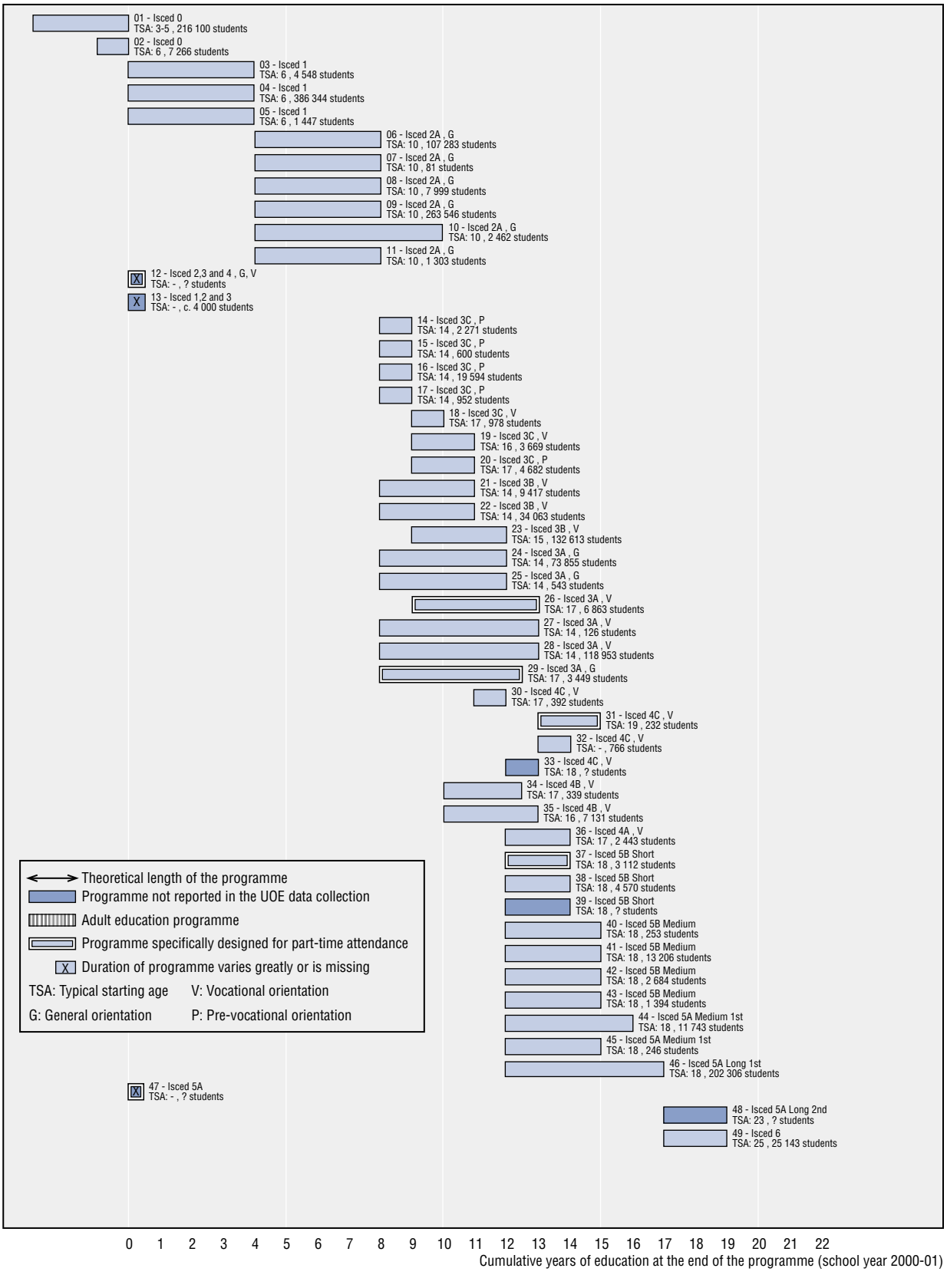
The length of the block represents the theoretical duration of the programme as indicated on the scale at the bottom of the diagram. Adult education programmes and programmes not reported in the annual UOE data collection (See Chapter 2) are indicated by different shading of the blocks and programmes 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

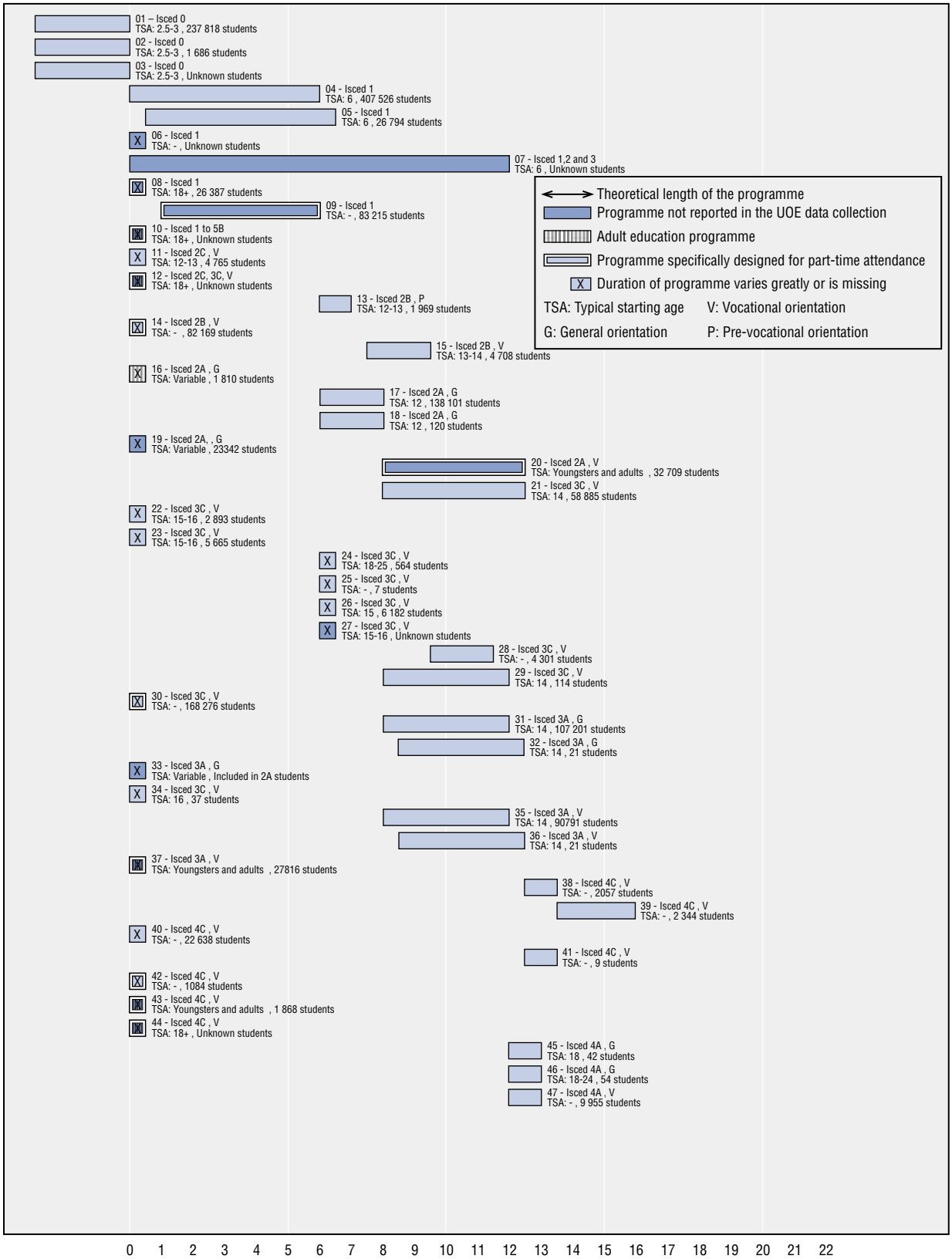
01 – Pre-school/Kindergarten
02 – Primary school
03 – 2100 Entry to Employment or Further Education: Basic Education and Basic Employment Skills (Stream 2100)
04 – Secondary school: 1st stage
05 – 2200 Entry to Employment or Further Education: Educational Preparation (Stream 2200)
06 – 3100 Initial Vocational 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



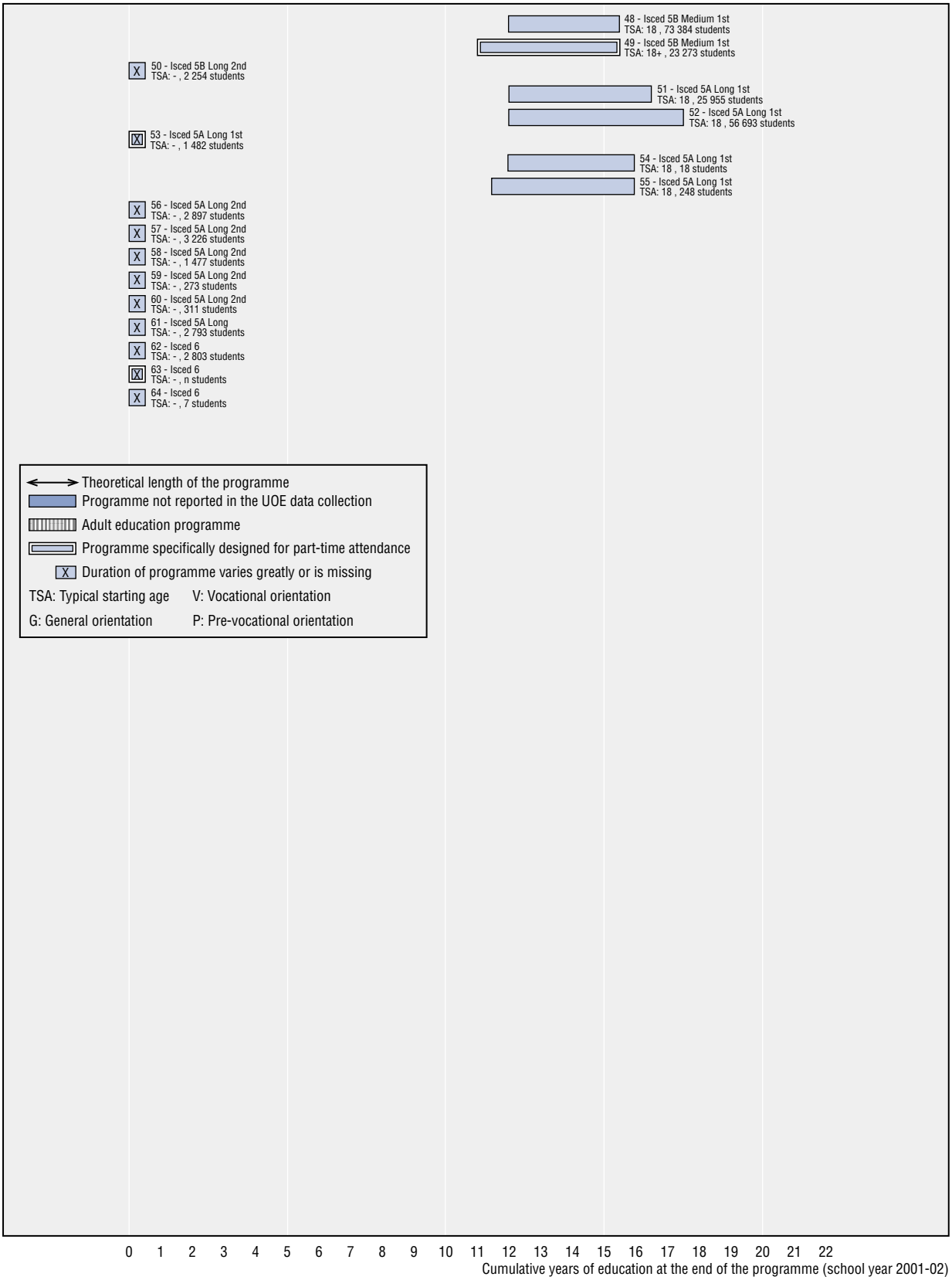
01 – Kindergarten
(Kindergartens)
02 – Vorschulstufe
(Pre-primary stage (of primary schools))
03 - Sonderschule (inkl. Heilstättenschulen), Schulstufen 1-4
(Special school, stages 1-4)
04 - Volksschule, 1-4.Schulstufe
(Primary school)
05 - Allgemeinbildende Statutschulen, 1.-4. Schulstufe
(General schools 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, schulpflichtersetzend)
(Pre-vocational schools for agriculture and forestry)
16 - Polytechnische Schule
(Pre-vocational year)
17 - Sonderschule (inkl. Heilstättenschulen), 9. Schulstufe
(Special school, stage 9)
18 – Pflegehilfelehrgänge
(Courses for the training of auxiliary nurses)
19 - Schulen zur Ausbildung von Leibeserziehern 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)



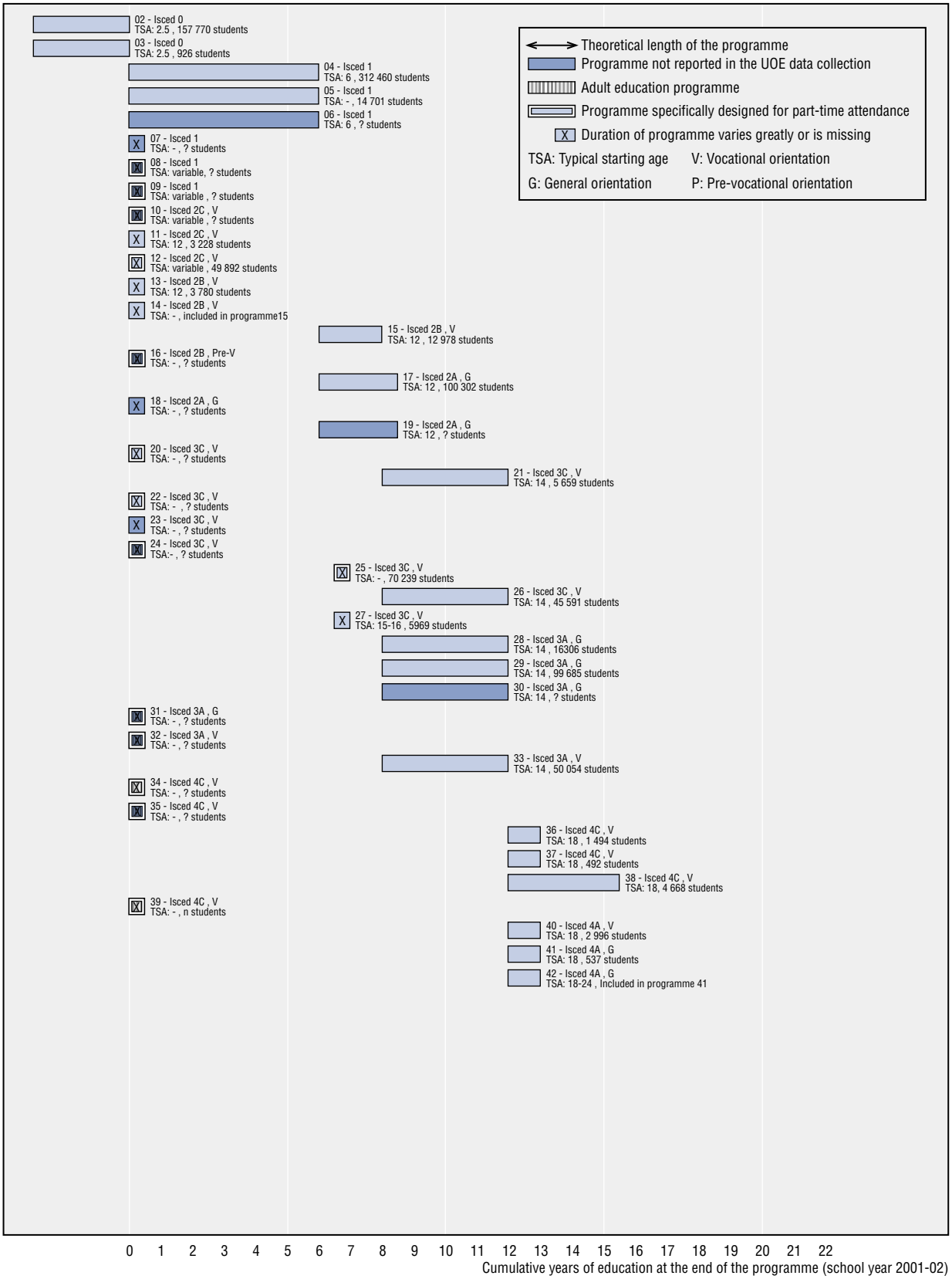
01 - Gewoon kleuteronderwijs
(Regular nursery education)
02 - Buitengewoon kleuteronderwijs
(Special nursery education)
03 - Europese en internationale scholen
(European and international schools)
04 - Gewoon lager onderwijs
(Regular primary education)
05 - Buitengewoon lager onderwijs
(Special primary 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-commisioned officiers)
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 - Landbouwopleidingen
(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)*



