

# Classifying Educational Programmes

Manual for ISCED-97  
Implementation  
in OECD Countries

1999 Edition

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# **Classifying Educational Programmes**

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**Implementation**

**in OECD Countries**

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# Foreword

As the structure of educational systems varies widely between countries, a framework to collect and report data on educational programmes with a similar level of educational content is a clear prerequisite for the production of internationally comparable education statistics and indicators. In 1997, a revised International Standard Classification of Education (ISCED-97) was adopted by the UNESCO General Conference. This multi-dimensional framework has the potential to greatly improve the comparability of education statistics – as data collected under this framework will allow for the comparison of educational programmes with similar levels of educational content – and to better reflect complex educational pathways in the OECD indicators. The purpose of *Classifying Educational Programmes: Manual for ISCED-97 Implementation in OECD Countries* is to give clear guidance to OECD countries on how to implement the ISCED-97 framework in international data collections.

First, this manual summarises the rationale for the revised ISCED framework, as well as the defining characteristics of the ISCED-97 levels and cross-classification categories for OECD countries, emphasising the criteria that define the boundaries between educational levels. The methodology for applying ISCED-97 in the national context that is described in this manual has been developed and agreed upon by the OECD/INES Technical Group, a working group on education statistics and indicators representing 29 OECD countries. The OECD Secretariat has also worked closely with both EUROSTAT and UNESCO to ensure that ISCED-97 will be implemented in a uniform manner across all countries. Selected programmes in OECD countries that meet specific classification criteria are also presented as examples of how the criteria can be properly applied.

Secondly, the manual contains detailed proposals for the allocation of national educational programmes to ISCED-97 levels for all 29 OECD countries in a tabular format. These proposals have been developed by Member countries, in consultation with the OECD Secretariat, and represent the starting point for a process of consultation within the OECD/INES Technical Group, with the aim of working towards an internationally agreed upon allocation of national educational programme to ISCED-97 in the OECD. The national programme allocations presented here have been reviewed and approved by the OECD/INES Technical Group and will form the basis of data reporting in the 1999 UNESCO/OECD/EUROSTAT (UOE) Data Collection on Education Statistics. These country allocations will also guide the implementation of ISCED-97 in all future OECD data collections, including the alignment of levels of educational attainment data collected in national Labour Force Surveys and the categorisation of both students' educational aspirations and teachers' educational qualifications in the Programme for International Student Assessment (PISA).

The primary goal of OECD's work in the ISCED-97 implementation process is that the allocation of national education programmes to the revised ISCED framework be perfectly transparent and jointly agreed upon by all Member countries. The Technical Group will continue to serve as a forum for discussing and evaluating individual country's ISCED-97 allocations. Particular programme allocations that do not match the criteria laid out in this manual, and thereby do not lead to comparable education statistics, will be brought up and discussed in the Technical Group. In cases where this manual does not make it clear how a programme with particular characteristics should be mapped to ISCED-97, proposals for modifying the manual will be developed and discussed within the Technical Group. The implementation of ISCED will be both an iterative and interactive process, with both Member countries and international organisations reviewing countries' assignments of programmes to ISCED categories and recommending adjustments to enhance international comparability.

The OECD foresees that the implementation instructions for ISCED-97, as well as ISCED itself, will need to be updated as education systems evolve and additional comparability issues are identified. The publication of this manual is an important step forward in a long-term consultative process designed to improve the comparability of educational statistics.

The book is published on the responsibility of the Secretary-General of the OECD.

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# Introduction

## ◆ The need to revise ISCED

The structure of education and learning systems has changed dramatically over the last 25 years. The increasing complexity of education systems, often reflecting more choice both between types of programmes and modes of attendance, has imposed new difficulties for the international comparability of education statistics. New forms of education have appeared and the boundaries that have traditionally separated different types of education programmes have blurred. Many of these changes could no longer be adequately reflected in data collected under the original International Standard Classification of Education (ISCED), which was first implemented in the mid-1970s. These structural changes in national education systems have driven the need to revise ISCED, the classification system underlying the mapping of national data to policy-oriented international indicators of education systems.

ISCED is significant for educational policy making in OECD countries, as it provides the essential basis for collecting the data underlying OECD's set of policy-guided indicators on education systems. It provides the metric through which the level of educational content underlying different educational programmes is assessed and aligned. Although the INES project (Indicators of Education Systems) has advanced significantly in developing internationally comparable education indicators, a conceptually adequate and operational definition of levels of education has been the essential missing element, without which the usefulness of the indicator set for policy purposes is compromised. Particularly affected by the current problems of ISCED are indicators on costs and resources, graduation rates and level of educational attainment in the population and indicators on labour market outcomes.

The purpose of ISCED is to provide an *integrated* and *consistent* statistical framework for the collection and reporting of *internationally comparable* education statistics. 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.

In the remainder of this section the key problems with the original ISCED framework (referred to in this document as ISCED-76) are summarised and OECD's priorities for the revised ISCED framework are reviewed. As the revised ISCED framework is broadly compatible with OECD's priorities, the ultimate success of the ISCED revision rests on the uniformity of its implementation across Member countries. This manual provides a methodology for the uniform implementation of the revised ISCED framework in OECD countries.

## ◆ The necessary components of a revised ISCED

An international taxonomy for classifying levels of education must take variations in national education structures explicitly into account. The objective of any taxonomy is to represent diverse structures satisfactorily within a single set of international categories. How such variations in structures are handled by the classification system is critically important for achievement of the comparability goal. A lack of comparability between countries in various education indicators was introduced in data collected under ISCED-76 for three main reasons: 1) the ISCED categories did not adequately reflect the diversity in structure of national education systems; 2) ISCED provided few guidelines for how to classify programmes that did not neatly fit into the taxonomy framework; and 3) countries were left to interpret the ISCED level taxonomy on their own.

With each country deciding separately how to portray its system in terms of ISCED levels, the responses have been of two main kinds: some countries simply identified their own national institutional stages with seemingly corresponding ISCED categories, without consideration of the starting points or lengths of programmes; others have deviated deliberately from national structures in attempts to conform their statistics at least partly to the ISCED model. Not surprisingly, given the lack of a coordinating mechanism, these modes of response have not always yielded internationally consistent programme groupings.

To resolve this unsatisfactory situation, it is critical that explicit and detailed operational specifications become an integral part of the revised ISCED framework – that is, inseparable from the basic taxonomy. Without specific instructions that are internationally agreed upon, a particular country, despite the best of intentions, will not be in a position to determine whether its methods of assigning programmes to international categories are compatible with those of other countries.

It is critical that any framework used for empirically describing national educational systems be capable of reflecting existing variations and complexities. Such a framework needs to incorporate multiple statistical dimensions that allow for a more complete description of national educational programmes. Among these are the duration of programmes, typical starting ages, the programme orientation (general/vocational/pre-vocational), programme prerequisites, the characteristics of degrees or certificates awarded upon completion, etc. A multi-dimensional taxonomy of educational programmes that contains these elements will make it possible to aggregate statistics along various dimensions of the classification, according to analytical and policy requirements. Graduation rate statistics could, for example, respect the institutional structure of educational systems, while enrolment data, on the other hand, could ensure that programmes of comparable duration and orientation are being compared.

The establishment of an internationally comparable set of categories for the levels of education involves the “valuation” of educational activities in very different educational systems in an internationally comparable way. A prerequisite for this is to find international consensus on the criteria that are used to describe and classify national educational programmes as well as on the statistical formulation of these criteria.

Most importantly, it has been critical that the revised ISCED will lead countries to depart from current institutionally based reporting practices. Only in this way can it be ensured that the content of educational activities serve as the baseline of international comparisons. It was generally agreed upon by OECD countries that the revised ISCED must be built on three components: 1) internationally agreed concepts and definitions; 2) a classification system that strikes a careful balance between the faithful representation of national education systems and the possibility of aggregating data according

to dimensions that are interpretable; and 3) operational instructions and a well-defined implementation process.

