UNESCO
Institute for Statistics

International Standard Classification
of Teacher Training Programmes

ISCED-T 2021

UNESCO

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UNESCO Institute for Statistics

The UNESCO Institute for Statistics (UIS) is the statistical office of UNESCO and is the UN depository for global statistics in the fields of education, science, technology and innovation, culture and communication.

The UIS was established in 1999. It was created to improve UNESCO's statistical programme and to develop and deliver the timely, accurate and policy-relevant statistics needed in today's increasingly complex and rapidly changing social, political and economic environments.

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FOREWORD

Teachers are generally considered the single most influential variable in an education system for achieving quality learning outcomes. Therefore, reaching the global education goal and targets will greatly depend on teachers that are empowered, adequately recruited, well-trained, professionally qualified, and supported within well-resourced, efficient and effectively governed systems.

Initial and continuing professional development for teachers is key to the professionalisation of the teacher workforce. However, the differences between national teacher training programmes make it difficult to compare countries and to monitor progress towards national and international goals, in particular to monitor Sustainable Development Goal (SDG) target 4.c:

> *By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States.*

The International Standard Classification of Teacher Training Programmes (ISCED-T) has been developed to offer a solution, through the definition of internationally agreed categories which will support the production of cross-nationally comparable statistics on teacher training. Its creation was endorsed during the 40th session of the UNESCO General Conference in 2019.

The preparation of ISCED-T was guided by a global Technical Advisory Panel (TAP), comprised of experts in classifications and those specialised in teachers' education and qualifications statistics. The Panel included relevant international organisations and partners, such as representatives of the International Task Force on Teachers for Education 2030, Eurostat, the Organisation for Economic Co-operation and Development (OECD), and the United Nations Statistics Division. It was also guided by an extensive review process, including a series of formal consultations of Member States, UNESCO Category 1 Institutes and relevant Category 2 Centres which was coordinated by the UNESCO Institute for Statistics and the UNESCO Division for Policies and Lifelong Learning Systems (Education Sector).

The ambition is that the application of ISCED-T will lead to more reliable and comparable statistics on teacher training programmes, which in turn will support the monitoring of global goals and targets and ultimately increase the provision of quality and equitable education for all.
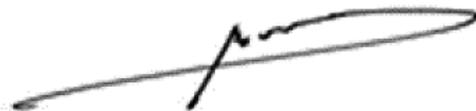
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WHAT IS ISCED-T?

1.   The International Standard Classification of Teacher Training Programmes (ISCED-T) is a framework for assembling, compiling and analysing cross-nationally comparable statistics on teacher training programmes and the related teacher qualifications.

2.   ISCED-T is based on the International Standard Classification of Education (ISCED), which serves to classify education programmes and the related qualifications by education levels and fields.

3.   ISCED-T complements ISCED with additional dimensions for the classification of teacher training programmes according to internationally agreed categories.

PURPOSE AND SCOPE OF ISCED-T

Purpose

4. The *primary* purpose of ISCED-T is to produce internationally comparable data on teacher training programmes to improve the availability and quality of teacher statistics, especially about national programmes for pre-service teacher education.

5. The *secondary* purpose of ISCED-T is to contribute directly to the identification, development and collection of data at relevant national, regional and international levels for:

    a. combinations of teacher qualifications and teacher training programmes that make up pathways to the teaching profession;

    b. the scope and quality of teaching practice within teacher training programmes; and

    c. knowledge, skills and competencies for teacher qualifications.

6. At a *third level*, ISCED-T may influence the identification, development and collection of data related to other aspects of teacher training programmes at national and regional levels, including, where relevant:

    a. in-service teacher education;

    b. postgraduate teacher education studies;

    c. continuing professional development (CPD) for teachers;

    d. regional and global collaborations to improve the quality of teacher training programmes;

    e. research into the teacher profession, including new pedagogies;

    f. alternative pathways to the teaching profession, including teacher internship programmes;

    g. new digital forms of teacher training programmes, certifications and credentials; and

    h. professional standards for licensing of teachers.

Scope

7. The teacher training programme is the primary focus of ISCED-T. A teacher training programme is defined as a coherent set or sequence of educational activities designed and organized to achieve predetermined learning objectives or accomplish a specific set of educational tasks over a sustained period to prepare teachers for their occupation.