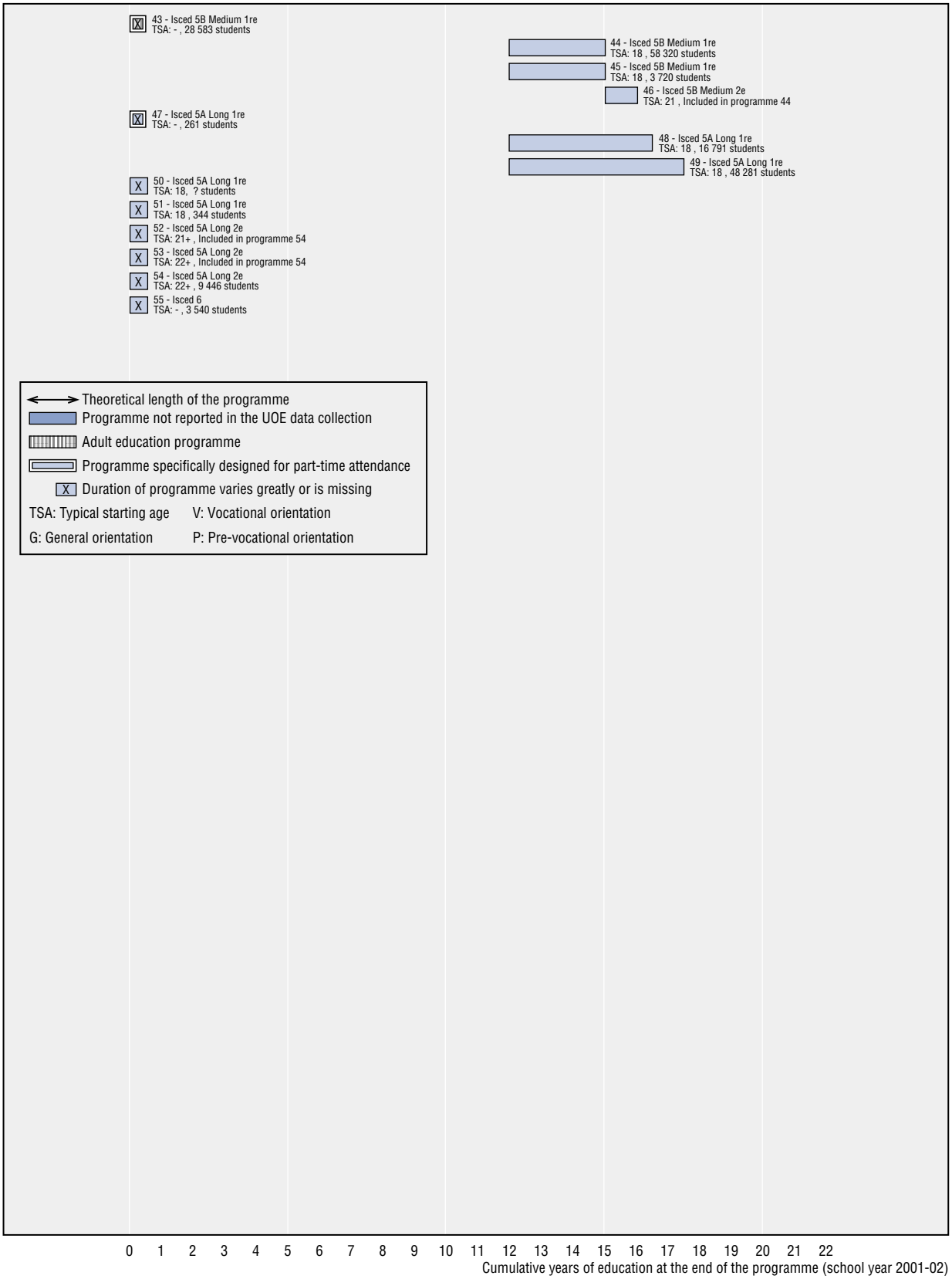
48 - Hogescholenonderwijs van 1 cyclus
(1-cycle higher education provided by colleges of higher education)
49 - Hoger onderwijs voor sociale promotie
(Social advancement higher education)
50 - Voortgezette opleidingen volgend op hogescholenonderwijs van 1 cyclus
(Advanced studies after 1-cycle higher 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 Insititute for Tropical Science)
64 - Doctoraat aan de Universitaire Faculteit voor Protestantse Godsgeleerdheid
(Doctorate)

Belgium (French Community)



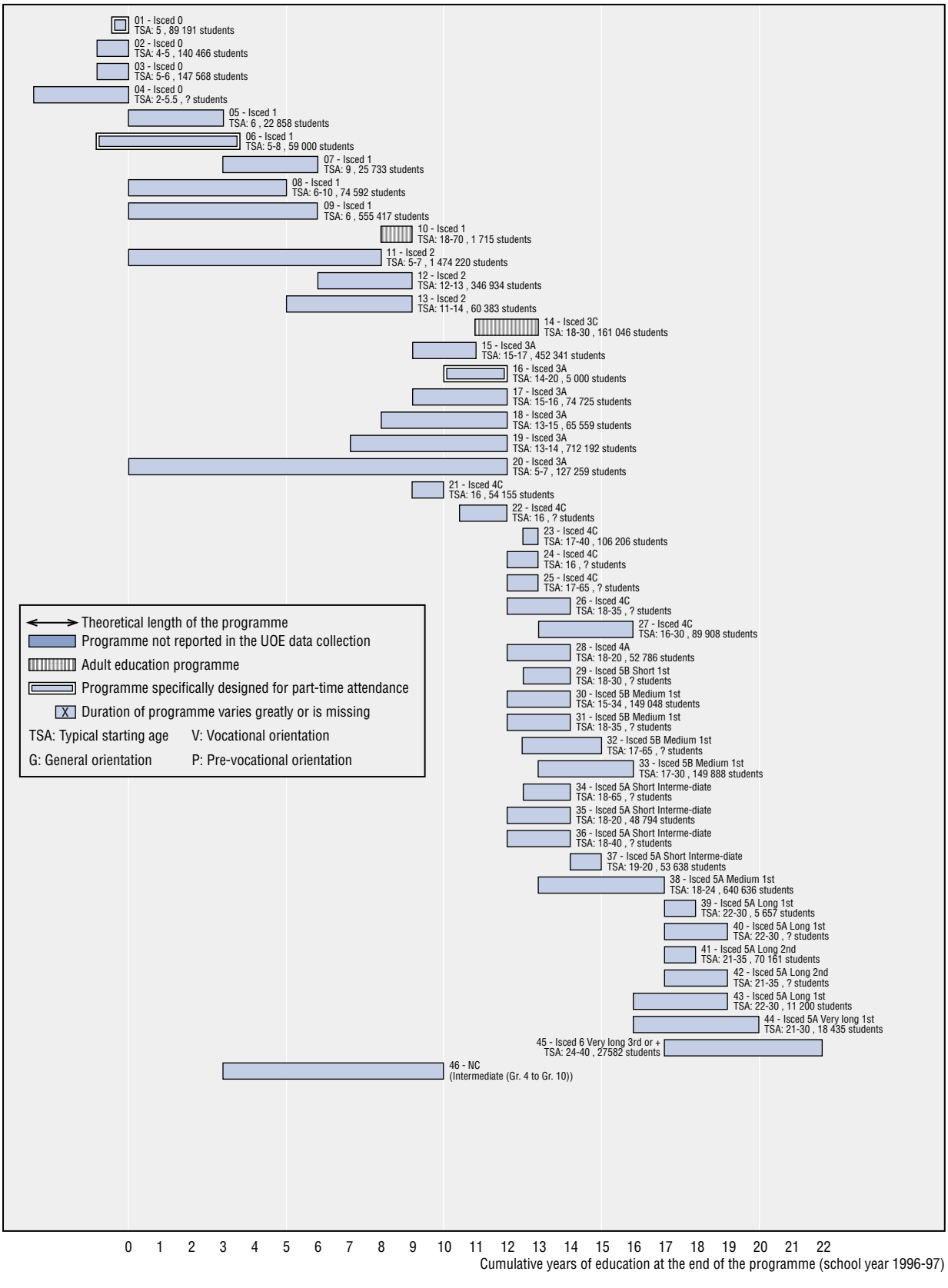
02 - Enseignement maternel ordinaire
(regular pre-primary education)
03 - Enseignement maternel spécial
(special pre-primary education)
04 - Enseignement primaire ordinaire
(regular primary education)
05 - Enseignement primaire spécial
(special primary education)
06 - Enseignement à domicile
(home education)
07 - Enseignement à distance
(distance learnnig)
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 : 1ere 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 - Fillière 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)*



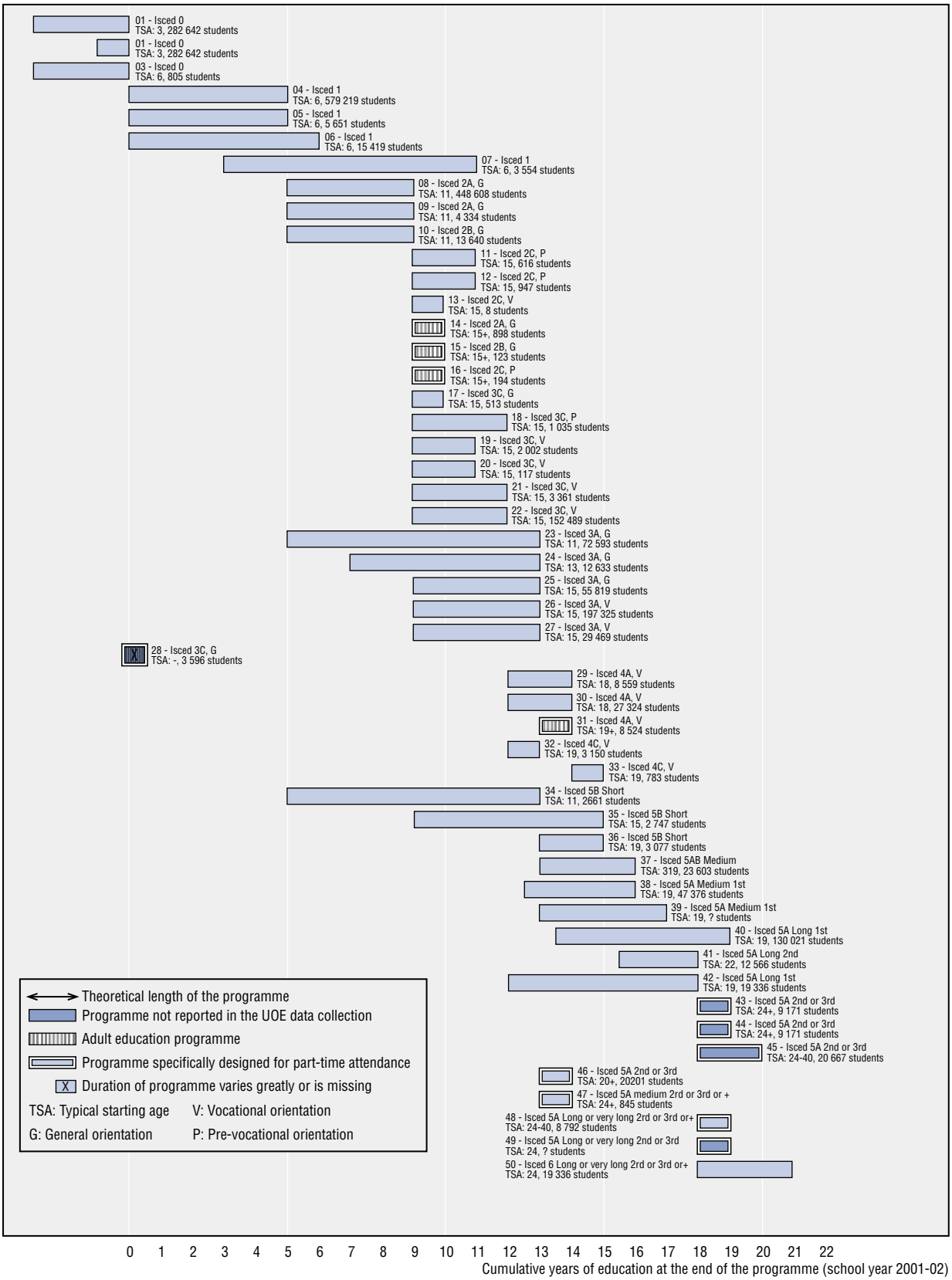
43 - Enseignement supérieur de promotion sociale de type court
44 - Enseignement supérieur de type court
45 - Enseignement artistique supérieur (musique et arts plastiques)
46 - Enseignement supérieur de type court complémentaire
47 - Enseignement supérieur de promotion sociale de type long
48 - Enseignement 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



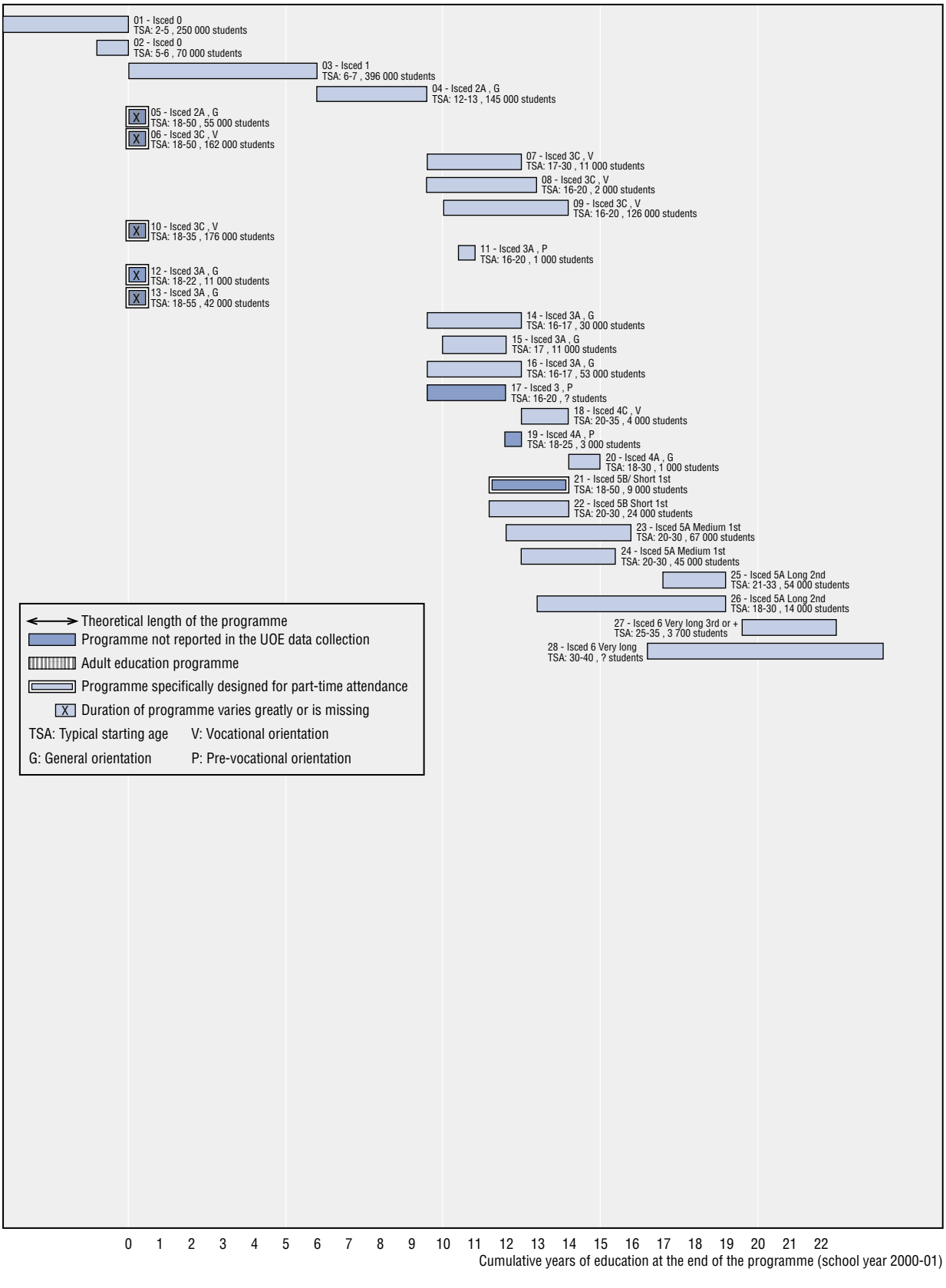
01 - Preschool
02 - indergarten/Jr. K.
03 - Kindergarten
04 - Pre-kindergarten/Nursery
05 - Primary (3 years)
06 - Primary (Kinder. to Gr. 3)
07 - Elementary (3 years)
08 - Grades 1 to 5
09 - Primary (6 years)
10 - Adult basic academic upgrading(< 1 year)
11 - Elementary (8 years)
12 - Secondary – 1st 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