The ISCED-76 framework is also limited in the extent to which it captures learning opportunities in modern education systems. The skill and qualification requirements of labour markets have changed considerably since ISCED-76 was developed. New demands on education and training systems have lead to new types of learning opportunities for both children and adults, as well as those with special needs, which cannot be captured adequately under ISCED-76. Particular deficiencies are evident at the higher levels of education and, specifically, in the domain of continuing education and training outside institutional settings. It has been a clear priority for the OECD throughout the revision process that the revised ISCED address these new learning opportunities, and to reflect the multiple pathways through education systems.

#### ◆ OECD contribution to the revision of ISCED

At the third INES General Assembly in Lahti (June 1995), Member countries recommended that OECD make a contribution towards the revision of ISCED currently being undertaken by UNESCO. This co-operation was initiated with an exchange of letters between the Secretary-General of OECD and the Director-General of UNESCO in October 1995. In his letter, the Secretary-General of OECD suggested that the OECD would focus its work on the further elaboration of the taxonomy of the levels of education and on the definition of the scope and coverage of ISCED for the purpose of reporting.

Four basic principles were advocated by OECD in the revision of ISCED, namely that: 1) the level concept should be defined on the basis of the content of the underlying education activities and operationalised on the basis of multiple auxiliary criteria; 2) the uni-dimension ladder system of ISCED (1976) should be replaced by a flexible multi-dimensional taxonomy; 3) the coverage of ISCED should be expanded in order to better capture the higher levels of education, in particular the domains of continuing education and training outside institutional settings; and 4) the revised ISCED should have an empirical foundation, reflecting the complexities and structures of national educational systems.

Following this General Assembly, a proposal for a survey of national education programmes was prepared by the Secretariat and circulated to Member countries for comment. This Taxonomy Survey of National Educational Programmes, which was undertaken in January 1996, collected information on national educational programmes and their various attributes, including: the national level and type of the educational programme, theoretical and typical ages of attendance, minimum and typical entrance requirements, theoretical and typical duration, qualifications awarded and degree of access to further educational programmes. This study has provided the empirical basis for OECD's contribution to the revision of ISCED, through the UNESCO ISCED Task Force, in an effort to ensure that the new framework would more accurately reflect the complexities of national education systems in the international comparative framework of the OECD education indicators. As a result, the revised ISCED has developed as a multi-dimensional framework, able to capture the complexities of modern education systems.

In October 1997, the 29th Session of the UNESCO General Conference reviewed and approved a revised framework for the International Standard Classification of Education (ISCED). This framework proposes a methodology for translating national educational programmes into an internationally comparable set of categories for the levels of education. The revised ISCED framework (henceforth referred to as ISCED-97) provides the potential for significant improvement in the coverage and comparability of international education indicators, and thus for their relevance to educational policy.

The general framework of the revised ISCED is detailed in UNESCO document 151 EX/8 Annex II (March 1997).

The successful implementation of ISCED-97 is a crucial next step in the improvement of international statistics on education. This multi-dimensional framework has the potential to greatly improve the comparability of educational statistics, as data collected under this framework will allow for the comparison of educational programmes with similar levels of educational content, and to better reflect complex educational pathways in the OECD indicators.

### ◆ Purpose of this manual and the next steps in the implementation of ISCED-97

The purpose of this ISCED-97 implementation manual is to give clear guidance to OECD countries on how to implement the ISCED-97 framework in international data collections. The methodology for applying ISCED-97 in the national context that is described below has been developed and agreed upon by the OECD/INES Technical Group, a working group on education statistics and indicators representing 29 OECD countries. The OECD Secretariat has also worked closely with both EUROSTAT and UNESCO to ensure that ISCED-97 will be implemented in a uniform manner across all countries.

First, this manual summarises the defining characteristics of the ISCED-97 levels and cross-classification categories in OECD countries, emphasising the criteria that define the boundaries between levels. Selected programmes in OECD countries that meet specific classification criteria are also presented as examples of how the criteria can be properly applied.

Secondly, this manual contains the mapping of national educational programmes to ISCED-97 for all 29 OECD countries in a tabular format. The allocations of national programmes to ISCED-97 have been developed by Member countries, in consultation with the OECD Secretariat. These proposals represent the starting point for a process of consultation within the Technical Group, with the aim of working towards an internationally agreed upon allocation of national educational programme to ISCED-97 in the OECD. These mappings will form the basis of data reporting in the 1999 UOE Data Collection on Education Statistics. These country allocations will also guide the application of ISCED-97 in all future OECD data collections, including the alignment of levels of educational attainment data collected in national Labour Force Surveys and the categorisation of both students' educational aspirations and teachers' educational qualifications in the Programme for International Student Assessment (PISA).

The primary goal of OECD's work in the implementation process is that the mapping of national education programmes to the revised ISCED be perfectly transparent and jointly agreed upon by all Member countries. The Technical Group will continue to serve as a forum for discussing and evaluating individual country's ISCED-97 allocations. Particular programme allocations that do not match the criteria laid out in this manual, and thereby do not lead to comparable education statistics, will be brought up and discussed amongst the Technical Group. In cases where this manual does not make it clear how a programme with particular characteristics should be mapped to ISCED-97, proposals for modifying the manual will be developed and discussed within the Technical Group. The implementation of ISCED will be both an iterative and interactive process, with both Member countries and international organisations reviewing countries' assignments of programmes to ISCED categories and recommending adjustments to enhance international comparability.

The OECD Secretariat foresees that the implementation instructions for ISCED-97, as well as ISCED itself, will need to be updated as education systems evolve and additional comparability issues are identified. While this document primarily deals with institutional structures for which data are currently collected, it will be expanded as data development expands.

# Coverage and structure of ISCED-97

The purpose of ISCED is to provide an *integrated* and *consistent* statistical framework for the collection and reporting of *internationally comparable* education statistics.

While it is widely recognised that learning can occur in situations that are not formally organised (*e.g.* reading a newspaper article or watching a particular educational television programme) and in activities of short duration (*e.g.* a one-off lecture or visit to a museum), the requirement that instruction be organised and sustained facilitates the collection of comparable data across countries. In the ISCED-97 framework, “organised” activities include those planned with explicit or implicit educational aims. They involve a providing agency that establishes both the learning environment and the method of instruction. For a learning activity to be “sustained”, it must contain the elements of duration and continuity. While ISCED-97 does not explicitly state a minimum duration for inclusion, an individual data collection certainly would. For example, an international data collection on enrolment in educational programmes, based primarily on institutional level data, might limit coverage to programmes leading towards an educational qualification, while a sample survey designed to measure participation in continuing education and training might seek much broader coverage.

## ◆ The content of educational activities as the key to the level concept

The definition of the level concept and the establishment of an internationally comparable set of categories for the levels of education is far from trivial since it involves the “valuation” of educational activities in very different educational systems in an international comparable way. A precondition for improving the comparability of educational statistics was to find international consensus on the criteria that should be used to describe and classify national educational programmes, as well as on the statistical formulation of these criteria. Consensus for the overall framework of ISCED-97 was built throughout the ISCED revision process, with a number of diverse countries participating in the UNESCO ISCED Task Force and a larger number in the ISCED Reference Group. It was important that classification criteria for ISCED-97 fit the wide diversity in educational programmes in both OECD and non-OECD countries in order for data collected under this framework to meet the standards of comparability that today’s policy makers are using to assess the validity of education indicators.

A departure from a purely institutionally based reporting practice is critical if any level taxonomy is to make the level of the content of educational activities the baseline of statistical comparisons. It is recognised that the use of institutional categories facilitates the reporting and the interpretation of the level categories in the context of national education systems. It is also evident that institutional categories continue to be an integral component of ISCED, not least because they relate to important transition

characteristics of education systems. However, the sole reliance on such criteria sacrifices the goal of international comparability for a wide range of comparisons, simply because institutional structures are not comparable in terms of non-institutionally bound criteria (for example, entrance qualifications or theoretical and typical ages or typical programme durations). From a practical standpoint, transition points of national education systems will often need to be used as criteria for allocating programmes to the education levels because of the way in which data are collected at the national level. It must be ensured, however, that the selection of national transition points for matching the classification categories in ISCED-97 is determined by the content and structural attributes of the underlying educational programmes. Allocating a programme to an international category simply because its national name matches the name of the international reporting category must be avoided.