8. The qualification to which one or more teacher training programmes may lead is classified in the same manner as the associated teacher training programme, and is included in

ISCED-T. In some cases, a teacher training programme may comprise more than one qualification. Teacher training programmes are always linked to a specific provider, which may be public or private, and which could be a university, college or similar body. The qualifications earned are typically recognized by a government body.

9. ISCED-T can be applied to all pre-service teacher training programmes and teacher qualifications offered globally that train teachers for teaching at pre-primary, primary, lower secondary and upper secondary levels. ISCED-T can be applied to teacher training programmes offered in both public and private educational institutions.

10. ISCED-T is based on the broader ISCED classification designed to classify education programmes and the resulting qualifications into internationally agreed levels of education. The basic concepts and definitions of ISCED apply to ISCED-T.

11. ISCED-T is a framework applied across five dimensions of a teacher training programme (see Section 3) namely the:

    a. ISCED level of the qualification obtained upon completion of the teacher training programme;

    b. target teaching level of the teacher training programme;

    c. minimum educational level required for entry into the teacher training programme;

    d. theoretical duration of the teacher training programme; and

    e. teaching practice ratio.

12. The underpinning curriculum of a teacher training programme is *not* classified in ISCED-T as there are many variations which may be both geographically and institutionally specific.

13. ISCED-T is *not* designed to produce data related to the qualitative elements of teacher training programmes - such as the assessment of the learning outcomes of student teachers or teachers upon completion of a programme, the quality of the delivery of a programme, or the scope of the curriculum content of a programme.

SECTION 3

UNITS AND CONCEPTS OF CLASSIFICATION IN ISCED-T

Main units of classification

14. The basic units of classification in ISCED-T are **teacher training programmes** and the related **qualifications**.

15. The **level of the qualification** obtained upon completion of the teacher training programme is the ISCED level of the teacher training programme and its related qualification.

16. The **target teaching level** of the teacher training programme is the ISCED level (0-3) at which graduates from the teacher training programme will teach (see Table 2). ISCED levels 4 and higher are excluded as they fall outside the target levels for teacher training programmes classified in ISCED-T. If a teacher training programme qualifies graduates to teach at more than one ISCED level, all levels are indicated in the ISCED-T code of the programme (see Section 4).

17. The **minimum educational level required for entry** into the teacher training programme[1] is the ISCED level of the minimum prior learning required to gain access to a teacher training programme, typically through successful completion of an education programme, as defined in ISCED 2011:

   a. The prior learning may be formally linked to a teacher training programme or qualification, or may be non-formal, evidenced through a recognition of prior learning processes.

   b. In some cases, workplace experience may also be required, such as in vocational and occupational settings, but this information is not considered in ISCED-T.

18. The **theoretical duration of the teacher training programme**[2] is the intended time to complete the programme measured in full-time equivalents, which is the prescribed length of time, usually calculated in years or parts of a year, taken by a full-time student to achieve the specified learning outcomes of the teacher training programme:

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1   At the time ISCED-T was developed, no teacher training programme that required a doctorate or equivalent degree for entry had been observed.

2   The following ISCED ranges are used as guides for the FTE duration of teacher training programmes: ISCED level 2: duration typically varies from 2 to 5 years; the most common duration is 3 years. ISCED level 3: duration typically varies from 2 to 5 years; the most common duration is 3 years. ISCED level 4: duration typically varies from 6 months to 2 or 3 years. ISCED level 5: duration typically varies from 2 to 3 years. ISCED level 6: the duration of Bachelor's or equivalent level programmes typically varies from 3 to 4 or more years when directly following ISCED level 3, or 1 to 2 years when following another ISCED level 6 programme. ISCED level 7: the duration of Master's or equivalent level programmes typically varies from 1 to 4 years when following ISCED level 6, or from 5 to 7 years when directly following ISCED level 3. ISCED level 8: duration is a minimum of 3 years.

a. If the intended time is a range of years, the average or most common time needed to complete a programme is used.

b. If the average or most common duration is unknown, the minimum theoretical duration of a programme is used for classification.