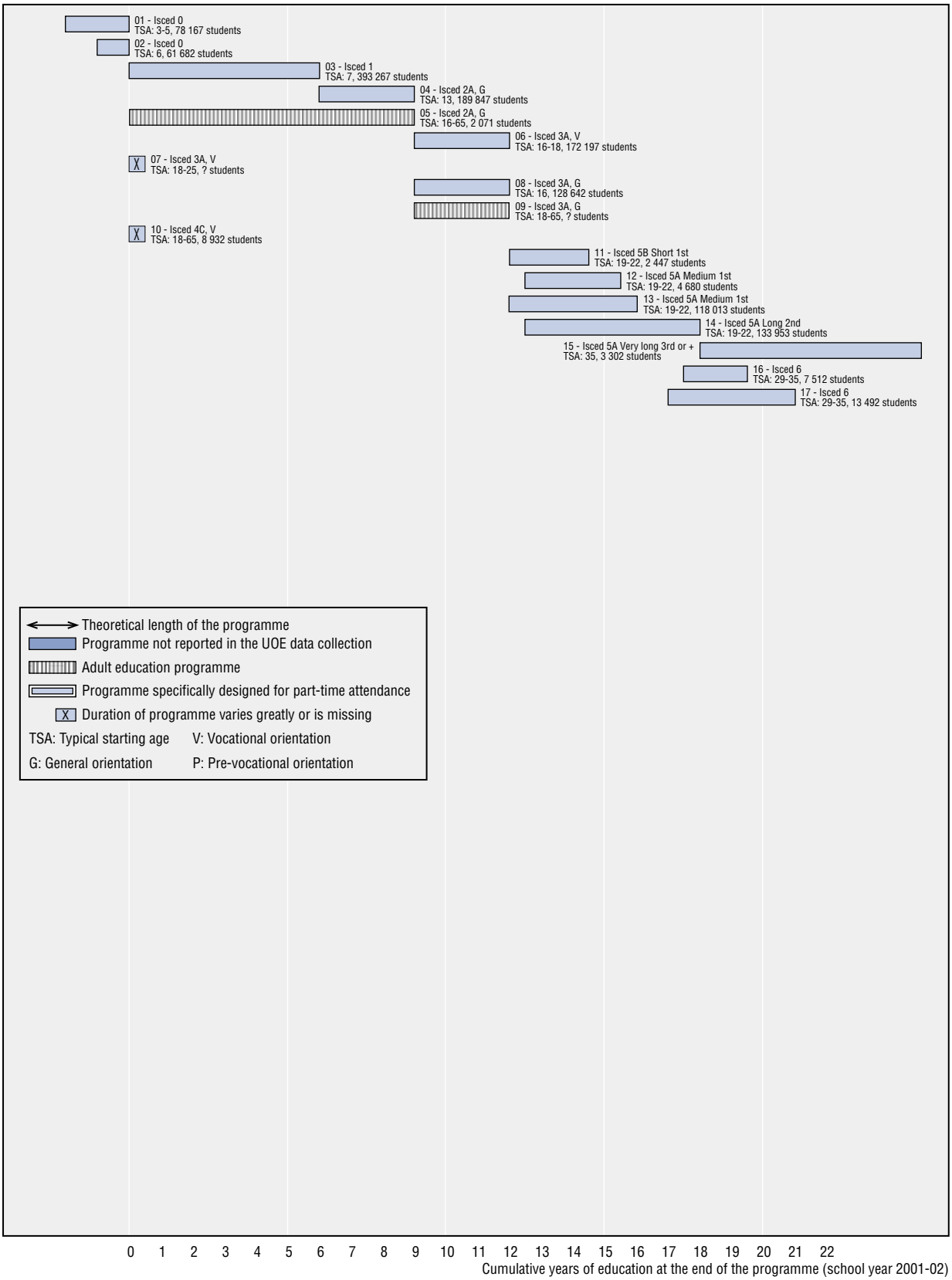
01 - Mate ská škola
(Kindergarten)
02 - P ípravné t ídy pro d ti ze sociokulturn znevýhodn ného prost edí
(Preparatory classes for socially disadvantaged children)
03 - P ípravný stupe
(Auxiliary school – preparatory stage)
04 - Základní škola – 1. stupe
(Basic school – 1st stage)
05 - Speciální základní škola – 1. stupe
(Special basic school – 1st stage)
06 - Zvláštní škola – 1. a 2. stupe
(Remedial school – 1st and 2nd stages)
07 - Pomocná škola – nižší, st ední, vyšší stupe a rehabilita ní t ídy
(Auxiliary school – lower, middle and upper stages)
08 - Základní škola – 2. stupe
(Basic school – 2st stage)
09 - Speciální základní škola – 2. stupe
(Special basic school – 2st stage)
10 - Zvláštní škola – 3. stupe
(Remedial school – 3rd stage)
11 - Pracovní stupe pomocné školy
(Auxiliary school – working stage)
12 - Praktická škola 1-2letá
(1-2 year special vocational school)
13 - Samostatné t ídy odborných u ilišt pro p ípravu pro výkon jednoduchých profesí
(Vocational school – programmes for simple appretices fields)
14 - Kursy pro doplnění základního vzd lání
(Courses complementary to basic education)
15 - Kursy pro doplnění vzd lání poskytovaného zvláštní školou
(Courses complementary to education at schools for mentally handicapped (remedial schooling programme))
16 - Kursy pro doplnění vzd lání poskytovaného pomocnou školou
(Courses complementary to education at auxiliary school)
17 - Integrovaný 1. ro ník
(Integrated 1st grade)
18 - Praktická škola 3letá
(3year special vocational school)
19 - U ilišt – obory se zvláš upravenými u ebními plány
(Vocational school – programmes with specially modified curriculum)
20 - Odborné u ilišt – obory se zvláš upravenými u ebními plány
(Vocational school – programmes with modified curriculum)
21 - St ední odborná škola, studium bez maturity
(Secondary technical, courses school without maturita)
22 - St ední odborné u ilišt , studium bez maturity
(Secondary vocational school, courses without maturita)
23 - 8leté gymnázium
(Gymnasium – 8 years)
24 - 6leté gymnázium
(Gymnasium – 6 years)
25 - 4leté gymnázium, lyceum
(Gymnasium, lyceum – 4 years)
26 - St ední odborná škola, studium s maturitou
(Secondary technical school, courses with maturita exam)
27 - St ední odborné u ilišt , studium s maturitou
(Secondary vocational school, courses with maturita)
28 - Studium jednotlivých p edmet
(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 - Rekvalifika ní kursy na SOŠ a SOU
(Courses for retraining vocational type)
33 - Rekvalifika ní kursy na SOU s výu ním listem
(Courses for retraining, vocational type with certificate on apprenticeship)
34 - Konzervato , 8leté studium
(Conservatoire, 8 years)
35 - Konzervato , 6leté studium
(Conservatoire, 6 years)
36 - Vyšší odborná škola
(Higher technical school)
37 - Vyšší odborná škola
(Higher technical school)
38 - Bakalá ské univerzitní studium
(Bachelor university study)
39 - U itelství pro 1.stupe 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 vzd lávání na vysoké škole: získání pedagogické kvalifikace
(Universities: pedagogical education - second qualification)
44 - Další vzd lávání na vysoké škole: rozší ení pedagogické kvalifikace
(Universities: extension of pedagogical education - 2nd or 3rd qualification)
45 - Další vzd lávání na vysoké škole: jiné formy studia (nepedagogické)
(Universities: non pedagogical education - second qualification)
46 - Další vzd lávání na vysoké škole: pro absolventy SŠ
(Universities: the second qualification for graduates of upper secondary schools)
47 - Další vzd lávání na vysoké škole: pro bakalá e a absolventy VOŠ
(Universities: the second qualification for bachelors and graduates of higher technical schools)
48 - Další vzd lávání na vysoké škole: pro absolventy magisterských studijních program .
(Universities: the second qualification for masters)
49 - Státní rigorózní zkouška
(State rigorous exam)
50 - Doktorské studium
(Doctoral university study)

Denmark



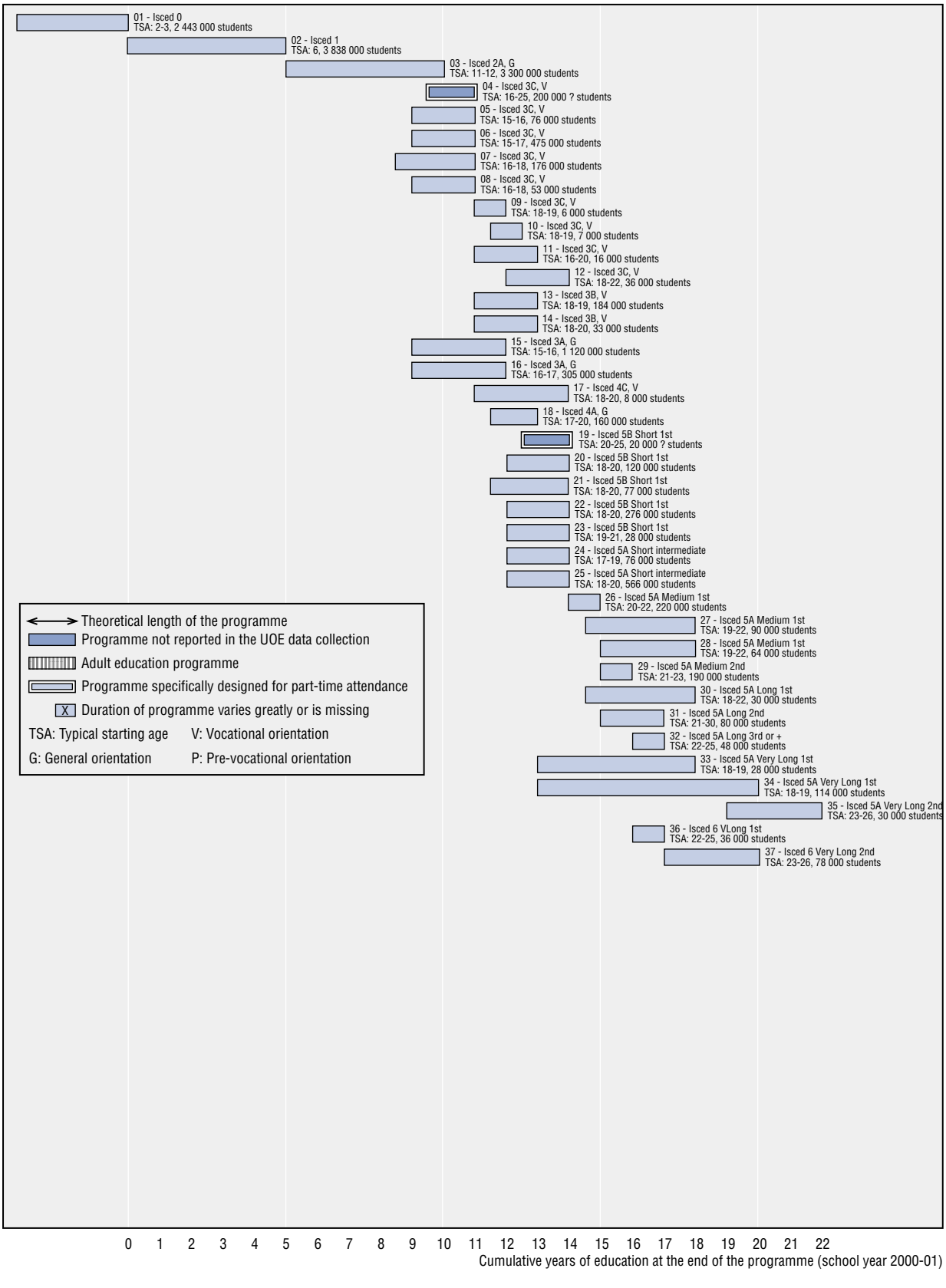
01 - Børnehave
(kindergarten)
02 - Børnehaveklasse
(pre-school class in primary school)
03 - Grundskolen 1.-6. klasse
(primary level 1st-6th grade)
04 - Grundskolen 7.-10. Klasse
(lower secondary level 7th-10th grade)
05 - Almen voksenuddannelse (AVU)
(general adult education 9th-10th grade)
06 - EUD-enkeltfag
(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 - Abejdsmarkedsuddannelserne (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 prepatory 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 prepatory examination)
16 - Gymnasium
(upper secondary school leaving examination)
17 - Fri ungdomsuddannelse
(indidividual organised youth education)
18 - Korte videregående uddannelser af mindre end 2 års varighed, herunder teknikere
(technician <2 years)
19 - TIF- kurser (værkstedskurser)
(practical admitance 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



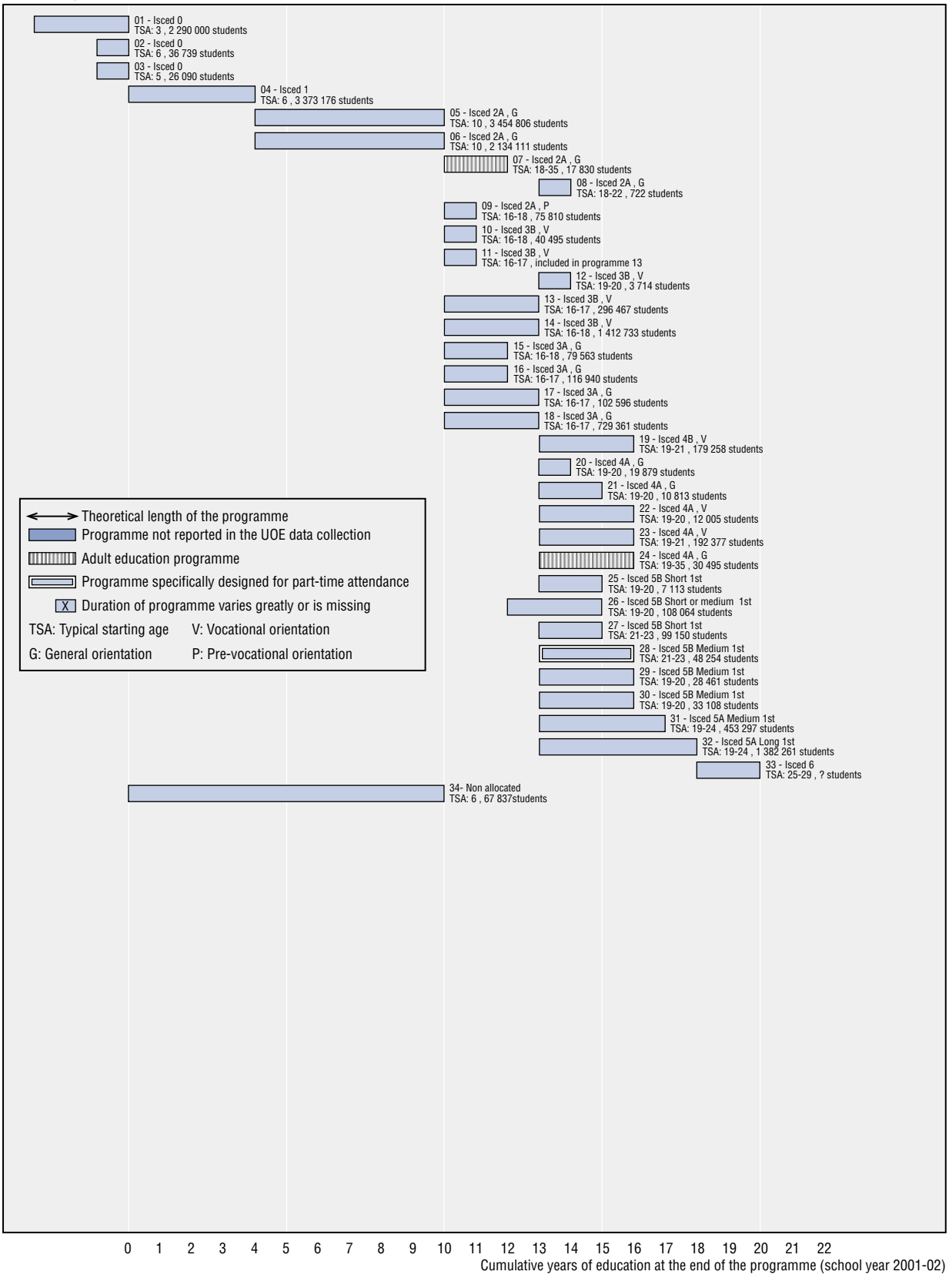
01 - 3-5-v. lapset päiväkodeissa
(Kindergartens (3 to 5-year-old children), including special education)
02 - 6-v. lasten esiopetus
(Pre-primary education for 6-year-old children in kindergartens and comprehensive schools, including special education)
03 - Peruskoulun luokat 1-6
(Comprehensive school 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



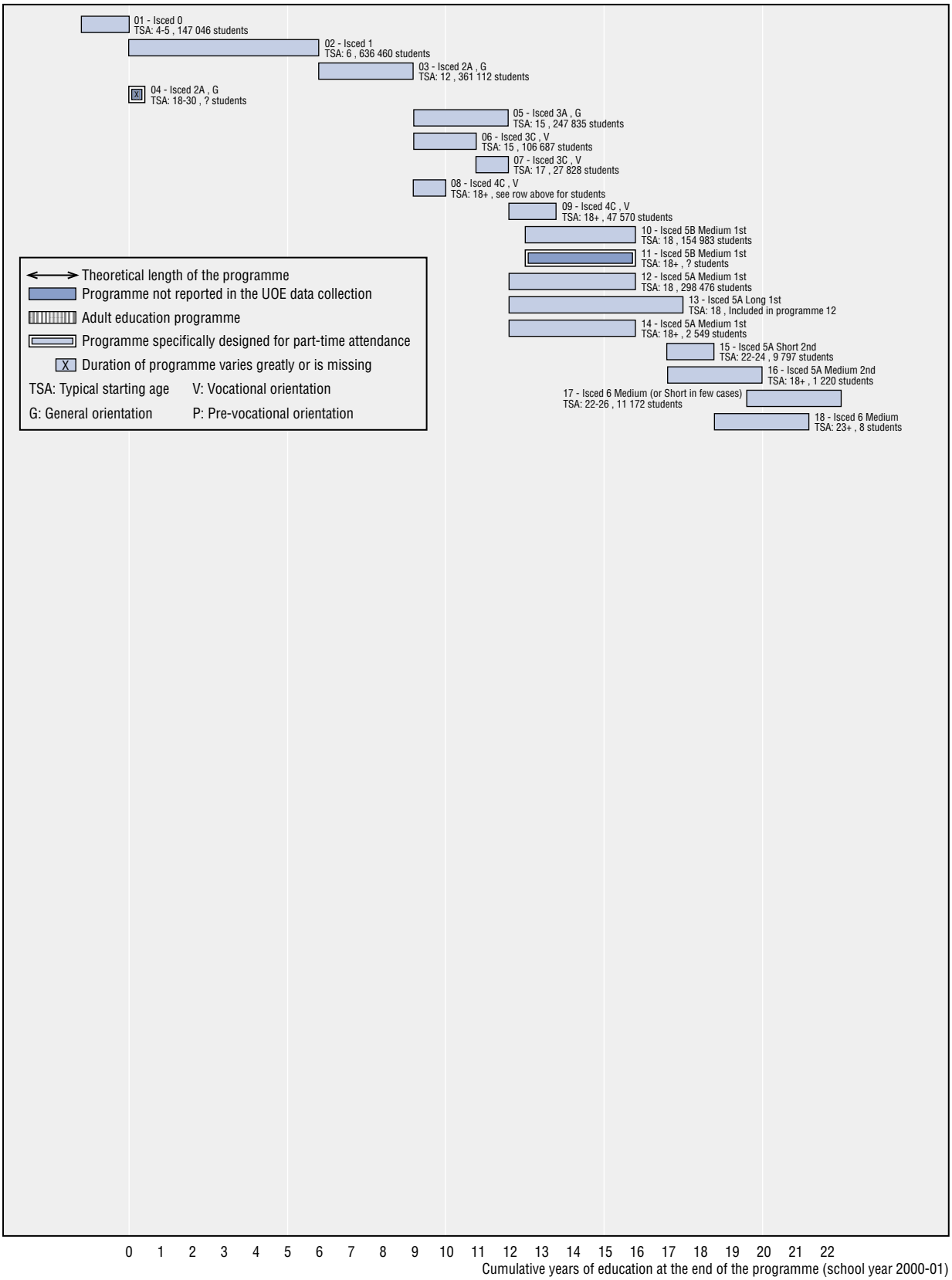
01 - Enseignement préélémentaire
(Pre-school education)
02 - Enseignement primaire
(Primary education)
03 - Enseignement du premier cycle du second degré – Collège
(Secondary education (1st cycle))
04 - Enseignement dans le cadre de contrat de qualification (niveau enseignement secondaire)
(Vocational 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 techniciens (under school statute))
23 - Enseignement des classes des sections de techniciens supérieurs (en apprentissage)
(Courses in the classes of the sections of high-level techniciens (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 departement))
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 odonthologie
(Teaching in universities with medicine and odonthology 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