#### ◆ The educational programme remains the basic unit of classification in ISCED-97

In the general absence of individualised data on participants in educational activities, international educational comparisons rely on taxonomies in which aggregates of educational activities – referred to as educational programmes – provide the basis for comparisons. ISCED-97, as was the original ISCED, is such a programme-based taxonomy. ISCED-97 works through the reduction of complex national educational structures along certain classification criteria into defined international categories. It thus provides the possibility of transforming detailed national education statistics on recipients, providers and sponsors of education, 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 from an international comparative perspective.

The basic unit of classification in ISCED-97 is the educational programme. Educational programmes are defined on the basis of their educational content as an array or sequence of educational activities which are organised to accomplish a pre-determined objective or a specified set of educational tasks. Objectives can, for example, be preparation for more advanced study, qualification for an occupation or range of occupations, or simply an increase of knowledge and understanding. ISCED-97 is intended to cover both initial education at the early stages of a person's life prior to entry into the world of work, as well as continuing education throughout a person's life.

The term “educational activity” implies a broader meaning than the terms “course” or “class,” which is important because education at a given level comprises not only courses organised into programmes but also free-standing courses and a variety of non-course activities as well. Programmes sometimes include major components not normally characterised as courses – for example, interludes of work experience in enterprises, research projects, and preparation of dissertations.

It must be recognised, however, that ISCED has natural limitations for the direct classification and assessment of competencies and qualifications of the participants in educational activities. This is because there is no close and universal relationship between the programmes a participant is enrolled in and actual educational achievement. The educational programmes an individual has participated in or even successfully completed are, at best, a first approximation of the skills and competencies he or she has actually obtained. Furthermore, for a programme-based taxonomy it is very difficult to capture educational activities that are not organised in the form of educational programmes.

#### ◆ Proxies for educational content

As discussed above, the only concept that can meaningfully underlie an international level taxonomy is the educational content of the educational activities involved. This implies, for instance, that whether

the instruction a country provides to its 11-year-olds should be called primary or lower secondary education would be determined by an assessment of what 11-year-olds are expected to learn.

It is clearly not possible, 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 unambiguous determinations 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 do not exist. It is therefore necessary to establish auxiliary criteria as proxies for the content, including:

- Typical starting ages of participants and theoretical and typical durations of the programmes.
- Typical entrance qualifications and minimum entrance requirements.
- Type of certifications, diplomas, or qualifications awarded upon successful completion of the programme.
- Types of subsequent education for which completers are eligible.
- The degree to which the programme is specifically oriented towards a specific class of occupations or trades and is generally oriented towards the immediate transition into the labour market.

Each of these criteria serves as classifying criteria for ISCED-97. When a national programme has programme options or paths of study that differ with respect to one or more of such criteria, then – depending on the level of education and the education system concerned – it should be broken apart and reported as separate programmes under ISCED-97. For example, if in a country it takes four years to train a teacher and seven years to train a medical doctor, then the corresponding activities should be reported as separate programmes under ISCED-97, even if they are considered from a national perspective as one type of programme (*e.g.* university education).

A fundamental aspect of these criteria 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, other classification criteria may be utilised for classifying participants in adult literacy programmes.

Similarly, neither the duration of an educational programme nor the theoretical and typical starting ages should be the sole criterion for its level attribution. Australia, New Zealand, and the United Kingdom are examples of countries where the final years of secondary education and the first years of the tertiary level of education are organised according to a qualifications framework based on a recognition of competencies. This organisational framework implies that the mapping of programmes at the boundary between these educational levels cannot be solely based on 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.

To the extent 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, it will be necessary to ensure that these transition points are consistent with the classification criteria set forth in this document. It is expected that the ISCED-97 framework will not match perfectly the data reporting

framework in all countries and that estimation procedures may need to be employed to either combine or divide national programmes for reporting under ISCED-97.

### ◆ Comparison of ISCED-97 with ISCED-76

The biggest change between ISCED-97 and ISCED-76 is the introduction of a multi-dimensional classification framework, allowing for the alignment of the educational content of programmes using multiple classification criteria. These dimensions include: 1) the type of subsequent education or destination to which the programme leads; 2) the programme orientation (whether it be general education or pre-vocational education or vocational education); 3) the programme duration (for the ISCED Levels 3, 4 and 5, where programmes that vary widely in duration exist); and 4) position in the national degree and qualification structure. In ISCED-1976, there was no such provision.

In the revised version of ISCED, a new level, *Level 4*, has been introduced to cover programmes which straddle the boundary between upper secondary and post-secondary education from an international point of view, even though some of them might be either upper secondary or post-secondary programmes in the national context. In ISCED 1976, such programmes belonged either to Level 3 or Level 5.

Tertiary education now comprises only two levels, Level 5 or Level 6, instead of the previous three Levels 5 to 7. The new *Level 5* consists of programmes that do not lead directly to an advanced research qualification while Level 6 is now reserved for programmes leading to advanced research qualifications. Level 5 is subdivided into two categories, ISCED 5A and 5B. While ISCED 5A covers more theoretically-based programmes that give access to advanced research qualifications or professions with high skill requirements, ISCED 5B is meant for more practically oriented or occupationally specific programmes that provide participants with a labour-market relevant qualification. Level 5 in ISCED 1997 corresponds approximately to Levels 5 and 6 of ISCED-76, as well as graduate programmes (e.g. those leading to the Master's degree) in countries with an undergraduate/graduate split that were previous part of 7, and advanced research qualifications are now covered exclusively in the new Level 6.

ISCED 1976		ISCED 1997	
0	Education preceding the first level	0	Pre-primary level of education
1	Education at the first level	1	Primary level of education
2	Education at the second level, first stage	2	Lower secondary level of education (2A, 2B and 2C)
3	Education at the second level, second stage	3	Upper secondary level of education (3A, 3B, 3C)
5	Education at the third level, first stage, of the type that leads to an award not equivalent to a first university degree	4	Post-secondary, non-tertiary education (4A, 4B, 4C)
6	Education at the third level, first stage, of the type that leads to a first university degree or equivalent	5	First stage of tertiary education 5B, 1st, 2nd qualifications (short or medium duration) 5A, 1st degree (medium duration)
7	Education at the third level, second stage of the type that leads to a post-graduate university degree or equivalent		5A, 1st degree (long) 5A, 2nd degree
9	Education not definable by level	6	Second stage of tertiary education (leading to an advanced research qualification)

Level 9 of ISCED 1976, which was reserved for the educational programmes that could not be allocated to any other level, has been eliminated in ISCED-97. It is presumed that all educational programmes can be classified in one of the proposed seven levels (0 to 6).

The correspondence between the level classifications of ISCED 1976 and ISCED 1997 is shown in the table above.

#### ◆ Classification of programmes that do not easily fit into the ISCED level taxonomy

Some educational activities cannot be easily mapped to a particular level of education even though they clearly involve organised and sustained communication designed to bring about learning. As countries move towards more flexible provision of education, modelled on a lifelong learning approach, characteristics such as typical entry ages, entry requirements, and programme duration may not be very useful criteria for classifying some programmes.

All such educational activities should be classified based on the degree of equivalence of their educational content with programmes that can be mapped to ISCED-97 using the classification criteria detailed below. For some programmes, the equivalence of the qualifications or certifications awarded upon successful completion can help to classify 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.

Another example of educational programmes that are typically organised outside of the regular education system are those organised by the military. As with other types of programmes, 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 can lead to data incomparability. This is an issue that must be taken up when defining the coverage of an individual data collection.