19. **Teaching practice ratio** is the ratio of the theoretical duration of the work-based (in-school) component of the overall teacher training programme relative to the theoretical duration of the same programme:

a. The teaching practice ratio is expressed as a percentage and calculated as the theoretical duration of the work-based component (numerator) divided by the theoretical duration of the programme (including the work-based component) (denominator). For cross-national comparative purposes one year is defined as 52 weeks.

b. Teaching practice ratio value ranges are specified in Table 1. The ranges are based on available information and could be further refined during future reviews of ISCED-T.

c. The teaching practice ratio can be applied to both general/academic and professional orientated teacher training programmes but would be more prevalent in professional programmes and internship pathways.

d. If the intended time spent on teaching practice is a range of weeks, the average or most common teaching practice time is used.

e. If the average or most common teaching practice time is unknown, the minimum amount of time students in a teacher training programme must spend in teaching practice is used for classification.

Table 1: Teaching practice ratios

Code	Ratio
0	None
1	≤10%
2	>10%, <20%
3	≥20%

SECTION 4

CODING SCHEME OF ISCED-T

Coding scheme

20. The ISCED-T coding scheme comprises five dimensions of classification of teacher training programmes (see Table 2).

21. The ISCED-T code is a sequence of five numbers in the order of the five dimensions.

22. For the first dimension, the ISCED level of the teacher training programme is used.

23. For the second dimension, if a teacher training programme leads to multiple target teaching levels, all target levels are indicated in the second element of the ISCED-T code. For example, programmes that qualify graduates to teach in lower and upper secondary education, are coded as 9.

Table 2: ISCED-T coding scheme

1. Level of the qualification obtained upon completion of the teacher training programme
2. Lower secondary education
3. Upper secondary education
4. Post-secondary non-tertiary education
5. Short-cycle tertiary education
6. Bachelor's or equivalent level
7. Master's or equivalent level
8. Doctor or equivalent level

2. Target teaching level of the teacher training programme

0. ISCED level 0

1. ISCED level 1

2. ISCED level 2

3. ISCED level 3

4. ISCED levels 0 and 1

5. ISCED levels 0, 1 and 2

6. ISCED levels 0, 1, 2 and 3

7. ISCED levels 1 and 2

8. ISCED levels 1, 2 and 3

9. ISCED levels 2 and 3

3. Minimum educational level required for entry into the teacher training programme

1. ISCED level 1

2. ISCED level 2

3. ISCED level 3

4. ISCED level 4

5. ISCED level 5

6. ISCED level 6

7. ISCED level 7

8. ISCED level 8

9. Not specified

4.   Theoretical duration of the teacher training programme

1. ≤1 year

2. >1 year, ≤2 years

3. >2 years, ≤3 years

4. >3 years, ≤4 years

5. >4 years, ≤5 years

6. >5 years, ≤6 years

7. >6 years

5.   Teaching practice ratio

0. None

1. ≤10%

2. >10%, <20%

3. ≥20%

9. Not specified

EXAMPLES OF THE APPLICATION OF ISCED-T

Example 1

44312

24. Early childhood and primary school teachers in Country A are trained at a teachers' training college. Students can gain access to the teacher training programme after completing at least upper secondary education. The pre-service training programme for full-time students has a duration of one year, and it includes two four-week periods where the student teachers are placed within schools to shadow practicing teachers. The teacher training programme is not offered by a university but prepares the candidate for entry in Bachelor degree studies and/or the labour market.

Table 3: ISCED-T coding scheme: Example 1

ISCED-T Dimension	Calculation/description	Coding
Level of the qualification obtained	Prepares for a Bachelor's degree but is not offered by universities = Post-secondary non-tertiary education (ISCED 4)	4
Target teaching level	Early childhood education = ISCED level 0 Primary education = ISCED level 1	4
Minimum educational level required for entry	Students can gain access to the teacher training programme after completing at least upper secondary education = ISCED level 3	3
Theoretical duration	Pre-service training programme for full-time students is one year	1
Teaching practice ratio	8/52 = 15.4% = 2	2

Example 2

68342

25. Both primary and secondary school teachers in Country B require at least a professional Bachelor's in Education Degree (BEd, four years). Students can gain access to the teacher training programme after completing upper secondary education (i.e., they must have a school leaving certificate with the right subject combinations and a minimum of 60% aggregate in the two main teaching subjects). The BEd route requires student teachers to spend time in schools for 8 weeks in years 2 and 3, and for 12 weeks in year 4.