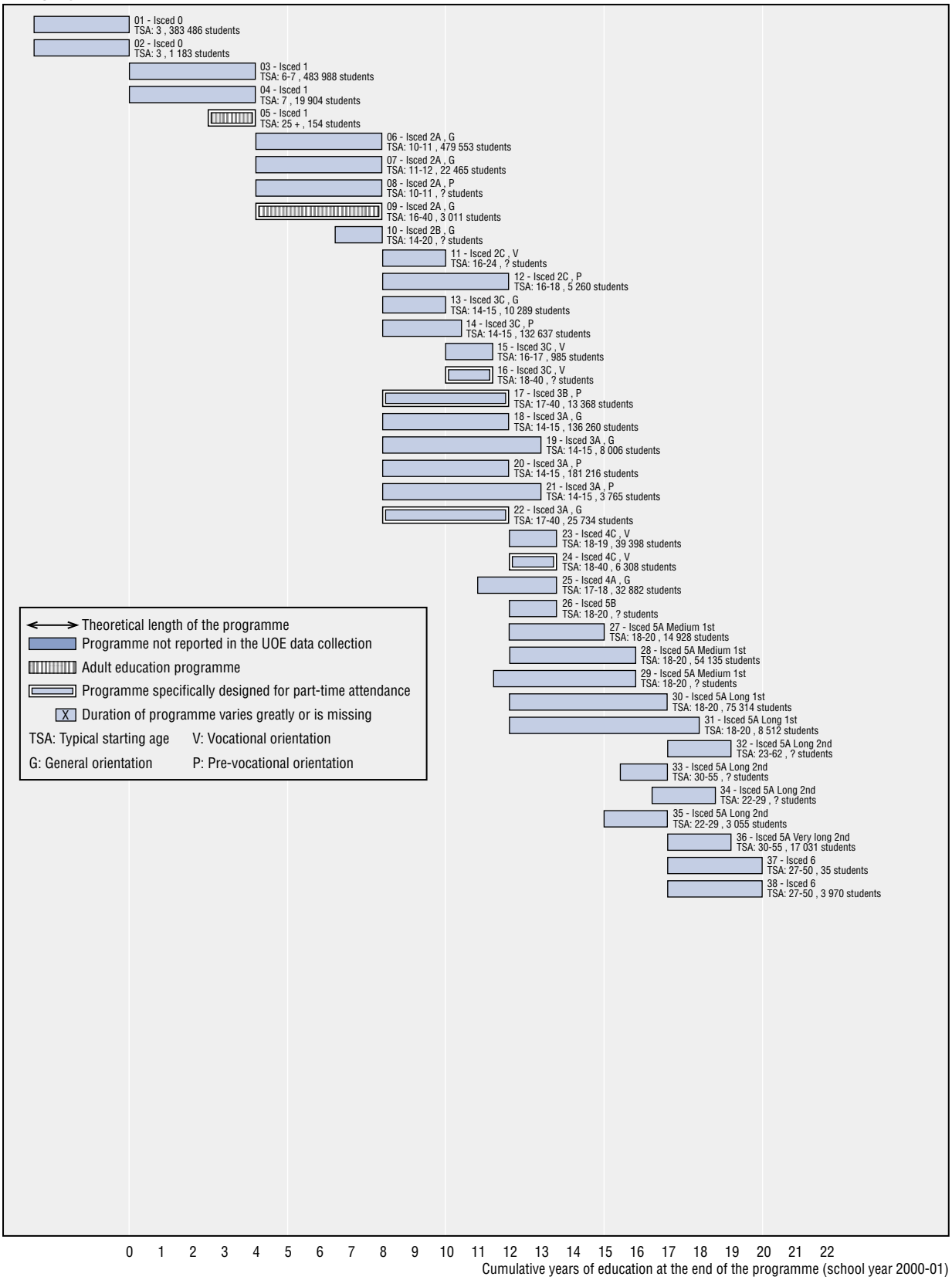
01 - Kindergärten
(Kindergarten)
02 - Schulkindergärten
(School kindergarten)
03 - Vorklassen
(Pre-school classes)
04 - Primarbereich
(Primary schools)
05 - Sekundarbereich I, ohne Qualifikation für weiterführende allgemeinbildende Bildungsgänge
(Lower secondary schools, no access to general)
06 - Sekundarbereich 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 Efkairias
(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 - Institouto Epangelmatikis Katartisis (IEK)
(Institute of vocational training (post secondary education))
09 - Institouto 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

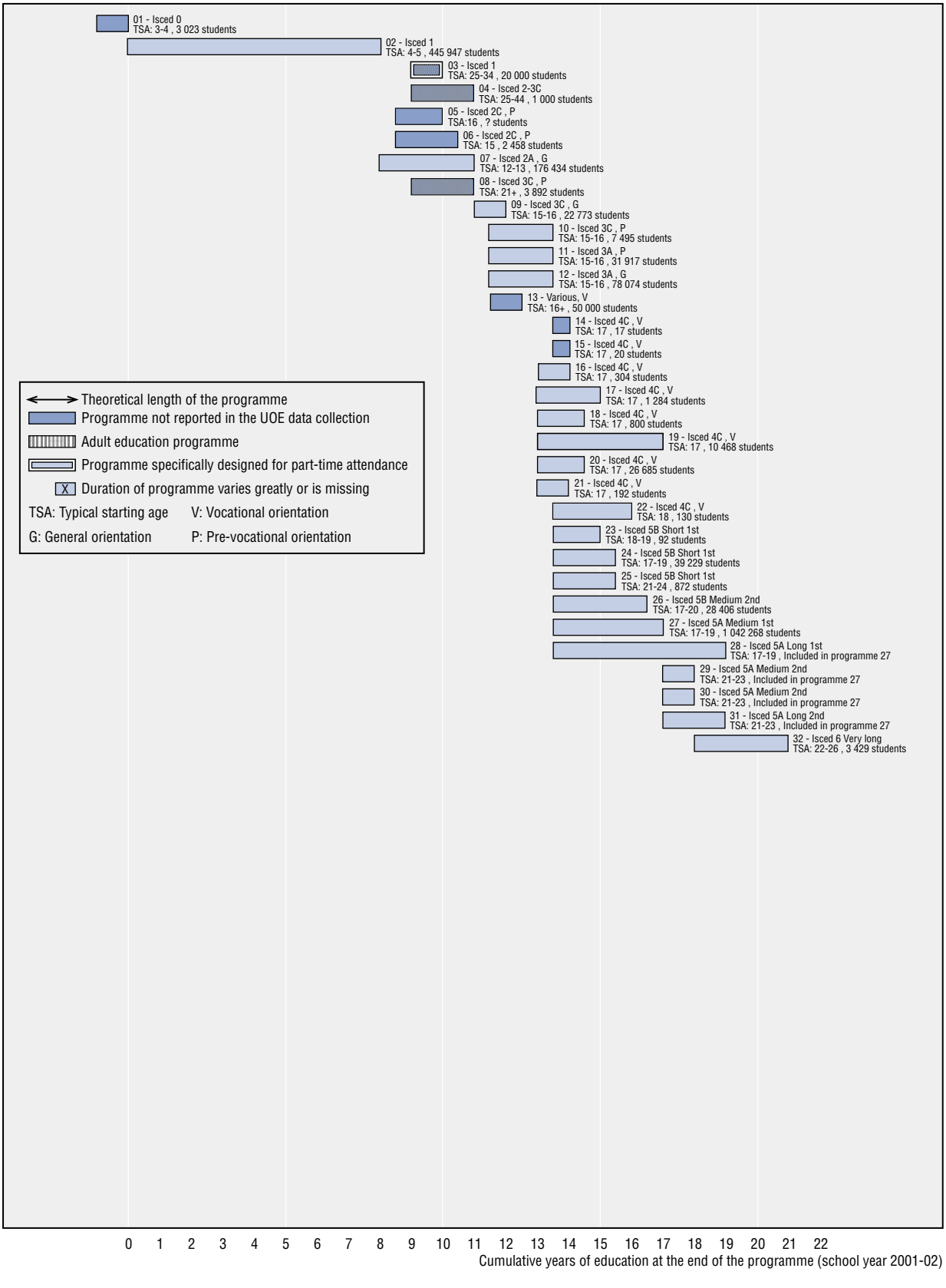


01 - Óvoda (kindergarten, of which one-year compulsory pre-school education)
02 - Gyógypedagógiai óvoda (kindergarten, special education)
03 - Általános iskola 1-4 (general school primary level, 1-4 Grades)
04 - Gyógypedagógiai általános iskola elokészíto és 1-4 évfolyam (general school primary level, 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 - Muvészeti általános iskola (basic – lower secondary – education with art/music pre-vocational programmes)
09 - Felnottek 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 képzo -. évfolyamai (basic education programme of the vocational school)
14 - Szakmunkásképzo iskola . Törvény szerint (vocational school- according to the Education Act of)
15 - Szakiskolai szakképzo évfolyamok és programok (vocational programmes preparing for NVQL examinations)
16 - Szakiskolai szakképzo évfolyamok és programok (esti, levelezo képzés(vocational programmes preparing for NVQL examinations, part-time)
17 - Felnottek 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 - Muvészeti szakközépiskola -. évfolyam (upper secondary education with art/music pre-vocational programmes)
22 - Felnottek gimnáziuma -. évfolyam (upper secondary part-time programmes)
23 - Szakképzo évfolyamok és programok érettségire épülo OKJ szakmákban (post-secondary vocational programmes)
24 - Szakképzo évfolyamok és programok érettségire épülo OKJ szakmákban (esti-levelezo) (post-secondary vocational programmes, part-time)
25 - Szakmunkások érettségire felkészíto középiskolája (general secondary programme for vocational school graduates)
26 - Akkreditált iskolai rendszeru felsofokú 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 felsofokú végzettséget igénylo OKJ szakmákra (vocational programmes with an entrance requirement of Level qualification)
33 - Foiskolai szakirányú továbbképzés (college post-graduate specialisation programmes)
34 - Kiegészíto egyetemi képzés foiskolát végzettek számára (mérnök, közgazdász, agrármérnök, nyelvtanár (university supplementary programme)
35 - Muszaki tanárképzés muszaki foiskolát végzetteknek (supplementary teacher training programme for engineers)
36 - Egyetemi szakirányú továbbképzés (university post-graduate specialisation programme)
37 - DLA (muvészképzésben megfelel a Ph.D.-nek(doctoral degree in liberal arts)
38 - Ph.D. (doctoral programme)

Iceland

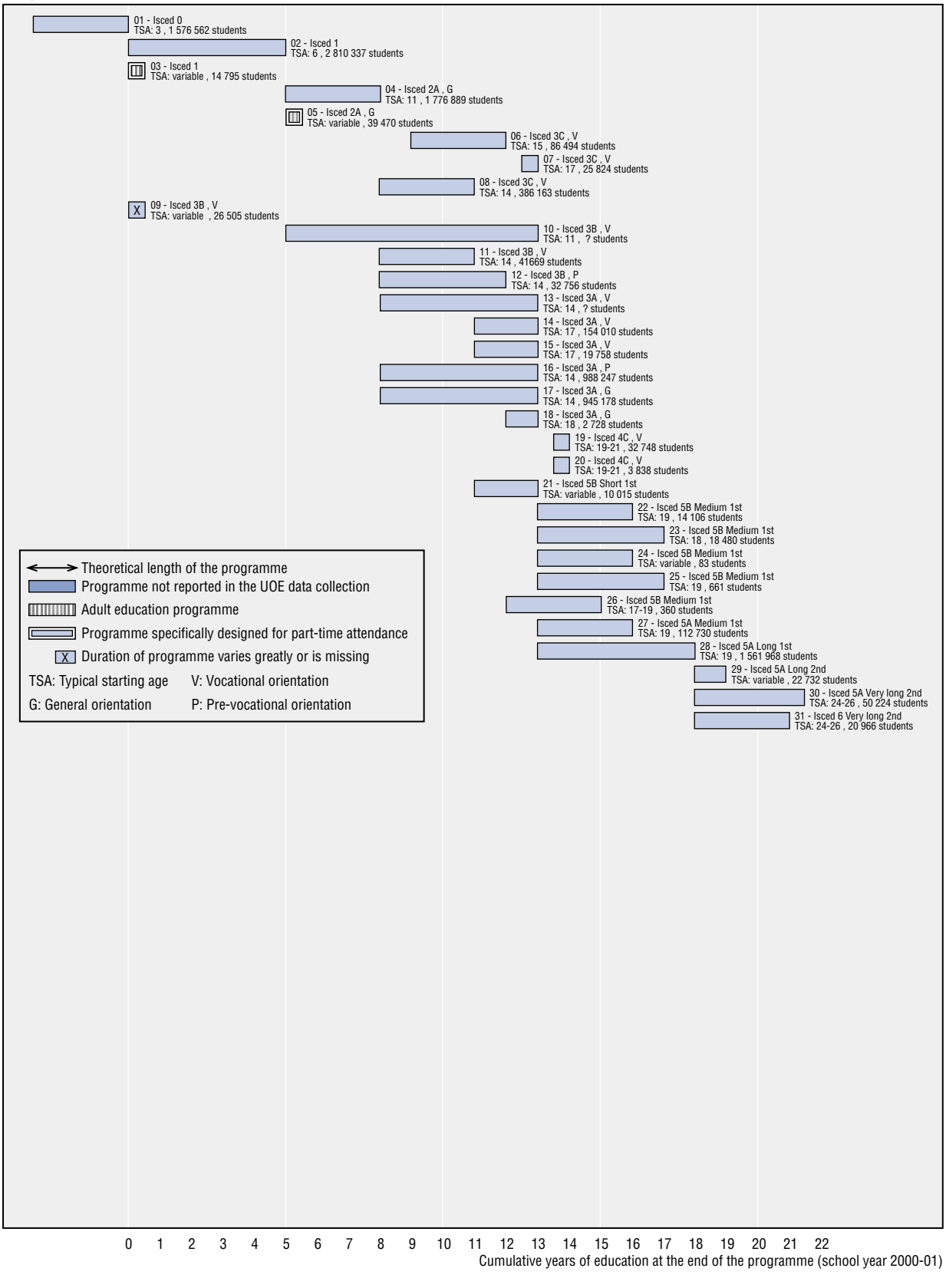
01 - Leiksk li
(Pre-primary schools)
02 - Grunnsk li I
(Primary schools (1st section compulsory education))
03 - Grunnsk li II
(Lower-secondary school (2nd section compulsory education))
04 - Skip- og vØlstj rn 1. stig
(Marine captain and engineering programmes, 1st grade)
05 - Eins Ærs verknÆmsbrautir framhaldssk lastigs
(1-year upper secondary level vocational programmes)
06 - Skip- og vØlstj rn 2. stig
(Marine captain and engineering programmes, 2nd grade)
07 - L ggilt i ngrein 2ja Æra
(Certified indentured trades, 2 years contract time)
08 - Tveggja Æra verknÆmsbrautir framhaldssk lastigs
(Upper secondary level vocational 2-year programmes)
09 - Skip- og vØlstj rn 3. stig
(Marine captain and engineering programmes, 3rd grade)
10 - StarfsnÆm Æ framhaldssk lastigi me b knÆm sem forkr fu
(Vocational programmes at upper secondary level with a general programme prerequisite)
11 - 3ja Æra verknÆmsbrautir framhaldssk lastigs
(Upper secondary level vocational 3-year programmes)
12 - L ggilt i ngrein 3ja Æra
(Certified indentured trades, 3-year contract time)
13 - L ggilt i ngrein 4ra Æra
(Certified indentured trades, 4-year contract time)
14 - StarfsnÆm 4 Ær Æ framhaldssk lastigi
(Vocational 4-year programmes at upper secondary level)
15 - StarfsnÆm 5 Ær Æ framhaldssk lastigi
(Vocational 5-year programmes at upper secondary level)
16 - SØrdeildir fatla ra
(Special education programmes for the mentally handicapped)
17 - Almenn nÆmsbraut framhaldssk la
(General programmes at the start of upper secondary level)
18 - ListnÆm Æ framhaldssk lastigi
(Fine and applied arts at upper secondary level)
19 - FornÆm myndlistar Æ framhaldssk lastigi
(Preparatory programme for fine and applied arts)
20 - B knÆmsbrautir til stœdentspr fs, 4ra Æra
(General programmes leading to matriculation examination at upper secondary level, 4 years)
21 - Stœdentspr f a loknu starfsnÆmi
(Matriculation examination at upper secondary level after completion of vocational programmes)
22 - Lei s gunÆm
(Tourist guide programme)
23 - Skip- og vØlstj rn 4. stig
(Marine captain and engineering programmes at post-secondary level, 4th grade)
24 - MeistaranÆm l ggiltri i ngrein
(Trade master's programmes at post-secondary level in a certified indentured trade)
25 - StarfsnÆm, 1,5 Ær Æ millinÆmsstigi
(Vocational programmes at post-secondary level, 1.5 years)
26 - ˇ ra nÆm 2 Ær Æn hÆsk lagrÆ u
(Tertiary programmes 2 years not leading to a university degree)
27 - ˇ ra nÆm 3 Ær Æn hÆsk lagrÆ u
(Tertiary programmes 3 years not leading to a university degree)
28 - ListnÆm ri sk la, 3ja Æra
(Fine and applied arts at tertiary level, 3 years)
29 - NÆm til kennslurØttinda Æn hÆsk lagrÆ u
(Teacher's qualification programme, no degree)
30 - Stuttar hagn tar nÆmsbrautir hÆsk lum
(Short practical programmes at the tertiary level)
31 - HÆsk lanÆm t knifr i til fyrstu grÆ u
(Tertiary technical programmes, first university degree)
32 - HÆsk lanÆm 3ja Æra til fyrstu grÆ u
(Tertiary programmes 3 years, first university degree))
33 - HÆsk lanÆm 4ra Æra til fyrstu grÆ u
(Tertiary programmes 4 years, first university degree)
34 - HÆsk lanÆm, 1 vi b tarÆr ofan Æ 3 Ær, ekki vi b targrÆ a
(Tertiary programmes, 1 year in addition to 3-year studies, not leading to a second degree)
35 - HÆsk lanÆm, 2 vi b tarÆr ofan Æ 4 Ær, ekki vi b targrÆ a
(Tertiary programmes 2 years in addition to 4 years studies, not leading to a second degree)
36 - HÆsk lanÆm 5 Æra til fyrstu grÆ u
(Tertiary programmes, 5 years, first university degree)
37 - HÆsk lanÆm 6 Æra til fyrstu grÆ u
(Tertiary programmes, 6 years, first university degree)
38 - HÆsk lanÆm, 1.5-2 vi b tarÆr ofan Æ 3-4 Ær, tekin vi b targrÆ a
(Tertiary programmes, 1.5-2 years in addition to 3-4 year studies, leading to a second degree)
39 - HÆsk lanÆm, 2 vi b tarÆr ofan Æ 5-6 Ær, tekin vi b targrÆ a
(Tertiary programmes, 2 years in addition to 5-6-year studies, leading to a second degree)
40 - DoktorsnÆm
(Doctoral programme, Ph.D.)