Enterprise-based education is another type of programme that can be difficult to classify under ISCED. While some enterprise training courses may have minimum entrance requirements that can be easily identified in ISCED, many will not. One option would be to assess what minimum level of skills are required to benefit from participation in a particular programme, along with the typical level of educational attainment that the typical participant in this programme might have. Another consideration would be whether or not the programme prepares participants for entry into a programmes in the regular education system. By considering these three criteria jointly, and relating them to the criteria for programmes that can more easily be mapped to ISCED, the enterprise-based programme can be mapped to a particular ISCED level.



# Other dimensions not accounted for ISCED-97

The dimensions listed below were not taken up in the first stage of the revision of ISCED, although they are relevant for classifying educational programmes. Detailed definitions and classification categories for these dimensions have not yet been developed, although further developmental work is intended.

## ◆ Institutional and structural arrangements

The main distinctions under this heading could be among services offered in educational institutions, in other types of education or training facilities, and in workplaces (as under apprenticeship programmes). A distinction between school-based, work-based, and mixed school/work-based programmes could be made.

### *School-based and combined school- and work-based programmes*

Although not specifically detailed in ISCED-97, ISCED 3 and ISCED 4 programmes can be divided into “school-based programmes” and “combined school- and work-based programmes” on the basis of the amount of training that is provided in-school as opposed to training 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.
- In *combined school- and work-based programmes* instruction is shared between school and the workplace, although instruction may take place primarily at the workplace.

In distinguishing between school-based and combined school- and work-based programmes, classification should be made according to the amount of training provided in school. Programmes should be classified as *school-based* if at least 75% of the curriculum is presented in the school environment (covering the whole educational programme) where distance education is included.

Programmes are classified as *combined school- and work-based* if less than 75% of the curriculum is presented in the school environment or through distance education. The 75% cut-off point should be regarded as a general guideline that may need to be operationalised differently in different countries.

*Dual-system apprenticeship programmes* are examples of combined school and work-based educational programmes. They typically involve alternating between learning in an educational institution (ordinary or specialised) and learning through work experience programmes, which may include highly organised training in a firm or with a craftsperson. Even though only a part of the training occurs in schools, it is considered as a full-time activity, because it covers both theoretical and practical training.

### ***Service provider***

This embraces classification both by type of institution and by auspices or control, specifically for the setting of objectives and/or the design and content of the programme. It does not necessarily coincide with the institution actually delivering the education. The principal distinction with respect to institutional type is between educational institutions – meaning institutions with education as their principal function – and institutions that exist mainly for other purposes but also provide educational services. The latter include government non-education agencies, various non-profit organisations, business firms, and more generally, employers engaged in training their own employees. The main distinction with respect to auspices is between public and private providers, with public providers further sorted by level of government, and private providers divided into enterprises and other private entities.

Categories that would need to be considered in this dimension are: Ministries of Education or institutions at the national level which are delegated authority by the Ministry of Education (national school boards, chambers, etc.); other ministries at the national level; regional government authorities; local government authorities; institutional providers of education or training; trade unions; professional bodies; employer associations; enterprises (*e.g.* dual system or apprenticeship employers); or religious organisations.

### ***Mode of service provision***

This dimension refers to the methods and, especially, the technologies used to deliver educational services. For instance, it could involve distinctions among conventional (classroom) instruction, correspondence education, various forms of telecommunications-based education (*e.g.* distance learning via television), and computer-based education.

### ***Type of participant***

This heading covers possible distinctions among programmes serving persons in different age ranges, persons with different labour-force status, and students with various special needs (handicapped students, immigrants, etc.). These attributes generally have not been treated as dimensions of programmes in the past but have been reflected in specific statistics (*e.g.* enrolment data are routinely broken down by age). By using them selectively to classify programmes, it might be possible to bring out certain distinctions lost in the current classification by level – *e.g.* the difference between primary programmes for children and basic literacy programmes (also classified as primary) serving adults.

***Mode of participation***

Mode refers mainly, in this instance, to intensity or time commitment – whether the programme is designed for full-time or part-time or for full-year or part-year students. These attributes currently are taken into account in enrolment statistics but have not been used to distinguish among programmes. Their usefulness depends on the extent to which they reflect attributes of the programme rather than attributes of the individual participants. A completely different aspect of mode of participation concerns on-site versus remote involvement in instruction. Its usefulness would depend on whether the potentially overlapping dimensions of educational setting and mode of service provision are to be included in the taxonomy.



# Level structure of ISCED-97 and corresponding classification criteria

ISCED-97 facilitates the transformation of detailed national education statistics on participants, providers and sponsors of education, compiled on the basis of national concepts and definitions, into aggregate categories that are internationally comparable and that can be meaningfully interpreted. 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 the access of prospective participants to each level necessarily depends on having successfully completed the previous level. It also does not preclude the possibility that some participants in educational programmes at a given level may have previously successfully completed programmes at a higher level.

Empirically, ISCED assumes that there exists several main and auxiliary criteria which can help point to the level of education into which a given educational programme should be classified (typical or minimum ages for entry, typical entrance qualifications, minimum entrance requirements, educational properties of the programme, duration of programmes, types of educational or labour market activities that programmes are designed to prepare students for, staff qualification requirements, etc.). These criteria are introduced in the following table for each ISCED-97 level and are discussed in detail for the specific ISCED level that they relate to in the remainder of this manual.

It should be noted that the degree of detail in which the ISCED-97 levels, classification categories, and sub-categories are described below reflect the greatest degree of detail in which it is envisaged that ISCED-97 will be utilised in international data collections. Although, in theory, a greater number of cross-classification categories can be created using the ISCED-97 framework, the presentation in this manual reflects a collapsing of categories to a manageable number in order to be useful to both the designers of data collections, and the suppliers of data.

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 development needs of children at least 3 years of age, and have staff that are adequately trained ( <i>i.e.</i> 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		
	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 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.	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.  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.	<p><b>A</b> 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.</p> <p><b>B</b> Programmes designed to prepare students for direct access to programmes at Level 3C.</p> <p><b>C</b> Programmes primarily designed for direct access to the labour market at the end of this level (sometimes referred to as "terminal" programmes).</p>	<p><b>1</b> 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% of the programme content is vocational or technical.</p> <p><b>2</b> Education mainly designed as an introduction to the world of work and as preparation for further vocational or technical education. It does not lead to a labour-market relevant qualification. Content is at least 25% vocational or technical.</p> <p><b>3</b> 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.</p>
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 than at ISCED 2.  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.	National boundaries between lower secondary and upper secondary education should be the dominant factor for splitting Levels 2 and 3.  Admission into educational programmes usually requires 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.	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.  Modular programmes should be classified at Level "3" only, without reference to the educational or labour market destination of the programme.	<p><b>A</b> ISCED 3A: programmes at Level 3 designed to provide direct access to ISCED 5A.</p> <p><b>B</b> ISCED 3B: programmes at Level 3 designed to provide direct access to ISCED 5B.</p> <p><b>C</b> 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.</p>	<p><b>1</b> 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% of the programme content is vocational or technical.</p> <p><b>2</b> Education mainly designed as an introduction to the world of work and as preparation for further vocational or technical education. It does not lead to a labour-market relevant qualification. Content is at least 25% vocational or technical.</p> <p><b>3</b> 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.</p>