Table 4: ISCED-T coding scheme: Example 2

ISCED-T Dimension	Calculation/description	Coding
Level of the qualification obtained	BEd = ISCED level 6	6
Target teaching level	Primary education = ISCED level 1 Lower and upper secondary education = ISCED levels 2 and 3	8
Minimum educational level required for entry	Students can gain access to the teacher training programme after obtaining a school leaving certificate = ISCED level 3	3
Theoretical duration	BEd = 4 years	4
Teaching practice ratio	BEd route requires student teachers to spend time in schools for 8 weeks in years 2 and 3, and for 12 weeks in year 4 = (8 + 8 + 12)/208 = 28/208= 13.5% = 2	2

Example 3

73623

26. Upper secondary school teachers in State C require at least a master's degree in education or a related field. Access to the qualification is a first degree at ISCED Level 6. The Master's Degree is completed over two years by full-time students, and over four years by part-time students. In both instances a period of 6 months is required for work-based learning. State C is in a country with a highly decentralised system of education.

Table 5: ISCED-T coding scheme: Example 3

ISCED-T Dimension	Calculation/description	Coding
Level of the qualification obtained	Master's Degree = ISCED level 7	7
Target teaching level	Upper secondary education = ISCED level 3	3
Minimum educational level required for entry	Students can gain access to the teacher training programme after completing a first degree = ISCED level 6	6
Theoretical duration	2 years	2
Teaching practice ratio	6 months = 26/104 = 25% = 3	3

Example 4

69343

27. Secondary school teachers in Country D are trained through two parallel pathways. The newly introduced teacher internship pathway is linked to four-year Bachelor in Education degrees at various universities across Country D. The programme can be completed over 6 years on a part-time basis. Student teachers are placed in schools from the outset and need only a school leaving certificate at the upper secondary level to enrol for the BEd. The highly immersed work-based learning environment results in this programme having the equivalent of up to 6 months of teaching practice per year.

Table 6: ISCED-T coding scheme: Example 4

ISCED-T Dimension	Calculation/description	Coding
Level of the qualification obtained	BEd = ISCED level 6	6
Target teaching level	Lower and upper secondary education = ISCED levels 2 and 3	9
Minimum educational level required for entry	Students can gain access to the teacher training programme after obtaining a school leaving certificate = ISCED level 3	3
Theoretical duration	4 years	4
Teaching practice ratio	6 months per year over a 4-year FTE = 50% = 3	3

Example 5

69343

28. Vocational lecturers in Country E are trained within the same policy framework as school teachers, although the curricula of the training programmes are substantially different. The programme is based on a four-year degree programme, and requires an upper secondary school leaving certificate plus at least two years of workplace experience for entry. A full year of work-based learning makes up the fourth year of the qualification.

Table 7: ISCED-T coding scheme: Example 5

ISCED-T Dimension	Calculation/description	Coding
Level of the qualification obtained	Bachelor's = ISCED level 6	6
Target teaching level	Lower and upper secondary education (vocational) = ISCED levels 2 and 3	9
Minimum educational level required for entry	Students can gain access to the teacher training programme after completing a school leaving certificate & 2 years of experience= ISCED level 3	3
Theoretical duration	4 years	4
Teaching practice ratio	12 months over a 4-year FTE = 52/208 = 25% = 3 Internship route: No	3

SECTION 6

GOVERNANCE OF ISCED-T

29. The UNESCO Institute for Statistics (UIS) is the custodian of ISCED-T and is responsible for the development, maintenance, updating and revision of this reference classification. The UIS also provides guidance on the effective and consistent use of ISCED-T for data collection and analysis.

30. The UIS aims to maintain links with custodians of other programme classifications relevant to teacher training programmes in order to ensure consistency across related standard frameworks.

31. An ISCED-T Committee should be formed in order to advise UIS regarding the classification of teacher training programmes and qualifications, to review the current version of ISCED-T and to identify potential areas for further development. The Committee should consist of UNESCO (as lead agency within the UN system of organizations), custodians of other related classifications as appropriate, and key education data collection partners, such as OECD and Eurostat, as permanent members. The composition of the Committee membership should aim to be balanced both technically and geographically, and therefore would include in addition a number of teacher educational, statistical and classification experts with knowledge of ISCED-T and representing different regions of the world on a non-permanent basis as well as representatives from the research and user community.

32. Further responsibilities of the UIS include:

    a. promoting the use of ISCED-T for cross-nationally comparable statistics on teacher training programmes;

    b. providing documentation and support to enable the United Nations Committee of Experts on International Statistical Classifications (UNCEISC) to assess the classification and take it through the approval process for becoming a member of the Family of International Statistical Classifications;

    c. providing effective mechanisms to advise countries on implementation, including guidance materials, training and technical support to ensure the effective implementation and utilization of the classification throughout the world; and

    d. establishing monitoring mechanisms for proper feedback from ISCED-T users about problems in its use.