Ireland



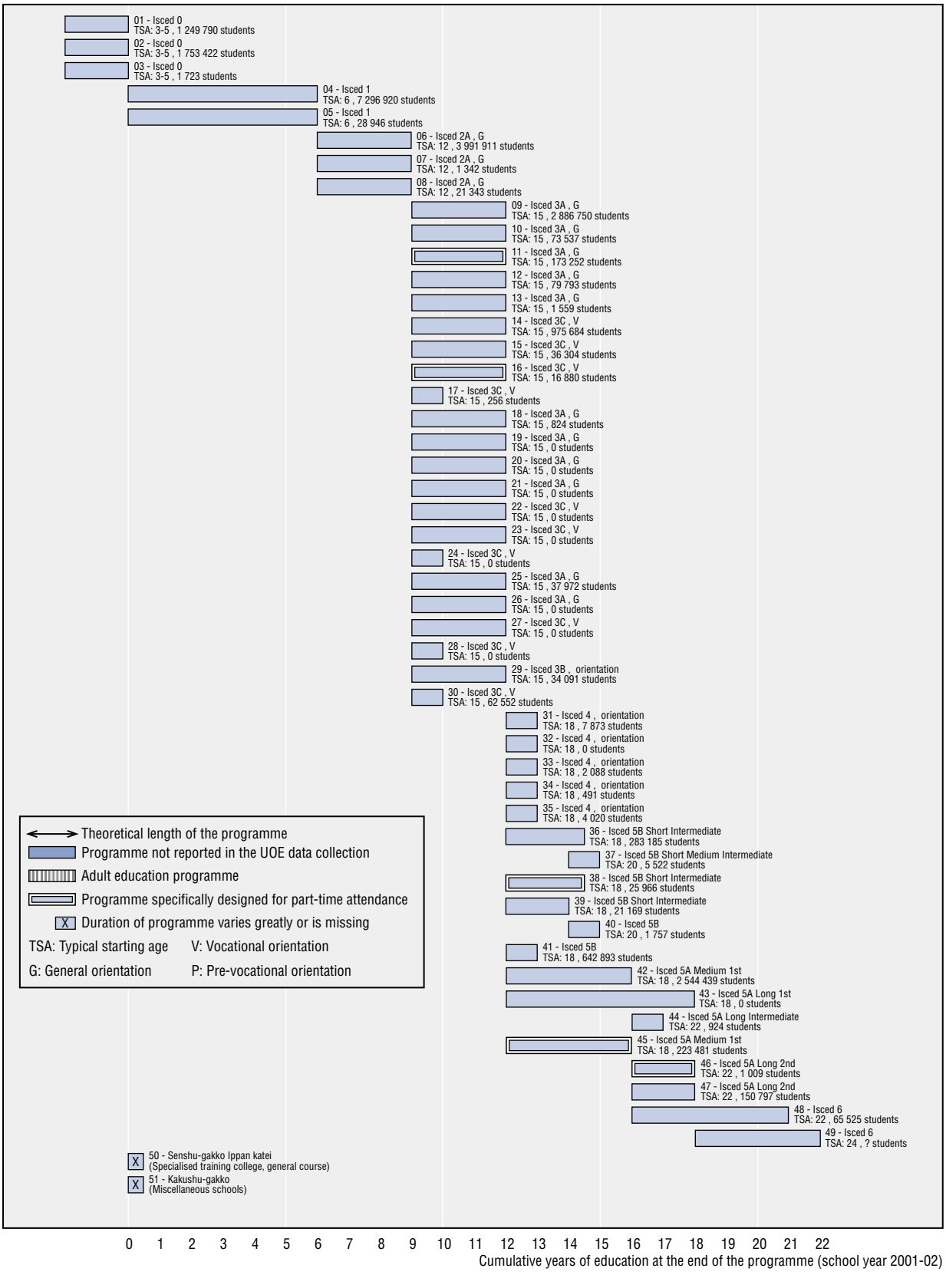
01 - Pre-primary education (early start + private)
02 - Primary education
03 - Adult Literacy Programme
04 - Senior Traveller Education Programme
05 - BIM Introducation to Aquaculture
06 - Youth Reach
07 - Junior Certificate (and JCSP)
08 - Core VTOS
09 - Transition year programme
10 - Leaving Certificate 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



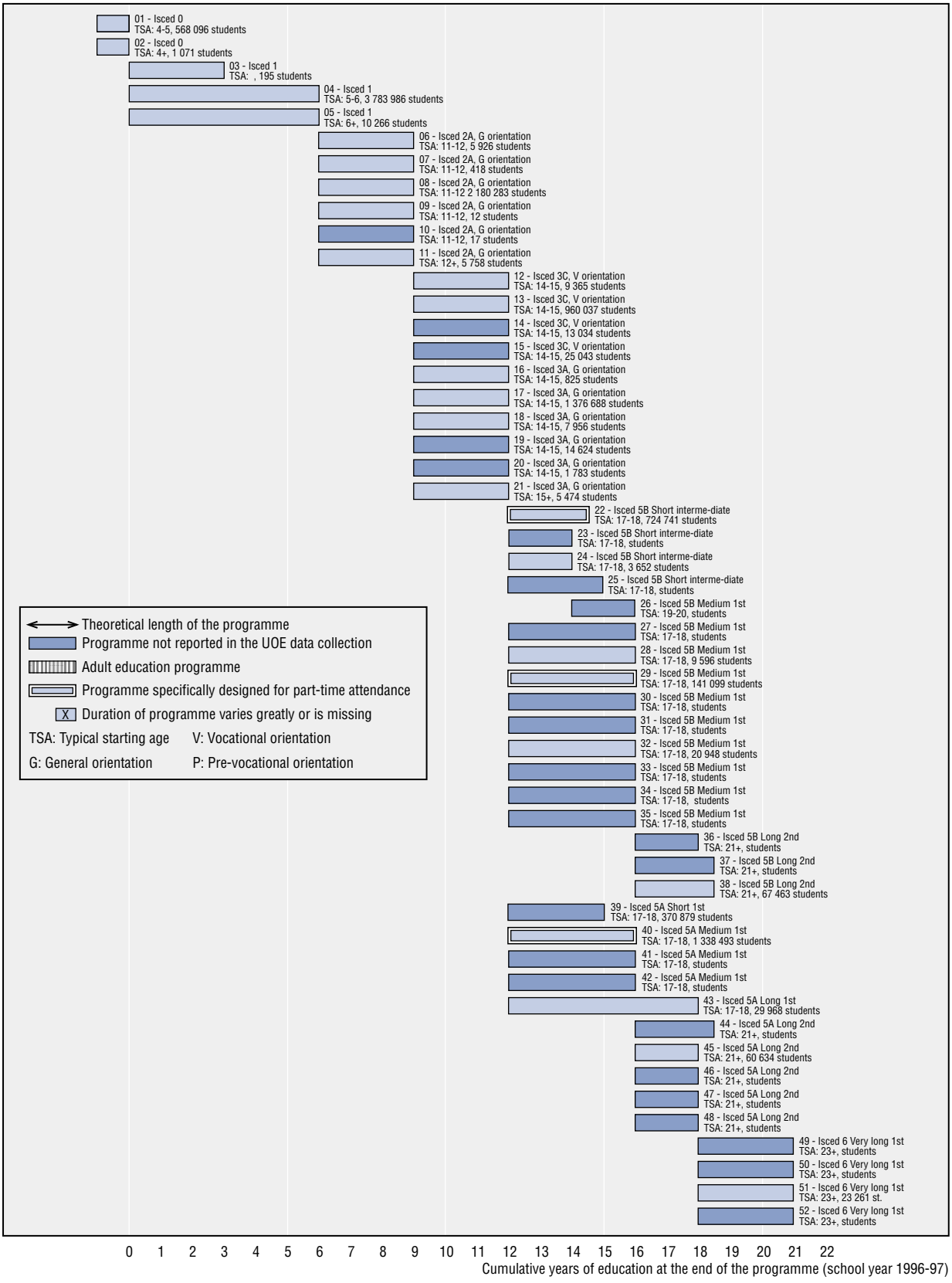
01 - Scuola dell'infanzia
(Pre-primary education)
02 - Scuola elementare
(Primary school)
03 - Corsi di alfabetizzazione culturale 1° ciclo
(Adult literacy school (1st cycle))
04 - Scuola Media
(Lower secondary education)
05 - Corsi di alfabetizzazione culturale 2° ciclo
(Adult literacy school (2nd cycle))
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



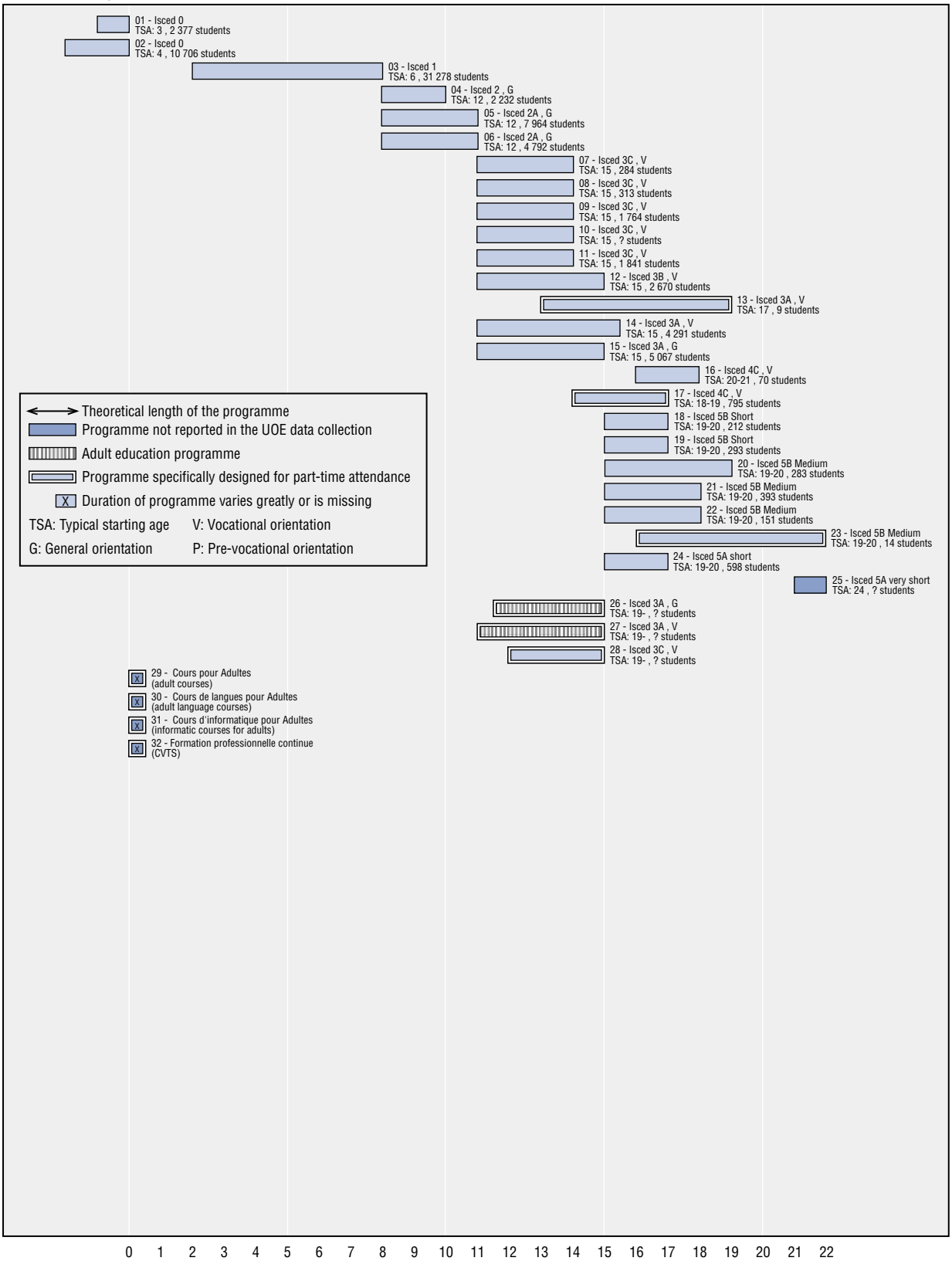
01 - Hoikusho
(Day nursery)
02 - Yochien
(Kindergarten)
03 - Tokushu-kyoiku-gakko Yochi-bu
(Special education school, kindergarten department)
04 - Shogakko
(Elementary school)
05 - Tokushu-kyoiku-gakko Shogaku-bu
(Special education school, elementary department)
06 - Chugakko
(Lower secondary school)
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/evening 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)

Korea



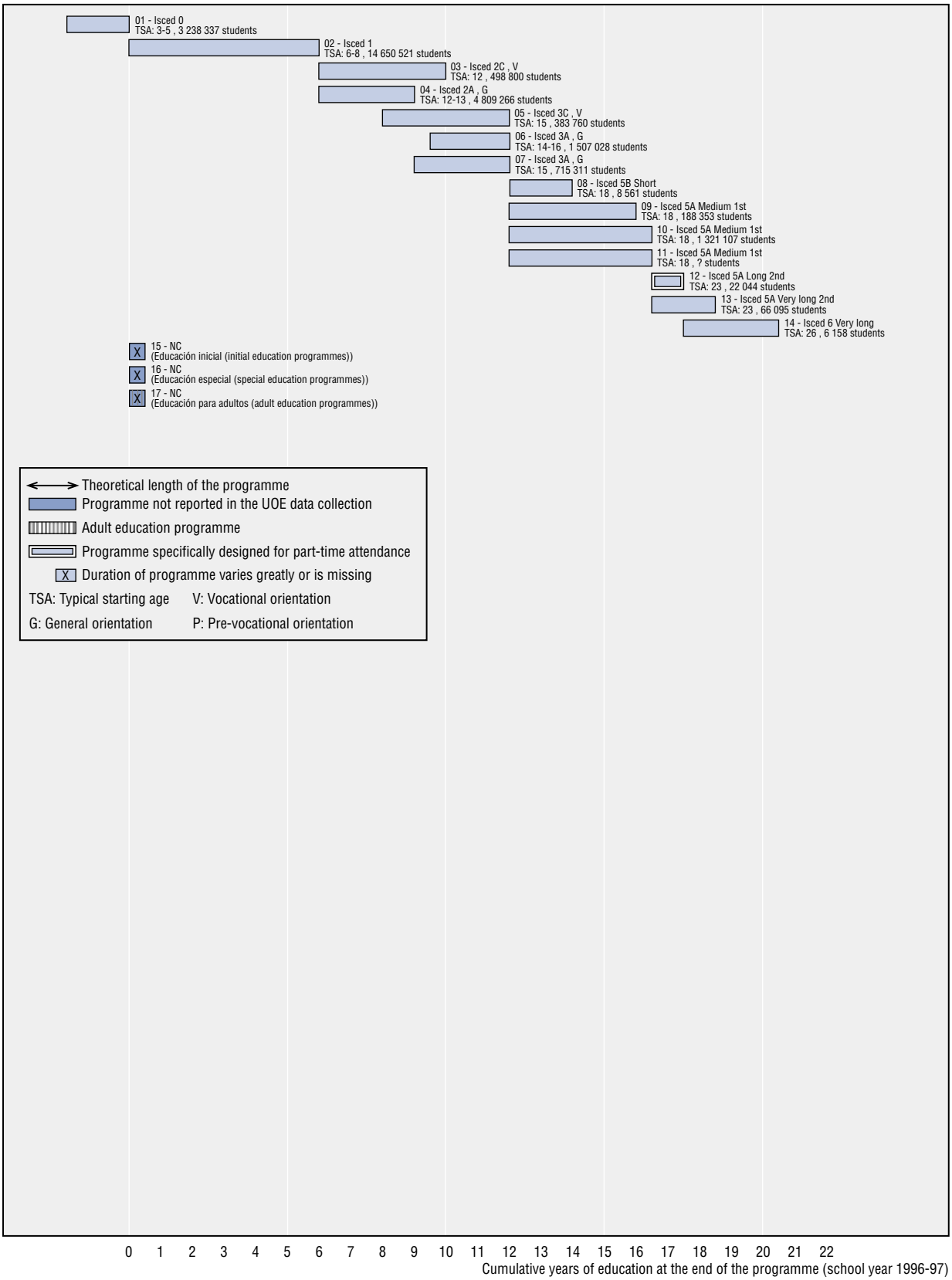
01 - (Yuchiwon (kindergarten))
02 - (Teuksu-hakgyo(ynchiwon kwajong) (special school, kindergarten course))
03 - (Kongmin-hakgyo (civic school))
04 - (Chodeung-hakgyo (primary school))
05 - (Teuksu-hakgyo(chodeung-hakgyo kwajong) (special school, primary school course))
06 - (Kakjong-hakgyo(jung-hakgyo 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 - (Ilbangye 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(ilbangye 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