## Description of ISCED-97 levels, classification criteria, and sub-categories (cont.)

4	POST-SECONDARY NON-TERTIARY	Main criteria	Types of programmes that can fit into Level 4	Destination for which the programmes have been designed to prepare students	Programme orientation
	<p>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.</p> <p>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.</p>	<p>Students entering ISCED 4 programmes will typically have completed ISCED 3.</p> <p>Programme duration: ISCED 4 programmes typically have a full-time equivalent duration of between 6 months and 2 years.</p>	<p>The first type are short vocational programmes where either the content is not considered "tertiary" in many OECD countries or the programme did not meet the duration requirement for ISCED 5B -- at least 2 years FTE since the start of Level 5.</p> <p>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.</p> <p>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).</p>	<p>A</p> <p>Programmes at Level 4, designed to provide direct access to ISCED 5A.</p>	<p>1</p> <p>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% of the programme content is vocational or technical.</p>
				<p>B</p> <p>Programmes at Level 4, designed to provide direct access to ISCED 5B.</p>	<p>2</p> <p>Education mainly designed as an introduction to the world of work and as preparation for further vocational or technical education. It does not lead to a labour-market relevant qualification. Content is at least 25% vocational or technical.</p>
				<p>C</p> <p>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.</p>	<p>3</p> <p>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.</p>
5	FIRST STAGE OF TERTIARY EDUCATION	Classification criteria for level and sub-categories (5A and 5B)		Cumulative theoretical duration of tertiary	Position in the national degree and qualifications structure
	<p>ISCED 5 programmes have an educational content more advanced than those offered at Levels 3 and 4.</p>	<p>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.</p>			
	<p>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.</p>	<p>The minimum cumulative theoretical duration (at tertiary level) is of three years (FTE). The faculty must have advanced research credentials. Completion of a research project or thesis may be involved.</p>	<p>The programmes provide the level of education required for entry into a profession with high skills requirements or an advanced research programme.</p>	<p>A</p> <p>Duration categories: Medium: 3 to less than 5 years; Long: 5 to 6 years; Very long: more than 6 years.</p>	<p>A</p> <p>Categories: Intermediate; First; Second; Third and further.</p>
	<p>ISCED 5B programmes that are generally more practical/technical/occupationally specific than ISCED 5A programmes.</p>	<p>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.</p>	<p>The programme content is typically designed to prepare students to enter a particular occupation.</p>	<p>B</p> <p>Duration categories: 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.</p>	<p>B</p> <p>Categories: Intermediate; First; Second; Third and further.</p>
6	SECOND STAGE OF TERTIARY EDUCATION (LEADING TO AN ADVANCED RESEARCH QUALIFICATION)				
	<p>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.</p>	<p>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.</p>	<p>It prepares recipients for faculty posts in institutions offering ISCED 5A programmes, as well as research posts in government and industry.</p>		



# 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 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 utilised to determine whether or not a programme should be classified at this level. ISCED Level 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, it is necessary to rely on proxy criteria. The requirement of pedagogical qualifications for the teaching staff can be a good proxy criterion for distinguishing 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 are no qualification requirements for staff), this criterion 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 for distinguishing between programmes that meet the educational content requirements of ISCED 0 and 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 the same age as other students enrolled in pre-primary education or if the content of the instruction is significantly lower than that of the first years of primary education. This education may be also 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, or 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. Programmes at formal Long Day Care centres are a “grey area” because the programmes generally have some educational content, they 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 are considered 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.



# 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, art and music. The commencement of reading activities alone is not a sufficient criterion for classification of an educational programme 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 Level 1 is the stage when children enter into the primary institutions or programmes, although in countries where primary education starts at an early age (*e.g.* age 4 or 4-and-a-half), children enrolled in these grades should be classified at ISCED 1 only if the duration of the school day, the qualifications of the staff, and the level of content of the programme are similar to the grades where children of age 6 are enrolled.

Although the start of compulsory education is also laid out as a subsidiary criterion for determining the boundary between ISCED 0 and 1, this criterion is not particularly useful in many OECD countries, as 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 systematic studies in the above subjects start 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 school period (*i.e.* where there is no systems 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**

- 4 years: Austria, Germany and Hungary.
- 5 years: Czech Republic, France and Italy.
- 6 years: Belgium, Denmark, Finland, Greece, Japan, Mexico, Poland, Spain and the United Kingdom.
- 7 years: Iceland
- 7 or 8 years: Australia (depending on the state/territory).
- As duration varies across regions, the first 6 years will be reported as ISCED 1: Canada and the United States.
- Since full basic education ranges from 9 to 10 years, the first 6 years will be reported 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 for reporting at ISCED Level 1, so that the grades contained in each level facilitate cross-country comparability. This method of reporting programme data will ensure that, in a national context, comparable programmes are allocated at each level as the level of content is broadly similar at a particular grade across the states/provinces.
- *Primarschule, école primaire, scuola elementare* (Switzerland). The entry age to primary education is either 6 (4 cantons), 6.5 (2 cantons) or 7 (17 cantons). One canton leaves the decision whether to start school at the age of 6 or 7 to the communes (local authorities). Since the length of the primary and lower secondary levels combined is a uniform 9 years, the differences in the beginning ages translate into different beginning ages all through the school careers of the students. Primary education lasts between 4 and 6 years (depending on the canton). Reforms under way will reduce the fraction of students in four-year programmes. For comparability purposes, the first 6 years of primary/lower secondary education will 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.

### ◆ Unresolved issue of incomparability at ISCED 1

In neither the Technical Group nor the OECD Expert Group on the Implementation of ISCED-97 was there a consensus to standardise the number of years allocated to ISCED 1 across countries. Countries felt strongly that the ISCED 1/2 boundary should correspond to national boundaries between primary and lower secondary education – that the boundary should reflect the transition point in national educational structures where the way in which instruction is organised begins to change (discussed further below). As the theoretical duration of ISCED 1 can range from 4 to 8 years, and the duration of ISCED 2 is correspondingly longer or shorter, many forms of comparisons at the primary level will remain problematic. For example, comparisons of the percentage of GDP spent on ISCED 1 or the percentage of total expenditure spent at ISCED 1 will not be comparable across countries. Even comparisons of pupil/teacher ratios or expenditure per student could be affected if the quantity of resources allocated to older students (*e.g.* through class sizes) differs from resources allocated to younger students. Users of data collected under the ISCED-97 taxonomy will need to take these differences in the duration of programmes at ISCED 1 into account when analysing results.



# ISCED 2

## Lower secondary level of education

### ◆ Definitions and classification criteria

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. Lower secondary education may either be “terminal” (*i.e.* preparing the students for entry directly 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<sup>1</sup>*

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): 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% 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% of its content has 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.<sup>2</sup>

In some cases the first few months or first year of a Type 3 programme has 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.

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 utilised 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. ISCED-97 also allows for the subdivision of Type 3 (vocational) programmes into two types: 1) those which are primary theoretically oriented; and 2) those which are primarily practically oriented. As these categories are unlikely to be utilised in any OECD data collection, they are not elaborated on here.

## ◆ Specific classification issues

### *Use of Type 2 (pre-vocational) for special education programmes*

Countries should attempt to classify and report programmes that are specifically designed to provide a basic labour market orientation to students with special educational needs as Type 2 (pre-vocational) if the programme meets the classifying criteria of pre-vocational programmes, that is, 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. 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), the country should note this in its mapping of the corresponding programme to ISCED-97.

### *Boundary between ISCED 2 and ISCED 3*

National boundaries between lower secondary and upper secondary education should be the dominant factor for splitting 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 15, 16, or even 17 years of age. For countries that have two major transition points in or around these grades 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 for entry into a different type of programme at Level 3 than which they 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

### *ISCED 2A – 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 which is marked by the beginning 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 which qualify for ISCED 5A 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 the 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). 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 its institutional affiliation.

#### **ISCED 2A – 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).
- *Művészeti 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).

#### **ISCED 2B – Type 1 (general)**

- *Felzárkóztató általános iskolai programok* (Hungary). Remedial programme 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.

#### **ISCED 2B – 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 are of a type which aims to achieve basic skills and standards and completion can be a foundation to entering 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.
- *Voorbereidend beroepsonderwijs* (Netherlands). Pre-vocational education (VBO) is for 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.

#### **ISCED 2B – Type 3 (vocational or technical)**

- *Secundair onderwijs voor sociale promotie – LSBL en LSTL* (Flemish Community of Belgium). Social advancement secondary education is divided into 2 cycles: the lower and the higher secondary level. The lower level includes the following programmes: lower secondary vocational courses (LSBL: *lagere secundaire beroepsleergangen*) and lower secondary technical courses (LSTL: *lagere secundaire technische leergangen*).