33. The UIS will maintain a database on its website of mappings of national teacher training programmes to ISCED-T.

RECOMMENDATIONS AND FUTURE CONSIDERATIONS

Recommendations

34. ISCED-T is well positioned to benefit from, but also contribute to, possible revisions of ISCED. There has been significant progress over the last decade in the global approach to learning through the near ubiquitous use of learning outcomes. While there is still much to be done to allow for better scaffolding of these learning outcomes across the knowledge, skills, competencies and other domains, it will be important for ISCED-T to take these developments into account.

35. Data interoperability standards should be considered to work towards more seamless and automated data collection through automated coding algorithms. ISCED-T is well positioned to take on board current developments in this area, which will contribute to more valid and reliable data, and in turn, allow for more dynamic data utilisation to the benefit of the teaching profession.

36. ISCED-T focuses on a subset of dimensions that differentiate between teacher training programmes. Data collection should also, where feasible, consider the following characteristics of teacher training programmes:

  a. Target teaching level: explicit identification of vocationally orientated programmes.

  b. Minimum educational level required for entry: explicit identification of cases where a prior learning access route is available.

  c. Teaching practice ratio: explicit identification of internship routes.

  d. Application to in-service teacher training programmes.

  e. Pathways: explicit identification of different pathways that lead to qualified teacher status, and that may comprise of more than one teacher training programme or qualification.

37. ISCED-T can contribute to a global minimum standard for national measurement of the proportion of teachers with the minimum required qualifications by level of education taught. ISCED-T can also be linked to new indicators developed through global initiatives that aim to improve the quality of teacher training.

Future considerations

38. The purpose of ISCED-T is to compile and analyse cross-nationally comparable statistics on teacher training programmes and the related teacher qualifications. This means ISCED-T is quantitative in its design and descriptive in its intent.

39. On its own, ISCED-T is not designed to indicate the quality of teacher training programmes. In this regard, ISCED-T should be seen as one of an array of national and international instruments that can contribute to improved teacher quality. Other instruments include professional and content standards for teachers, as well as the strong international shift over the last three decades to national and regional qualifications frameworks. This includes the acceleration of the referencing processes between national and regional qualifications frameworks that contribute directly to more standardised terminology and use of concepts internationally, such as the common use of level descriptors. The most recent thinking on world reference levels of learning outcomes is also important to take note of in the future.

40. The use of credit systems and notional learning time is strongly associated with the development of qualifications frameworks. In the medium to long term, these concepts could potentially replace the notion of "duration" to ensure more consistency when countries report on learning time, workloads and even levels of complexity intrinsic to teacher training programmes. It is possible that future iterations of ISCED-T may prioritise notional learning time above full-time equivalents as more internationally comparable proxies for the duration and scope of teacher training programmes.

41. New forms of credentials that are digital in their design, delivery, certification and authentication, and that are increasingly being delivered across formal, non-formal and informal modes, are important to take note of. It is not unrealistic to expect that this expanded scope may be considered in future iterations of ISCED-T as teacher training programmes become more modular and stackable.

42. The inclusion of teaching practice in ISCED-T should be further developed and refined. Greater consistency will be required in how teaching practice is reported and integrated into teacher training programmes overall.

43. The global shift is towards forms of privacy wherein an individual (in this case a teacher, or student teacher) should have a degree of control over how their data is collected and used. It will be important to consider how concepts such as data privacy and self-sovereign identity will impact on data of teacher training programmes in the future.

44. The increasing demand for digital and soft skills in the labour market means teachers need to foster the development of these skills in their students. Data collection for ISCED-T could include a specific focus on these aspects.

45. The relatively long development and approval cycles required for frameworks such as ISCED-T that analyse cross-nationally comparable statistics mean that their conceptualisations should always be a few years ahead of current practices, but not so far ahead that countries may struggle to apply them. ISCED-T is well positioned to find this balance.

GLOSSARY [3]

Certification. The formal recognition of the achievement of a qualification or part-qualification in the form of an official document, issued by an awarding body, which records the achievements of an individual following a standard assessment procedure.