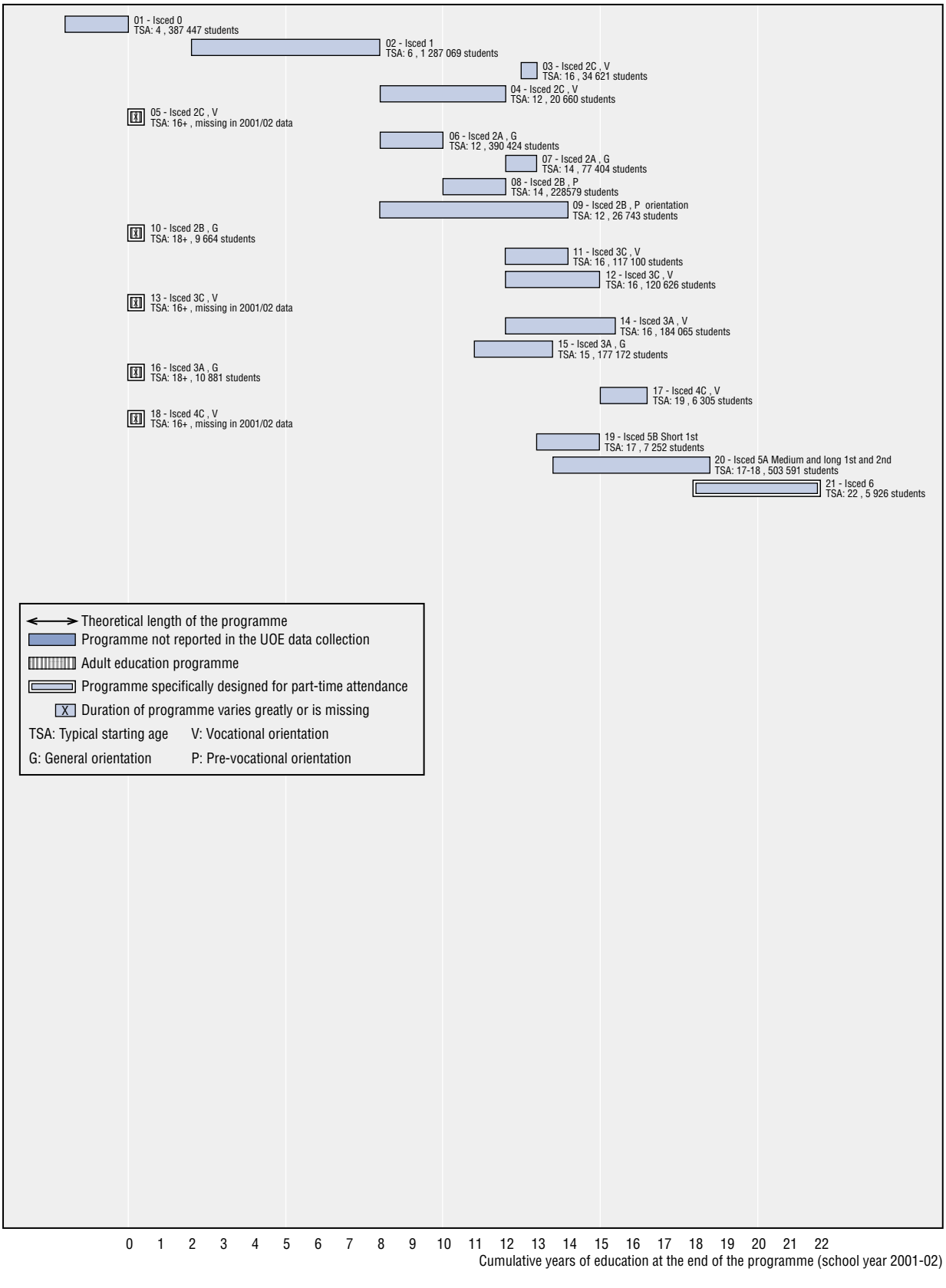
01 - Education précoce (early maturity education)
02 - Education préscolaire (pre-primary education)
03 - Enseignement primaire (primary education)
04 - Regime préparatoire de l'EST (preparatory regime of the technical secondary education)
05 - Cycle inférieur de l'EST (lower technical secondary education)
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 er 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



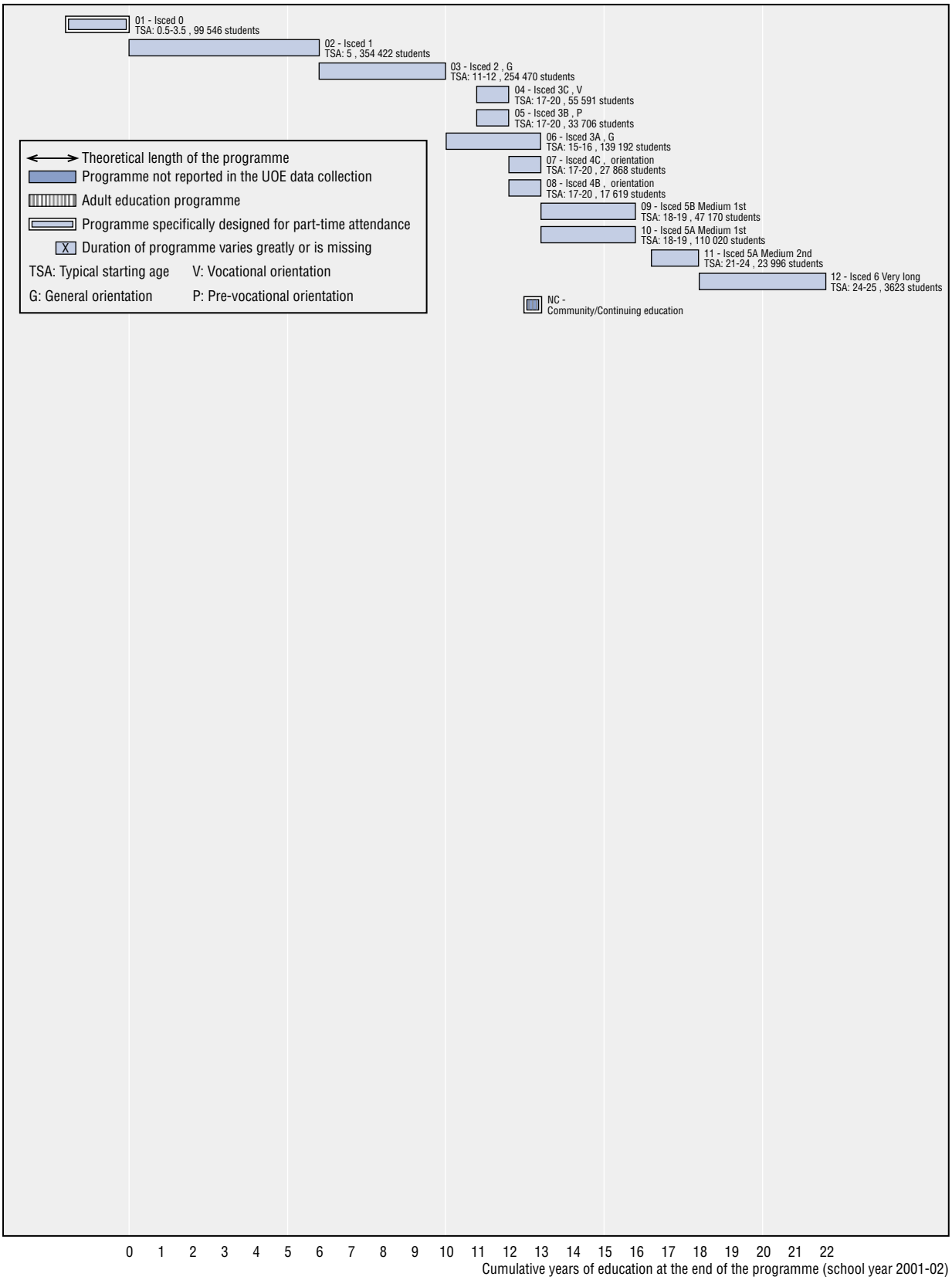
01 - Educación preescolar (pre-primary education)
02 - Educación primaria (primary education)
03 - Capacitación para el trabajo [lower secondary (job training)]
04 - Educación secundaria (lower secondary education)
05 - Profesional medio [upper secondary (vocational or technical programmes)]
06 - Bachillerato 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



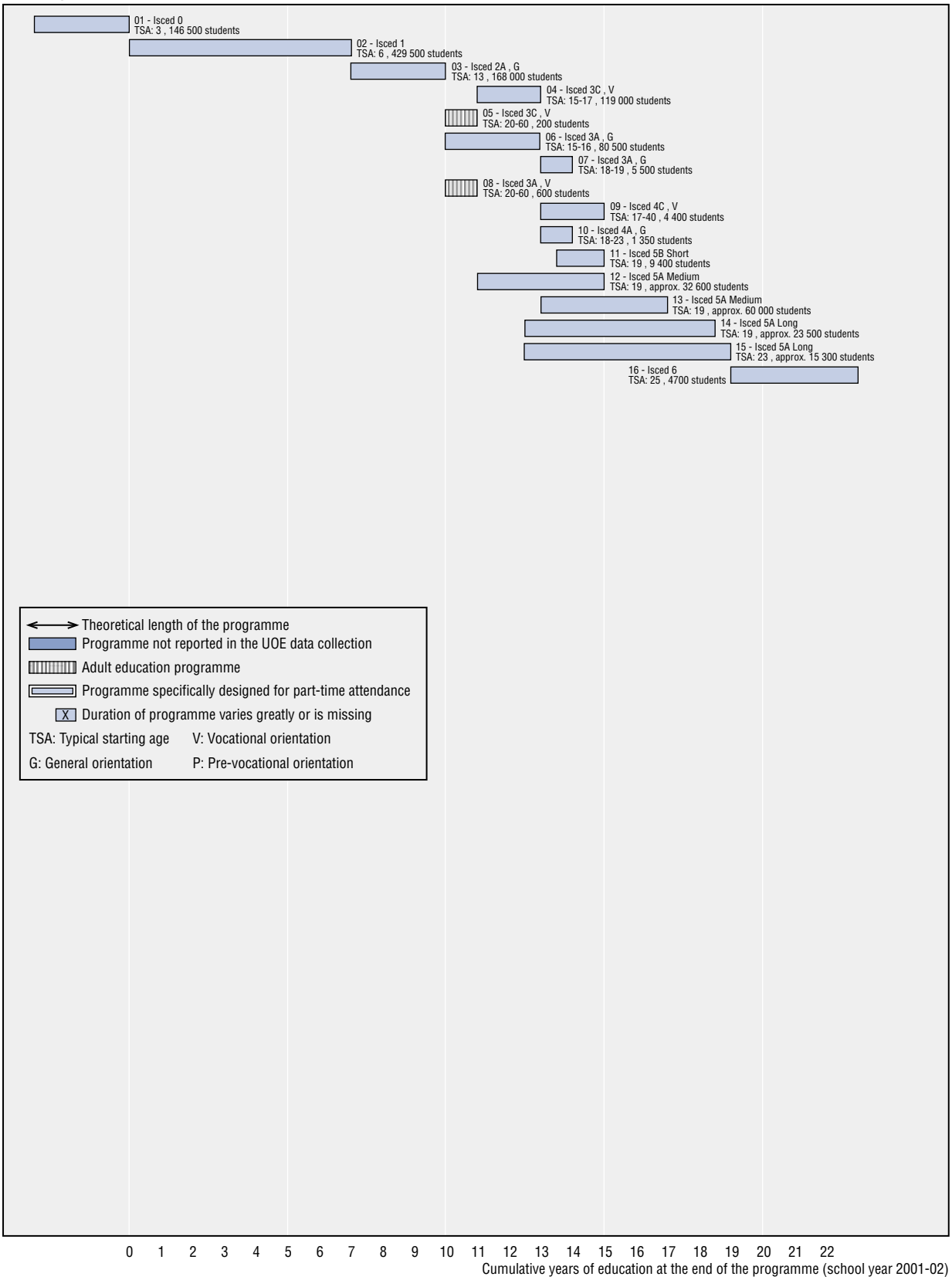
01 - Basisonderwijs en speciaal onderwijs ; leerlingen 3-5 jaar oud
(Primary education and primary special needs education; pupils 3-5 years of age)
02 - Basisonderwijs en speciaal onderwijs ; leerlingen van 6 jaar en ouder
(Primary education and primary special needs education; pupils 6 years of age 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



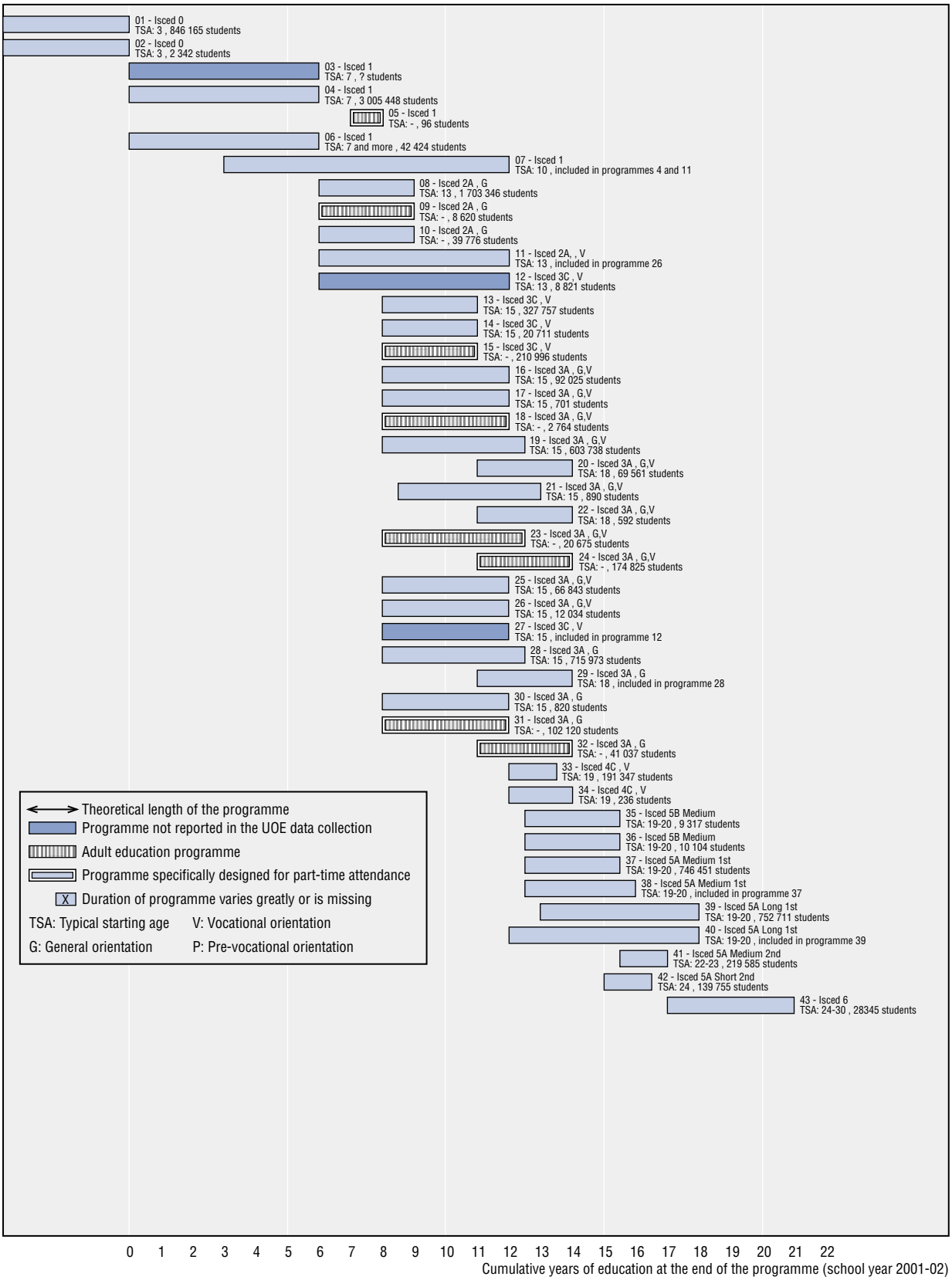
01 - Early childhood education
02 - Primary
03 - Secondary (Year 7 to Year 10)
04 - Certificate
05 - Certificate
06 - Upper Secondary (Year 11 to Year 13)
07 - Certificate
08 - Certificate
09 - Diploma
10 - Bachelor's degree
11 - Post-graduate
12 - Doctorate, Higher Doctorates
13 - Community/Continuing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

Norway



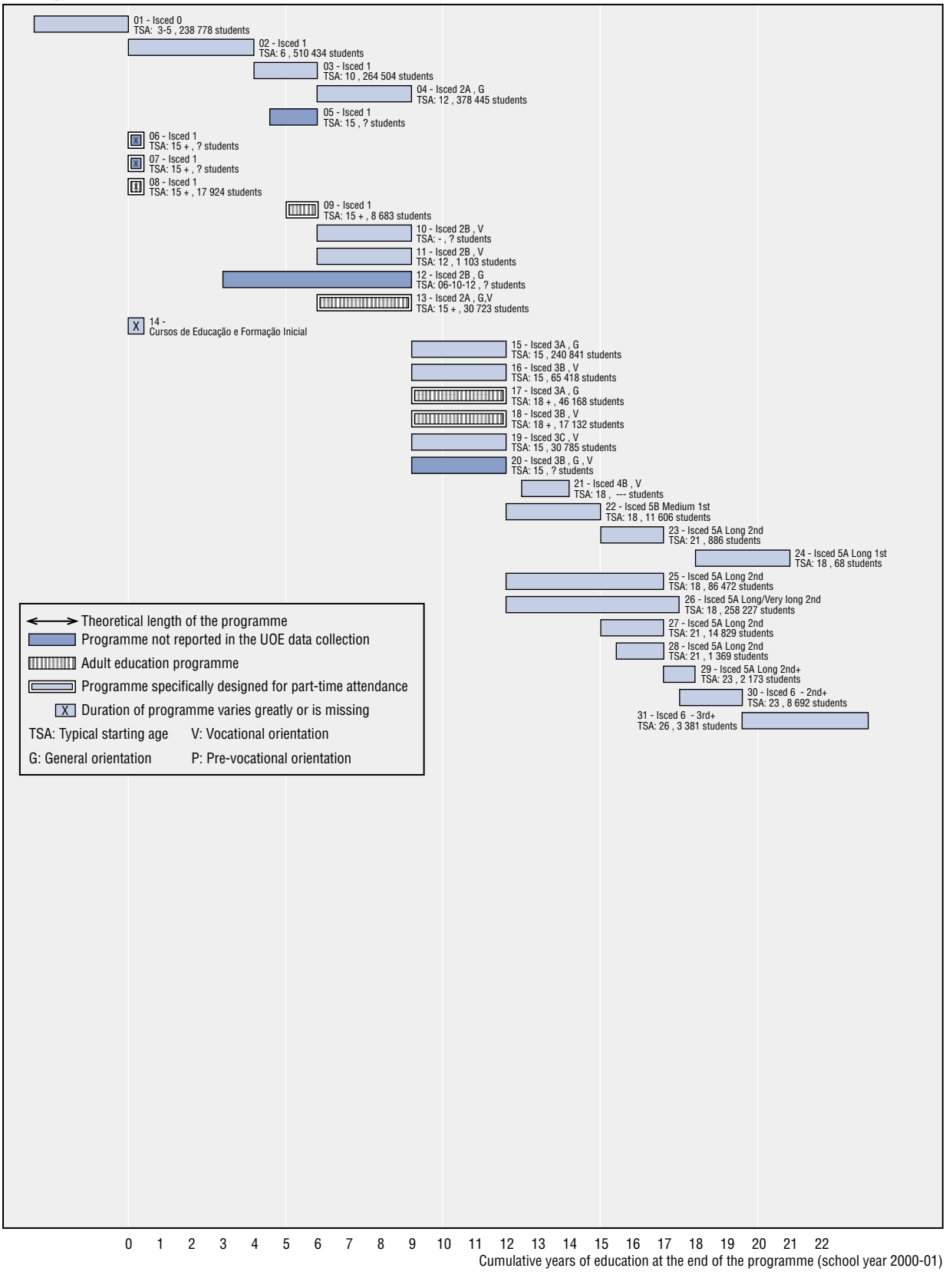
01 - Barnehage (kindergartenog Førskole (pre-school)
02 - Grunnskole 1.-7. klasse (primary school)
03 - Ungdomsskole 8.-10. klasse (lower secondary)
04 - Videregående opplæring, yrkesfag (upper secondary vocational)
05 - Arbeidsmarkedsopplæring (AMO(labour market courses))
06 - Videregående opplæring, 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/profesjonsutdannninger (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 - Szko a muzyczna I stopnia
(1st level music school)
04 - Szkola podstawowa dla dzieci i m odzie y
(primary school for children and youth)
05 - Szkola podstawowa dla doros ych
(primary school for adult)
06 - Szkola podstawowa specjalna dla dzieci i m odzie y
(primary special school for children and youth)
07 - Szko a baletowa
(Ballet school)
08 - Gimnazjum dla dzieci i m odzie y
(gymnasium for children and youth)
09 - Gimnazjum dla doros ych
(gymnasium for adults)
10 - Gimnazjum specjalne dla dzieci i m odzie y
(special gymnasium for children and youth)
11 - Szko a artystyczna II stopnia
(second level art school)
12 - Szko a artystyczna II stopnia
(second level art school)
13 - Szko a zasadnicza dla m odzie y
(basic vocational school)
14 - Szko a zasadnicza specjalna dla m odzie y
(special basic vocational school)
15 - Szko a zasadnicza dla doros ych
(basic vocational school for adults)
16 - Liceum zawodowe dla m odzie y
(secondary school of vocational education for youth)
17 - Liceum zawodowe specjalne dla m odzie y
(special secondary school of vocational education for youth)
18 - Liceum zawodowe dla doros ych
(secondary school of vocational education for adults)
19 - Technikum (liceum, szko a równorz dna) dla m odzie y
(secondary technical (or equivalent) school for youth)
20 - Technikum (liceum, szko a równorz dna) dla m odzie y na podbudowie szko y zasadniczej
(secondary technical (or equivalent) school for youth)
21 - Technikum specjalne (liceum, szko a równorz dna) dla m odzie y
(special secondary technical (or equivalent) school for youth)
22 - Technikum specjalne (liceum, szko a równorz dna) dla m odzie y na podbudowie szko y zasadniczej
(special secondary technical (or equivalent) school for youth)
23 - Technikum (liceum, szko a równorz dna) dla doros ych
(secondary technical (or equivalent) school for adults)
24 - Technikum (liceum, szko a równorz dna) dla doros ych na podbudowie szko y zasadniczej
(secondary technical (or equivalent) school for adults)
25 - Liceum techniczne dla m odzie y
(technical liceum for youth)
26 - Szko a artystyczna II stopnia
(second level art school)
27 - Szko a artystyczna II stopnia
(second level art school)
28 - Liceum ogólnokszta c ce dla m odzie y
(secondary school of general education for youth)
29 - Liceum ogólnokszta c ce dla m odzie y na podbudowie szko y zasadniczej
(secondary school of general education for youth)
30 - Specjalne liceum ogólnokszta c ce dla m odzie y
(special secondary school of general education for youth)
31 - Liceum ogólnokszta c ce dla doros ych
(secondary school of general education for adults)
32 - Liceum ogólnokszta c ce dla doros ych na podbudowie szko y zasadniczej
(secondary school of general education for adults)
33 - Szko a policealna
(post-secondary school)
34 - Szko a policealna specjalna
(special post-secondary school)
35 - Kolegium nauczycielskie
(teacher training college)
36 - Nauczycielskie kolegium j zyków obcych
(foreign language teacher training college)
37 - Wy sze studia zawodowe
(higher education professional studies)
38 - Wy sze studia zawodowe
(higher education professional studies)
39 - Studia magisterskie
(university studies)
40 - Studia medyczne, studia weterynaryjne
(university medical studies, veterinary studies)
41 - Studia uzupelniaj ce magisterskie
(post-licentiate master diploma studies)
42 - Studia podyplomowe
(post-graduate courses)
43 - Studia doktoranckie
(doctoral studies)

