EDUCATION DATA PLAN:
GUIDE TO REPORTING
INTERNATIONAL STATISTICS
UNESCO

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The UIS is based in Montreal, Canada.
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Introduction

Since the late 1990s, the UNESCO has supported a wide range of technical assistance activities focused on completing education questionnaires that are used to report education data globally. Starting with the World Education Indicators (WEI) project, the UNESCO Institute for Statistics (UIS), in collaboration with the Organisation for Economic Co-operation and Development (OECD), provided technical support with the WEI questionnaires in over a dozen countries. Subsequently, the UIS and the UNESCO Bureau for Education in Latin America and the Caribbean supported technical assistance with the UIS questionnaires in over 20 countries in the region, largely under the auspices of the Regional Education Indicators Project of the Organization of the American States (better known by its Spanish acronym, PRIE).

The technical assistance carried out to date has involved extensive preparation and, in the case of the PRIE project in Latin America and the Caribbean, a training programme on international education questionnaires given to consultants in order to support their work with countries. However, these previous efforts did not include the development of a training manual that could be used more generally by consultants for this type of assistance. Now, as the UIS plans to move forward with larger-scale assistance efforts in other regions of the world, most notably in Asia and Africa, a training manual takes on greater importance.

First and foremost, this training manual is designed as a resource for consultants who work with countries, helping them to complete UIS questionnaires. The manual presents step-by-step activities with key questions to guide preparation for the technical assistance, on-site assistance and follow-up after completion of the mission. It also contains instructions for completing different questionnaires in a user-friendly format. Second, in addition to serving as a tool for consultants, the manual is designed to serve as a reference for the UIS, Field Offices¹ and other field staff.

The manual is organized into four main sections that correspond to each of the key technical assistance activities. These include: 1) preparation for the technical assistance mission (site visit); 2) organization of the site visit and conduct of the mission activities; 3) preparation of the data plan that codifies the procedures countries will use to complete the UIS questionnaires; and 4) post-site visit communication and process.

A number of important points should be clarified. First, the technical assistance mission has the greatest success potential if countries are already fully engaged in the process at its outset and can provide key documents and resources to the consultant in advance of the meeting. If this occurs, the consultant can review the material thoroughly and prepare a draft data plan for discussion during the mission; if not, the consultant must develop the plan during and after the mission, making the process less efficient.

Second, the process of conducting the work will be similar, regardless of whether it takes place in advance or during the site visit. The manual will fully describe these processes in the first section (preparation for the mission) and will reference them in the second section (conduct of the mission), where they need to be carried out on site.

¹ The regional structure of UNESCO includes Cluster and National Offices, Regional Bureau and Liaison Offices. All of them are considered UNESCO Field Offices.
Finally, the technical assistance conducted to date has focused almost exclusively on procedures to complete the international education questionnaires. The country missions have neither been used as an opportunity to “sensitize” policymakers and technical staff about the use of the data by international organizations to meet different policy concerns and about the potential use of the data and indicators for national policy and planning, nor as an opportunity to analyze the actual operations of the national information systems that produces the internationally reported data. Based on a recommendation by an advisory group convened by the UIS and the Regional Bureau for Education in Latin America and the Caribbean, the section of the manual that discusses the conduct of the site visit also mentions the possibility of an optional visit for capacity development opportunities.
1. Preparation for technical assistance missions

Prior to organizing and preparing for the technical assistance mission, the UIS and the UNESCO Field Office\(^2\) will carry out several steps that include:

a) The UIS Director and the Director of the Field Office will send out a letter to the Minister of Education regarding the availability of technical assistance to support the country’s participation in the UIS education data collection. This letter will stress the importance of high-quality data and their impact on the country’s international commitments, as well as the utility of the data for national policy and planning.

b) Once the Minister of Education has expressed interest in the technical assistance, programme leaders at the UIS and the Field Office will request the minister to designate a senior member of staff to serve as the national coordinator and assist in the organization of the mission. This issue should be managed with caution in countries for which there are already national coordinators or point-persons related to statistical activities (e.g. WEI national coordinators).

c) The UIS Regional Advisor (or staff member charged with the responsibility for the mission) will send a written communication to the national coordinator requesting that: firm dates are established for the technical assistance mission and all relevant materials be sent to the consultant who will conduct the technical assistance by a specified date in advance of the mission\(^3\).

\(^2\) This type of mission should be a coordinated effort carried out by the UIS and the appropriate UNESCO Field Office (or Offices, if more than one share responsibilities on specific countries), but the most appropriate mechanisms for coordination among UNESCO offices is not discussed here. However, it is emphasized that lead players should be the UIS Regional Advisor based in the relevant Field Office and the regional point-person within the Education Indicators and Data Analysis (EIDA) Section at the UIS.

\(^3\) It should be noted that a slightly different approach was used to obtain an expression of interest from countries in the Latin America and Caribbean region. The Field Office used regular workshops and/or regional meetings to determine interest in technical assistance to develop data plans. Representatives then returned to their countries and submitted a formal letter expressing interest in technical assistance. (Ideally, this letter should be signed by a high-level authority, e.g. minister or Secretary of Education.)

Another point to note is that there is no single procedure that can guarantee success in obtaining a country’s commitment to the effort. Probably the most important part of the process at this stage is to have a clear expression of interest by top-level authorities in order to generate the conditions for maximum engagement of technical staff later on in the process. Without national commitment, the effort would not work, since some communication links among several national counterparts are needed. Finally, it is up to people with more experience with target countries to set up the best procedures according to their particular circumstances.
The materials requested in advance of the technical assistance mission will be used by the consultant to accomplish three main purposes:

a) develop a solid understanding of the country’s education system in terms of the International Standard Classification of Education 1997 (ISCED 97);

b) develop a solid understanding of the country’s education finance system and related finance and expenditure data; and

c) establish the basis for a data plan that provides detailed instructions for current and future staff in the Ministry of Education to complete the three main UIS education questionnaires. These materials are discussed more fully in the sections that follow.

1.1 Materials to review

i) Understanding the national education system and its mapping to ISCED

In order to develop a solid understanding of the education system and how it is structured according to ISCED, the most important document to review is the official ISCED mapping for the country produced by the UIS and published at www.uis.unesco.org/publications/iscedmaps. If that document is not available, the consultant must contact the UIS to obtain the most up-to-date documentation available in that regard.

In addition, the consultant should review the following materials in order to have the most comprehensive knowledge possible about the country to be visited:

- Legislation or other documents, such as school codes, that specify the institutional structure of public education and the type of private education that can be provided in the country.

- Descriptions of the education system, including graphic presentations, that provides information about the size of each education level.

- Policies that apply to education, including:
  - Required age of entry into primary education.
  - Ages/grades/levels of compulsory education.
  - Grade structures at each education level.
  - Promotion/retention policies by grade and level of education.
  - Differentiation of general and technical/vocational education.
  - Examinations, including entry and exit examinations, at each education level.
  - Graduation or completion requirements at each education level.
  - The school calendar, noting differences in the school calendar in different parts of the country.
  - Financing of education at each education level from pre-primary through tertiary.

- Names of organizations or associations that represent different types of institutions (e.g. private primary and secondary schools, public and private institutions of tertiary education, etc.), since meetings with representatives of these organizations may be needed during the site visit.
Programmes offered in secondary and tertiary institutions, with information about:

- Years of schooling required prior to entry into the programme of study.
- Qualifications required for entrance into the programmes of study (e.g. completion of particular grades, passing or attaining specified grades on selected examinations, grade point averages at the previous education level).
- Duration of the programme of study (e.g. 6 months, 1 year, 2 years, etc.).
- Orientation of the programme of study (general, pre-vocational or technical/vocational).
- Attendance modalities (e.g. full-time, part-time or both; day or evening or both; face-to-face or distant registration, etc.).
- Qualification/certification awarded upon successful completion of the programme or course of study.
- Higher-level programmes of study into which successful completers of the programme can enter.

- Recent changes to the education system that might not be reflected in the existing ISCED mapping.
- Data Quality Assessment Frameworks (DQAFs) in countries where they have been prepared.
- UIS Questionnaire on National Education Programmes, which serves as the basis for the ISCED mapping.
- National questionnaires and forms used to collect education data from pre-primary, primary, secondary and tertiary institutions.
- National statistical and indicator reports prepared using education data collected from public and private institutions.
- Computer printouts of the UIS education questionnaires' tables.
- Descriptions of how data are stored and reports generated, including data on schools, enrolment, teachers, etc.

For countries that have up-to-date ISCED mappings, particular attention should be paid to institutions that offer programmes that spread across ISCED levels.

**Education structure and data collection issues**

In addition to improving the current ISCED mapping of a country or contributing to the creation of one, the review of the above-mentioned material also helps to understand how education data are collected by institutions, and thus, this information can be used to develop a strategy to complete UIS questionnaires. Particular attention should be paid to institutions that offer programmes that spread across ISCED levels, since these cases can be the most challenging in terms of international data reporting.

While ISCED classifies programmes (not institutions) on the basis of their content or purpose, national data collections are, generally, organized by institutions (not programmes). Thus, different programmes may be treated nationally as a single block (like basic education that typically combines content that belongs to primary and lower secondary education as defined by ISCED). The consultant's goal is to assist the country in linking both schemes and documenting this in the data plan by ensuring that: a) all programmes in an institution are recorded in the
ISCED mapping (especially for technical/vocational programmes); and b) data reported in the UIS questionnaires are broken down by ISCED level (even if recoded by institutions in the country).

Although it is beyond the scope of this document to present a comprehensive list of potential issues when mapping national education systems to ISCED, Table 1 serves as a useful guide. The main message is that an ISCED mapping is about classifying educational programmes, independent of national naming conventions or in what type of institutions they are offered.