#### **ISCED 2C – Type 1 (general)**

- *Zvláštní škola – 3. stupen* (Czech Republic). Remedial school – 3rd stage. Programme for children with learning difficulties (including those that are socially disadvantaged). Results in a school leaving certificate (*vysvědčení*).

#### **ISCED 2C – Type 2 (pre-vocational or pre-technical)**

- *Youth Reach* (Ireland). Results in a basic skills training certificate.

**ISCED 2C – 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.
- *Szakiskola alapfokú iskolai végzettség nélküli szakmákra* (Hungary). NVQL (National Vocational Qualification List) training in programmes requiring less than 10 years of completed general education.
- *Capacitación para el trabajo (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) for introducing them to the world of work.



# 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 Level 2 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 across and between countries, typically ranging from 2 to 5 years of schooling. ISCED 3 may either be “terminal” (*i.e.* preparing the students for entry directly 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 (typically 8 or 9 years of full-time education since the beginning of Level 1), or a combination of basic education and life experience that demonstrates the ability to handle ISCED 3 subject matter.

### *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.

### ◆ 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 5B.
- 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 based on the orientation of *the design of the curriculum*, that is, what type of Level 5 programmes (A or B) does the curriculum of the Level 3 programme prepare students to attend or is the programme primarily designed to prepare students for direct labour market entry. 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) or the *sections de techniciens supérieurs* (STS) 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; 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, they should be classified at ISCED 3B.

### ***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 Level 3 qualification, had the programme given this option at the midway point, should be estimated for the calculation of graduates.

### ***Programme orientation***

Programmes at Level 3 can also be subdivided into three categories based on the degree to which the programme is specifically oriented towards a specific class of occupations or trades and leads to a labour-market relevant qualification:

- 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% 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% of its content has 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.

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 it is how the modules they take are combined that determines their further educational or labour market access. This issue is similar to the case 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 make every attempt, however, 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 to enter.

### **Successful completion of Level 3**

As widely acknowledged, difficulty in interpreting what signifies a 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. Because of the wide variability in the duration and level of content in ISCED 3 programmes, both within and between countries, ISCED-97 has specified a requirement for Level 3 programmes that are considered to be of insufficient duration to count as a Level 3 “completion” (see paragraph 74 of the UNESCO document 151 EX/8 Annex II, March 1997). The criterion for completion at Level 3 in ISCED-97 requires either the successful completion of a 3A or 3B programme (completion of a programme that is designed to provide access to a Level 5 programme) or the successful completion of a 3C programme with a cumulative theoretical duration of 3 years full-time equivalent (FTE).

After examining the preliminary results of the mapping of national programmes to ISCED 3 in OECD countries, and to ISCED 3C in particular, it is clear that the above duration requirement for 3C will do little to decrease the heterogeneity of ISCED 3 qualifications that might be aggregated into an aggregate ISCED 3 completion rate. 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 have completed a similar number of years of education as ISCED 3A completers. Completers of 3-year programmes in Iceland would be counted as ISCED 3 completions, even if they have completed one year of schooling less than their ISCED 3A counterparts.

Both of the following options will be employed for the 1999 UOE data collection, although the option selected for reporting in *Education at a Glance – OECD Indicators* will depend on whether or not country reclassification of ISCED 3C programmes under option 2 will in fact lead to meaningful comparisons:

- *Option 1.* In addition to collecting data on first-time ISCED 3 graduates (unduplicated) in the UOE, we will also collect data on first-time ISCED 3A or 3B graduates (unduplicated). Comparisons of graduates in *Education at a Glance – OECD Indicators* will focus primarily on first-time ISCED 3A or 3B graduates, although the number of ISCED 3C graduates would be discussed separately as well (assuming that total graduates minus first-time ISCED 3A or 3B graduates roughly equals ISCED 3C graduates). We would, then, be admitting that ISCED 3C is a wide mix of different programmes in different countries, with some leading directly to the labour market, some leading to 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 1999 UOE. The distinction between ISCED 3C less than 3-year programmes and ISCED 3C programmes of 3 years or more will be dropped. This distinction will be replaced, instead, by a distinction that would separate 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

programmes and ISCED 3C programmes. We may then decide to define an ISCED 3 completion (for the purposes of reporting in *Education at a Glance – OECD Indicators*) as successful completion of an ISCED 3A or 3B programmes or successful completion of an ISCED 3C programmes that is no more than 1 year (FTE) duration shorter than the country's ISCED 3A or 3B programmes. The change will allow for us to control 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 programmes and ISCED 3C programmes.

## ▼ 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 ISCED 3 – 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-year upper secondary general programme, comprising grades 11 to 13, which leads to the *Abitur (Hochschulreife)*. It is attended by students who have earned the *Realschulabschluß (Gymnasium, Integrierte Gesamtschule, Freie Waldorfschule)*. Successful graduates of this programme are entitled to enter ISCED 5A programmes.
- *Eniaio Lykeio* (Greece). In school year 1997-98, the institution of Eniaio Lykeio (Comprehensive Lyceum) was established and is gradually being applied from the first class of Lyceum. This programme is designed to provide a high standard of general education; to develop the pupils skills, initiatives, creativity and critical thought; to provide the pupils with the essential knowledge and adequately equip them for the advancement of their studies at the higher education level; and to help pupils to develop those skills which will enable them to access the labour market through further specialisation or training. Graduates have access to tertiary education (at ISCED 5A and 5B) and to the labour market through the Institutes for Vocational Training (IEK), an ISCED 4C programme.

### ***ISCED 3A – 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 pupils for the Maturity Examination.
- *Leaving Certificate Vocational Programme* (Ireland). This programme prepares people 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.

### ***ISCED 3A – Type 3 (vocational or technical)***

- *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 year of the 3rd stage TSO. TSO (technical secondary education) essentially concentrates on general and technical/theoretical subjects. This programme consists of practical and general courses. Young people emerging from TSO can join the labour market or continue 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 are usually for two years full-time.

### ***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 their students directly for entry into an occupation. They also offer a longer study for 4 years ending with the *maturita* exam enabling the graduate the entry to the university (this will be classified at 3A). These schools specialise mostly in engineering and technical areas, more recently also in management. They also provide general education, including mother tongue, history, mathematics and sciences. Study at secondary vocational schools is completed with a final exam and is classified at ISCED 3C, Type 3. Graduates of four-year curricula take both the final exam and the *maturita* exam and will be classified at ISCED 3A, Type 3.

### ***ISCED 3B – Type 2 (pre-vocational or pre-technical)***

- *Felnevelő szakközépiskolája 9-12.* (Hungary). Upper level part-time, secondary education programme preparing pupils for the Maturity Examination. This programme has pre-vocational programme elements.
- *Listnám á framhaldsskólastigi* (Iceland). Fine and applied arts programme at the upper secondary level. Designed to provide access to fine arts programmes at ISCED 5B.

### ***ISCED 3B – Type 3 (vocational or technical)***

- *Skilled Courses for Recognised Trades* (Australia). Complete Trade Courses (Stream 3212) provide initial education and training for entry to 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 to operatives, persons in such vocations are competent to carry out a broad range of related tasks. The skill level for such vocations is less than 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 at 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 for 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.
- *Baccalauréat 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 *baccalauréat professionnel* by apprenticeship, with instructional time shared between an education/training institutions and an enterprise. The professional

*baccalauréat* allows an immediate labour force entry. A minority of graduates continues to higher studies however, mainly to earn the *Brevet de technicien supérieur* (BTS) at ISCED 5B.

- *Berufsschulen/Duales System* (Germany). Special form of apprenticeship which comprises 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 2 (pre-vocational or pre-technical)**

- *Leaving Certificate Applied* (Ireland). This 2-year 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.