Competency. The proven ability to use knowledge, skills and personal, social or methodological abilities, in work or study situations and in professional and personal development.

Completion of an education programme. Participation in all components of an education programme (including final examinations if any), irrespective of the result of any potential assessment of achievement of learning objectives.

Credential. Certification issued for successful achievement of a defined set of outcomes which may include a qualification, part-qualification, course, module, as well as non-formal and informal learning.

Credit. Unit in which the successful completion of courses or modules is earned and documented during and at the end of an education programme. Credits express the volume of learning based on a typical workload needed to achieve the expected learning objectives. One credit is typically equivalent to ten notional hours.

Curriculum. The inventory of activities implemented to design, organise and plan an education or training action, including the definition of learning objectives, content, methods (including assessment) and material, as well as arrangements for training teachers and trainers.

Data privacy. Involves the correct handling of an individual's data (including personal, financial and intellectual property) from the point of collection, through to use and dissemination. An individual should have a degree of control over how their data is collected and used.

Degree. Educational qualification awarded upon successful completion of specific education programmes in tertiary education (traditionally by universities or equivalent institutions).

Digital credential. The digital representation of the attainment of specific skills and competencies which can be shared in real time, thus enabling learners to have further control over the planning, tracking and sharing of educational accomplishments.

Duration. Length of time needed to complete a programme and earn a qualification or part-qualification.

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

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3   This glossary draws on ISCED 2011 as well as various other international glossaries, including from UNESCO UNEVOC, OECD, CEDEFOP, and the ILO.

Education programme. A coherent set or sequence of educational activities designed and organised to achieve predetermined learning objectives or accomplish a specific set of educational tasks over a sustained period. Within an education programme, educational activities may also be grouped into subcomponents variously described in national contexts as 'courses', 'modules', 'units' or 'subjects'. A programme may have major components not normally characterised as courses, units or modules – for example, play-based activities, periods of work experience, research projects and the preparation of dissertations.

Entrance examination. An assessment conducted by institutions of learning in order to determine whether learners should be granted admission to a qualification or part-qualification.

Entrance requirements. Specific minimum knowledge, competencies, and conditions that need to be fulfilled before admission to a programme for a specific qualification or part-qualification can be granted.

Formal education. Education that is institutionalised, intentional and planned through public organizations and recognised private bodies and – in its totality – constitutes the formal education system of a country. Formal education programmes are thus recognised as such by the relevant national education authorities or equivalent authorities, e.g. any other institution in cooperation with the national or sub-national education authorities. Formal education consists mostly of initial education. Vocational education, special needs education and some parts of adult education are often recognised as being part of the formal education system.

General education. Education programmes that are designed to develop learners' general knowledge, skills and competencies, as well as literacy and numeracy skills, often to prepare students for more advanced education programmes at the same or higher ISCED levels and to lay the foundation for lifelong learning. General education programmes are typically school- or college-based. General education includes education programmes that are designed to prepare students for entry into vocational education but do not prepare for employment in a particular occupation, trade, or class of occupations or trades, nor lead directly to a labour market-relevant qualification. At tertiary education levels, the term 'academic' is used in place of 'general'.

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

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

Interoperability. The degree to which different components of the education ecosystem can function effectively to exchange information across various systems.

International Standard Classification of Education (ISCED). A comprehensive framework for organising education programmes and qualifications by applying uniform and internationally agreed definitions to facilitate comparisons of education systems across countries.

Knowledge. Facts, information and skills that are acquired through education and experience to help understand a subject theoretically or practically.

Learning outcomes. The totality of information, knowledge, understanding, attitudes, values, skills, competencies or behaviours an individual is expected to master upon successful completion of an education programme.

Learning programme. A structured and purposeful learning process that leads to the achievement of a qualification or part-qualification.

Level descriptor. Descriptors define what is meant by learning outcomes, describing what an individual is expected to know, be able to do and to understand, having acquired a qualification at a particular level.

Licensing. A credential provided by a teacher licensing/regulatory body that provides the right to practice in a particular country or territory.

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

Mode of delivery. The manner in which the training instructions for a qualification or part-qualification are delivered, and through which the learning process is aided.

Modular programmes. Education programmes in which students may compose the content of their education in a flexible way by combining different courses or modules. Modular programmes thus often do not have clearly defined sequencing.

Non-formal education. Education that is institutionalised, intentional and planned by an education provider. The defining characteristic of non-formal education is that it is an addition, alternative or complement to formal education within the process of the lifelong learning of individuals.