Table 1. Possible issues when mapping to ISCED

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<th>Key issues</th>
<th>Implications for data collection and indicators</th>
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<td>Separation of pre-primary education (ISCED 0) from other early childhood development programmes</td>
<td>ISCED distinguishes pre-primary education (ISCED 0) from other early childhood development programmes based on three criteria: i) it is designed mainly for children aged 3 years and above; ii) it takes place in a formal setting such as a school; and iii) one of its purposes is to offer a structured and purposeful set of learning activities (accounting for at least the equivalent of 2 hours per day and 100 days per year). Indicators of participation at this education level include pre-primary education and exclude non-educational early childhood programmes such as daycare. Furthermore, programmes that satisfy criterion iii), but not either of the other criteria, should be classified as “other early childhood development programmes” and should be reported in the appropriate place in Table 3 of Questionnaire A, but not counted as ISCED 0.</td>
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<td>Placement of kindergarten classes in primary schools in ISCED 0 or 1</td>
<td>In many countries primary schools house kindergarten classes, so it is very important to determine whether that kind of programme should be considered as ISCED 0 or ISCED 1. If the curriculum content of kindergarten is comparable to the Grade 1 curriculum of primary education in other countries (i.e. the beginning of systematic studies of primary education, including reading, writing and mathematics), it should be placed in ISCED 1 in Questionnaire A; if it is not comparable, it should be placed in ISCED 0 in the questionnaire.</td>
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<td>Placement of Grades 7 and 8 in primary schools</td>
<td>Primary education ranges in duration from four to eight years in national education systems. In principle, ISCED 1 does not define a specific number of years of duration as a main criterion. Yet, it is not internationally acceptable to have an ISCED 1 programme of more than seven years’ duration. The main criteria to determine the boundaries between ISCED 1 and 2 are: a more subject-oriented pattern; more specialized teachers; and several teachers conducting classes in their fields of specialization. This also applies to countries with basic education (longer than six years) with no clear internal distinction for classification between ISCED 1 and 2.</td>
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<td>Placement of Grades 5 and 6 in lower secondary schools</td>
<td>In some countries, primary education terminates at the end of Grade 4 and secondary or middle education begins in Grade 5. Similar to the previous point, that does not mean that Grades 5 and 6 should be considered the first two grades at ISCED 2 level. The consultant should be aware of this issue and place these grades at the most appropriate ISCED level based on UIS guidance.</td>
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4 When facing issues of this kind, the consultant should use the ISCED classification in order to determine the boundaries between different ISCED levels. If doubts persist, the consultant should communicate with the UIS to determine the appropriate programme classification.
Table 1 continued…

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<th>Key issues</th>
<th>Implications for data collection and indicators</th>
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<td>Placement of technical/vocational programmes offered in secondary and higher education institutions</td>
<td>In some countries, secondary schools offer either advanced technical/vocational programmes that do not qualify as tertiary education or second programmes of study for students who have completed one programme of technical/vocational education. In other countries, these programmes are offered in what the country classifies as higher education institutions. In reviewing national education structures, the consultant needs to recognize this situation and place programmes in ISCED 3 or 4, regardless of the institution where they are offered.</td>
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<td>Placement of the first two years of general tertiary education offered in two-year institutions, such as community colleges</td>
<td>In many countries, the first two years of general higher education studies that lead to an ISCED 5A certification may be offered in two-year institutions (e.g. community colleges in the Caribbean); students then complete their final years of ISCED 5A coursework in four- or five-year higher education institutions. Although completion of these programmes of study does not result in the attainment of a first degree based on ISCED, enrolment in these programmes should be considered as ISCED 5A, rather than ISCED 5B.</td>
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<td>Placement of advanced Master’s degrees with a dissertation component</td>
<td>ISCED 6 is specifically defined as a doctoral programme with a dissertation or thesis requirement. However, some countries offer advanced Master’s degrees that resemble the doctorate in most respects, including the dissertation requirement. Nevertheless, these programmes should be placed in ISCED 5A, research degree in the mapping, rather than in ISCED 6. To maintain comparability with programmes in other countries, data for these programmes are recorded together with the second degree programmes.</td>
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In addition to issues about the placement of education programmes at appropriate ISCED levels, the consultant must also pay attention to other issues which are relevant for international data reporting. These include:

a) **Classification of public and private institutions.** UIS norms for international data reporting distinguish three types of institutions: public, government-dependent private and independent private schools. Public schools are directed and managed by public authorities (e.g. ministries of education, regional and/or local governments), while private schools are governed and operated by private agents (e.g. businesses, churches, non-government organizations, charities, etc.). The main distinction between government-dependent and independent private schools is in relation to the proportion of their general funding that they receive from government sources. If the proportion exceeds 50%, they are classified as government-dependent; if it falls below 50%, they are classified as independent. Some countries classify private schools that receive more than 50% of their funding from public sources as “public,” since they are generally treated the same way as public schools; while others follow the international norm and treat them as “government-dependent private schools”. Although the latter classification may strike countries as inconsistent with their national education systems, the consultant should classify these schools as government-dependent private to be consistent with the international classification, which is based primarily on the criterion of governance. For the purpose of data reporting in Questionnaire A, these institutions must be considered private.\(^5\) **Annex A** presents examples of programmes and institutions by ISCED level.

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\(^5\) It should be noted that Questionnaire A requires data to be disaggregated by public and private institutions only, while Questionnaires B and C contain the three categories described above.
b) **Treatment of adult education.** The UIS specifically distinguishes regular primary and secondary education programmes for students of traditional school age from similar programmes for adults who could not access the regular education programme or who have not successfully completed primary or secondary education. Although it is often relatively easy to distinguish “regular” education from “adult” education since adult programmes are typically offered at night to accommodate employment and other responsibilities, it is not always possible to do this, especially when secondary students of regular school age complete their studies in evening programmes. The consultant, therefore, must fully understand the organization and content of these programmes to distinguish between regular and adult education. When completing UIS questionnaires A, B and C, enrolment in regular programmes should be included in the tables, while enrolment in adult education programmes should be excluded. However, these programmes should be recorded in the ISCED questionnaire, Section II (Adult education programmes).

c) **Distinguishing technical/vocational education from job training programmes.** ISCED includes technical/vocational education as part of the classification of education programmes, beginning at ISCED 2 and continuing through ISCED 5. However, it is very often difficult to distinguish technical/vocational education programmes from job training programmes, particularly at ISCED 3 and 4, when many of these programmes are offered either by not-for-profit, non-government organizations or private enterprises. Therefore, the consultant must develop a solid understanding of the full range of programmes of this type in order to determine when they should be classified as “education”, included in the UIS submission and recorded in the ISCED questionnaire, and when they should be classified as “job training” and excluded from the submission.

ii) **Understanding the finance system and finance/expenditure data**

In order to develop a solid understanding of the country’s education finance system and develop a preliminary approach to completing the UIS Education Questionnaire B on finance and expenditure, the consultant should review the following materials:

- Budgets and financial reports prepared by the Ministry of Finance or the Ministry of Education with detailed data on education revenue and expenditure;
- Financial reports of public and private primary and secondary schools and institutions of tertiary education;
- Descriptions of the country’s finance arrangements at each education level;
- Instruments used to collect data on private investments (e.g. household surveys, surveys of firms expenditure, etc.); and
- Detailed description of how data on teacher payrolls are recorded, including contributions to retirement funds and social insurance systems.
The review should focus on the following issues at each education level:

- What does public expenditure provide (e.g. student instruction in the form of teachers' salaries, school management, ancillary services such as transportation, school meals and residential facilities)?
- Are there systems that provide for funding for retirement and other fringe benefits, such as health and disability insurance for teachers and other education personnel? How are these systems financed?
- What is required private expenditure in public schools (e.g. tuition or school fees, books and materials, school uniforms, etc.)? What is private education expenditure in the general market?
- Do different levels of government provide funding for education? How does the intergovernmental finance system operate?
- Does the system include government-dependent private schools? If so, how are these schools financed from public sources and private sources?
- Does the system include independent private schools? If so, do governments provide any financing for these schools? What form does this financing take?

1.2 Foundations for a data plan

i) Mapping the national education system to ISCED

In order to complete the UIS annual education questionnaires properly, it is essential to have an accurate ISCED mapping for a country. The UIS started systematically collecting information for the production of those mappings through the Questionnaire on National Educational Programmes (i.e. ISCED questionnaire) in 2007. As a result, many updated, country-approved mappings are now available on the UIS website: www.uis.unesco.org/publications/iscedmaps.

When organizing a country visit, one of the first actions is to check if an official ISCED mapping is available. If no mapping is available, the consultant should contact the UIS to enquire about its status. Having this information in advance of the site visit will contribute to a proper understanding of the structure of the national education system and will shorten these discussions significantly during the visit.

If an ISCED mapping is not available and an ISCED questionnaire has never been submitted, the consultant should request the country to complete the ISCED questionnaire before the mission takes place. The preliminary version of the mapping should then be prepared in collaboration with the UIS.

ii) UIS Education Questionnaires A and C

With the national ISCED mapping in hand, the consultant should review the surveys and other instruments used by the Ministry of Education to collect basic education data from all institutions offering pre-primary to tertiary education programmes. The main focus of this review is to assess whether the instruments contain sufficient detail to permit the country to complete all of the cells in Questionnaires A and C. The former collects data on enrolment, teachers and
institutions from ISCED 0 to 4, as well as on graduates from ISCED 1 and 2; the latter collects data on enrolment, teachers, graduates and foreign students at ISCED 5 and 6.

In relation to Questionnaire A, the review of surveys and data collection instruments should focus on the following areas:

a) Pre-primary education and other early childhood programmes
   - Distinction between pre-primary and other early childhood development programmes and programmes with little or no education content such as daycare.
   - Enrolments by sex and age in public and private pre-primary schools and institutions that provide other early childhood development programmes.
   - Teaching staff in public and private pre-primary schools.
   - Inclusion of kindergarten and other pre-primary enrolment in primary schools.
   - Inclusion of kindergarten and other pre-primary education teachers in primary schools.