Portugal

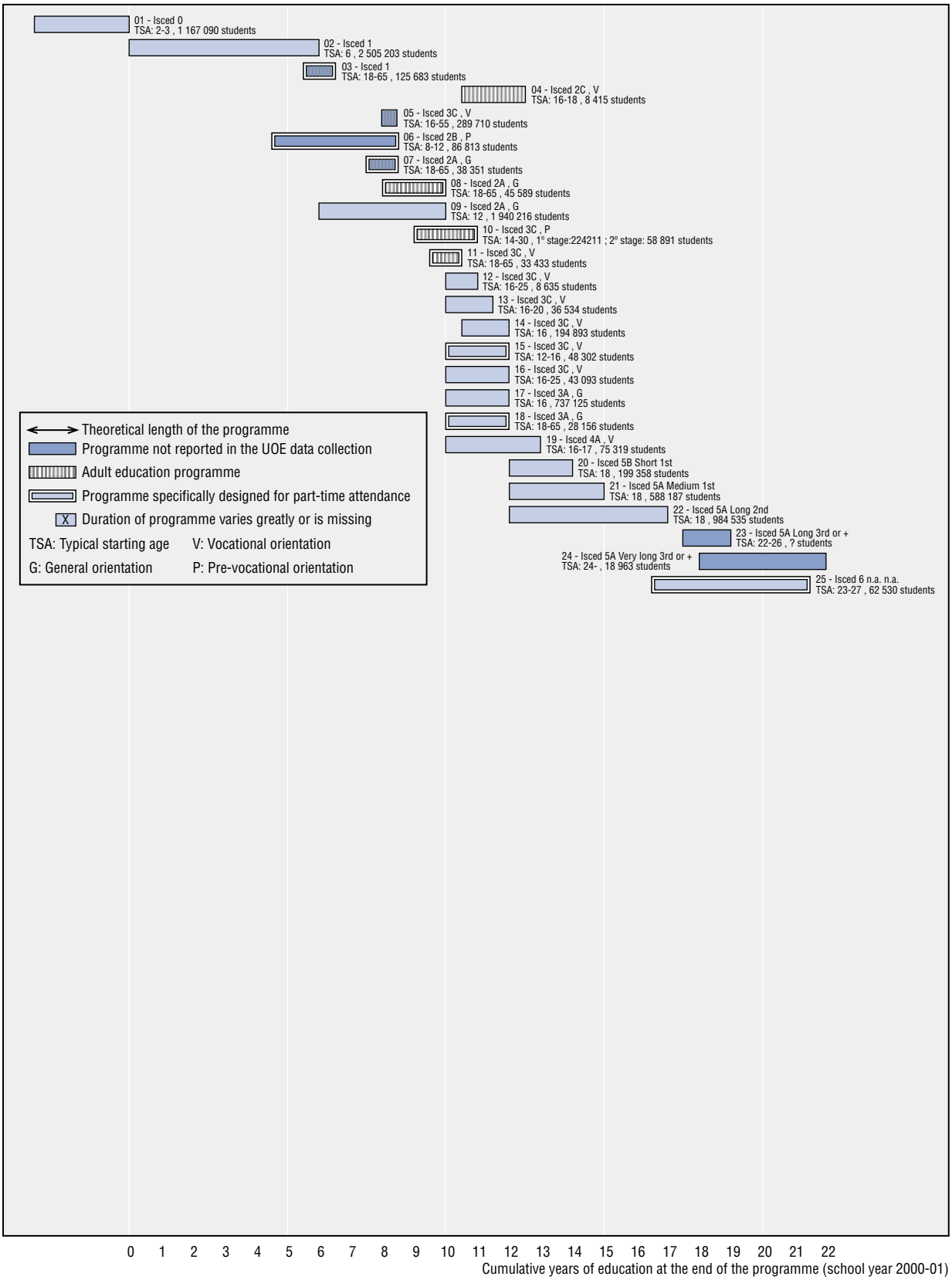


01 - Educação Pré-Escolar
(Pre-school education)
02 - Ensino Básico do 1º Ciclo
(Primary education 1st cycle)
03 - Ensino Básico do 2º Ciclo
(Primary education 2nd cycle)
04 - Ensino Básico do 3º Ciclo
(Lower secondary education)
05 - Formação Profisssional - Pré_aprendizagem
(Pre-vocational training)
06 - Educação Extra-Escolar Cursos de Actualização
(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 Tecnico-Profissionais da Casa Pia -nivel I
("Casa Pia" vocational programme– level I)
11 - Escolas Profissionais Nível II
(Vocational training schools– level II)
12 - Curso Geral do Ensino Artistico
(Artistic lower secundary (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
(Intial 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 programmme 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 terninal
(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

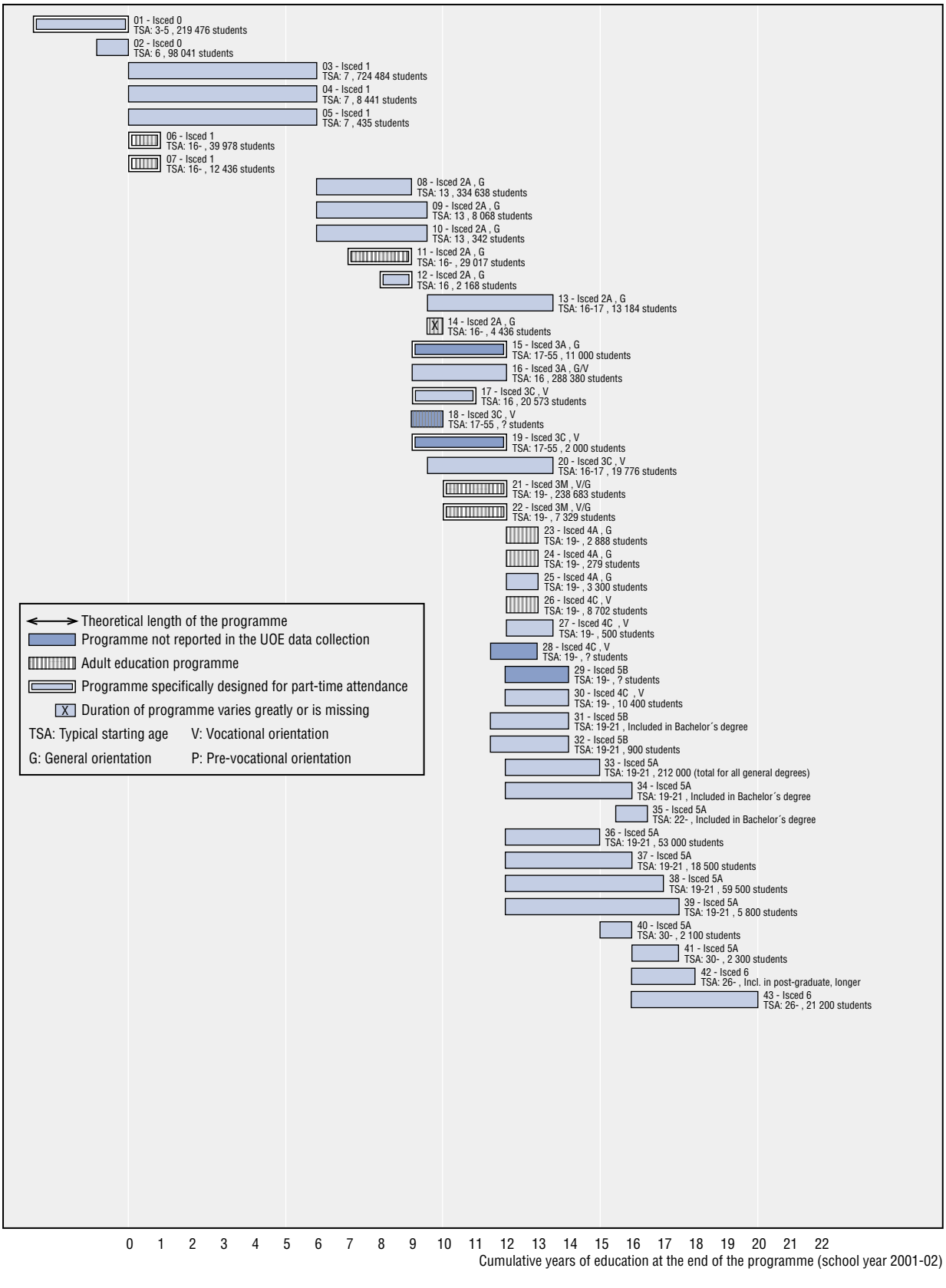
01 - Materská škola
(Kindergarten)
02 - Špeciálna materská škola
(Special kindergarten)
03 - Prípravne triedy na základnej škole
(Preparatory classes in basic school)
04 - Prípravne triedy v špeciálnych školách
(Preparatory classes in special school)
05 - Základna škola - 1.stupe
(Basic school - 1st stage)
06 - Špeciálna základná škola - 1.stupe
(Special basic school - 1st stage)
07 - Špeciálna škola typ A - 1.stupe
(Special school, Type A 1st stage)
08 - Špeciálna škola typ B - nizši a stredns stupe
(Special school,Type B - lower and middle stage)
09 - Špeciálna Škola typ B - vyšší a pracovn• stupe
(Special school, Type B - upper and working stage)
10 - U ilište
(Apprentice centre)
11 - Praktická škola
(Practical school)
12 - Špeciálna škola typ A - 2.stupe
(Special school, Type A 2nd stage)
13 - Základná škola - 2.stupe
(Basic school - 2nd stage)
14 - Špeciálna základná Škola - 2.stupe
(Special basic school - 2nd stage)
15 - Kurzy na doplnenie základného vzdelania
(Courses for complementing basic education)
16 - Štúdium jednotlivšch predmetov
(Study of selected subjects)
17 - Odborné u ilište
(Vocational school)
18 - Stredná odborná škola - štúdium bez maturity
(Specialized secondary school - programme without maturita)
19 - Stredné odborné u ilište - Štúdium bez maturity
(Vocational secondary school - programme without maturita)
20 - Rekvalifika né kurzy
(Retraining courses)
21 - Stredná odborná škola - štúdium s maturitou
(Specialized secondary school - programme with maturita)
22 - Stredné odborné u ilište - štúdium s maturitou
(Vocational secondary school - programme with maturita)
23 - 8 ro né gymnázium
(Gymnasium - 8 years)
24 - 6 ro né gymnázium
(Gymnasium - 6 years)
25 - 4 ro né gymnázium
(Gymnasium - 4 years)
26 - nadstavbové štúdium
(Follow-up courses)
27 - Pomaturitné kvalifika né štúdium
(Postsecondary qualification study)
28 - dopl ujúce pedagogické štúdium
(Supplementary pedagogical study)
29 - Pomaturitné špecializa né Štúdium
(Postsecondary specialized study)
30 - Tane né konzervatórium - 8 ro né štúdium
(Dance conservatoire - 8 years)
31 - Konzervatórium - 6 ro né
(Conservatoire - 6 years)
32 - Stredná odborná škola - 6 ro né štúdium
(Specialized secondary school - 6 years)
33 - Vyššie odborné štúdium
(Higher professional studies)
34 - dopl ujúce pedagogické Štúdium
(Supplementary pedagogical study)
35 - rozširujúce štúdium na vyu ovanie
(Extensive study for teaching)
36 - Bakalárske štúdium
(Bachelor university study)
37 - 4 ro né magisterské Štúdium
(Master university study - 4 years)
38 - Magisterské a in inierske Štúdium
(Master and Engineering study)
39 - Doktorské a in inierske štúdium
(Doctoral and Engineering study)
40 - Štátne rigorózne skúšky
(State examina rigorosa)
41 - Doktorandské štúdium
(PhD. study)
42 - alšie vzdelávanie organizované univerzitami
(further education organized by universities)
43 - štúdium cudzích jazykov na jazykovej •kole
(Foreign language study at a language school)

Spain



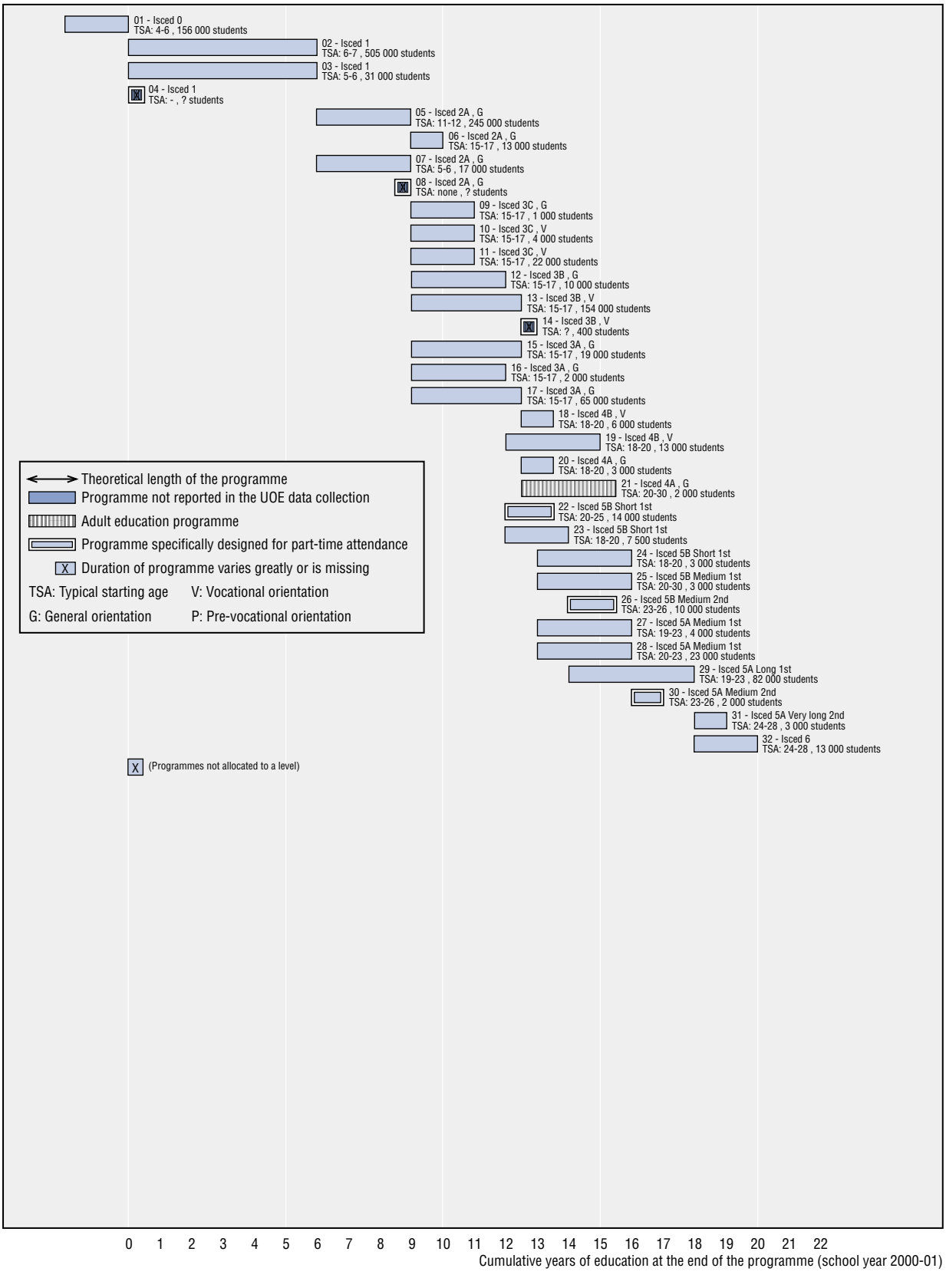
01 - Educación Infantil
(Pre-school education)
02 - Educación Primaria
(Primary education)
03 - Enseñanzas Iniciales de Educación Básica para personas en edad adulta
(Adult education – primary level)
04 - F.P. Aprendizaje de Tareas / Transición a la vida adulta
(Vocational training – special education)
05 - Formacion 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)