Notional time. The estimated learning time that an average learner takes to achieve the specific learning outcomes for a qualification or part-qualification.

Orientation. The two categories of orientation of programmes at ISCED levels 2 to 5 are general and vocational. At ISCED levels 6 to 8, the terms 'academic' and 'professional' are used to describe the programme orientation.

Post-secondary non-tertiary education (ISCED level 4). Post-secondary non-tertiary education provides learning experiences building on secondary education, preparing for labour market entry as well as tertiary education. It typically targets students who have completed upper

secondary education (ISCED level 3), but who want to increase their opportunities either to enter the labour market or progress to tertiary education. Programmes are often not significantly more advanced than those at upper secondary education as they typically serve to broaden – rather than deepen – knowledge, skills and competencies. It therefore aims at learning below the high level of complexity characteristic of tertiary education.

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

Qualification. The official confirmation, usually in the form of a document, certifying the successful completion of an education programme or a stage of a programme. Qualifications can be obtained through: i) successful completion of a full education programme; ii) successful completion of a stage of an education programme (intermediate qualifications); or iii) validation of acquired knowledge, skills and competencies, independent of participation in an education programme. This may also be referred to as a 'credential'.

Qualifications framework. An instrument for the development, classification and recognition of skills, knowledge and competencies along a continuum of agreed levels. It is a way of structuring existing and new qualifications, which are defined by learning outcomes – clear statements of what the learner must know or be able to do, whether learned in a classroom, on the job, or less formally.

Referencing. A process that results in the establishment of a relationship between the levels of a Regional Qualifications Framework and National Qualifications Framework or system.

Secondary education (ISCED levels 2 and 3). Secondary education provides learning and educational activities building on primary education and preparing for labour market entry, post- secondary non-tertiary education and tertiary education. Broadly speaking, secondary education aims at learning at an intermediate level of complexity. ISCED distinguishes between lower and upper secondary education.

Skills. A bundle of knowledge, attributes and capacities that can be learnt and that enable individuals to successfully and consistently perform an activity or task and can be built upon and extended through learning.

Sustainable development. Development that meets the needs of current generations without compromising the ability of future generations to meet their needs.

Target teaching level. The level at which student teachers will teach once they are qualified, such as early childhood, primary or secondary education.

Teacher. A person whose professional activity is to teach theory and practice at different education levels. Teaching involves the planning, organisation, and conducting of group activities whereby students' knowledge, skills, and attitudes develop as stipulated by educational programmes.

Teaching practice (also referred to as practice teaching). A period of workplace (in-school) experience that student teachers undergo as part of their training under the supervision of an experienced teacher.

Teacher training programme. A coherent set or sequence of educational activities designed and organized to achieve predetermined learning objectives or accomplish a specific set of educational tasks over a sustained period to prepare teachers for their occupation.

Teacher training provider. A formally recognised institution of learning that offers an accredited/recognised teacher training programme that leads to a nationally recognised teacher qualification.

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

Theoretical duration. The time, expressed in academic years, it takes to deliver an education programme, assuming regular participation on a full-time basis.

Typical duration. The time, expressed in academic years, it usually takes students to successfully complete an education programme, assuming regular participation on a full-time basis.

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

Vocational education. Education programmes that are designed for learners to acquire the knowledge, skills and competencies specific to a particular occupation, trade, or class of occupations or trades. Vocational education may have work-based components (e.g. apprenticeships, dual-system education programmes). Successful completion of such programmes leads to labour market-relevant vocational qualifications acknowledged as occupationally-oriented by the relevant national authorities or the labour market. At tertiary education levels, the term 'professional' is used in place of 'vocational'.

Work-based learning. Educational activities which take place in a work environment, usually in the context of vocational education programmes. The aim is to achieve specific learning objectives through practical instruction and participation in work activities under the guidance of experienced workers or trainers.

The differences between national teacher training programmes make it difficult to compare countries and to monitor progress towards national and international goals. The International Standard Classification of Teacher Training Programmes (ISCED-T) offers a solution through the definition of internationally agreed categories for the production of cross-nationally comparable statistics on teacher training.

The UNESCO Institute for Statistics (UIS) is the custodian of ISCED, responsible for its development, maintenance, updating and revision. The Institute provides guidance on the effective and consistent use of ISCED for international data collection and analysis.