The consultant should be cognizant of the following issues when reviewing the material on pre-primary education:

- There might be an absence of data on enrolment and teachers in pre-primary education and other early childhood development programmes. This may be a product of several factors.
  - No government ministry is charged with collecting data on this sector, in part because some or most pre-primary schools and early childhood development programmes are operated by private organizations. In this case, an issue for discussion during the site visit is whether the Ministry of Education or another ministry could initiate a collection of pre-primary education data.
  - A ministry other than the Ministry of Education is responsible for collecting data on this education sector but data are not shared with the Ministry of Education. In this case, an issue for discussion during the site visit is whether it would be possible for these data to be shared between ministries. It would also be advisable to try to arrange a visit to the organization responsible for that data collection.
  - The Ministry of Education collects data on this sector but coverage is not complete, particularly for private schools and child development centers. In this case, an issue for discussion during the site visit is whether the Ministry of Education can take steps to improve the coverage and quality of its pre-primary data collection.

- Kindergarten and other pre-primary grades might be provided in primary schools and are therefore not separated out as pre-primary education. In this case, the issue is whether the national primary schools questionnaire can be used to separate out data on enrolment and teachers in pre-primary grades.
b) Primary and secondary education

- There might be an absence of data on enrolment by grade, sex and age, which precludes the development of several indicators (e.g. net enrolment rates). Data collections may include only total enrolment by grade and sex. In this case, issues for discussion are whether enrolment with breakdowns by age can be estimated from household surveys (if they are available and methodological issues – such as reference periods for age computation, dates of data collection, etc. – can be properly dealt with) or whether the Ministry of Education could initiate an expanded data collection that includes this additional detail.

- There might be an absence of data on the number of new entrants into Grade 1 with pre-primary education or some other form of early childhood education, which precludes the development indicators such as “access to the initial grade of primary education”. Issues for discussion during the site visit are whether the Ministry of Education can add a question of this type to its school registration form, as well as a question on its primary school surveys. Alternatively, the consultant should determine whether there is a sound approach to estimate data for this indicator based on enrolment in pre-primary education and early childhood development programmes from the previous year.

- Data on enrolment in primary schools might only be available as an aggregate figure, not by individual grade. This lack of separate data by grade can have a negative impact, not only regarding the computation of some indicators, but also in relation to some basic data, if they do include pre-primary or secondary grades. If the latter is true, the country’s figures would overstate enrolment in primary education (ISCED 1). Therefore, issues for discussion are whether the Ministry of Education could amplify its data collection to include enrolment by grade.

- Data on enrolment from ISCED 2 through ISCED 4 might not be available separately for general and technical/vocational programmes in public and private schools. In this case, it is not possible to produce indicators on the proportion of students enrolled in each of these types of courses. Issues for discussion during the site visit include the feasibility of expanding the country’s school questionnaires to collect this breakdown of information.

- Post-secondary or tertiary institutions might offer general courses at ISCED 3 as a second chance to students who have not successfully completed their secondary education. In this case, some enrolment that should be reported in ISCED 3 may not be available from the Ministry of Education’s data collection and must be incorporated from records maintained by post-secondary and/or tertiary institutions. It might be the case that Ministry of Education staff members do not know about these programmes and, therefore, do not take steps to collect the data from these institutions. Issues for discussion during the site visit include procedures for Ministry of Education staff to get access to this information.

- Post-secondary or tertiary institutions might offer advanced general and technical/vocational courses at ISCED 4 that should be reported in enrolment statistics below the tertiary level. The issues discussed in the point immediately above apply here as well.
Data on teachers might not be separated by grade but are only available for primary schools or secondary schools. This lack of separate data does not constitute a problem if primary and secondary education in the national system each corresponds with ISCED. Counts of student enrolment at these levels provided in Tables 2.1, 2.2 and 2.3 correspond with counts of teachers at these levels, permitting the development of indicators of pupil-teacher ratios and the percentage of teachers who are trained to teach at that level. However, if what is nationally defined as primary education includes ISCED 0 education or ISCED 2 grades, it is often difficult to separate teachers by ISCED level, since teachers in the lower grades of primary education may also teach ISCED 0 grades and teachers in the upper grades may also teach lower secondary grades. In these cases, discussion during the site visit should focus on the ways to establish correspondence between students and teachers at each of the three ISCED levels.

The education information system does not count completers of primary education (ISCED 1) and lower secondary education (ISCED 2) as “graduates” and therefore does not collect and report statistics on graduates. In these countries, it is important to develop an agreed-upon definition of a graduate of these levels (e.g. a successful completer of the final grade at that level) and to review current procedures used by the Ministry of Education for collecting and reporting data on completers. If such procedures are absent from the ministry’s collection, the discussion should ascertain whether these primary and secondary school data collections could be expanded.

c) All education levels

Countries might be unable to define part-time employment of teaching staff and to convert part-time teachers into full-time-equivalents. In this case, discussions during the site visit should focus on establishing agreed procedures for defining full-time and part-time teachers and establishing full-time-equivalents.

Countries might include government-dependent private schools as public schools and might be unwilling or unable to separate these enrolments from enrolment in public schools. In this case, discussions during the site visit should focus on whether countries can modify their data collections to permit reporting of these enrolments as part of private schools.
In relation to Questionnaire C, the review of surveys and data collection instruments should focus on the following areas related to tertiary education:

- **Post-secondary or tertiary institutions might offer advanced general and technical/vocational courses at ISCED 4 that should be reported in enrolment statistics below the tertiary level.** This issue was discussed above.

- **Data on enrolment in tertiary institutions do not distinguish between enrolment in ISCED 5B, 5A and 6 programmes.** This could be due to two factors: i) tertiary institutions do not keep records that identify programmes of study that correspond with ISCED 5B and 5A; or ii) the Ministry of Education or another ministry responsible for tertiary education does not collect data from institutions, either at all or based on the ISCED classification. The latter is more likely, since tertiary institutions need to manage their programmes and enrolment effectively, so they usually have all the necessary information to distinguish ISCED 5A and 5B programmes. In this case, the discussion should focus on whether the Ministry of Education or another ministry responsible for tertiary education could initiate a collection on enrolment that differentiates between these two types of programmes.

- **Countries might lack data on enrolment in tertiary institutions based on fields of study that correspond with or can be harmonized with the ISCED categories.** In this case, discussion during the site visit should focus on an explanation of the ISCED categories and the possibility of a tertiary data collection that includes enrolment that can be harmonized with the ISCED fields of study.

- **Countries might lack data on graduates of tertiary programmes by fields of study that correspond with or can be harmonized with the ISCED categories.** In this case, discussion should focus on the possibility of a data collection that includes graduates that can be harmonized with the ISCED fields of study.

- **There might be an absence of data on enrolment by programme, sex and age, which precludes the development of several indicators (e.g. school life expectancies).** Data collections may include only total enrolment by sex. In this case, issues for discussion are whether enrolment with breakdowns by age can be estimated using data from household surveys (if they are available and appropriate methodological issues can be addressed) or whether the Ministry of Education or another ministry responsible for tertiary education could initiate a data collection that includes this additional detail.

- **Countries might be unable to distinguish full-time and part-time students and teachers and establish full-time-equivalents.** During the site visit, there should be discussions about ways to establish part-time participation and teacher counts that can be included in the UIS submission.

- **Data on teachers might not be separated by ISCED 5A, 5B and 6, but are only available for the entire institution.** The absence of data on teachers by programme precludes the development of some indicators such as student-teacher ratios by programme of study. During the site visit, there should be discussion of methods of allocating teachers to ISCED 5A and 5B.
iii) UIS Education Questionnaire B

After reviewing the finance system, the consultant should analyze budget and expenditure reports to determine whether they: i) provide all of the aggregate data on expenditure needed to complete all components of Questionnaire B on finance and expenditure; and ii) contain the detailed data to differentiate expenditure from different sources required for Table 1 and expenditure for different purposes required for Table 2 in Questionnaire B. The review of the budget and finance documents should focus on a range of issues, but the following are most critical for the production of the basic finance indicators for each education level.

- Is expenditure for education in budgets and financial documents reported for all education levels and programmes combined or separately for different education level?

- If expenditure is reported by education level (e.g. primary), do these figures also include some expenditure for other education levels (e.g. pre-primary or secondary education)? Do other financial records (e.g. payroll for teachers’ and other staff salaries) exist that could separate this expenditure into ISCED levels that correspond with student enrolment at each level?

- Do budgets and other financial documents distinguish direct expenditure for public schools from transfers to government-dependent or independent private schools and student financial aid?

- Do budgets and other financial records include public expenditure in all regions and government levels or are some geographic units or government levels missing from these records? Can expenditure data from missing units be obtained or estimated using data from other sources?

- Do budgets and other financial records contain detailed data on capital expenditure, as well as on current expenditure such as teachers’ salaries, other staff salaries, books and materials and other operating costs?

- Is expenditure for capital projects included in the Ministry of Education’s financial records or in those of other ministries? Can capital expenditure for education projects be extracted from another ministry’s financial records and included in the data submission?

- Are contributions to retirement systems and social insurance programmes for education staff included in the Ministry of Education’s financial records or those of another ministry? Can contributions for education staff be extracted from another ministry’s financial records and included in the data submission? What methods can be used for this purpose?

- Does the Ministry of Education or another ministry (e.g. Ministry of Finance) collect and aggregate data on revenue and expenditure by private schools and institutions of tertiary education? If not, can the ministry initiate such a collection from these schools and institutions?

- Does any ministry administer surveys of household expenditure that can be used to estimate private expenditure for education by education level? If not, what actions would be needed for the country to initiate such a collection?

- What is the nature of international and bilateral financial aid for education in the country? How is this financing reported in national budgets and expenditure documents?
iv) Basic metadata

The first table of Questionnaires A, B and C collects some basic metadata that are necessary for the production of indicators and improve the understanding of the information reported. The consultant should, therefore, discuss the completion of these tables with country representatives, record the results of these discussions in the data plan and request other metadata that are not collected by these tables. The metadata that should be incorporated into the data plan are:

- Reference period for enrolment, teachers, institutions and graduates, registering usual months of the beginning and end of the academic year. It is recognized that countries might have difficulties, particularly with the graduate data, which is why Table 1 differentiates between those data and the rest (i.e. enrolment, teachers and institutions).