**ISCED 3C – Programmes with a cumulative duration similar to ISCED 3A and 3B programmes – Type 3 (vocational or technical)**

- *Střední odborná škola, studium bez maturity* (Czech Republic). Secondary technical school without a *maturita* examination. This 3-year programme provides both general education and practical vocational training. Students do not have access to higher education unless they take the *maturita* examination, which can be sat after taking a 2-year ISCED 4A programme.
- *Erhvervsfaglige uddannelser* (Denmark). Primary vocational youth programme which includes training for carpenters, blacksmiths, electricians, etc. There are 86 different courses in trade and technical fields, and more than 20 specialities. Most courses last between 3 and 4 years.
- *Szakiskolai szakképző évfolyamok és programok* (Hungary). One- to two-year 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 programme). 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 less (more than one year) than ISCED 3A and 3B programmes – Type 1 (general)**

- *Entry to Employment or Further Education: Educational Preparation, Stream 2200* (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.
- *Általános iskola, szakiskola általánosan képző 9-10. évfolyamai* (Hungary). Basic education programme of the vocational school. Grade 9-10 general subject courses preparing pupils for entrance to NVQL programmes with an entrance requirement of 10 years of general education. The typical starting age is between 14 and 15.

**ISCED 3C – Programmes with a cumulative duration less (more than one year) than ISCED 3A and 3B programmes – Type 2 (pre-vocational or pre-technical)**

- *Polytechnische Schule, pre-vocational year* (Austria). One-year programme in the last year of compulsory education which introduces into broad occupational fields. It is often followed by apprenticeship (ISCED 3B). The typical starting age is 14.
- *General National Vocational Qualification Foundation Level* (United Kingdom). These programmes are essentially targeted at 16-19 year-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, 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.

***ISCED 3C – Programmes with a cumulative duration less (more than one year) than ISCED 3A and 3B programmes – Type 3 (vocational or technical)***

- *Enseignement de second cycle professionnel du second degré (sous statut scolaire)* (France). This 2-year 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 an education/training institutions but includes training periods in an enterprise. The typical starting ages are between 15 and 17.
- *Formazione professionale regionale post-obbligo* (Italy). This 2-year 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.

# 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 (paragraph 72), 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 an 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 shorter duration than ISCED 3A or 3B programmes (*e.g.* more than one year), 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, if a 2-year programme under consideration for classification at ISCED 4 has a 2-year 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-month programme under consideration for classification at ISCED 4 has a 2-year 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 met (2 years at ISCED 3C + 0.5 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.<sup>3</sup>

#### *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% 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% of its content has 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 for which either the content would not be considered “tertiary” in many OECD countries or the programme does not

3. 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 sub-categories: 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.

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 will have typically already completed another upper secondary programme (*i.e.* second-cycle programmes).

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

### **ISCED 4B – Type 3 (vocational or technical)**

- *Trade Technician/Trade Supervisory* (Australia). Programmes classified nationally to Stream 3300 which 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 3300 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 3300 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). A three-year programme consisting of theoretical and practical courses leading to a nursing diploma. Training comprises fields such as nursing, medical and various related subjects such as law and psychology. These programmes are open to pupils who have successfully completed the tenth year of education (ISCED 3C). Upon completion of this programme, a student will have completed one more year of schooling than graduates from ISCED 3A programmes.
- *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 condition and there is a lively national debate on whether the content of these programmes would allow them to be classified as tertiary.

### **ISCED 4C – Type 3 (vocational or technical)**

- *Mittlere Speziallehrgänge* (Austria). One-year specialised courses designed for people who have completed initial vocational education. They 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 are pre-employment and apprenticeship programmes, as well as skill upgrading programmes designed for people already working who 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-year vocational training programmes directed towards 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.
- *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.

## Upper secondary, second-cycle programmes

### **ISCED 4A – Type 1 (general)**

- *Upper secondary evening schools* (Germany). Three-year 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-year apprenticeship and last one year giving a complete duration of four or five years after the beginning of ISCED Level 3.

### **ISCED 4A – Type 2 (pre-vocational or pre-technical)**

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

### **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 under certain conditions.
- *Nástavbové studium* (Czech Republic). Follow-up courses. The student who completed vocational education in a 3-year programme in order to enter the labour market can re-enter the secondary school for a secondary education with *maturita* exam. The student has, therefore, a higher level of education in the labour market and this qualification also enables him/her to enter, after passing an entrance examination, into higher education institutions.

### **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 qualifications. A demonstration examination 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.

# 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 for classifying 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 levels. 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 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.

## ◆ ISCED 5A – Sub-categories

### *Cumulative theoretical duration*

ISCED 5A programmes can be sub-classified by the theoretical cumulative duration of programmes. 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 duration 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<sup>4</sup>*

- 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 “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-year 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 the typical student studying full-time should take to complete the programme. This is particularly the case where theoretical duration has a legal basis (*e.g.* it is tied to the amount of time during which a student receives a subsidy) rather than a credit or course hour requirement. In cases where the theoretical duration is thought to be distortionary, that is, it reflects a requirement that is laid

4. 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 here 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.

out in law but does not reflect the reality of the design of today’s programmes, 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 why 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 a student who completes a three-year Bachelor’s degree programme will have access to a wide range of occupations and opportunities for further education, whereas a student studying in Austria or Germany will only obtain a labour market relevant qualification after the completion of a full five-year degree programme, 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 countries.

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 the “theoretically-based” type of programme 5A with the “first” position 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 for the degree and qualification structure***

- Intermediate.<sup>5</sup>
- First.
- Second.
- Third 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.

## **◆ ISCED 5A – Specific classification issues**

### ***ISCED 5A intermediate qualifications – where do they go?***

ISCED-97 requires that ISCED 5A first degrees have a minimum 3 years full-time equivalent duration. ISCED 5A intermediate was developed explicitly because some countries have shorter

5. 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.

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-year awards should be included in the graduate data (*e.g.* the DEUG 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 qualifications are often not required for progressing on to earn the 1st 5A degree.

This procedure will not be sufficient, however, for classifying individuals by 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 an ISCED 3 completer. 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:

- Classification at ISCED 3 (reflecting the last completed level of educational attainment in the ISCED framework).
- Specific classification in a category for intermediate 5A qualifications (which could then be combined with either ISCED 3, 4, 5B, or 5A, depending on analytical purpose).

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

### ***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 for gaining 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 ISCED 5A 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). For example, in Australia 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 a 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:

- ISCED 5A 2nd programmes require an ISCED 5A first qualification (or an 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 programmes if the level of 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.
- If a country cannot separately report ISCED 5A (2nd) degrees by cumulative duration, second programmes that are less than 1-year FTE duration should be excluded from the UOE data collection on graduates. This second recommendation would also pertain to the collection of data on educational attainment.

Example: Higher education “postgraduate” in Australia follow the structure below:

*Higher degree:*

- Higher Doctorate
- Doctorate by research
- Doctorate by coursework
- Master’s by research
- Master’s by coursework

*Other Postgraduate:*

- Postgraduate qualifying or preliminary (for Master’s, Ph.D. or Higher Doctorate)
- Graduate diploma/postgraduate diploma
- Graduate Certificate

As the “Other Postgraduate” courses are designed to widen a student’s education rather than to educate the student to a significantly higher level, Australia has proposed to allocate the “Other Postgraduate” to ISCED 5A 1st programmes. The “Master’s by research” and “Master’s by coursework” would remain as 2nd programmes.

### ***Degrees in medicine, dentistry, and veterinary medicine***

First degrees in medicine, dentistry, and veterinary medicine should be classified at Level 5A, unless they meet 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 also appears to be wide variability in the degree to which qualifications of this type would come under the coverage of the collection of education statistics. For example, in Germany 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 degrees 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 will often meet many of the same criteria as 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 Master's degree by Research in Australia, Ireland, New Zealand, and the United Kingdom. As many long ISCED 5A programmes will have a research component, even if they are not explicitly designed to prepare participants for research positions, it is likely that 5A research qualifications and long 5A programmes would be grouped for analytical purposes.

## **∇ Examples**

### **ISCED 5A – Short, Intermediate**

→ *University Transfer Programmes* (Canada). These are programmes of one- or two-year 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's degree programmes. Although enrolments in these programmes count at ISCED 5A, students who complete these programmes are not counted as ISCED 5A graduates.