Sweden



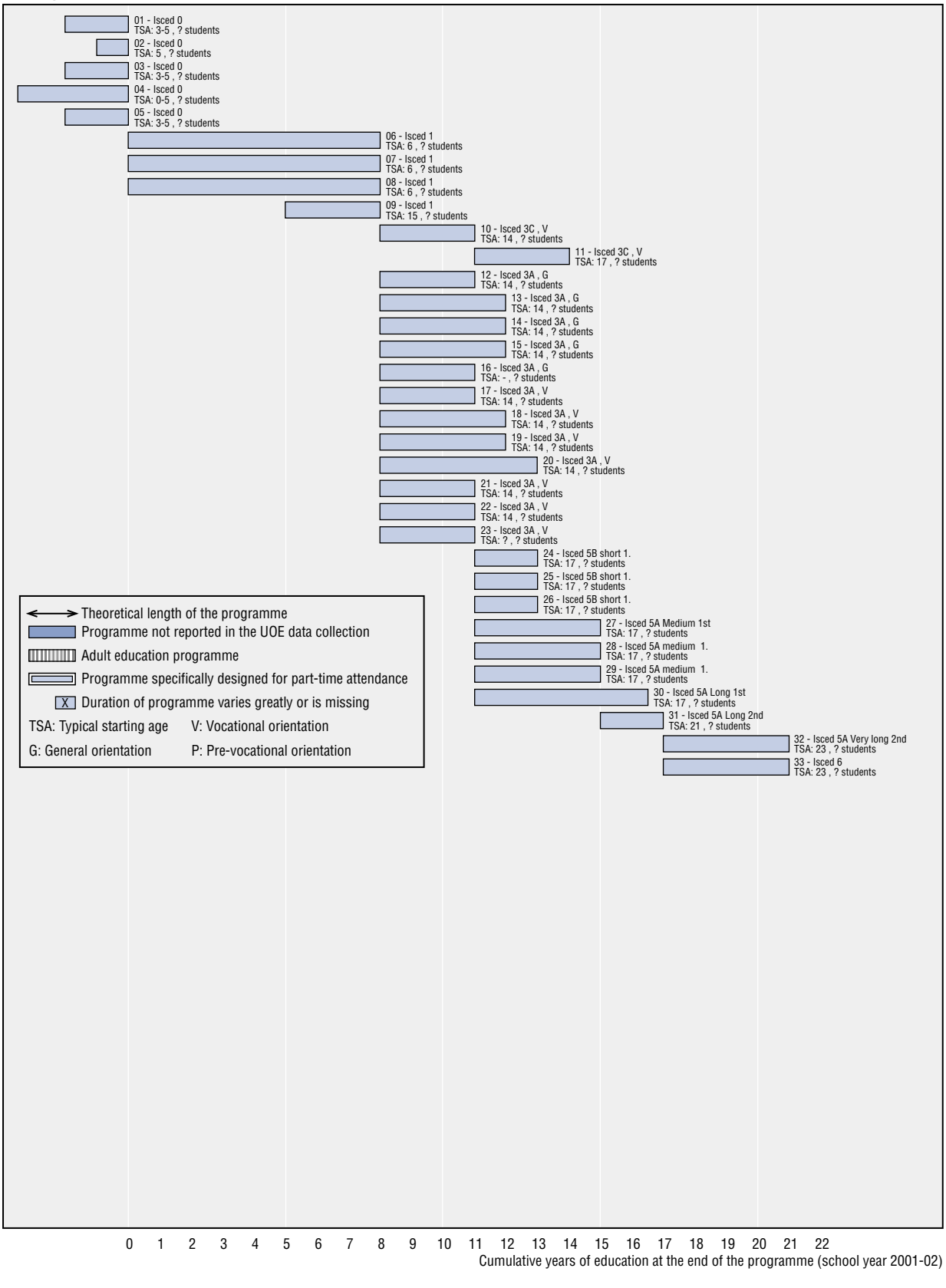
01 - Förskola för barn/elever 3 år eller äldre
(Pre-school, for children/pupils 3 years of age or older)
02 - Förskoleklass
(Pre-school classes)
03 - Grundskolan, skolår 1-6.
(Compulsory school, grades 1-6.)
04 - Obligatorisk särskola, skolår 1-6.
(Special school for the intellectually disabled, grades 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 skrivinlärning (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 - Särvux, grundsärskolenivå och träningsskolenivå.
(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 futher studies)
24 - Statens skola för vuxna - Påbyggnadsutbildningar, tekniskt basår och andra studieförberedande utbildningar
(National state school for adults - post-secondary training programmes, preparatory for futher 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



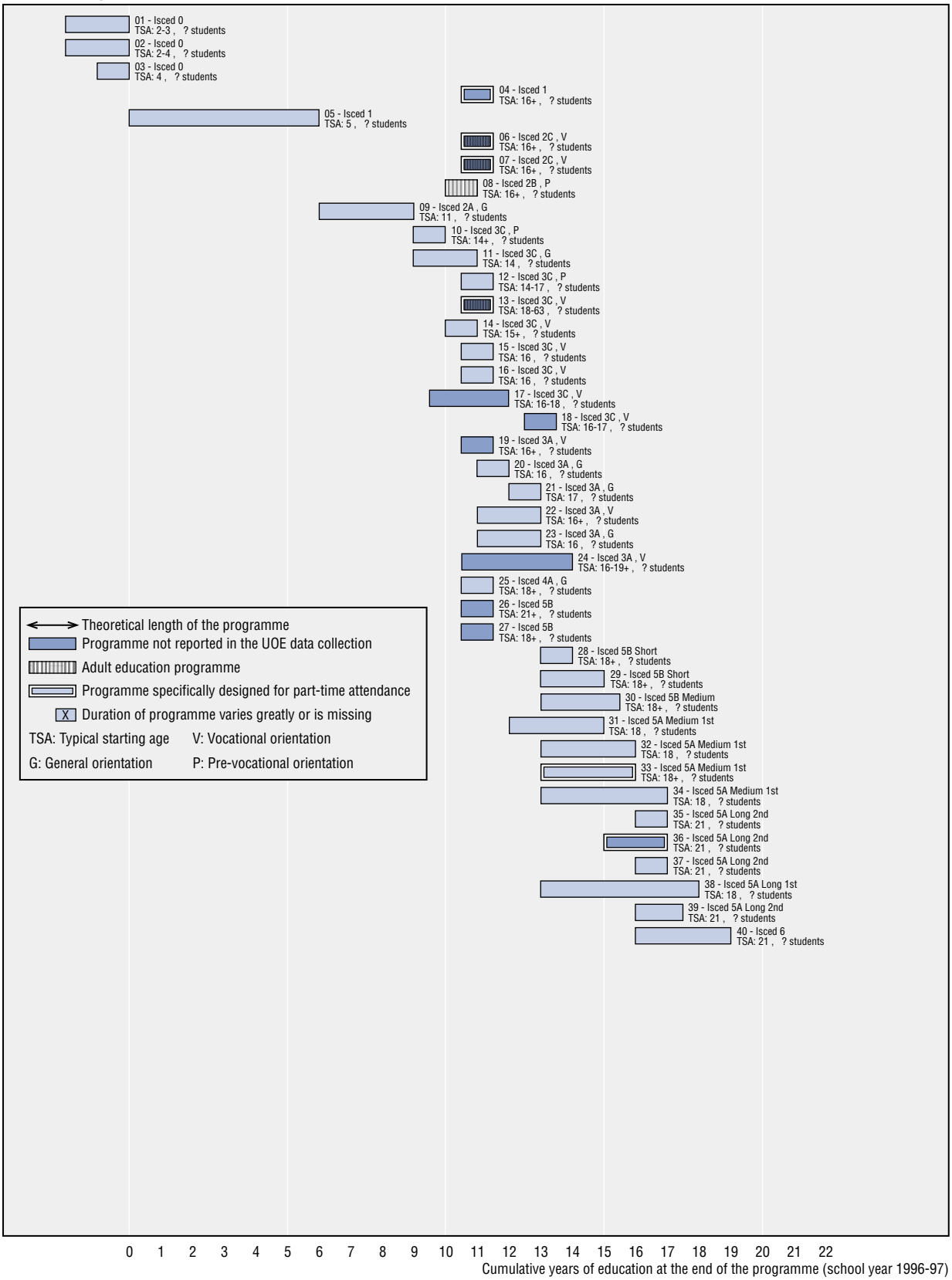
01 - Vorschule, préscolarité, prescolarità
(Kindergarten)
02 - Primarschule, école primaire, scuola elementare
(primary school)
03 - Besonderer Lehrplan, programme d'enseignement spécial, programma scolastico speciale
(special needs education programmes)
04 - Alphabetisierungsprogramm
(Programmes for 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



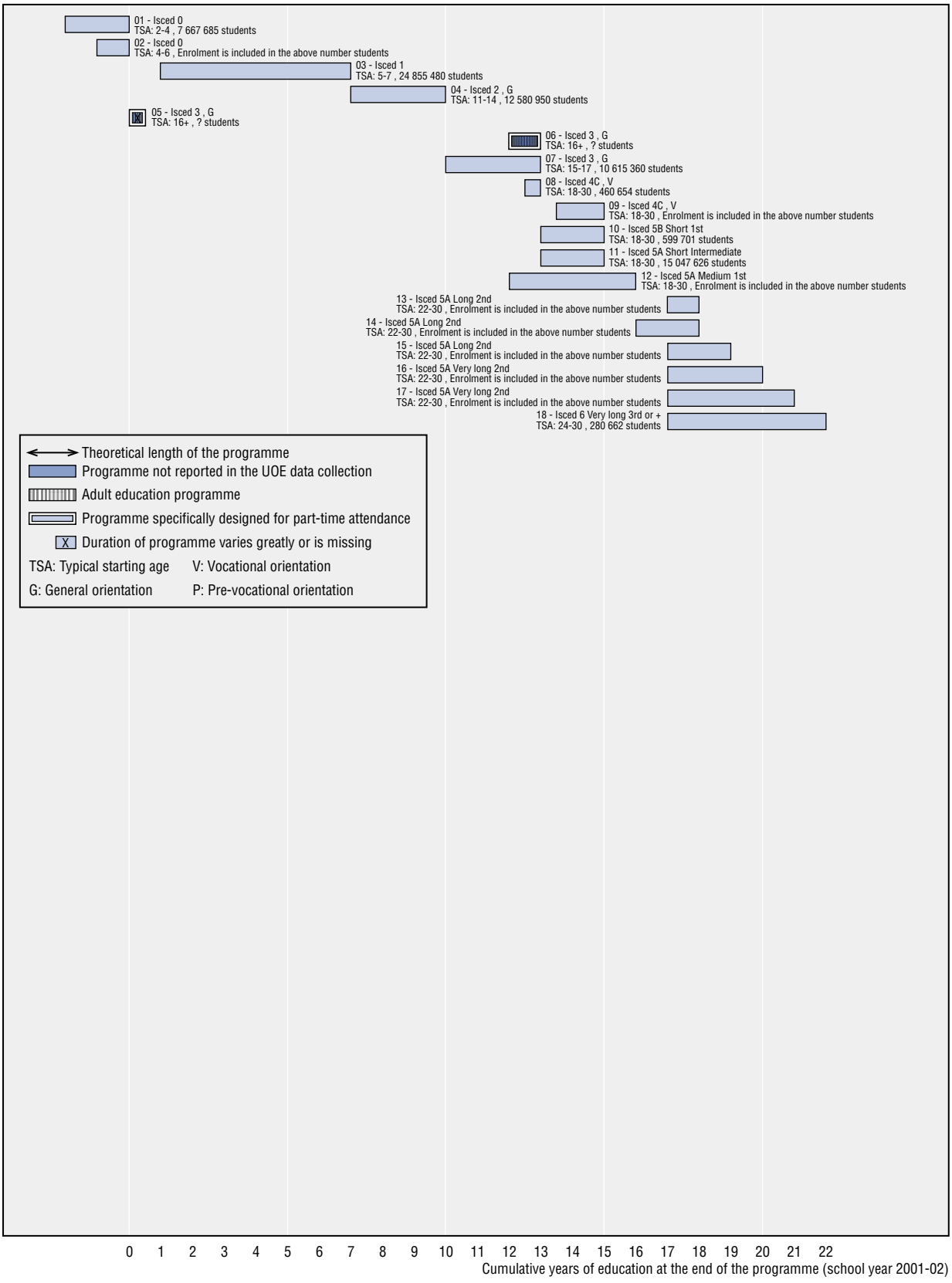
01 - Uygulamal ana okulu (practising nursery)
02 - Ana s n f (nursery class)
03 - Ana okulu (kindergarten)
04 - Kre (Early childhood care and education:day nursery)
05 - Özel e itim ana s n f ve ana okulu (special education nursery class and kindergarden)
06 - Ilkögretim (primary education)
07 - Özel e itim ilkö retim okullar (special education primary schools)
08 - Özel e itim ilkö retim okullar (special education primary schools)
09 - Aç k lkö retim (open primary school)
10 - Ciraklik Egitimi (apprenticeship training)
11 - Ciraklik 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 programl 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 Okulla (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 - Tipta Uzmanlik (specialization in medicine)
33 - Doktora (Ph.D.)

United Kingdom



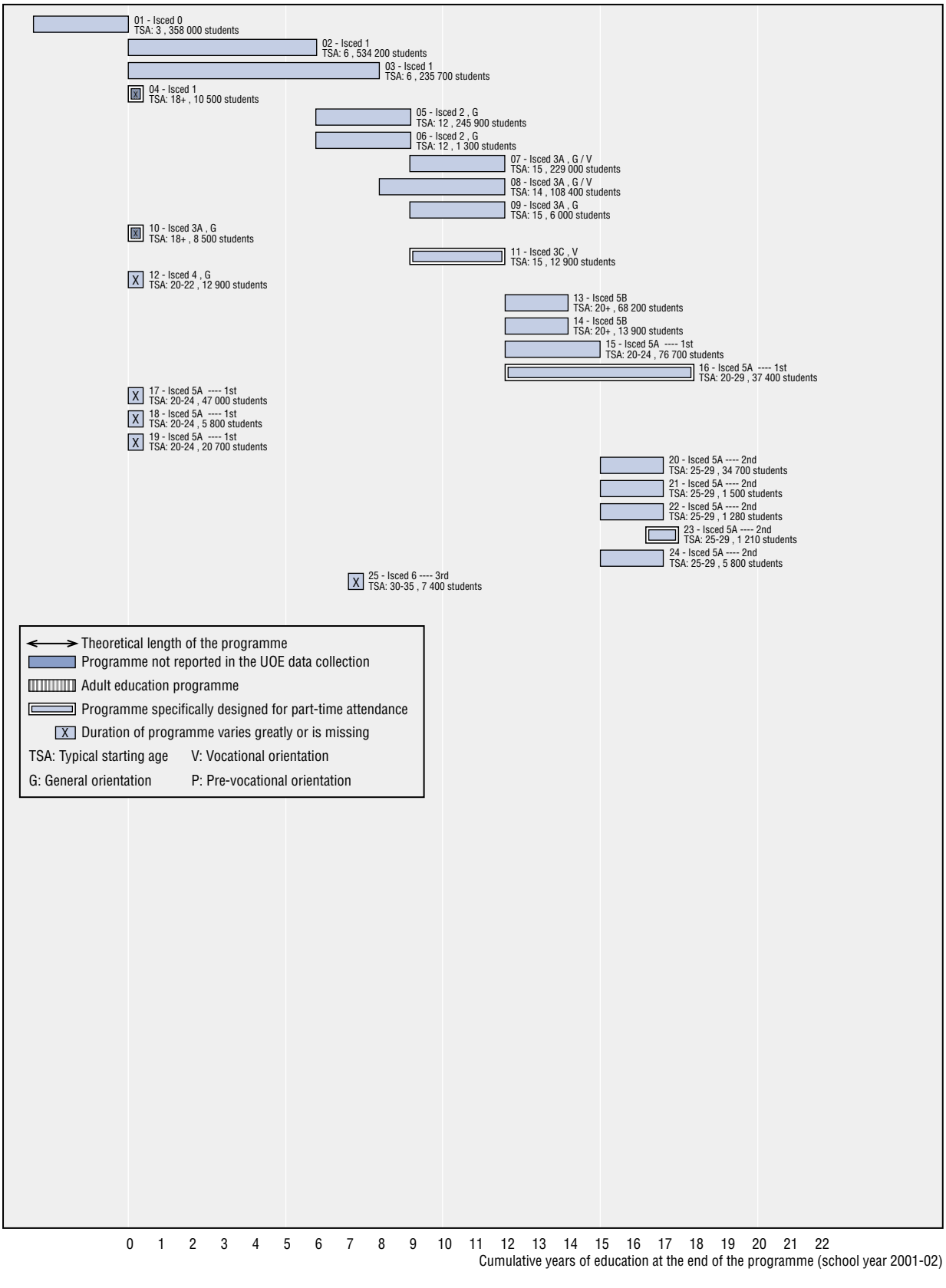
01 - Nursery schools and classes
02 - Playgroups and day nurseries
03 - Reception classes
04 - Adult literacy and numeracy
05 - Primary school
06 - Employer supported off-the-job
07 - Employer supported on-the-job trainin
08 - Skillstart (Scotland only)
09 - Secondary school (age <14)
10 - GNVQ [GSVQ] 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



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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Not relevant, I am using the e-book	❑				

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Meaningful Yes ❑ No ❑

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