- Definition of compulsory education, if it exists.

- Sources of data: are figures on schools, enrolment and teachers based on a direct extraction from administrative records or are they produced using a statistical event (e.g. school census) or a combination of both?

- Completeness of the data: if the mechanism to collect data is a statistical event, what is the response rate? A discussion of coverage is presented further in the manual, together with a sample exhibit to record the results of that analysis.

- If the mechanism to collect data is a statistical event, how is non-response treated? Does non-response affect a particular level of education? Private schools? Are estimations made for non-response? Are total numbers or just reported numbers submitted? How is it done?

- What are the periods of reference used to collect data? Is enrolment reported at the beginning of the school year? At the end? At a mid-point?

- How might these different periods of collection affect data? Is there any particular time of year with instability in enrolment data (e.g. enrolment in more than one school at the beginning of the school year, transfers from one sector to another)?

- How are ages computed? What are the rules regarding entry ages? What is the reference period enacted in the rules? How are these harmonized with population data at the national level?

- With regard to Questionnaire B, what is the national currency? What is the monetary unit used to report data (e.g. units, hundreds, thousands, etc.)? What is the structure of the financial year (starting and ending months)? How accessible and timely are actual expenditure data?

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6 There are some countries that have different types of school year within the same education system due to regional differences. In theory, such differences within the country should be noted.
2. Organization and conduct of the site visit

This section is structured based on the assumption that the material discussed above was sent to the consultant well in advance of the site visit and reviewed thoroughly by the consultant before the technical assistance mission. This, of course, represents the optimal situation and provides for the most efficient and effective use of time on site. However, there will be situations where material is provided shortly before the mission or when the consultant arrives for the official start of the scheduled meetings. In these cases, the consultant will need to use the scheduled meetings to ask questions about the key issues discussed in the previous section. As a result, it may only be possible to develop a draft data plan after the mission, when all of the information gathered during the site visit can be processed. Nonetheless, the meeting time will still be used to advise staff in the Ministry of Education and other relevant organizations, if applicable, about the procedures they should follow in completing UIS questionnaires, with detailed documentation in the form of a data plan provided following the site visit.

A second point should be noted here. As discussed in the Introduction, past technical assistance missions have focused exclusively on procedures to complete UIS questionnaires and have not been used to “sensitize” senior education officials and technical staff to use national and international data to met different policy concerns.

Considering that the visit is usually organized with a duration of three days, this opportunity could be pursued by extending the site visit for an additional half-day or day and including a capacity development component to the mission.

With this in mind, the mission could be structured as a 3½- or 4-day mission, with the first half-day organized as a workshop that presents analyses of international data and suggested ways that these could be used nationally for planning and programme development. The specific content of each workshop would have to be developed and negotiated in advance with senior education officials to ensure that it addresses the country’s specific needs and priorities for education information and analysis. The remaining time on site would then be devoted to the standard sessions.

It is expected that this kind of approach would generate greater engagement of national officials involved in international data reporting, although designing a detailed plan for this work is outside the scope of this manual.7

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7 During the meeting in Santiago, several participants indicated that the data plan missions were sometimes too technical and, hence, of interest only to statisticians in the Ministry of Education, mainly because the missions focused exclusively on completion of UIS questionnaires. It was suggested that additional time be devoted to data analysis and reporting for national purposes, thus giving the mission much higher priority for senior officials.
The technical assistance mission is generally organized as a three-day site visit, with the following activities scheduled on each of the three days:

- **Day 1:** Official meeting with senior education officials; review of ISCED mapping or the ISCED questionnaire; and discussion on how to complete UIS Education Questionnaire A. As noted in Section 1.2i, the consultant should have the official ISCED mapping prior to arrival in the country or at least a preliminary version produced in collaboration with the UIS – this reduces the complexity of the discussions required on site and allows for more time to be dedicated to other areas.

- **Day 2:** Discussion on financial arrangements, budgets and financial reports; as well as procedures on how to complete UIS Education Questionnaire B. This workday should include officials from the Ministry of Finance, as well as those institutions which are responsible for financing tertiary education and administration of household surveys.

- **Day 3:** Discussion on organization and structure of tertiary education and its mapping to ISCED; programmes offered by post-secondary and tertiary institutions; procedures on how to complete UIS Education Questionnaire C; and debriefing of senior education officials. The discussion on Questionnaire C should include representatives of all organizations involved in the administration of tertiary education programmes.

In cases where all relevant material is not provided to the consultant in advance of the meeting or representatives from various organizations are unable to attend the scheduled meetings during the site visit, the mission can be extended for an additional half-day to obtain the required information. Activities for each day are outlined in further detail below.

**DAY 1**

**2.1 Meeting with senior officials**

The first day of the site visit is designed to accomplish three main purposes. The first part involves a protocol meeting with a representative of the Minister of Education, the Permanent Secretary and/or the director of the planning department, which should require between a half-hour and an hour (depending on the amount of time the senior official has available). The overall purpose of the meeting is to reaffirm the objectives of the technical assistance (which were communicated previously in the correspondence between UNESCO and the Minister of Education) and to explain how the work will be conducted over the next three days. It is also an opportunity to learn about the specific interests or concerns of the senior ministry officials in relation to the UIS data collection and to ensure that these will be addressed during the site visit or forwarded to the corresponding UIS unit for action.

The consultant’s introduction to the work should provide a historical context for the current technical assistance work, a brief discussion on how their data submissions related to key international policy issues, and an explanation of the main indicators produced by the UIS and their inclusion in major international publications. It is important to stress the importance of establishing relationships with other ministries or agencies responsible for components of education in the country and to encourage having these representatives present during the site visit.
2.2 Review of national education system and ISCED mapping

The next two sessions, which involve a review of the national education system and its mapping to ISCED, as well as a discussion on completing Questionnaire A, should involve the same group of people since they know the institutions and programmes that comprise the education system and the surveys that are used for data collection. This group should comprise:

a) Ministry of Education staff responsible for the collection of enrolment statistics from public and private schools;

b) Ministry of Education staff responsible for the collection of statistics on teachers and/or staff responsible for the payroll of teachers and other education staff;

c) Ministry of Education staff responsible for the examination system and for statistics on promotions, repeaters, graduates and dropouts;

d) representatives of associations of private schools;

e) representatives of other ministries responsible for pre-primary or technical/vocational education;

f) representatives of non-government organizations that provide accredited technical/vocational education from ISCED 2 to ISCED 4; and

g) representatives of post-secondary and tertiary institutions that offer general and technical/vocational programmes below the tertiary level.\(^8\)

It is highly desirable that the representatives for d) through g) are responsible for the statistics for that sector.

In organizing the discussion of the national education system and its mapping to ISCED, it is anticipated that the consultant will already be fairly knowledgeable about the education institutions and programmes, based on the review of materials obtained from the UIS and sent by the Ministry of Education prior to the site visit. In this case, the discussion should focus on the validation of the consultant’s understanding of the system and its mapping to ISCED. If, however, the consultant has not received the requested materials in advance of the meeting, then the discussion during the site visit should focus on the questions and issues set out in Section 1. The main outcome would be completing the information in Annex A. This would then be used to complete Section I of the ISCED questionnaire at a later stage and sent to the country for full completion.

Finally, it is very important to ensure that each education programme is mapped to ISCED. The consultant should avoid omissions from the ISCED questionnaire, paying particular attention to programmes that are not offered by the Ministry of Education or programmes to which the Ministry of Education does not have data access. Typically, these programmes may be operated by ministries of social welfare, health, defence or vocational/technical education and training, as well as private institutions that offer labor market-oriented education programmes. Early-childhood programmes may also be offered by Ministries of Population, Social Affairs or non-governmental organizations.

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\(^8\) Note that the discussion around the part of the ISCED mapping focused on tertiary programmes will likely take place during the third day that is oriented on Questionnaire C.
2.3 Procedures to complete UIS Education Questionnaire A

Following clarification of the structure of the national education system, the consultant should turn the discussion to procedures needed to complete Questionnaire A – Pre-primary, primary, secondary and post-secondary non-tertiary education. This step entails five components:

- review of Questionnaire A, including definition of levels of education and key columns and cells in the questionnaire;
- explanation of how data in Questionnaire A are used to produce key education indicators;
- review of the questionnaires used by the country to collect data on pre-primary, primary, secondary and post-secondary non-tertiary education;
- coverage of different types of schools and institutions; and
- instructions for completing the questionnaire. Each of these components is discussed below.

i) Review of Questionnaire A

Although many people in the Ministry of Education who fill in and submit the UIS questionnaires have a working knowledge of their content, they might lack understanding of some elements. In addition, representatives of other organizations may not have any knowledge of the UIS questionnaires at all. Therefore, a review is the first order of business and should focus on explanations or clarifications of the following:

- Education levels from ISCED 0 to 4, including typical grade structure;
- Programme orientation: general and technical/vocational education;
- Student enrolment: full-time and part-time;
- Teacher counts: full-time, part-time and full-time equivalent;
- Trained teachers;
- Institutions, including treatment of institutions that house schools at multiple levels. Differences among institutions, programmes and buildings, and how they are recorded in the national information system;
- Distinction between pre-primary education and other early childhood programmes;
- Definition of a new entrant into Grade 1 of primary education;
- Definition of “unspecified or residual grade” in primary education;
- Determination of graduates of primary and lower secondary education in systems where students do not “graduate” formally upon completion of these education levels; and
- Explanation of the symbols that should be used to fill in cells that do not contain actual data, including “a” – category not applicable, “m” – data missing or not available, “n” – quantity nil and “x” – data included in another category. It is important to stress the impact of missing data in some computations (preventing those computations at all) and why it is so important to avoid the category “m” – “missing” by using the category “n” – “quantity nil” when this is reasonable, or by undertaking additional efforts to produce or have access to the required data.
ii) Use of data for education indicators