### **ISCED 5A – Medium, 1st degree**

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

→ *Licence* (France). This programme (one 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 *classes préparatoires aux 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-year higher vocational education (HBO) programmes, teaching is of a more practical nature than in the universities. The most common fields studied are economics, engineering, agriculture, teacher education, social work and community education, health care and the arts.

→ *Høgre utd. lavere grad* (Norway). These are 4-year 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-year university programme leading to the *Diplomado Universitario*,

*Arquitecto Técnico* or *Ingeniero Técnico* in a particular field. The holder 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. The programmes will demand a *Berufsmaturität/maturité professionnelle* (ISCED 3A vocational education of three or four years duration with a substantially enlarged general education part) as entry requirement, last three or four years and prepare for highly skilled professions such as architecture, engineering, business administration or design. The areas mentioned are the ones in which the first *Fachhochschulen* will be created, but others will follow suit.
- *Bachelor's degree programme* (United Kingdom). First degree, awarded usually after three year's 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-year 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 continue their education in graduate (Master's or Ph.D.) or first-professional (law, medicine, dentistry) degree programmes.

#### **ISCED 5A – Medium or Long, 1st degree**

- *Enseignement des écoles de commerce* leading to the *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 ISCED 5A.
- *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' 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 obligatory for every student. 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 for entering into 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 field of education: 4 to 5 years (6 years in some cases, like medicine). Four-year Bachelor's degree programmes should be allocated to ISCED 5A medium and 5- to 6-year programmes allocated to ISCED 5A long.

#### **ISCED 5A – Medium and Long, 1st and 2nd degrees**

- *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 university programme. In principle, both the Bachelor's and the Master's degree can be first qualifications, as not all students get the Bachelor's degree prior to earning the Master's degree. Studies for training teachers for basic school, 1st stage (primary level) last four years (on average). University study ends with a defence of a thesis and the passing of state exams.

**ISCED 5A – Long, 1st degree**

- *Bachelor's degrees in professional areas* (Australia). Undergraduate studies lasting between 5 years (veterinary science, dentistry, architecture) and 7 years (medicine and surgery), leading to a Bachelor's degree.
- *Fachhochschulen* (Germany). Programme (4 or 5 years) at the university level which prepares for occupations which require 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).

**ISCED 5A – Long or Very long (depending on particular programme), 1st degree**

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

**ISCED 5A – Long and Very Long, 2nd degree**

- *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 to the *shushi* (Master's degree). Completion of the *shushi* degree requires two years' full-time study (at least 6 years cumulative at the tertiary level) following the *gakushi*, including 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-year 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-year 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 practical/technical/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 programmes.

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' full-time equivalent 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.

#### ◆ ISCED 5B – Sub-categories

##### *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 in a manner similar to 5A programmes (see 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-year programmes must be a component or a stage of a longer programme in order to be classified at Level 5B. Individuals who complete these intermediate programmes would not be counted as 5B graduates, however. Most ISCED 5B programmes would fall into the short and medium categories.

##### *National 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 for the qualification structure*

- Intermediate.
- First.
- Second.
- Third and further.

#### ∇ Examples

##### *ISCED 5B – Short, 1st qualification*

→ *3400 Initial Vocational Courses: Paraprofessional/Technician* (Australia). Paraprofessional/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 full-time equivalent duration.

- *Kollegs* (Austria). Two-year, post-secondary courses in technical and vocational education (TVE). This programme is primarily designed to provide the holders of a long type secondary education diploma (ISCED 3A) with vocational qualifications similar to those acquired in secondary technical and vocational colleges.
- *Ammatillinen opisto (vocational colleges)* (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-year 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-year 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, continue 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's Degree Programmes* (Mexico). These programmes are offered in Technological Universities. Graduates from these 2-year 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 Edexcel 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 and generally leads to the level of senior technician or junior management. The duration is either two years full-time or three years part-time.

#### **ISCED 5B – Short and Medium, 1st qualification**

- *2-3 year college; 3-4 year 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 bis 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.

#### **ISCED 5B – Medium, 1st qualification**

- *Bakalárské univerzitní studium* (Czech Republic). Three-year university programmes leading to the *bakalár* (Bachelor's degree). Programmes that do not give direct access to Master's or Engineer programmes are

classified at ISCED 5B, while programmes providing direct access to Master's or Engineer programmes are classified at ISCED 5A.

- *Hogescholenonderwijs van 1 cyclus* (Flemish Community of Belgium). One-cycle higher education provided by *hogescholen*. These 3- to 4-year programmes lead to a final diploma which qualifies the holder for immediate employment. Qualifications are awarded in industry, commerce, agriculture, health and rehabilitation, social work, teaching, informatics, applied arts or the media.
- *Verwaltungsfachhochschulen/College of public administration* (Germany). Special type of *Fachhochschulen* run by the public administration to provide training for medium-level, non-technical careers within the public sector. Entrants hold a qualification that would also 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-year (cumulative) programmes leading to Diplomas and National Diplomas (Levels 5, 6).
- *Nauczycielskie kolegium języków obcych (foreign language teacher training college)* (Poland). A three-year 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.

#### **ISCED 5B – 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 paraprofessional courses, and include courses which 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 about 2 years full-time equivalent duration in addition to the prerequisites. Examples include Advanced Diplomas in Information Technology or in Rural Management.



# 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:

- For successful completion, 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.
- Is not solely based on course-work.
- Prepares recipients for faculty posts in institutions offering ISCED 5A programmes, as well as research posts in government and industry.

Although most countries would 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 for defining 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 towards an advanced research degree.

## ∇ Examples

### **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 obligatory in preparing for a *doctorat*. Enrolment for the DEA is open to holders of the *maîtrise*. While enrolments in the DEA year are included at ISCED 6, the DEA does not count as an ISCED 6 completion.

### **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 usually three years' full-time study devoted to preparing a thesis based on an original research project resulting in a significant contribution 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 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' study at 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).

# Proposed allocation of national educational programmes to ISCED-97

The following tables contain the proposed mapping of national educational programmes to ISCED-97 for all 29 OECD countries. The allocations of national educational programmes to ISCED-97 have been developed by Member countries, in consultation with the OECD Secretariat. These proposals represent the starting point for a process of consultation within the Technical Group, with the aim of working towards an internationally agreed upon allocation of national educational programme to ISCED-97 in the OECD. These mappings will form the basis of data reporting in the 1999 UOE Data Collection on Education Statistics. The goal of the ISCED-97 implementation process is that the mapping of national education programmes to the revised ISCED be perfectly transparent and jointly agreed upon by all Member countries.

The Technical Group will continue to serve as a forum for discussing and evaluating individual country's ISCED-97 allocations. Particular programme allocations that do not match the criteria laid out in this manual, and thereby do not lead to comparable education statistics, will be brought up and discussed amongst the Technical Group. In cases where this manual does not make it clear how a programme with particular characteristics should be mapped to ISCED-97, suggestions for modifying the manual will be sought. The implementation of ISCED will be both an iterative and interactive process, with both Member countries and international organisations reviewing countries' assignments of programmes to ISCED categories and recommending adjustments to enhance international comparability.

## Table legend

NC	<b>ISCED-97 level</b> Not yet classified
General (G)/Type 1	<b>Programme orientation</b> 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% of the programme content is vocational or technical.
Pre-vocational or pre-technical (P)/Type 2	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. At least 25% of the content has to be vocational or technical.
Vocational or technical (V)/Type 3	Education which prepares participants for direct entry, without further training, into specific occupations. Successful completion of such programmes leads to a labour-market relevant vocational qualification.
Short (S) Medium (M) Long (L) Very long (VL)	<b>Cumulative duration at ISCED 5</b> Short: 2 to less than 3 years. Medium: 3 to less than 5 years. Long: 5 to 6 years. Very long: more than 6 years.
Intermediate 1st 2nd 3rd and +	<b>Position in the national degree/qualification structure</b> Intermediate degree/qualification. First degree/qualification. Second degree/qualification. Third and further degree/qualification.

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