Ministry of Education staff often view the provision of data to the UIS as a one-way street: they provide education data to the UIS but do not get information in return that they can use in national policy and planning. Often, they are not aware of the *Global Education Digest* and other reports that present the data and indicators on the status of the country’s education system, mainly the Education for All (EFA) *Global Monitoring Report*, the *World Development Indicators* (World Bank), the *Human Development Report* (UNDP) and the *State of the World’s Children* (UNICEF). The consultant should, therefore, highlight the importance of the data reported in Questionnaire A for the production of key indicators and indicate more specifically which data in which tables are required to produce particular indicators. Among those that should be highlighted are:

- Gross enrolment ratios, by ISCED level, sex and programme of study (Tables 2.1, 2.2 and 2.3);
- Net enrolment rates in pre-primary education (Table 3), primary education (Table 5) and secondary education (Tables 6 and 7);
- Information on coverage and timely coverage (Tables 5, 6 and 7);
- Flow indicators (survival rates) and repetition (percentage of repeaters) (Table 5);
- Proportion of students enrolled in public (or private) schools, by ISCED level (Tables 2.1, 2.2 and 2.3);
- Proportion of students enrolled in general (or technical/vocational) education at ISCED 2, 3 and 4, by sex (Tables 2.1, 2.2 and 2.3);
- Pupil-teacher ratios, by ISCED level (Tables 2.1, 2.2 and 2.3);
- Proportion of trained teachers, by ISCED level (Tables 2.1, 2.2 and 2.3); and
- Completion ratios and rates (Table 9).\(^9\)

iii) Review of existing national questionnaires

Once Questionnaire A and its use have been explained, the consultant should turn the discussion to the instruments and mechanisms used by the country to collect data on enrolment, teachers, repeaters and graduates in primary and secondary education, as well as enrolment and teachers in pre-primary education. Ideally, the consultant has received detailed information and descriptions of these questionnaires well in advance of the site visit and has been able to identify major gaps in the country’s data collection (e.g. enrolment in primary and secondary schools by grade, sex and age, or graduates of primary and/or lower secondary education) and ISCED-related issues (e.g. national primary schools offer not only ISCED 1 programmes but also what has to be considered ISCED 0 or 2 and the national survey on enrolment does not permit easy separation of enrolment based on the ISCED requirements). In this case, the discussion should be focused on ways that data can be estimated using other sources (e.g. household surveys) or other techniques (e.g. collecting data from samples of schools to produce estimates).

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\(^9\) The collection of graduates from ISCED 1 and 2 programmes is carried out in Table 9 of Questionnaire A. However, other measures of primary completion have been developed based on data by grade and age collected in Table 5.
If, however, the country’s surveys only become available at the time of the site visit, the discussion should first involve a review of the country’s surveys. This would then be followed by identification of gaps and problems and methods to address these issues.

iv) Coverage of types of schools and institutions

Although the Ministry of Education generally may obtain higher response rates from public rather than private institutions, even coverage of public institutions may not always be complete. One factor contributing to incomplete coverage of public institutions below the tertiary level may be geographic autonomy of different parts of the country (e.g. regional or local governments). Another may be the occasional inability or unwillingness of some schools to complete the national surveys completely and accurately. When countries report data to the UIS without any information about the extent of the coverage of different types of institutions, the figures the UIS reports internationally may not represent the country fairly and accurately. Following the discussion of the country’s data collection instruments, the consultant should, therefore, attempt to ascertain the proportion of public and private institutions at each education level that are included/excluded from the national data, along with notes on the implications of these exclusions on key statistics such as enrolment, teachers and graduates. This information should then be included in an exhibit in the country’s data plan that documents the extent of the problem. A sample of coverage is presented in Annex B.

v) Instructions for completing Questionnaire A

The core of the technical assistance work is providing specific directions for using data generated from the country’s school collections to complete each cell of Questionnaire A. (These data may be drawn from the survey itself, computer printouts that extract data from the surveys, or published tables that present these data.)

However, prior to beginning the discussion about the placement of data in Questionnaire A, the consultant should ensure that: all participants in the meeting have a hard copy of the questionnaire that contains all the tables; and in addition to taking notes, the consultant fills in the instructions for completing the tables on his/her own copy of the questionnaire. The first step is important because it enables the team receiving the technical assistance to actively engage in the process and helps them identify issues as they go along. The second step is important because it enables the consultant to produce a resource document for Ministry of Education staff to review and use after the site visit terminates. The table with complete instructions written on it directly is also easier for Ministry of Education staff to use as a simplified reference than a longer, more detailed data plan. However, there might be many directions that will not fit directly in the tables (specifically for Questionnaire B), so it should be clear that the official document with the national plan for international data reporting will be the data plan.
With these steps in place, the consultant can begin the formal discussions of instructions for completing the tables in Questionnaire A. To simplify the process and make it clear to country participants that the questionnaire is not as daunting as it appears at first glance, the consultant should block out all columns and cells that do not pertain to the country’s education system, indicating that they have to be filled in with the symbol “a” – “not applicable”. This can be illustrated with the following examples:

a) There are no post-secondary non-tertiary education programmes (ISCED 4) in the country. In this case, the consultant should block out in gray the last three columns of Tables 2.1, 2.2 and 2.3 and all four columns in Table 8, indicating that they have to be filled in with the corresponding symbol “a”.

b) There are no technical/vocational education programmes in lower secondary education (ISCED 2) in the country. In this case, the consultant should block out in gray the column on technical vocational education in ISCED 2 in Tables 2.1, 2.2 and 2.3 and the first four columns in Table 7, indicating that they should be filled in with the corresponding symbol “a”.

After columns and cells that do not pertain to the education system have been blocked out and filled in with the appropriate symbol “a” – “not applicable”, the consultant should turn to the components of the education system for which data are missing. These components should again be blocked out in a different color (e.g. blue) and coded with the letter “m” – ”data missing or not available”. Here again, this situation can be illustrated with a few examples.

a) There is no data collection on private pre-primary through post-secondary non-tertiary schools. In this case, all of the cells in Table 2.2 should be blocked out in blue and filled in with the letter “m.” In addition, data provided on Tables 3, 4, 5, 6, 7, 8 and 9 should be accompanied by a note that the indicates that the data do not include enrolment in or graduates from private schools.

b) There is no data collection on other early childhood development programmes. In this case, the last two columns in Table 3 should be blocked out in blue and filled in with the letter “m”.

The next activity is the assignment of data cells from the country’s school surveys to specific cells in Questionnaire A, which should be straightforward in most cases. As noted in the section on “Preparation for the mission”, the issues that could present problems here include:

- Missing data on enrolment by grade, sex or age;
- Problems separating pre-primary education (ISCED 0) from other early childhood development programmes;
- Problems separating enrolment and teachers in ISCED 0 and ISCED 2 classes in national primary schools from enrolment and teachers in ISCED 1 grades; and
- Missing data on new entrants into Grade 1 of ISCED 1, as well as new entrants into Grade 1 of ISCED 1 who have attended either pre-primary school or an early childhood development programme.
In these cases, the consultant needs to determine whether: other data sources could provide methods for estimating the missing data; some data can be reported as “x” – “included in another category”; or some data will be reported as “m” – "data missing or not available". The solution to this problem cannot be specified in a generic way, since it is dependent on the country’s education structure and the data that could be used to deal with these types of problems.

A specific discussion should also take place around the concept of “teacher” and “trained teacher”. From the international reporting perspective, the term “teacher” (or teaching staff) refers to “those persons employed in an official capacity for the purpose of guiding and directing the learning experience of pupils and students, irrespective of his/her qualification or the delivery mechanism (i.e. whether face-to-face and/or at distance”. This definition excludes educational personnel who have no active teaching duties (e.g. headmasters or principals who do not teach) or who work occasionally or in a voluntary capacity in an education institution (e.g. parents).

The concept of “trained teachers” should also be discussed. According to the UIS Instruction Manual for Completing the Questionnaires on Statistics of Education, a trained teacher is “a teacher who has received at least the minimum organized teacher-training (pre-service or in-service) required for teaching at the relevant level”. When giving directions on reporting the number of trained teachers, the consultant should include in the data plan specific names of national degrees that would give teachers the status of “trained teacher” for each ISCED level.

DAY 2

2.4 Procedures to complete UIS Education Questionnaire B

The second day of the site visit is generally devoted exclusively to the elaboration of procedures to complete Questionnaire B: Questionnaire on Statistics of Educational Finance and Expenditure. The meetings around Questionnaire B need to involve a different set of players from those involved in discussions about Questionnaire A. They should include:

1. Ministry of Education staff with knowledge of different aspects of education finance;
2. Ministry of Finance staff with responsibility for the education accounts;
3. representatives of private schools and institutions of tertiary education with knowledge of the financial accounts of these schools and institutions;
4. representatives of other organizations that provide education programmes and who understand their financial accounts; and
5. those in charge of keeping accounts on international transfers (grants and loans).

This component of the technical assistance should follow many of the procedures set out in relation to Questionnaire A, including:

- review of Questionnaire B, including definition of expenditure by source of funds and expenditure by nature, as well as key columns and cells in the questionnaire;
- explanation of how data in Questionnaire B are used to produce key education finance indicators;
• review of the budget and other financial documents that contain data related to finance and expenditure;
• determination of missing data; and
• instructions for completing the questionnaire.

Prior to commencing these activities, the consultant should lead a discussion about public and private financial contributions to public and private schools at each ISCED level, since this information is critical to developing instructions for filling in Questionnaire B completely and accurately.

i) Review of Questionnaire B

Because Ministry of Education staff in many countries work almost exclusively with basic education data on students and teachers, they could lack even basic understanding of Questionnaire B on finance expenditure. In addition, Ministry of Finance staff who work with education finance data generally do not have much exposure to the UIS finance questionnaire and are not necessarily familiar with the categories of data collected. As with Questionnaire A, a review of Questionnaire B is therefore the first order of business and should focus on explanations or clarifications of the following:

• Education levels from ISCED 0 through 6;
• Definition of central, regional and local governments;
• Definition of public, government-dependent and independent private institutions;
• Direct public expenditure;
• Intergovernmental transfers;
• Financial aid to students and transfers to other private entities;
• Expenditure not allocated by ISCED level;
• Expenditure by households and other private entities;
• Expenditure by international sources;
• Current and capital expenditure;
• Expenditure for compensation of teachers (including salaries and fringe benefits);
• Expenditure for compensation of other non-teaching staff;
• Other current expenditure (particularly welfare services);
• Public expenditure for all sectors; and
• Explanation of the symbols that should be used to fill in cells that do not contain actual data, including “a” – “category not applicable”, “m” – “data missing or not available”, “n” – “quantity nil or negligible”, and “x” – “data included in another category”.

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ii) Use of finance data for education indicators

Even more than with the core education indicators, it is very important to explain how finance and expenditure data collected through Questionnaire B will not only be used for international reporting but also for supporting national education policy and planning. Although it is not possible to provide a detailed explanation about every indicator that can be generated with finance data, the consultant could highlight the following indicators that reflect a country's macro-investment in education at each education level:

- Expenditure as a percentage of Gross Domestic Product (GDP);
- Expenditure per pupil (adjusted by PPP);
- Public expenditure for education as a percentage of total public expenditure;
- Proportion of expenditure from public and private sources;
- Current and capital expenditure as a percentage of total expenditure; and
- Expenditure for teacher compensation as a percentage of current expenditure.

The presentation should highlight the benefits of comparing expenditure indicators across countries at the current time, as well as the changes in these indicators over time – both within the country and comparatively.

iii) Review of budget and other financial documents

In most countries, public expenditure represents the large majority of funds for education at the primary and secondary levels, as well as a substantial proportion of funds at the post-secondary and tertiary levels. The budget (or a different financial report that contains actual expenditure data) will, therefore, be the primary source document for completing Questionnaire B.

However, expenditure data from the budget or another source cannot simply be moved as a block into Questionnaire B, since these documents may contain a lump sum figure of expenditure for “primary schools” which may not be sufficient to account for expenditure for primary education, since it does not take into account the components of this expenditure. Each line in the programme designated “primary schools” must be separately placed in an appropriate cell in both Tables 1 and 2 of Questionnaire B. In the final part of this section, illustrative procedures for placing line items in the budget to cells in Questionnaire B are presented.

Other documents that may be reviewed at this time include: budgets and financial reports of regional and local governments; budgets and/or financial reports of ministries other than the Ministry of Education; financial reports of private primary and secondary schools; financial reports of public and private institutions of post-secondary and tertiary education; and surveys of household expenditure. These documents are reviewed for the following purposes.
First, the information from the Ministry of Education will only include budget or expenditure made at the national level by the Ministry of Education. It will not include expenditure by other ministries responsible for different aspects of education (e.g. a Ministry of Social Services which may be responsible for pre-primary education, or the Ministry of Finance which may be responsible for contributions to retirement and social security programmes) and will not include expenditure by regional or local governments. In order to obtain a complete picture of public investment in education, these other documents need to be reviewed, with the idea of extracting relevant information from them for Questionnaire B.

Second, the Ministry of Education budget or financial reports only contain expenditure from public sources and exclude all private expenditure for education at all levels. In order to obtain a complete picture of education funding (and to fill out the sections of Table 1 in Questionnaire B that deal with private expenditure), the consultant needs to review financial reports and surveys that would contain information on private expenditure. These would include financial reports of private schools and institutions of post-secondary and tertiary education, as well as economic or household expenditure surveys that contain sections on education expenditure. They would also include financial reports of public post-secondary and tertiary institutions, since these institutions often bring in money and incur expenditure using funds from private sources (e.g. research, evaluation, etc.).

It is difficult to say in advance precisely how to transfer data from these reports into Questionnaire B, since the format of these reports is likely to differ substantially, even within a country. However, the main focus of this review should be on private sources of revenue, total expenditure and expenditure for different categories (e.g. salaries, administration, etc.). This expenditure would be placed in cells in Tables 1 and 2, based on the same criteria used to place public expenditure in these tables.

iv) Missing data

It should be anticipated that many countries do not currently collect finance data from private schools and institutions of post-secondary and tertiary education and from public institutions of post-secondary and tertiary education. The result is likely to be the absence of data on private expenditure for education both in schools and tertiary institutions and in the broader market. In the short term, this will result in the use of the symbol “m” – “missing or not available” for many cells in Table 1 that deal with private financial of education and Table 2 that deal with expenditure by private schools. However, the absence of data on private funding and expenditure for education provides the basis for recommendations for future data collections that could fill in this important gap in finance data.

v) Instructions for completing Questionnaire B

The final activity of the second day involves a discussion of procedures to use data available from budgets and other financial documents to complete Questionnaire B. Based on the experience in almost all countries that have received technical assistance to date, it is very unlikely that all finance data in the country’s financial documents can be mapped to the cells in Questionnaire B during this time period. Instead, the time should be used to clarify how the expenditure data will be mapped to cells in the questionnaire, using a few concrete examples. The consultant will then use these methods to complete the mapping after the site visit and incorporate all of the information into the country’s data plan.
Before beginning the mapping of data to cells in Questionnaire B, the consultant should again ensure that all participants in the meeting have a hard copy of Questionnaire B in hand and block out the columns and rows that are not applicable to the country’s education system. The columns that are blocked out should correspond with those blocked out in Questionnaire A, since these columns represent levels of education that are not present in the education system.

The mapping of finance data to cells in Questionnaire B should now begin, again with a focus on mapping each line in the country’s budget or financial records to specific cells in Tables 1 and 2. It should be noted that the mapping procedures are going to differ from country to country, since each country maintains a different accounting structure. However, there are some general principles that should apply in many countries. The table that follows illustrates the application of these principles and indicates how expenditure figures from a budget document or financial report can be placed in appropriate cells in Tables 1 and 2.

This hypothetical country uses a programme code that includes the following sample of sub-programmes:

1. Programme 040 – Direction Policy Formulation Services;
2. Programme 309 – Nursery Education;
3. Programme 270 – Primary Education Domestic Programme;
4. Programme 278 – Special Schools; and
5. Programme 270 – Teacher Training.

Each of these belongs in a different column in Tables 1 and 2. The accounting system also uses an object code that distinguishes various types of operating expenditure from capital expenditure. Each of these belongs on a different line in Tables 1 and 2, representing different types of expenditure. The following points highlight key aspects of the mapping of this country’s finance data to Questionnaire B that can be applied in other countries.

a) Programme 040 – Direct Policy Formulation Services basically represents expenditure by the Ministry of Education to administer the country’s education system. Because this expenditure does not apply to any ISCED level, it should be placed in the column “Expenditure not allocated” in both Tables 1 and 2. However, objects of expenditure within this programme that are “current expenditure” (ex 01, 02, 03, 06 to 17) can be placed in cell C5B in Table 1 and in X5 (compensation of non-teaching staff) and X13 (other current expenditure) in Table 2. Objects of expenditure that are “capital expenditure” (ex 25) can be in cells C5A in Table 1 and X15 in Table 2, which are the cells where capital expenditure is placed.
### Table 2. Guidelines for reporting expenditure data in UIS Questionnaire B

<table>
<thead>
<tr>
<th>Sub-programme code</th>
<th>Object code</th>
<th>Sub-programme name</th>
<th>Table 1 of UIS Questionnaire B</th>
<th>Table 2 of UIS Questionnaire B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programme 040</td>
<td></td>
<td>Direction Policy Formulation Services</td>
<td>Expenditure not allocated</td>
<td></td>
</tr>
<tr>
<td>070</td>
<td>Ex 01,02,03</td>
<td>General Management &amp; Coordination Services</td>
<td>C15, C5B</td>
<td>X5</td>
</tr>
<tr>
<td>070</td>
<td>Ex 06 to Ex 17</td>
<td>“ ” “ ”</td>
<td>C15, C5B</td>
<td>X13</td>
</tr>
<tr>
<td>070</td>
<td>Ex 25</td>
<td>“ ” “ ”</td>
<td>C15, C5A</td>
<td>X15</td>
</tr>
<tr>
<td>270</td>
<td>Ex 02, 03</td>
<td>Project Implementation Unit</td>
<td>C15, C5B</td>
<td>X5</td>
</tr>
<tr>
<td>270</td>
<td>Ex 06, to Ex 17</td>
<td>“ ” “ ”</td>
<td>C15, C5B</td>
<td>X13</td>
</tr>
<tr>
<td>270</td>
<td>Ex 25</td>
<td>“ ” “ ”</td>
<td>C15, C5A</td>
<td>X15</td>
</tr>
<tr>
<td>309</td>
<td></td>
<td>Nursery Education ISCED 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>309</td>
<td>Ex 16</td>
<td>Nursery Education</td>
<td>C1, C5B</td>
<td>X12</td>
</tr>
<tr>
<td>277</td>
<td></td>
<td>Primary Education Domestic Programme ISCED 0 and 1*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>277</td>
<td>Ex 23</td>
<td>Primary education domestic programme</td>
<td>C1, C5A</td>
<td>X15</td>
</tr>
<tr>
<td>277</td>
<td>Ex 26</td>
<td>“ ”</td>
<td>C1, C5A</td>
<td>X12</td>
</tr>
<tr>
<td>* Attempt to allocate between ISCED 0 and 1 based on the number of students enrolled</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>278</td>
<td></td>
<td>Special Schools ISCED 1&lt;sup&gt;10&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>278</td>
<td>Ex 17</td>
<td>Special schools</td>
<td>C2, C5B</td>
<td>X12</td>
</tr>
<tr>
<td>Programme 270</td>
<td>Teacher Training</td>
<td>ISCED 5B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>272</td>
<td>Ex 01, 02, 03</td>
<td>Erdiston college</td>
<td>C1, C5B</td>
<td>X 6</td>
</tr>
<tr>
<td>272</td>
<td>Ex 25</td>
<td>“ ”</td>
<td>C1, C5A</td>
<td>X15</td>
</tr>
<tr>
<td>272</td>
<td>Ex 26</td>
<td>“ ”</td>
<td>C1, C5B</td>
<td>X12</td>
</tr>
<tr>
<td>273</td>
<td></td>
<td>Other local training</td>
<td>Expenditure not allocated</td>
<td></td>
</tr>
<tr>
<td>273</td>
<td>Ex 12</td>
<td>Other local training</td>
<td>C15, C5B</td>
<td>X13</td>
</tr>
</tbody>
</table>

b) Programme 309 – Nursery Education includes all public pre-primary schools. This expenditure is placed in ISCED 0 – pre-primary education, with objects placed in the appropriate lines in Tables 1 and 2 in the same way as expenditure cited in Programme 040.

c) Programme 277 – Primary Education Domestic Programme should, in principle, be included exclusively in ISCED 1 – primary education. However, public primary schools also include kindergarten classes, which should be included in ISCED 0 – pre-primary education. The data plan, therefore, includes a note that indicates that expenditure should be allocated between pre-primary and primary education (ISCED 0 and 1) based either on enrolment or teachers working at each of these levels. Objects of expenditure in this programme are then placed in Tables 1 and 2 based on the procedures discussed above.

<sup>10</sup> Special Education is not a separate education level, but may be included in ISCED 1, 2 or 3. In the case of the hypothetical country, it was appropriate to include all Special Education in ISCED 1.
d) Programme 278 – Special Schools captures expenditure for special education. Since most students enrolled in special education classes are functioning at the primary level in the hypothetical country, this expenditure is included in ISCED 1 – primary education in Tables 1 and 2 of Questionnaire B. Objects of expenditure in the programme are then placed in Tables 1 and 2 based on the procedures discussed above.

e) Programme 270 – Teacher Training is a programme that belongs in tertiary technical/vocational education (ISCED 5B) and therefore is placed in this column in Tables 1 and 2. Objects of expenditure are then placed in Tables 1 and 2 based on the procedures discussed above.

The final step in the process is determining a code to place in each cell that does not have actual expenditure included in it. These symbols will include: “m”, “a”, “n” or “x” based on the definitions in the questionnaire.

DAY 3

2.5 Procedures to complete UIS Education Questionnaire C

The third day of the site visit includes two main activities: elaboration of procedures to complete Questionnaire C: Questionnaire on Statistics of Tertiary Education and debriefing with senior education officials.

The meetings around Questionnaire C need to involve the following individuals:

1. Ministry of Education staff with knowledge of different aspects of post-secondary and tertiary education;
2. representatives of public institutions of tertiary education with knowledge of education programmes and institutional data collections; and
3. representatives of private institutions with this same knowledge base.

This component of the technical assistance should follow the same procedures set out in relation to Questionnaires A and B, including:

- a review of Questionnaire C, including levels of education and key columns and cells in the questionnaire;
- an explanation of how data in Questionnaire C are used to produce key education indicators of tertiary education;
- a review of the current questionnaires used to collect data on enrolment, teachers and graduates of post-secondary and tertiary institutions;
- coverage of different types of institutions; and
- instructions for completing the questionnaire.
i) Review of Questionnaire C

Because Ministry of Education staff work almost exclusively with basic education data on primary and secondary education, they often are not familiar with all of the programmes offered in institutions of post-secondary and tertiary education. In addition, representatives of post-secondary and tertiary institutions often are not even aware of the UIS questionnaires, since they have not been involved in previous data collection efforts. Therefore, the first part of this meeting should include a review of Questionnaire C, with a focus on the following:

- ISCED levels 5 and 6, including first and second degrees;11
- Public, government-dependent and independent private institutions;
- Programme orientation: general and technical/vocational education;
- Student enrolment: full-time and part-time;
- Teacher counts: full-time, part-time and full-time equivalent;
- Fields of study, including disciplines that fall under the major ISCED fields;
- Graduates, by field of study;
- Foreign students, by country of origin; and
- Explanation of the symbols that should be used to fill in cells that do not contain actual data.

ii) Use of data in Questionnaire C for education indicators

To make the questionnaire more meaningful to representatives of post-secondary and tertiary education institutions, the consultant should explain how the data generated by Questionnaire C can be used to produce indicators for the tertiary level that are valuable not only internationally, but nationally and at the institutional level as well. Among the indicators that may be highlighted are:

- Gross enrolment ratios;
- School life expectancies;
- Gross completion ratios;
- Proportion of students enrolled in different fields, by education level;
- Proportion of graduates in different fields, by education level; and
- Statistics on internationally mobile students and enrolment based on territorial or permanent residences criteria.

iii) Review of existing national questionnaires

Following the review of Questionnaire C and indicators of tertiary education, the consultant should focus on the instruments and mechanisms used by the Ministry of Education or another ministry to collect statistics on tertiary education. It should be recognized, however, that in many countries these types of surveys are missing from education data collections. In these cases, the discussion should focus on strategies that the ministry could employ to initiate such a collection from both public and private institutions of post-secondary and tertiary education. The

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11 Questionnaire C should collect data on ISCED 5 and 6 only and that has to be communicated clearly to representatives in charge of data from national tertiary institutions in order to avoid any misunderstanding about programmes which do not qualify as ISCED 5 or 6.
discussion should focus on the importance of including the following data in the proposed tertiary surveys:

- Separating enrolment in programmes that fall into ISCED 4A and 4B from ISCED 5B, 5A and 6, given that enrolment in ISCED 4A and 4B should be reported in Questionnaire A;
- Enrolment by programme, sex and age of students;
- Enrolment by field of study in programmes at each ISCED level;
- Graduates by field of study in programmes at each ISCED level; and
- Foreign students by county of origin.

iv) Coverage of types of institutions

In countries that do administer surveys of post-secondary and tertiary institutions, coverage may vary by type of institution. Typically, coverage is more complete for public institutions, because ministries have some legal or financial authority to require institutions to report the data. However, even among public institutions, coverage may be weak because institutions tend to jealously guard their autonomy. The exhibit presented in Annex A provides an example of the way that institutional coverage can be presented in the data plan.

v) Instructions for completing Questionnaire C

The approach to completing Questionnaire C is much more straightforward than the approaches to Questionnaires A and B, assuming that countries actually collect data from their tertiary education programmes. In providing instructions, the consultant should reinforce all of the issues cited above when Ministry of Education staff complete the different tables in the questionnaire.

2.6 Debriefing with senior officials

The final session should include a debriefing with senior education officials on the accomplishments of the technical assistance mission and the next steps in moving forward with work on the questionnaires. Most important, however, the consultant should use this opportunity to highlight the areas where the country’s education data collection needs improvement from the international reporting perspective and provide specific suggestions on how to improve current data collections and/or initiate new data collections. ¹²

It is difficult to generalize recommendations in a technical assistance manual, since the recommendations are going to dependent on the status of each country’s data collections. But it is almost certain that the recommendations will include steps to initiate new surveys or improve the coverage of existing surveys of private institutions and their finances at all education levels, since these are the areas where many countries currently lack complete and reliable data.

¹² It is important to keep the focus of the site visit to improving international data reporting, and therefore, improving the national system itself goes beyond the scope of the mission. If a country requests UNESCO’s support to amend their information systems, a different set of actions should be put in place.
3. Preparation of the data plan

The data plan represents a codification of the work conducted in preparation for the technical assistance mission and the results of the mission itself. It should serve several functions. First, it should serve as a resource document that Ministry of Education staff can turn to in future years for completing each UIS questionnaire. If the same person continues to be responsible for completing and submitting the UIS questionnaires each year, he/she should be able to use comparable procedures, since these are specified in the data plan. If a new person takes on the responsibility, he/she should be able to turn to a resource document that provides specific instructions for filling out each questionnaire. Of course, when sectors of a country’s education system change, then the Ministry of Education staff can incorporate these changes into a revised plan, as required – and provide an updated plan to the UIS and the UNESCO Field Office.

Second, the data plan should serve as a reference for UIS staff and UNESCO Field Offices to use while reviewing data that countries submit through UIS questionnaires. With this reference, staff members responsible for collecting, analyzing and publishing the data can develop a better understanding of the coverage and quality of the data they are using.

Finally, the data plan could be made available to staff in other international organizations that support development efforts in countries, again, as a resource to help them better understand the data they are using in their own work.

The consultant should use a standard format for preparing a country’s data plan to the extent possible, recognizing that there are unique elements of each education system that must be appropriately dealt with in the framework of the data plan. These components include:

- An introduction that includes the date and location of the site visit, along with names and titles of all participants in each session of the meeting;
- A general written description of the national education system, which includes for each institution all of the information that is now contained in the UIS Questionnaire on National Education Programmes;
- The ISCED mapping of the country, incorporating the information on institutions, as presented in Annex A;
- An exhibit that clarifies the coverage of national data for each programme and institution that has been mapped to ISCED, similar to the one provided in Annex B;
- Instructions for completing Questionnaires A, B and C;
- Recommendations for improving the detail or coverage of current national data collections and/or initiating new data collections to obtain data that are currently missing or not available.
4. **Post-site visit procedures**

After the site visit is completed, the consultant will prepare a draft data plan for review by the Ministry of Education and representatives other ministries and organizations that are involved in the country’s education and finance systems and data. The consultant will also send a copy of the draft data plan to the UIS Regional Advisor (or staff member responsible for the technical assistance mission), who will then forward the document to the country’s national coordinator. The UIS Regional Advisor (RA) will request the country to submit comments within a period of one month following the transmission of the draft data plan. The national coordinator will also be advised that: i) comments should be returned to the RA; and ii) if the RA does not receive comments within the time period, it will be assumed that the draft data plan is correct and approved by the country.

The RA member will transmit comments from the national coordinator to the consultant in order to finalize the data plan. If there are discrepancies with the amendments and the site visit discussions, the consultant will draft a set of questions for further discussion, which will again be transmitted to the country’s national coordinator by the RA. Once the issues are addressed, the consultant will prepare a final data plan, which will be sent to the RA.

The RA will transmit the final data plan to both the Minister of Education and the national coordinator, indicating that this document represents the resource which the country should use to fill out UIS questionnaires. The RA will advise the national coordinator that if there are changes to the national education system in the future, the Ministry of Education should revise the data plan and send a copy of the revised plan to the RA for their reference.

Once this process is completed, the RA will transmit a copy of the final data plan to the UIS for use in reviewing the country’s data submissions and will retain a copy of the plan as a resource document for Field Office staff working on education indicators and other reports.
## Annex A. Example of ISCED mapping of programmes and institutions from ISCED 0 to 6

<table>
<thead>
<tr>
<th>Name of the education programme</th>
<th>Theoretical entrance age</th>
<th>Theoretical duration (in years)</th>
<th>Is the programme part of compulsory education?</th>
<th>Institutions</th>
<th>ISCED97 level</th>
<th>ISCED97 programme destination</th>
<th>Programme orientation or position in national structure</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-primary education</td>
<td>3</td>
<td>2 years</td>
<td>n</td>
<td>70 primary schools with nursery classes, 5 nursery schools</td>
<td>Pre-primary</td>
<td>0</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>(independent private)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-primary education</td>
<td>3</td>
<td>2 years</td>
<td>y</td>
<td>15 primary schools registered with the MOE that provide pre-primary grades</td>
<td>Pre-primary</td>
<td>0</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>(independent private)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daycare centers (public and private)</td>
<td>6 months to age 2</td>
<td>No defined duration</td>
<td>n</td>
<td>16 public and 168 private day care centers registered with the Child Care Board in the Ministry of Social Transformation</td>
<td>Other early childhood development programmes</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Primary education (public and independent private)</td>
<td>5</td>
<td>6 years</td>
<td>y</td>
<td>70 public primary schools operated by the MOE; 25 independent private schools registered with the MOE</td>
<td>Primary</td>
<td>1</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Secondary education (public), Forms 1, 2 and 3</td>
<td>11*</td>
<td>3 years*</td>
<td></td>
<td>23 public secondary schools operated by the MOE; 7 government assisted secondary schools</td>
<td>Lower Secondary</td>
<td>2</td>
<td>A</td>
<td>General</td>
</tr>
<tr>
<td>Secondary education (public), Forms 4 and 5</td>
<td>14*</td>
<td>2 years*</td>
<td></td>
<td>1 independent private school; 23 public secondary schools operated by the MOE</td>
<td>Upper Secondary</td>
<td>3</td>
<td>A</td>
<td>General</td>
</tr>
<tr>
<td>Sixth Form – advanced or “A” levels (public)</td>
<td>16</td>
<td>2 years</td>
<td></td>
<td>4 public secondary schools operated by the MOE</td>
<td>Post-secondary non-tertiary education</td>
<td>4</td>
<td>A</td>
<td>General</td>
</tr>
<tr>
<td>Diploma/Award</td>
<td>Level</td>
<td>Duration</td>
<td>Institution</td>
<td>Qualification</td>
<td>Destination Category</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-------</td>
<td>----------</td>
<td>-------------</td>
<td>---------------</td>
<td>---------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certificate courses in trades and crafts (public)</td>
<td>16</td>
<td>&lt; 2 years</td>
<td>Samuel James Prescod Polytechnic – all courses; Smith Community College – certificate courses</td>
<td>Post-secondary non-tertiary education</td>
<td>4 A Vocational</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate’s degrees in Arts and Science</td>
<td>16</td>
<td>2 years</td>
<td>Smith Community College</td>
<td>First stage of tertiary education</td>
<td>5 A Intermediate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate’s degrees in Applied Arts and Science</td>
<td>16</td>
<td>2 years</td>
<td>Smith Community College</td>
<td>First stage of tertiary education</td>
<td>5 B First qualification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate’s degree in Teacher Training (pre-primary, primary and secondary)</td>
<td>16*</td>
<td>2 years</td>
<td>Lee Teachers’ Training College</td>
<td>First stage of tertiary education</td>
<td>5 B First qualification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certificate in Teacher Training</td>
<td>**</td>
<td>1 year</td>
<td>Lee Teachers’ Training College</td>
<td>First stage of tertiary education</td>
<td>5 B First qualification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor’s degrees</td>
<td>18***</td>
<td>3 years</td>
<td>University of the West Indies</td>
<td>First stage of tertiary education</td>
<td>5 A First degree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master’s degrees</td>
<td>21***</td>
<td>2 years</td>
<td>University of the West Indies</td>
<td>First stage of tertiary education</td>
<td>5 A Second degree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ph.D.</td>
<td>23***</td>
<td>2 years</td>
<td>University of the West Indies</td>
<td>Second stage of tertiary education</td>
<td>6 na na</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

P = Pre-vocational  
V = Vocational  
na = Not applicable  
A, B, C = Destination categories

* Secondary education in the hypothetical country is not divided between lower and upper secondary education. To conform to ISCED, we have classified the first three grades of secondary education (Forms 1, 2 and 3) as ISCED 2 - lower secondary education, and the last two grades (Forms 4 and 5) as ISCED 3 - upper secondary education.

** In the hypothetical country, teachers generally undertake their teacher training after they have completed their “A” levels, an Associate’s degree or a Bachelor’s degree. However, individuals can enter a teacher training programme after completing their upper secondary education. The civil service requires successful completion of 4 CXCs, including English; the MOE usually accepts as a minimum requirement 5 CXCs, of which two are English and Mathematics.

*** Traditionally students who enter a Bachelor’s programme in the university have completed Sixth Form classes and the GCE Advanced Levels. They would enter the programme around age 18 and the programme of study would last three years. However, students can now enter directly into a Bachelor’s programme after passing their CXCs at the end of secondary education. Students in some of the science programmes would require one year of preliminary study before starting the three-year Bachelor’s degree programme. The theoretical entrance ages in the table reflect the traditional pathway into tertiary education.
Annex B. Example presentation of coverage of programmes and institutions from ISCED 0 to 4

<table>
<thead>
<tr>
<th>ISCED level</th>
<th>Institutions</th>
<th>Enrolment by sex and age</th>
<th>Teachers/trained teachers</th>
<th>New entrants to primary education</th>
<th>Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – Pre-primary</td>
<td>Primary schools and nurseries (public)</td>
<td>100% coverage</td>
<td>100% coverage but data cannot be separated from primary education except for the 6 nursery schools</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>0 – Pre-primary</td>
<td>Primary schools (private)</td>
<td>About 80% coverage</td>
<td>About 80% coverage but data cannot be separated from primary education</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Other early childhood development programmes</td>
<td>Public and private day care centers under control of Child Care Board</td>
<td>Totals are available currently; plans to work with Child Care Board to obtain detailed data for 2007 submission</td>
<td>Not applicable since center staff are not required to be trained teachers</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>1 – Primary</td>
<td>Primary schools (public)</td>
<td>100% coverage</td>
<td>100% coverage but data cannot be separated from pre-primary education</td>
<td>Data include total enrollment in Grade 1, including repeaters*</td>
<td>100% coverage</td>
</tr>
<tr>
<td>1 – Primary</td>
<td>Primary schools (independent private)</td>
<td>About 80% coverage</td>
<td>About 80% coverage but data cannot be separated from primary education</td>
<td>Data include total enrollment in Grade 1, including repeaters*</td>
<td>About 80% coverage</td>
</tr>
<tr>
<td>2A General – lower secondary</td>
<td>Secondary schools (public)</td>
<td>100% coverage</td>
<td>100% coverage but data cannot be separated from upper secondary education</td>
<td>Not applicable</td>
<td>100% coverage</td>
</tr>
<tr>
<td>2A General – lower secondary</td>
<td>Secondary schools (assisted)</td>
<td>100% coverage</td>
<td>100% coverage</td>
<td>Not applicable</td>
<td>100% coverage</td>
</tr>
<tr>
<td>2A General – lower secondary</td>
<td>Secondary schools (independent private)</td>
<td>Do not know if MOE collects these data</td>
<td>Do not know if MOE collects these data</td>
<td>Not applicable</td>
<td>Do not know if MOE collects these data</td>
</tr>
<tr>
<td>3A General – upper secondary</td>
<td>Secondary schools (public)</td>
<td>100% coverage</td>
<td>100% coverage but data cannot be separated from lower secondary education</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>3A General – upper secondary</td>
<td>Secondary schools (assisted)</td>
<td>100% coverage</td>
<td>100% coverage but data cannot be separated from lower secondary education</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>3A General – upper secondary</td>
<td>Secondary schools (independent private)</td>
<td>Do not know if MOE collects these data</td>
<td>Do not know if MOE collects these data</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
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<td>-----------------------------</td>
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<td>----------------</td>
</tr>
<tr>
<td>4A General – post-secondary non-tertiary</td>
<td>Secondary schools (public)</td>
<td>100% coverage</td>
<td>100% coverage but data cannot be separated from lower and upper secondary education</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>4B Technical/vocational – post-secondary non-tertiary</td>
<td>Samuel Jackson Prescod Polytechnic</td>
<td>Totals are available currently; plans to work with the Polytechnic to obtain detailed data for 2007 submission</td>
<td>Do not know if MOE collects these data</td>
<td>Not applicable</td>
<td>MOE plans to work with the Polytechnic to obtain data on enrollment by field for the 2007 submission</td>
</tr>
<tr>
<td>4B Technical/vocational – post-secondary non-tertiary</td>
<td>Smith Community College (SCC)</td>
<td>Totals are available but it will require considerable work for SCC to break out the data by sex and age</td>
<td>100% coverage but data for 4B; no separation from data for 5A and 5B programmes</td>
<td>Not applicable</td>
<td>Data not currently available; difficult to obtain this data for SCC students</td>
</tr>
</tbody>
</table>

* Repetition rates are very low in Grade 1, so the number of new entrants is very close to total enrolment. However, the MOE will review data on repeaters to try to improve the counts of new entrants. Data are not currently collected on the number of new entrants to Grade 1 who participated in pre-primary education or other early childhood development programmes. The MOE will check to determine whether this information can be collected from primary schools.